

APPENDIX C

SHADBOLT TIER 1 SOIL SCREENING VALUES

Derivation of Screening Values

In assessing risks to human health arising from materials present on site, environmental testing results are compared to Shadbolt Group Inhouse Tier 1 Soil Screening Values (TSVs).

These screening values are drawn from a range of sources including government guidance, research bodies, industry publications and modelling software.

On-going research by the Environment Agency (EA) is being undertaken to produce toxicology reports (TOX series) for each of the contaminants identified within the LCRM framework and then to produce published Soil Guideline Values (SGVs) using the Contaminated Land Exposure Assessment (CLEA) Model. Parallel to the work being undertaken by the EA is research being undertaken by Land Quality Management Limited and the Chartered Institute of Environmental Health (CIEH) to produce similar General Assessment Criteria (GAC) using the CLEA Model. To date, SGVs and GACs have been published for over 80 No. contaminants with SGVs / GACs derived for each contaminant for three different land use scenarios namely:

- Residential
- Allotment
- Commercial

In addition, Shadbolt Group screening values have been derived for **Public Open Space (residential), Public Open Space (Parks)** based on current guidance.

Shadbolt Group TSVs are based on the SGVs and GACs which are scientifically based generic assessment criteria that can be used to simplify the assessment of human health risks arising from long-term and on-site exposure to chemical contamination in soil.

SGVs and GACs are a screening tool for the generic quantitative risk assessment of land contamination (Defra and Environment Agency, 2004). They are not (unless clearly stated otherwise) relevant for assessing risks to human health from short-term exposure to chemicals in soil including injury arising from direct bodily contact and do not take account of other types of risks to humans such as explosion or suffocation risks (associated with the build-up of gases such as methane and carbon dioxide) or aesthetic issues such as odour or colour. SGVs and GACs do not take account of other non-soil-based sources of contamination such as contamination in groundwater, surface waters or drinking waters. They cannot be used to evaluate risks to non-human receptors such as controlled waters, ecosystems, buildings and services, domestic pets, or garden plants. Where, for example, phytotoxic effects are an important consideration in the current or future intended land use further investigation should be undertaken.

TGVs are guidelines on the level of long-term human exposure to individual chemicals in soil that, unless stated otherwise, are tolerable or pose a minimal risk to human health. They represent “trigger values” – indicators to a risk assessor that soil concentrations above this level **may** pose a possibility of *significant harm* to human health (Defra, 2008b).

Significance is linked to:

- **Margin** of exceedance;
- **Duration** and frequency of exposure;
- **Other site-specific factors** that the enforcing authority may wish to consider.

SGVs do not of themselves represent the threshold at which there is a *significant possibility of significant harm* (SPOSH). Nor do they automatically represent an unacceptable intake in the context of Part 2A of the Environmental Protection Act 1990. However, they can be a useful starting point for such an assessment.

In order to assess the soil analyses results with regard to potential human health risks, Shadbolt Environmental TSVs have been derived in accordance with the UK framework set out in the most recent LCRM documents (EA 2020) and LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment 2nd Edition 2015 and are “in line” with industry standards.

Assessment Framework

The CLEA model states that, ‘the contamination is assumed to be at or within 1m of the surface’. It is considered that at depths greater than 1.00m, the probability of human exposure via the direct contact pathways are significantly reduced, leaving inhalation of volatile compounds as the dominant pathway regarding human health risks. Typically, volatile compounds only significantly affect the indoor inhalation pathway.

Statistical Analysis

The CLEA guidelines also state that for each contaminant, the upper 95th percentile of the mean measured concentration (95%UCL) should be calculated and this value should be compared to the TSV.

The objective of maximum value tests is to decide whether the maximum concentration observed should be treated as an outlier or whether it can reasonably be considered to come from the same underlying population as the other samples.

It is known that contaminant concentrations often demonstrate lognormal or other distribution forms. Therefore, to calculate what are considered to be more representative 95%UCL values, the contaminant concentrations have first been assessed to determine if each contaminant distribution is closer to a normal or lognormal distribution.

If a dataset was found to be log normally distributed, the geometric mean was used to calculate the 95%UCL, for those that were found to be normally distributed; the arithmetic mean was used to calculate the 95%UCL. Constituent non-detects were assigned a value equal to the reported analytical laboratory limit of detection, considered reasonably conservative. Any identified outliers are excluded from the datasets used in calculation of the 95%UCL value.

Shadbolt Tier 1 Soil Screening Values (TSVs) used in the production of this report are presented below.

SOIL - THE SHADBOLT GROUP SUITABLE FOR USE LEVELS - HUMAN HEALTH													
Status		Issue No.		Date		SHADBOLT ENVIRONMENTAL							
Issue		Version 8		21/09/2023									
Determinand	Units	Residential with Home Grown Produce (1% SOM)	Residential with Home Grown Produce (6% SOM)	Residential without Home Grown Produce (1% SOM)	Residential without Home Grown Produce (6% SOM)	Allotments (6% SOM)	Commercial (1% SOM)	Commercial (6% SOM)	Public Open Space (res) (1% SOM)	Public Open Space (res) (6% SOM)	Public Open Space (park) (1% SOM)	Public Open Space (park) (6% SOM)	Derivation Tool
pH		<5, >9	<5, >9	<5, >9	<5, >9	<5, >9	<5, >9	<5, >9	<5, >9	<5, >9	<5, >9	<5, >9	Neutral Conditions
Asbestos	%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	<0.001%	Lab Screening Level
HEAVY METALS/METALLOIDS													
Arsenic (C4SL)	mg/kg	37	37	39.9	39.9	49	635	635	79.1	79.1	168	168	CLEA MODEL LQM/CIEH 2015
Beryllium	mg/kg	1.7	1.7	1.72	1.72	17.8	14	14	2.19	2.19	61	61	CLEA MODEL LQM/CIEH 2015
Boron	mg/kg	290	290	11000	11000	45	240000	240000	21000	21000	46000	46000	CLEA MODEL LQM/CIEH 2015
Cadmium (C4SL)	mg/kg	22.1	22.1	149	149	3.9	410	410	219	219	882	882	CLEA MODEL LQM/CIEH 2015
Chromium (III)	mg/kg	14300	14300	16700	16700	12600	208000	208000	30600	30600	83500	83500	CLEA MODEL LQM/CIEH 2015
Chromium (VI) (C4SL)	mg/kg	20.5	20.5	20.5	20.5	171	49.1	49.1	26.1	26.1	251	251	CLEA MODEL LQM/CIEH 2015
Chromium (VI) (MRL)	mg/kg	3.62	3.63	3.62	3.62	73.9	19.7	19.7	4.62	4.62	132	132	CLEA MODEL LQM/CIEH 2016
Copper	mg/kg	4730	4790	9060	9060	1450	106000	106000	16400	16400	45200	45200	CLEA MODEL LQM/CIEH 2015
Lead	mg/kg	200	200	313	313	79.1	2310	2310	625	625	1340	1340	pC4SL
Mercury (Elemental)	mg/kg	1.2	1.2	1.2	1.2	21	58 ^{pp} (25.8)	58 ^{pp} (25.8)	16	16	30 ^{pp} (25.8)	30 ^{pp} (25.8)	CLEA MODEL LQM/CIEH 2015
Mercury (Inorganic)	mg/kg	40	40	56	56	19	1100	1100	120	120	240	240	CLEA MODEL LQM/CIEH 2015
Mercury (Methyl)	mg/kg	11	11	15	15	6	320	320	40	40	68	68	CLEA MODEL LQM/CIEH 2015
Nickel	mg/kg	136	136	188	188	67.3	1770	1770	347	347	804	804	CLEA MODEL LQM/CIEH 2015
Selenium	mg/kg	375	375	595	595	143	13000	13000	1370	1370	2550	2550	CLEA MODEL LQM/CIEH 2015
Vanadium	mg/kg	136	136	357	357	33.2	7490	7490	818	818	1550	1550	CLEA MODEL LQM/CIEH 2015
Zinc	mg/kg	20000	20000	47000	47000	5230	1100000	1100000	93700	93700	201000	201000	CLEA MODEL LQM/CIEH 2015
GENERAL INORGANICS													
Cyanide (Free)	mg/kg	34	34	34	34	34	373	373	34	34	34	34	ATKINS ATRISK
US EPA PRIORITY PAHs													
Acenaphthene	mg/kg	210	1100	3000 (57)	6000 (336)	200	84000 (57)	100000	15000	15000	29000	30000	CLEA MODEL LQM/CIEH 2015
Acenaphthylene	mg/kg	170	920	2900 (86.1)	6000 (506)	160	83000 (86.1)	100000	15000	15000	29000	30000	CLEA MODEL LQM/CIEH 2015
Anthracene	mg/kg	2400	11000	31000 (1.17)	37000	2200	52000	540000	74000	74000	150000	150000	CLEA MODEL LQM/CIEH 2015
Benzo(a)Anthracene	mg/kg	7.2	13	11	15	13	170	180	29	29	49	62	CLEA MODEL LQM/CIEH 2015
Benzo(a)pyrene (C4SL)	mg/kg	2.2	3.00	3.2	3.2	3.5	35	36	5.7	5.7	11	13	CLEA MODEL LQM/CIEH 2015
Benzo(a)pyrene (MRL)	mg/kg												
Benzo(b)fluoranthene	mg/kg	2.6	3.7	3.9	4	3.9	44	45	7.1	7.2	13	16	CLEA MODEL LQM/CIEH 2015
Benzo(k)fluoranthene	mg/kg	320	350	360	360	640	3900	4000	640	640	1400	1600	CLEA MODEL LQM/CIEH 2015
Benzo(g,h,i)perylene	mg/kg	77	100	110	110	130	1200	1200	190	190	370	440	CLEA MODEL LQM/CIEH 2015
Chrysene	mg/kg	15	27	30	32	19	350	350	57	57	93	120	CLEA MODEL LQM/CIEH 2015
Di-benzo(a,h)anthracene	mg/kg	0.24	0.3	0.31	0.32	0.43	3.5	3.6	0.57	0.58	1.1	1.4	CLEA MODEL LQM/CIEH 2015
Indeno(1,2,3-cd)pyrene	mg/kg	27	41	45	46	39	500	510	82	82	150	180	CLEA MODEL LQM/CIEH 2015
Fluoranthene	mg/kg	280	890	1500	1600	290	23000	23000	3100	3100	6300	6400	CLEA MODEL LQM/CIEH 2015
Fluorene	mg/kg	170	860	2800 (30.9)	4500 (183)	160	63000 (30.9)	71000	9900	9900	20000	20000	CLEA MODEL LQM/CIEH 2015
Naphthalene	mg/kg	2.3	13	2.3	13	24	190 (76.4)	1100 (432)	4900	4900	1200 (76.4)	300	CLEA MODEL LQM/CIEH 2015
Phenanthrene	mg/kg	95	440	1300 (36)	1500	90	22000	23000	3100	3100	6200	6300	CLEA MODEL LQM/CIEH 2015
Pyrene	mg/kg	620	2000	3700	3800	620	54000	54000	7400	7400	15000	15000	CLEA MODEL LQM/CIEH 2015
Coal Tar (Bap as surrogate marker)	mg/kg	0.79	0.98	1.2	1.2	1.2	15	15	2.2	2.2	4.4	4.8	CLEA MODEL LQM/CIEH 2015
Chlorinated Solvents													
1,2 Dichloroethane (DCA)	mg/kg	0.0071	0.019	0.0092	0.023	0.016	0.67	1.7	29	29	21	28	CLEA MODEL LQM/CIEH 2015
1,1,1,2 Tetrachloroethane	mg/kg	1.2	6.4	1.5	8.2	4.4	110	560	1400	1400	1500	2100	CLEA MODEL LQM/CIEH 2015
1,1,2,2 Tetrachloroethane	mg/kg	1.3	7.5	3.9	17	2	270	1100	1400	1400	1800	2300	CLEA MODEL LQM/CIEH 2015
PCE (Tetrachloroethene)	mg/kg	0.18	0.9	0.18	0.92	3.6	19	95	1400	1400	810 (424) sol	1500	CLEA MODEL LQM/CIEH 2015
1,1,1 Trichloroethane (111 TCA)	mg/kg	8.8	39	9	40	240	660	3000	140000	140000	57000 (1425) vap	100000 (6392) vap	CLEA MODEL LQM/CIEH 2015
Chloroethene (Vinyl Chloride VC)	mg/kg	0.00064	0.0014	0.00077	0.0015	0.0018	0.059	0.12	3.5	3.5	4.8	5.4	CLEA MODEL LQM/CIEH 2015
Tetrachloromethane	mg/kg	0.016	0.075	0.017	0.08	0.21	1.2	5.7	120	120	70	120	CLEA MODEL LQM/CIEH 2015
Trichloroethene (TCE)	mg/kg	0.91	3.4	1.2	4.2	1.7	99	350	2500	2500	2600	3100	CLEA MODEL LQM/CIEH 2015
Trichloromethane (Chloroform)	mg/kg	0.026	0.13	0.026	0.13	2.4	2.9	14	890	950	190	400	CLEA MODEL LQM/CIEH 2015
Phenolics													
Phenol	mg/kg	280	1100	750	2300	280	760dir (31000)	3200dir (37000)	760dir (11000)	3200dir (11000)	760dir (8600)	3200dir (11000)	CLEA MODEL LQM/CIEH 2015
TPH (Environment Agency 16 Fractions)													
TPH Aliphatic >C5-6	mg/kg	42	160	42	160	3900	3200 (304) sol	12000 (1150) sol	570000 (304) sol	600000	95000 (304) sol	180000 (1150) sol	CLEA MODEL LQM/CIEH 2015
TPH Aliphatic >C6-8	mg/kg	100	530	100	530	13000	7800 (144) sol	40000 (736) sol	600000	620000	150000 (144) sol	320000 (736) sol	CLEA MODEL LQM/CIEH 2015
TPH Aliphatic >C8-10	mg/kg	27	150	27	150	1700	2000 (78) sol	11000 (451) vap	13000	13000	14000 (78) sol	21000 (451) vap	CLEA MODEL LQM/CIEH 2015
TPH Aliphatic >C10-12	mg/kg	130 (48) Vap	760 (283) vap	130 (48) vap	770 (283) vap	7300	9700 (48) sol	47000 (283) vap	13000	13000	21000 (48) sol	24000 (283) vap	CLEA MODEL LQM/CIEH 2015
TPH Aliphatic >C12-16	mg/kg	1100 (24) sol	4300 (142) sol	1100 (24) sol	4400 (142) sol	13000	59000 (24) sol	90000 (142) sol	13000	13000	25000 (24) sol	26000 (142) sol	CLEA MODEL LQM/CIEH 2015
TPH Aliphatic >C16-35	mg/kg	65000 (8.48) f, sol	110000 f	65000 (8.48) f, sol	110000 f	270000 f	1600000 f	1800000 f	250000 f	250000 f	450000 f	490000 f	CLEA MODEL LQM/CIEH 2015
TPH Aliphatic > C35-44	mg/kg	65000 (8.48) f, sol	110000 f	6000 (8.48) f, sol	110000 f	270000 f	1600000 f	1800000 f	250000 f	250000 f	450000 f	490000 f	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC5-7 (Benzene)	mg/kg	70	300	370	1400	57	26000 (1220) sol	86000 (4710) sol	56000	56000	76000 (1220) sol	92000 (4710) sol	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC7-8 (Toluene)	mg/kg	130	660	860	3900	120	56000 (869) vap	180000 (4360) vap	56000	56000	87000 (869) vap	100000 (4360) vap	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC8-10	mg/kg	34	190	47	270	51	3500 (613) vap	17000 (3580) vap	5000	5000	7200 (613) vap	9300 (3580) vap	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC10-12	mg/kg	74	380	250	1200	74	16000 (364) sol	34000 (2150) sol	5000	5000	9200 (364) sol	10000	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC12-16	mg/kg	140	660	1800	2500	130	36000 (169) sol	38000	5100	5000	10000	10000	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC16-21	mg/kg	260 f	930 f	1900 f	1900 f	260 f	28000 f	28000 f	3800 f	3800 f	7600 f	7800 f	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC21-35	mg/kg	1100 f	1700 f	1900 f	1900 f	1600 f	28000 f	28000 f	3800 f	3800 f	7800 f	7900 f	CLEA MODEL LQM/CIEH 2015
TPH Aromatic >EC35-44	mg/kg	1100f	1700 f	1900 f	1900 f	1600 f	28000 f	28000 f	3800 f	3800 f	7800 f	7900 f	CLEA MODEL LQM/CIEH 2015
Aliphatic - Aromatic EC44-70	mg/kg	1600 f	1900 f	1900 f	1900 f	3000 f	28000 f	28000 f	3800 f	3800 f	7800 f	7800 f	CLEA MODEL LQM/CIEH 2015
Total TPH	mg/kg	100.0	100.0	100.0	100.0	100	1000	1000	1000	1000	1000	1000	NOT a S4U if exceeded speciation required
BTEX													
Benzene	mg/kg	0.087		0.38	1.4	0.075	27	90	72	73	90	110	CLEA MODEL LQM/CIEH 2015
Toluene	mg/kg	130	660	880 (869) vap	3900	120	56000 (869) vap	180000 (4360) vap	56000	56000	87000 (869) vap	100000 (4360) vap	CLEA MODEL LQM/CIEH 2015
Ethylbenzene	mg/kg	47	260	83	440	91	5700 (518) vap	27000 (2840) vap	24000	25000	17000 (518) vap	27000 (2840) vap	CLEA MODEL LQM/CIEH 2015
Xylenes (ortho)	mg/kg	60	330	88	480	160	6600 (478) sol	33000 (2620) sol	41000	43000	17000 (478) sol	33000 (2620) sol	CLEA MODEL LQM/CIEH 2015
Xylenes (meta)	mg/kg	59	320	82	450	160	6200 (625) vap	31000 (3460) vap	41000	43000	17000 (625) vap	32000 (3460) vap	CLEA MODEL LQM/CIEH 2015
Xylenes (para)	mg/kg	56	310	79	430	170	5900 (576) sol	30000 (3170) sol	41000	43000	17000 (576) sol	31000 (3170) sol	CLEA MODEL LQM/CIEH 2015

NOTES

- 1) Screen individual constituent values initially and if exceedences are noted consider further in relation to averaging areas and statistical analysis.
- 2) These values are for initial screening for potential **risk to human health only**. They are **not remediation thresholds**. **Screening for other receptors to be done** separately as appropriate for the site, e.g. for water, ecology, building materials.
- 3) TSVs have been derived for common constituents only to date, pending future issues of this sheet. Research has bene undertaken for numerous other constituents already.
- 4) Please note that the TSVs derived for certain compounds may be low in relation to standard laboratory detection limits.

For certain compounds not identified as a significant risk to human health (eg heavy end hydrocarbon fractions), aesthetic and other considerations may drive requirement for remediation.

APPENDIX D

CHEMICAL LABORATORY RESULTS

STATISTICAL ANALYSIS WORKSHEETS

Stephen Fisk
The Shadbolt Group
18 Bewick Road
Gateshead
NE8 4DP

e: stephenf@shadboltgroup.net

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-77433-3

Replaces Analytical Report Number: 24-77433, issue no. 2
Additional analysis undertaken.
TPH CWG added as per customers request

Project / Site name:	Baldock	Samples received on:	21/12/2023
Your job number:	2899	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	2813	Analysis completed by:	06/02/2024
Report Issue Number:	3	Report issued on:	26/02/2024
Samples Analysed:	74 soil samples		

Signed: _____

Izabela Wójcik
Senior Reporting Specialist
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: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924154	2924155	2924156	2924157	2924158
Sample Reference				TP01	TP02	TP03	TP04	TP05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15	0.50-0.60
Date Sampled				13/12/2023	12/12/2023	13/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	17	15	15	13
Total mass of sample received	kg	0.001	NONE	1.2	0.6	0.6	0.6	0.6

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	N/A	EWS	MJN	MJN	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.1	8	8.1	8.7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0059	0.0086	0.0058	0.0061	0.0018
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	5.9	8.6	5.8	6.1	1.8
Organic Matter (automated)	%	0.1	MCERTS	0.4	2.1	2.5	2.2	< 0.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.09	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.07	0.06	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.06	0.1	0.07	0.07	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.05	0.09	0.07	0.06	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.08	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.8	18	13	14	7.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	2.1	1.8	1.6	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	39	26	28	9.2
Copper (aqua regia extractable)	mg/kg	1	MCERTS	99	29	24	18	9.2
Lead (aqua regia extractable)	mg/kg	1	MCERTS	7.7	41	41	37	3.8
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	33	22	23	8.1
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	28	90	74	65	20

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Lab Sample Number				2924154	2924155	2924156	2924157	2924158
Sample Reference				TP01	TP02	TP03	TP04	TP05
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15	0.50-0.60
Date Sampled				13/12/2023	12/12/2023	13/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 EH CU 1D TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
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TPH-CWG - Aliphatic >EC5 - EC6 HS 1D AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS 1D AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS 1D AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH CU 1D AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH CU 1D AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH CU 1D AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH CU 1D AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH CU+HS 1D AL	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS 1D AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS 1D AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS 1D AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH CU 1D AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH CU 1D AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH CU 1D AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH CU 1D AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH CU+HS 1D AR	mg/kg	10	NONE	-	-	-	-	-

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

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Lab Sample Number				2924159	2924160	2924161	2924162	2924163
Sample Reference				TP06	TP07	TP09	TP10	TP12
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.50-0.60	0.10-0.15
Date Sampled				13/12/2023	16/12/2023	12/12/2023	12/12/2023	11/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	14	16	18	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	EWS	N/A	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.2	8.2	8.4	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0054	0.0097	0.0061	0.0047	0.0104
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	5.4	9.7	6.1	4.7	10.4
Organic Matter (automated)	%	0.1	MCERTS	2.8	3	3.1	0.9	3.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.05	0.05	< 0.05	0.08
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05	< 0.05	0.07
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	< 0.05	0.15
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	< 0.05	0.12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.11
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.07
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.06	0.07	< 0.05	0.14
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05	< 0.05	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	0.84
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	12	13	3.9	11
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	2.4	2.2	1	1.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.3	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	27	24	7.4	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	25	28	8.5	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	40	34	42	29	59
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	22	20	7	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	60	74	79	30	80

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Lab Sample Number				2924159	2924160	2924161	2924162	2924163
Sample Reference				TP06	TP07	TP09	TP10	TP12
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.50-0.60	0.10-0.15
Date Sampled				13/12/2023	16/12/2023	12/12/2023	12/12/2023	11/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

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Lab Sample Number				2924164	2924165	2924166	2924167	2924168
Sample Reference				TP13	TP14	TP16	TP18	TP20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.30-0.40	0.10-0.15
Date Sampled				11/12/2023	11/12/2023	15/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	17	17	16	16
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	EWS	N/A	WEM

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.1	8.1	8.7	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0093	0.01	0.0228	0.0029	0.0042
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.3	10	22.8	2.9	4.2
Organic Matter (automated)	%	0.1	MCERTS	3.6	3.1	3.6	0.7	0.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.08	0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.12	0.13	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.3	0.27	0.06	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.27	0.24	0.05	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.16	0.15	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.16	0.14	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.23	0.21	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.1	0.06	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.2	0.18	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.11	0.1	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.13	0.11	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.86	1.64	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	9.1	8.6	3.1	2.2
Boron (water soluble)	mg/kg	0.2	MCERTS	2.3	1.2	0.9	0.5	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.5	0.5	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	21	19	7.4	5.5
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	23	24	5.8	4.6
Lead (aqua regia extractable)	mg/kg	1	MCERTS	47	65	35	7.2	5.4
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	17	12	5.6	3.3
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	74	75	71	20	14

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Lab Sample Number				2924164	2924165	2924166	2924167	2924168
Sample Reference				TP13	TP14	TP16	TP18	TP20
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.30-0.40	0.10-0.15
Date Sampled				11/12/2023	11/12/2023	15/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

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Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924169	2924170	2924171	2924172	2924173
Sample Reference				TP22	TP22	TP25	TP27	TP28
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15
Date Sampled				11/12/2023	11/12/2023	11/12/2023	15/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	15	16	15	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	WEM	WEM	N/A	WEM	WEM

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.1	8.2	8	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0114	0.0077	0.0142	0.0222	0.0086
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	11.4	7.7	14.2	22.2	8.6
Organic Matter (automated)	%	0.1	MCERTS	4.5	3.2	1.3	3.7	4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.08	0.07	0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.1	< 0.05	< 0.05	0.05	0.15
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.19	0.08	< 0.05	0.09	0.28
Pyrene	mg/kg	0.05	MCERTS	0.16	0.07	< 0.05	0.08	0.24
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.08	< 0.05	< 0.05	0.06	0.17
Chrysene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	0.05	0.14
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.14	< 0.05	< 0.05	< 0.05	0.18
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	< 0.05	< 0.05	< 0.05	0.09
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.12	< 0.05	< 0.05	< 0.05	0.17
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.03	< 0.80	< 0.80	< 0.80	1.47
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	11	17	9.7	12
Boron (water soluble)	mg/kg	0.2	MCERTS	3.6	0.3	1.4	0.4	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	< 0.2	< 0.2	0.4	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	21	42	20	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	28	18	21	36	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	46	40	22	38	74
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	14	37	14	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	73	52	87	79	90

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Lab Sample Number				2924169	2924170	2924171	2924172	2924173
Sample Reference				TP22	TP22	TP25	TP27	TP28
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15
Date Sampled				11/12/2023	11/12/2023	11/12/2023	15/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 _{EH, CU, 1D, TOTAL}	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 _{HS, 1D, AL}	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 _{HS, 1D, AL}	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 _{HS, 1D, AL}	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 _{EH, CU, 1D, AL}	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 _{EH, CU, 1D, AL}	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 _{EH, CU, 1D, AL}	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 _{EH, CU, 1D, AL}	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) _{EH, CU+HS, 1D, AL}	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 _{HS, 1D, AR}	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 _{HS, 1D, AR}	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 _{HS, 1D, AR}	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 _{EH, CU, 1D, AR}	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 _{EH, CU, 1D, AR}	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 _{EH, CU, 1D, AR}	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 _{EH, CU, 1D, AR}	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) _{EH, CU+HS, 1D, AR}	mg/kg	10	NONE	-	-	-	-	-

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

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Project / Site name: Baldock
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Lab Sample Number				2924174	2924175	2924176	2924177	2924178
Sample Reference				TP29	TP30	TP32	TP33	TP36
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				13/12/2023	11/12/2023	11/12/2023	11/12/2023	15/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	13	18	24	16
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	EWS	EWS	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.2	7.9	8	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0068	0.0084	0.0097	0.0092	0.0117
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	6.8	8.4	9.7	9.2	11.7
Organic Matter (automated)	%	0.1	MCERTS	3.2	1.6	3.3	3.9	4.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.06	0.09	0.11
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.12	0.21	0.2
Pyrene	mg/kg	0.05	MCERTS	0.06	< 0.05	0.12	0.18	0.18
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	0.06	0.13	0.12
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08	0.12	0.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.09	0.18	0.12
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.05	0.08	0.08
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	0.14	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	1.18	1.01
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9	7	8.7	9.7	8.5
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	0.3	2	0.6	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.3	0.5	0.5	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	19	24	20	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	22	23	24	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	42	15	48	49	43
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	13	14	14	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	63	44	66	71	57

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Lab Sample Number				2924174	2924175	2924176	2924177	2924178
Sample Reference				TP29	TP30	TP32	TP33	TP36
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				13/12/2023	11/12/2023	11/12/2023	11/12/2023	15/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	< 5.0	-
Toluene	µg/kg	5	MCERTS	-	-	-	< 5.0	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	< 5.0	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	< 5.0	-
o-xylene	µg/kg	5	MCERTS	-	-	-	< 5.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	< 5.0	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	13	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	< 0.020	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	< 0.020	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	< 0.050	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	9.9	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	11	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	< 0.010	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	< 0.010	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	< 0.050	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	< 10	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924179	2924180	2924181	2924182	2924183
Sample Reference				TP40	TP41	TP42	TP44	TP45
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50-0.60	0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				15/12/2023	13/12/2023	15/12/2023	11/12/2023	11/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	14	16	17	16
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	-	-	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	N/A	N/A	MLO	MLO	MLO

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.8	8.2	7.8	7.5	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0182	0.0129	0.0811	0.0091	0.0135
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	18.2	12.9	81.1	9.1	13.5
Organic Matter (automated)	%	0.1	MCERTS	0.3	1.3	3.5	2.8	3.2

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	0.14	0.11
Pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	0.15	0.12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05	0.1	0.07
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.06	0.12	0.06
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.07	0.12	0.09
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.05	0.05	0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.06	0.07	0.07
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	0.8	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	3.8	8.5	9.1	9.3	7.7
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	0.3	1.5	0.5	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.4	0.4	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	5.7	15	14	16	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	3.7	7.6	24	21	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	4.1	11	37	37	38
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	5	11	11	14	11
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	14	34	56	63	50

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924179	2924180	2924181	2924182	2924183
Sample Reference				TP40	TP41	TP42	TP44	TP45
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50-0.60	0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				15/12/2023	13/12/2023	15/12/2023	11/12/2023	11/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924184	2924185	2924186	2924187	2924188
Sample Reference				TP47	TP49	TP54	TP56	TP57
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.60-0.70
Date Sampled				11/12/2023	11/12/2023	15/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	25	19	14	14	9.6
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	MLO	MLO	MLO	MLO	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.4	8	8	8.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0183	0.0155	0.0204	0.0068	0.0173
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	18.3	15.5	20.4	6.8	17.3
Organic Matter (automated)	%	0.1	MCERTS	4.5	4.2	3.2	3	0.3

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	< 0.05	0.08
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.13	0.05	0.06	0.08	0.1
Pyrene	mg/kg	0.05	MCERTS	0.1	0.05	0.06	0.07	0.09
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	0.05	0.05
Chrysene	mg/kg	0.05	MCERTS	0.08	< 0.05	< 0.05	0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.09	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.4	7.9	10	13	7.2
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	0.7	0.5	0.3	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.4	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	17	16	18	10
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	19	25	25	7.8
Lead (aqua regia extractable)	mg/kg	1	MCERTS	34	27	34	35	7.9
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	13	13	17	9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.1	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	53	54	69	22

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924184	2924185	2924186	2924187	2924188
Sample Reference				TP47	TP49	TP54	TP56	TP57
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.60-0.70
Date Sampled				11/12/2023	11/12/2023	15/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
Toluene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
o-xylene	µg/kg	5	MCERTS	< 5.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 _{EH,CU,1D,TOTAL}	mg/kg	10	MCERTS	20	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 _{HS,1D,AL}	mg/kg	0.02	NONE	< 0.020	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 _{HS,1D,AL}	mg/kg	0.02	NONE	< 0.020	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 _{HS,1D,AL}	mg/kg	0.05	NONE	< 0.050	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 _{EH,CU,1D,AL}	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 _{EH,CU,1D,AL}	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 _{EH,CU,1D,AL}	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 _{EH,CU,1D,AL}	mg/kg	8	MCERTS	19	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) _{EH,CU+HS,1D,AL}	mg/kg	10	NONE	20	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 _{HS,1D,AR}	mg/kg	0.01	NONE	< 0.010	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 _{HS,1D,AR}	mg/kg	0.01	NONE	< 0.010	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 _{HS,1D,AR}	mg/kg	0.05	NONE	< 0.050	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 _{EH,CU,1D,AR}	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 _{EH,CU,1D,AR}	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 _{EH,CU,1D,AR}	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 _{EH,CU,1D,AR}	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) _{EH,CU+HS,1D,AR}	mg/kg	10	NONE	< 10	-	-	-	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924189	2924190	2924191	2924192	2924193
Sample Reference				TP62	TP71	TP72	TP73	TP75
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50-0.60	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				16/12/2023	16/12/2023	15/12/2023	15/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	20	13	16	15	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	N/A	MLO	MLO	MLO	IZJ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6	8.1	8.4	8.4	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0133	0.0292	0.0248	0.0319	0.0324
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	13.3	29.2	24.8	31.9	32.4
Organic Matter (automated)	%	0.1	MCERTS	0.4	2.9	3.7	3.9	4.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.13	< 0.05	0.09	0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.08	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.09	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.08	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.08	0.12	1	0.16
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.22	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.11	0.41	2	0.32
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.11	0.35	1.6	0.26
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.08	0.22	0.94	0.17
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.07	0.28	0.94	0.18
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.33	1.1	0.2
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.14	0.54	0.09
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.27	0.93	0.14
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.17	0.52	0.09
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.13	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.2	0.61	0.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	2.49	10.9	1.76
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	2.1	15	12	11	11
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.7	0.5	0.6	2.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	< 0.2	< 0.2	< 0.2	0.5
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	2	18	17	16	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	4.7	34	30	26	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.6	80	100	54	55
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.3	0.5	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	2.9	18	15	14	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	11	62	66	63	67

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924189	2924190	2924191	2924192	2924193
Sample Reference				TP62	TP71	TP72	TP73	TP75
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50-0.60	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				16/12/2023	16/12/2023	15/12/2023	15/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	< 5.0	< 5.0	-
Toluene	µg/kg	5	MCERTS	-	-	< 5.0	< 5.0	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	< 5.0	< 5.0	-
p & m-xylene	µg/kg	5	MCERTS	-	-	< 5.0	< 5.0	-
o-xylene	µg/kg	5	MCERTS	-	-	< 5.0	< 5.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	< 5.0	< 5.0	-

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	18	15	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	< 0.020	< 0.020	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	< 0.020	< 0.020	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	< 0.050	< 0.050	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	12	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	12	< 10	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	< 0.010	< 0.010	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	< 0.010	< 0.010	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	< 0.050	< 0.050	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	< 10	< 10	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924194	2924195	2924196	2924197	2924198
Sample Reference				TP76	TP78	TP79	TP80	TP85
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	1.00-1.10
Date Sampled				15/12/2023	11/12/2023	11/12/2023	11/12/2023	15/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	14	18	18	15
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	IZJ	IZJ	IZJ	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	8.1	8	8.1	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.016	0.0072	0.0106	0.0085	0.0104
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	16	7.2	10.6	8.5	10.4
Organic Matter (automated)	%	0.1	MCERTS	4.6	3	3.3	2.6	0.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.29	0.23	0.09	0.06	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.77	0.52	0.12	0.12	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.69	0.44	0.13	0.13	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.42	0.2	0.08	0.07	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.43	0.28	0.1	0.1	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.61	0.33	0.12	0.11	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.17	0.09	0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.46	0.24	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.29	0.12	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.32	0.15	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	4.45	2.6	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.6	9.6	7.5	5.3	2
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	0.4	0.8	0.4	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	< 0.2	0.3	0.3	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	14	10	6.7	3.4
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25	17	18	13	4.3
Lead (aqua regia extractable)	mg/kg	1	MCERTS	43	37	34	22	4.4
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.5	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	11	9.2	7.5	4.8
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	67	46	45	32	9.5

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Lab Sample Number				2924194	2924195	2924196	2924197	2924198
Sample Reference				TP76	TP78	TP79	TP80	TP85
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	1.00-1.10
Date Sampled				15/12/2023	11/12/2023	11/12/2023	11/12/2023	15/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
Toluene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
p & m-xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
o-xylene	µg/kg	5	MCERTS	< 5.0	-	< 5.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	-	< 5.0	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	17	< 10	26	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	-	< 0.020	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	< 0.020	-	< 0.020	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	< 0.050	-	< 0.050	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	< 8.0	-	8.3	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	< 10	-	11	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	-	< 0.010	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	< 0.010	-	< 0.010	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	< 0.050	-	< 0.050	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	< 10	-	12	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	< 10	-	12	-	-

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

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Project / Site name: Baldock
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Lab Sample Number				2924199	2924200	2924201	2924202	2924203
Sample Reference				TP86	TP89	TP106	TP110	TP112
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.60-0.70	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				15/12/2023	19/12/2023	13/12/2023	15/12/2023	15/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	17	27	18	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	N/A	IZJ	IZJ	IZJ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.6	8	8	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0333	0.0077	0.009	0.0184	0.0161
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	33.3	7.7	9	18.4	16.1
Organic Matter (automated)	%	0.1	MCERTS	2.6	0.9	4.2	4.4	4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.06
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.12	< 0.05	0.08	0.12	0.18
Pyrene	mg/kg	0.05	MCERTS	0.11	< 0.05	0.07	0.11	0.16
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.08	0.09
Chrysene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.05	0.09	0.12
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	0.1	0.1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	0.08
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.09
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	< 0.80	0.88
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.6	2.4	10	6.4	7.7
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.6	0.4	0.8	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	0.3	0.3	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	13	3.4	18	10	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	5.4	21	21	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	37	8.1	44	47	32
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	11	3.8	14	7.8	9.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	16	65	50	52

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Lab Sample Number				2924199	2924200	2924201	2924202	2924203
Sample Reference				TP86	TP89	TP106	TP110	TP112
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.60-0.70	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				15/12/2023	19/12/2023	13/12/2023	15/12/2023	15/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924204	2924205	2924206	2924207	2924208
Sample Reference				TP122	TP133	WS01	WS02	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80-0.90	0.10-0.15	0.10	0.10	0.10-0.15
Date Sampled				11/12/2023	15/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	17	18	15	22
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	-	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	N/A	IZJ	KSZ	KSZ	KSZ

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.9	7.9	7.8	7.9	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0084	0.0081	0.016	0.0115	0.0123
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	8.4	8.1	16	11.5	12.3
Organic Matter (automated)	%	0.1	MCERTS	0.2	5.3	4.3	4	4.4

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.06	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.14	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.08	0.07	0.63	0.29
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.11	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	< 0.05	0.16	0.12	2.3	0.81
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.16	0.12	2.1	0.76
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.1	0.06	1.2	0.38
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.12	0.1	1.5	0.56
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.11	< 0.05	1.8	0.71
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.06	< 0.05	0.76	0.35
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.08	< 0.05	1.5	0.51
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.05	< 0.05	0.83	0.37
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.15	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	0.96	0.47

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	0.99	< 0.80	13.9	5.21
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.7	12	11	11	12
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	1.8	0.8	1.2	2.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.5	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	7.4	21	18	25	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	3.2	28	24	28	26
Lead (aqua regia extractable)	mg/kg	1	MCERTS	3.8	49	51	69	70
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	7.6	16	16	20	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	19	75	75	92	76

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Lab Sample Number				2924204	2924205	2924206	2924207	2924208
Sample Reference				TP122	TP133	WS01	WS02	WS03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.80-0.90	0.10-0.15	0.10	0.10	0.10-0.15
Date Sampled				11/12/2023	15/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924209	2924210	2924211	2924212	2924213
Sample Reference				WS04	WS05	WS06	WS07	WS09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.10	0.15	0.10-0.15	0.15
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	17	19	16	25	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KSZ	KSZ	JBH	JBH	JBH

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	7.9	8.2	8.2	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0092	0.0165	0.0069	0.0111	0.0189
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	9.2	16.5	6.9	11.1	18.9
Organic Matter (automated)	%	0.1	MCERTS	3.3	3.9	3.5	4.1	3.8

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.06	0.26	0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.09	0.06	0.12	0.58	0.1
Pyrene	mg/kg	0.05	MCERTS	0.08	0.06	0.13	0.51	0.08
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	0.07	0.29	0.05
Chrysene	mg/kg	0.05	MCERTS	0.06	< 0.05	0.13	0.42	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.09	< 0.05	0.06	0.38	0.09
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	0.08	0.19	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.09	0.32	0.06
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.17	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.21	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	3.33	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.7	10	8.4	11	8.3
Boron (water soluble)	mg/kg	0.2	MCERTS	2.3	2.4	2.4	0.7	2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.5	0.4	0.5	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	19	14	18	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	22	22	23	23
Lead (aqua regia extractable)	mg/kg	1	MCERTS	32	35	54	58	31
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	15	13	15	10
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	60	63	59	72	52

Analytical Report Number: 24-77433
Project / Site name: Baldock
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Lab Sample Number				2924209	2924210	2924211	2924212	2924213
Sample Reference				WS04	WS05	WS06	WS07	WS09
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.10	0.15	0.10-0.15	0.15
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
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Lab Sample Number				2924214	2924215	2924216	2924217	2924218
Sample Reference				WS10	WS11	WS12	WS16	WS17
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.05	0.10-0.15	0.50-0.60	0.20	0.10-0.15
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	25	19	15	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	JBH	JBH	N/A	EWS	EWS

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	7.6	8.9	7.9	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0135	0.0166	0.0126	0.0629	0.0166
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	13.5	16.6	12.6	62.9	16.6
Organic Matter (automated)	%	0.1	MCERTS	3.3	5.5	< 0.1	4	3.9

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.08	0.13	< 0.05	0.09	0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.34	0.36	< 0.05	0.13	0.09
Pyrene	mg/kg	0.05	MCERTS	0.36	0.36	< 0.05	0.11	0.1
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.2	0.23	< 0.05	0.07	0.05
Chrysene	mg/kg	0.05	MCERTS	0.27	0.33	< 0.05	0.11	0.06
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.39	0.45	< 0.05	0.11	0.09
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.1	0.19	< 0.05	< 0.05	0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.28	0.34	< 0.05	0.06	0.06
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.18	0.22	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.21	0.3	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.46	2.91	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.8	9.1	1.1	11	11
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	2.6	< 0.2	2.4	2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	18	< 1.0	19	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	22	4.2	26	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	280	56	2.1	52	40
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	13	2	15	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	63	66	9.3	69	65

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Project / Site name: Baldock
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Lab Sample Number				2924214	2924215	2924216	2924217	2924218
Sample Reference				WS10	WS11	WS12	WS16	WS17
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.05	0.10-0.15	0.50-0.60	0.20	0.10-0.15
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Toluene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
p & m-xylene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
o-xylene	µg/kg	5	MCERTS	-	< 5.0	-	< 5.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	< 5.0	-	< 5.0	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	11	< 10	12	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	< 0.020	-	< 0.020	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	< 0.020	-	< 0.020	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	< 0.050	-	< 0.050	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	11	-	10	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	11	-	12	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	< 0.010	-	< 0.010	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	< 0.010	-	< 0.010	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	< 0.050	-	< 0.050	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	< 10	-	< 10	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
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Lab Sample Number				2924219	2924220	2924221	2924222	2924223
Sample Reference				WS18	WS21	WS22	WS25	WS40
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10-0.15	0.15	0.90-1.00	0.20
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	19	14	19	17
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS	EWS	DBU	N/A	DBU

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.1	8.2	8.5	8
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0155	0.009	0.0376	0.0181	0.0143
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	15.5	9	37.6	18.1	14.3
Organic Matter (automated)	%	0.1	MCERTS	3.2	4.5	3.2	0.2	4.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.11	0.05	0.1	< 0.05	0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.24	0.1	0.29	0.06	0.14
Pyrene	mg/kg	0.05	MCERTS	0.21	0.1	0.26	0.07	0.13
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.12	0.06	0.15	< 0.05	0.08
Chrysene	mg/kg	0.05	MCERTS	0.17	0.1	0.2	< 0.05	0.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.16	0.13	0.28	< 0.05	0.13
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	< 0.05	0.09	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.14	0.08	0.21	< 0.05	0.09
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.11	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.16	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.39	< 0.80	1.85	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	7.8	12	1	8.9
Boron (water soluble)	mg/kg	0.2	MCERTS	1	2.1	1.6	< 0.2	2.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	< 0.2	< 0.2	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	14	17	4	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25	24	28	4.3	38
Lead (aqua regia extractable)	mg/kg	1	MCERTS	47	38	54	3.2	55
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	11	14	4	10
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	65	57	74	12	62

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Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924219	2924220	2924221	2924222	2924223
Sample Reference				WS18	WS21	WS22	WS25	WS40
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10-0.15	0.15	0.90-1.00	0.20
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Monoaromatics & Oxygenates								
Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-
Petroleum Hydrocarbons								
TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924224	2924225	2924226	2924227
Sample Reference				WS41	WS46	WS47	WS49
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.10-0.20	0.10-0.20	0.10
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	21	20	15
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DBU	DBU	DBU	DBU

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	8	7.9	7.6
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0115	0.0094	0.0171	0.0264
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	11.5	9.4	17.1	26.4
Organic Matter (automated)	%	0.1	MCERTS	4.3	4.6	4	3.8

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.11
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	0.07	0.17	0.29
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.1	0.15	0.46	0.33
Pyrene	mg/kg	0.05	MCERTS	0.09	0.13	0.42	0.26
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.05	0.25	0.14
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.09	0.41	0.17
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.09	0.41	0.14
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.05	0.21	0.08
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.07	0.35	0.11
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.2	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.27	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	3.15	1.63
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	6.7	7.9	13
Boron (water soluble)	mg/kg	0.2	MCERTS	1	2.8	0.7	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	0.5	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	8.9	10	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	20	27	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	48	43	58	48
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	8.4	9.6	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	69	60	75	57

Analytical Report Number: 24-77433
Project / Site name: Baldock
Your Order No: 2813

Lab Sample Number				2924224	2924225	2924226	2924227
Sample Reference				WS41	WS46	WS47	WS49
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.15	0.10-0.20	0.10-0.20	0.10
Date Sampled				14/12/2023	14/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Monoaromatics & Oxygenates							
Benzene	µg/kg	5	MCERTS	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-
TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-

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

Analytical Report Number : 24-77433
Project / Site name: Baldock

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2924154	TP01	None Supplied	0.40-0.50	Light brown sand with gravel and chalk.
2924155	TP02	None Supplied	0.10-0.15	Brown clay.
2924156	TP03	None Supplied	0.10-0.15	Brown loam and sand with vegetation.
2924157	TP04	None Supplied	0.10-0.15	Brown loam and sand with vegetation.
2924158	TP05	None Supplied	0.50-0.60	Light brown sand with chalk.
2924159	TP06	None Supplied	0.10-0.15	Brown loam and sand with vegetation.
2924160	TP07	None Supplied	0.10-0.15	Brown loam and sand with vegetation.
2924161	TP09	None Supplied	0.10-0.15	Brown clay and loam with gravel and vegetation.
2924162	TP10	None Supplied	0.50-0.60	Brown clay and sand with gravel and chalk.
2924163	TP12	None Supplied	0.10-0.15	Brown clay and loam with gravel and vegetation.
2924164	TP13	None Supplied	0.10-0.15	Brown clay and loam with gravel and vegetation.
2924165	TP14	None Supplied	0.10-0.15	Brown clay and loam with gravel and vegetation.
2924166	TP16	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924167	TP18	None Supplied	0.30-0.40	Brown clay and sand with gravel and chalk.
2924168	TP20	None Supplied	0.10-0.15	Brown clay and sand with gravel and chalk.
2924169	TP22	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924170	TP22	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924171	TP25	None Supplied	0.40-0.50	Brown loam and clay with gravel and vegetation.
2924172	TP27	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924173	TP28	None Supplied	0.10-0.15	Brown loam with gravel and vegetation.
2924174	TP29	None Supplied	0.10-0.15	Brown loam with gravel and vegetation.
2924175	TP30	None Supplied	0.10-0.15	Brown clay and sand with gravel.
2924176	TP32	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924177	TP33	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924178	TP36	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924179	TP40	None Supplied	0.50-0.60	Brown clay and sand with gravel and chalk.
2924180	TP41	None Supplied	0.40-0.50	Brown sand with gravel.
2924181	TP42	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924182	TP44	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924183	TP45	None Supplied	0.10-0.15	Brown clay and sand with gravel.
2924184	TP47	None Supplied	0.10-0.15	Brown clay and sand with gravel.
2924185	TP49	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924186	TP54	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924187	TP56	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924188	TP57	None Supplied	0.60-0.70	Brown sand with gravel and chalk.
2924189	TP62	None Supplied	0.50-0.60	Beige sand with gravel and chalk.
2924190	TP71	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924191	TP72	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924192	TP73	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924193	TP75	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924194	TP76	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924195	TP78	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924196	TP79	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924197	TP80	None Supplied	0.10-0.15	Brown sand with gravel and chalk.
2924198	TP85	None Supplied	1.00-1.10	Beige clay and sand with gravel and chalk.
2924199	TP86	None Supplied	0.10-0.15	Brown sand with gravel.
2924200	TP89	None Supplied	0.60-0.70	Beige sand with gravel and chalk.
2924201	TP106	None Supplied	0.10-0.15	Brown clay and sand with gravel.
2924202	TP110	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924203	TP112	None Supplied	0.10-0.15	Brown sand with gravel.
2924204	TP122	None Supplied	0.80-0.90	Beige sand with gravel and chalk.
2924205	TP133	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924206	WS01	None Supplied	0.1	Brown loam and clay with gravel and vegetation.
2924207	WS02	None Supplied	0.1	Brown loam and clay with gravel and vegetation.
2924208	WS03	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924209	WS04	None Supplied	0.15	Brown loam and sand with vegetation.
2924210	WS05	None Supplied	0.1	Brown clay and sand.
2924211	WS06	None Supplied	0.15	Brown loam and sand with vegetation.

Analytical Report Number : 24-77433
Project / Site name: Baldock

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2924212	WS07	None Supplied	0.10-0.15	Brown clay and sand with vegetation.
2924213	WS09	None Supplied	0.15	Brown loam and sand with gravel and vegetation.
2924214	WS10	None Supplied	0.05	Brown loam and sand with gravel and vegetation.
2924215	WS11	None Supplied	0.10-0.15	Brown clay and loam with gravel and vegetation.
2924216	WS12	None Supplied	0.50-0.60	Beige chalk. **
2924217	WS16	None Supplied	0.2	Brown loam and sand with vegetation.
2924218	WS17	None Supplied	0.10-0.15	Brown sand with vegetation.
2924219	WS18	None Supplied	0.1	Brown loam and sand with vegetation.
2924220	WS21	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924221	WS22	None Supplied	0.15	Brown loam and sand with gravel and vegetation.
2924222	WS25	None Supplied	0.90-1.00	Beige chalk. **
2924223	WS40	None Supplied	0.2	Brown loam and sand with vegetation.
2924224	WS41	None Supplied	0.15	Brown loam and sand with vegetation.
2924225	WS46	None Supplied	0.10-0.20	Brown loam and sand with vegetation.
2924226	WS47	None Supplied	0.10-0.20	Brown loam and sand with vegetation.
2924227	WS49	None Supplied	0.1	Brown loam and sand with vegetation.

Analytical Report Number : 24-77433

Project / Site name: Baldock

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
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

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 30oC.

Analytical Report Number : 24-77433
Project / Site name: Baldock

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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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
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 - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

**Unaccredited sample matrix

Analytical Report Number : 24-77433

Project / Site name: Baldock

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP01	None Supplied	S	2924154	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP01	None Supplied	S	2924154	c	TPH Banding in Soil by FID	L076-PL	c
TP01	None Supplied	S	2924154	c	Total cyanide in soil	L080-PL	c
TP02	None Supplied	S	2924155	c	Hexavalent chromium in soil	L080-PL	c
TP02	None Supplied	S	2924155	c	Organic matter (Automated) in soil	L009-PL	c
TP02	None Supplied	S	2924155	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP02	None Supplied	S	2924155	c	TPH Banding in Soil by FID	L076-PL	c
TP02	None Supplied	S	2924155	c	Total cyanide in soil	L080-PL	c
TP02	None Supplied	S	2924155	c	pH in soil (automated)	L099-PL	c
TP03	None Supplied	S	2924156	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP03	None Supplied	S	2924156	c	TPH Banding in Soil by FID	L076-PL	c
TP03	None Supplied	S	2924156	c	Total cyanide in soil	L080-PL	c
TP04	None Supplied	S	2924157	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP04	None Supplied	S	2924157	c	TPH Banding in Soil by FID	L076-PL	c
TP04	None Supplied	S	2924157	c	Total cyanide in soil	L080-PL	c
TP05	None Supplied	S	2924158	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP05	None Supplied	S	2924158	c	TPH Banding in Soil by FID	L076-PL	c
TP05	None Supplied	S	2924158	c	Total cyanide in soil	L080-PL	c
TP06	None Supplied	S	2924159	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP06	None Supplied	S	2924159	c	TPH Banding in Soil by FID	L076-PL	c
TP06	None Supplied	S	2924159	c	Total cyanide in soil	L080-PL	c
TP07	None Supplied	S	2924160	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP07	None Supplied	S	2924160	c	TPH Banding in Soil by FID	L076-PL	c
TP07	None Supplied	S	2924160	c	Total cyanide in soil	L080-PL	c
TP09	None Supplied	S	2924161	c	Hexavalent chromium in soil	L080-PL	c
TP09	None Supplied	S	2924161	c	Organic matter (Automated) in soil	L009-PL	c
TP09	None Supplied	S	2924161	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP09	None Supplied	S	2924161	c	TPH Banding in Soil by FID	L076-PL	c
TP09	None Supplied	S	2924161	c	Total cyanide in soil	L080-PL	c
TP09	None Supplied	S	2924161	c	pH in soil (automated)	L099-PL	c
TP10	None Supplied	S	2924162	c	Hexavalent chromium in soil	L080-PL	c
TP10	None Supplied	S	2924162	c	Organic matter (Automated) in soil	L009-PL	c
TP10	None Supplied	S	2924162	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP10	None Supplied	S	2924162	c	TPH Banding in Soil by FID	L076-PL	c
TP10	None Supplied	S	2924162	c	Total cyanide in soil	L080-PL	c
TP10	None Supplied	S	2924162	c	pH in soil (automated)	L099-PL	c
TP106	None Supplied	S	2924201	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP106	None Supplied	S	2924201	c	TPH Banding in Soil by FID	L076-PL	c
TP106	None Supplied	S	2924201	c	Total cyanide in soil	L080-PL	c
TP110	None Supplied	S	2924202	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP110	None Supplied	S	2924202	c	TPH Banding in Soil by FID	L076-PL	c
TP110	None Supplied	S	2924202	c	Total cyanide in soil	L080-PL	c
TP112	None Supplied	S	2924203	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP112	None Supplied	S	2924203	c	TPH Banding in Soil by FID	L076-PL	c
TP112	None Supplied	S	2924203	c	Total cyanide in soil	L080-PL	c
TP12	None Supplied	S	2924163	c	Hexavalent chromium in soil	L080-PL	c
TP12	None Supplied	S	2924163	c	Organic matter (Automated) in soil	L009-PL	c
TP12	None Supplied	S	2924163	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP12	None Supplied	S	2924163	c	TPH Banding in Soil by FID	L076-PL	c
TP12	None Supplied	S	2924163	c	Total cyanide in soil	L080-PL	c
TP12	None Supplied	S	2924163	c	pH in soil (automated)	L099-PL	c
TP122	None Supplied	S	2924204	c	Hexavalent chromium in soil	L080-PL	c
TP122	None Supplied	S	2924204	c	Organic matter (Automated) in soil	L009-PL	c
TP122	None Supplied	S	2924204	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP122	None Supplied	S	2924204	c	TPH Banding in Soil by FID	L076-PL	c
TP122	None Supplied	S	2924204	c	Total cyanide in soil	L080-PL	c
TP122	None Supplied	S	2924204	c	pH in soil (automated)	L099-PL	c
TP13	None Supplied	S	2924164	c	Hexavalent chromium in soil	L080-PL	c

Analytical Report Number : 24-77433

Project / Site name: Baldock

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Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP13	None Supplied	S	2924164	c	Organic matter (Automated) in soil	L009-PL	c
TP13	None Supplied	S	2924164	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP13	None Supplied	S	2924164	c	TPH Banding in Soil by FID	L076-PL	c
TP13	None Supplied	S	2924164	c	Total cyanide in soil	L080-PL	c
TP13	None Supplied	S	2924164	c	pH in soil (automated)	L099-PL	c
TP133	None Supplied	S	2924205	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP133	None Supplied	S	2924205	c	TPH Banding in Soil by FID	L076-PL	c
TP133	None Supplied	S	2924205	c	Total cyanide in soil	L080-PL	c
TP14	None Supplied	S	2924165	c	Hexavalent chromium in soil	L080-PL	c
TP14	None Supplied	S	2924165	c	Organic matter (Automated) in soil	L009-PL	c
TP14	None Supplied	S	2924165	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP14	None Supplied	S	2924165	c	TPH Banding in Soil by FID	L076-PL	c
TP14	None Supplied	S	2924165	c	Total cyanide in soil	L080-PL	c
TP14	None Supplied	S	2924165	c	pH in soil (automated)	L099-PL	c
TP16	None Supplied	S	2924166	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP16	None Supplied	S	2924166	c	TPH Banding in Soil by FID	L076-PL	c
TP16	None Supplied	S	2924166	c	Total cyanide in soil	L080-PL	c
TP18	None Supplied	S	2924167	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP18	None Supplied	S	2924167	c	TPH Banding in Soil by FID	L076-PL	c
TP18	None Supplied	S	2924167	c	Total cyanide in soil	L080-PL	c
TP20	None Supplied	S	2924168	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP20	None Supplied	S	2924168	c	TPH Banding in Soil by FID	L076-PL	c
TP20	None Supplied	S	2924168	c	Total cyanide in soil	L080-PL	c
TP22	None Supplied	S	2924169	c	Hexavalent chromium in soil	L080-PL	c
TP22	None Supplied	S	2924169	c	Organic matter (Automated) in soil	L009-PL	c
TP22	None Supplied	S	2924169	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP22	None Supplied	S	2924169	c	TPH Banding in Soil by FID	L076-PL	c
TP22	None Supplied	S	2924169	c	Total cyanide in soil	L080-PL	c
TP22	None Supplied	S	2924169	c	pH in soil (automated)	L099-PL	c
TP22	None Supplied	S	2924170	c	Hexavalent chromium in soil	L080-PL	c
TP22	None Supplied	S	2924170	c	Organic matter (Automated) in soil	L009-PL	c
TP22	None Supplied	S	2924170	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP22	None Supplied	S	2924170	c	TPH Banding in Soil by FID	L076-PL	c
TP22	None Supplied	S	2924170	c	Total cyanide in soil	L080-PL	c
TP22	None Supplied	S	2924170	c	pH in soil (automated)	L099-PL	c
TP25	None Supplied	S	2924171	c	Hexavalent chromium in soil	L080-PL	c
TP25	None Supplied	S	2924171	c	Organic matter (Automated) in soil	L009-PL	c
TP25	None Supplied	S	2924171	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP25	None Supplied	S	2924171	c	TPH Banding in Soil by FID	L076-PL	c
TP25	None Supplied	S	2924171	c	Total cyanide in soil	L080-PL	c
TP25	None Supplied	S	2924171	c	pH in soil (automated)	L099-PL	c
TP27	None Supplied	S	2924172	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP27	None Supplied	S	2924172	c	TPH Banding in Soil by FID	L076-PL	c
TP27	None Supplied	S	2924172	c	Total cyanide in soil	L080-PL	c
TP28	None Supplied	S	2924173	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP28	None Supplied	S	2924173	c	TPH Banding in Soil by FID	L076-PL	c
TP28	None Supplied	S	2924173	c	Total cyanide in soil	L080-PL	c
TP29	None Supplied	S	2924174	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP29	None Supplied	S	2924174	c	TPH Banding in Soil by FID	L076-PL	c
TP29	None Supplied	S	2924174	c	Total cyanide in soil	L080-PL	c
TP30	None Supplied	S	2924175	c	Hexavalent chromium in soil	L080-PL	c
TP30	None Supplied	S	2924175	c	Organic matter (Automated) in soil	L009-PL	c
TP30	None Supplied	S	2924175	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP30	None Supplied	S	2924175	c	TPH Banding in Soil by FID	L076-PL	c
TP30	None Supplied	S	2924175	c	Total cyanide in soil	L080-PL	c
TP30	None Supplied	S	2924175	c	pH in soil (automated)	L099-PL	c
TP32	None Supplied	S	2924176	c	Hexavalent chromium in soil	L080-PL	c
TP32	None Supplied	S	2924176	c	Organic matter (Automated) in soil	L009-PL	c

Analytical Report Number : 24-77433

Project / Site name: Baldock

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Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP32	None Supplied	S	2924176	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP32	None Supplied	S	2924176	c	TPH Banding in Soil by FID	L076-PL	c
TP32	None Supplied	S	2924176	c	Total cyanide in soil	L080-PL	c
TP32	None Supplied	S	2924176	c	pH in soil (automated)	L099-PL	c
TP33	None Supplied	S	2924177	bc	Hexavalent chromium in soil	L080-PL	c
TP33	None Supplied	S	2924177	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TP33	None Supplied	S	2924177	bc	Organic matter (Automated) in soil	L009-PL	c
TP33	None Supplied	S	2924177	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
TP33	None Supplied	S	2924177	bc	TPH Banding in Soil by FID	L076-PL	c
TP33	None Supplied	S	2924177	bc	TPHCWG (Soil)	L088/76-PL	bc
TP33	None Supplied	S	2924177	bc	Total cyanide in soil	L080-PL	c
TP33	None Supplied	S	2924177	bc	pH in soil (automated)	L099-PL	c
TP36	None Supplied	S	2924178	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP36	None Supplied	S	2924178	c	TPH Banding in Soil by FID	L076-PL	c
TP36	None Supplied	S	2924178	c	Total cyanide in soil	L080-PL	c
TP40	None Supplied	S	2924179	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP40	None Supplied	S	2924179	c	TPH Banding in Soil by FID	L076-PL	c
TP40	None Supplied	S	2924179	c	Total cyanide in soil	L080-PL	c
TP41	None Supplied	S	2924180	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP41	None Supplied	S	2924180	c	TPH Banding in Soil by FID	L076-PL	c
TP41	None Supplied	S	2924180	c	Total cyanide in soil	L080-PL	c
TP42	None Supplied	S	2924181	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP42	None Supplied	S	2924181	c	TPH Banding in Soil by FID	L076-PL	c
TP42	None Supplied	S	2924181	c	Total cyanide in soil	L080-PL	c
TP44	None Supplied	S	2924182	c	Hexavalent chromium in soil	L080-PL	c
TP44	None Supplied	S	2924182	c	Organic matter (Automated) in soil	L009-PL	c
TP44	None Supplied	S	2924182	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP44	None Supplied	S	2924182	c	TPH Banding in Soil by FID	L076-PL	c
TP44	None Supplied	S	2924182	c	Total cyanide in soil	L080-PL	c
TP44	None Supplied	S	2924182	c	pH in soil (automated)	L099-PL	c
TP45	None Supplied	S	2924183	c	Hexavalent chromium in soil	L080-PL	c
TP45	None Supplied	S	2924183	c	Organic matter (Automated) in soil	L009-PL	c
TP45	None Supplied	S	2924183	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP45	None Supplied	S	2924183	c	TPH Banding in Soil by FID	L076-PL	c
TP45	None Supplied	S	2924183	c	Total cyanide in soil	L080-PL	c
TP45	None Supplied	S	2924183	c	pH in soil (automated)	L099-PL	c
TP47	None Supplied	S	2924184	bc	Hexavalent chromium in soil	L080-PL	c
TP47	None Supplied	S	2924184	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TP47	None Supplied	S	2924184	bc	Organic matter (Automated) in soil	L009-PL	c
TP47	None Supplied	S	2924184	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
TP47	None Supplied	S	2924184	bc	TPH Banding in Soil by FID	L076-PL	c
TP47	None Supplied	S	2924184	bc	TPHCWG (Soil)	L088/76-PL	bc
TP47	None Supplied	S	2924184	bc	Total cyanide in soil	L080-PL	c
TP47	None Supplied	S	2924184	bc	pH in soil (automated)	L099-PL	c
TP49	None Supplied	S	2924185	c	Hexavalent chromium in soil	L080-PL	c
TP49	None Supplied	S	2924185	c	Organic matter (Automated) in soil	L009-PL	c
TP49	None Supplied	S	2924185	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP49	None Supplied	S	2924185	c	TPH Banding in Soil by FID	L076-PL	c
TP49	None Supplied	S	2924185	c	Total cyanide in soil	L080-PL	c
TP49	None Supplied	S	2924185	c	pH in soil (automated)	L099-PL	c
TP54	None Supplied	S	2924186	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP54	None Supplied	S	2924186	c	TPH Banding in Soil by FID	L076-PL	c
TP54	None Supplied	S	2924186	c	Total cyanide in soil	L080-PL	c
TP56	None Supplied	S	2924187	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP56	None Supplied	S	2924187	c	TPH Banding in Soil by FID	L076-PL	c
TP56	None Supplied	S	2924187	c	Total cyanide in soil	L080-PL	c
TP57	None Supplied	S	2924188	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP57	None Supplied	S	2924188	c	TPH Banding in Soil by FID	L076-PL	c

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Project / Site name: Baldock

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Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP57	None Supplied	S	2924188	c	Total cyanide in soil	L080-PL	c
TP62	None Supplied	S	2924189	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP62	None Supplied	S	2924189	c	TPH Banding in Soil by FID	L076-PL	c
TP62	None Supplied	S	2924189	c	Total cyanide in soil	L080-PL	c
TP71	None Supplied	S	2924190	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP71	None Supplied	S	2924190	c	TPH Banding in Soil by FID	L076-PL	c
TP71	None Supplied	S	2924190	c	Total cyanide in soil	L080-PL	c
TP72	None Supplied	S	2924191	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TP72	None Supplied	S	2924191	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
TP72	None Supplied	S	2924191	bc	TPH Banding in Soil by FID	L076-PL	c
TP72	None Supplied	S	2924191	bc	TPHCWG (Soil)	L088/76-PL	bc
TP72	None Supplied	S	2924191	bc	Total cyanide in soil	L080-PL	c
TP73	None Supplied	S	2924192	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TP73	None Supplied	S	2924192	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
TP73	None Supplied	S	2924192	bc	TPH Banding in Soil by FID	L076-PL	c
TP73	None Supplied	S	2924192	bc	TPHCWG (Soil)	L088/76-PL	bc
TP73	None Supplied	S	2924192	bc	Total cyanide in soil	L080-PL	c
TP75	None Supplied	S	2924193	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP75	None Supplied	S	2924193	c	TPH Banding in Soil by FID	L076-PL	c
TP75	None Supplied	S	2924193	c	Total cyanide in soil	L080-PL	c
TP76	None Supplied	S	2924194	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TP76	None Supplied	S	2924194	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
TP76	None Supplied	S	2924194	bc	TPH Banding in Soil by FID	L076-PL	c
TP76	None Supplied	S	2924194	bc	TPHCWG (Soil)	L088/76-PL	bc
TP76	None Supplied	S	2924194	bc	Total cyanide in soil	L080-PL	c
TP78	None Supplied	S	2924195	c	Hexavalent chromium in soil	L080-PL	c
TP78	None Supplied	S	2924195	c	Organic matter (Automated) in soil	L009-PL	c
TP78	None Supplied	S	2924195	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP78	None Supplied	S	2924195	c	TPH Banding in Soil by FID	L076-PL	c
TP78	None Supplied	S	2924195	c	Total cyanide in soil	L080-PL	c
TP78	None Supplied	S	2924195	c	pH in soil (automated)	L099-PL	c
TP79	None Supplied	S	2924196	bc	Hexavalent chromium in soil	L080-PL	c
TP79	None Supplied	S	2924196	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
TP79	None Supplied	S	2924196	bc	Organic matter (Automated) in soil	L009-PL	c
TP79	None Supplied	S	2924196	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
TP79	None Supplied	S	2924196	bc	TPH Banding in Soil by FID	L076-PL	c
TP79	None Supplied	S	2924196	bc	TPHCWG (Soil)	L088/76-PL	bc
TP79	None Supplied	S	2924196	bc	Total cyanide in soil	L080-PL	c
TP79	None Supplied	S	2924196	bc	pH in soil (automated)	L099-PL	c
TP80	None Supplied	S	2924197	c	Hexavalent chromium in soil	L080-PL	c
TP80	None Supplied	S	2924197	c	Organic matter (Automated) in soil	L009-PL	c
TP80	None Supplied	S	2924197	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP80	None Supplied	S	2924197	c	TPH Banding in Soil by FID	L076-PL	c
TP80	None Supplied	S	2924197	c	Total cyanide in soil	L080-PL	c
TP80	None Supplied	S	2924197	c	pH in soil (automated)	L099-PL	c
TP85	None Supplied	S	2924198	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP85	None Supplied	S	2924198	c	TPH Banding in Soil by FID	L076-PL	c
TP85	None Supplied	S	2924198	c	Total cyanide in soil	L080-PL	c
TP86	None Supplied	S	2924199	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP86	None Supplied	S	2924199	c	TPH Banding in Soil by FID	L076-PL	c
TP86	None Supplied	S	2924199	c	Total cyanide in soil	L080-PL	c
TP89	None Supplied	S	2924200	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP89	None Supplied	S	2924200	c	TPH Banding in Soil by FID	L076-PL	c
TP89	None Supplied	S	2924200	c	Total cyanide in soil	L080-PL	c
WS01	None Supplied	S	2924206	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS01	None Supplied	S	2924206	c	TPH Banding in Soil by FID	L076-PL	c
WS01	None Supplied	S	2924206	c	Total cyanide in soil	L080-PL	c
WS02	None Supplied	S	2924207	c	Speciated EPA-16 PAHs in soil	L064-PL	c

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Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS02	None Supplied	S	2924207	c	TPH Banding in Soil by FID	L076-PL	c
WS02	None Supplied	S	2924207	c	Total cyanide in soil	L080-PL	c
WS03	None Supplied	S	2924208	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS03	None Supplied	S	2924208	c	TPH Banding in Soil by FID	L076-PL	c
WS03	None Supplied	S	2924208	c	Total cyanide in soil	L080-PL	c
WS04	None Supplied	S	2924209	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS04	None Supplied	S	2924209	c	TPH Banding in Soil by FID	L076-PL	c
WS04	None Supplied	S	2924209	c	Total cyanide in soil	L080-PL	c
WS05	None Supplied	S	2924210	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS05	None Supplied	S	2924210	c	TPH Banding in Soil by FID	L076-PL	c
WS05	None Supplied	S	2924210	c	Total cyanide in soil	L080-PL	c
WS06	None Supplied	S	2924211	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS06	None Supplied	S	2924211	c	TPH Banding in Soil by FID	L076-PL	c
WS06	None Supplied	S	2924211	c	Total cyanide in soil	L080-PL	c
WS07	None Supplied	S	2924212	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS07	None Supplied	S	2924212	c	TPH Banding in Soil by FID	L076-PL	c
WS07	None Supplied	S	2924212	c	Total cyanide in soil	L080-PL	c
WS09	None Supplied	S	2924213	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS09	None Supplied	S	2924213	c	TPH Banding in Soil by FID	L076-PL	c
WS09	None Supplied	S	2924213	c	Total cyanide in soil	L080-PL	c
WS10	None Supplied	S	2924214	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS10	None Supplied	S	2924214	c	TPH Banding in Soil by FID	L076-PL	c
WS10	None Supplied	S	2924214	c	Total cyanide in soil	L080-PL	c
WS11	None Supplied	S	2924215	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
WS11	None Supplied	S	2924215	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
WS11	None Supplied	S	2924215	bc	TPH Banding in Soil by FID	L076-PL	c
WS11	None Supplied	S	2924215	bc	TPHCWG (Soil)	L088/76-PL	bc
WS11	None Supplied	S	2924215	bc	Total cyanide in soil	L080-PL	c
WS12	None Supplied	S	2924216	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS12	None Supplied	S	2924216	c	TPH Banding in Soil by FID	L076-PL	c
WS12	None Supplied	S	2924216	c	Total cyanide in soil	L080-PL	c
WS16	None Supplied	S	2924217	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
WS16	None Supplied	S	2924217	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
WS16	None Supplied	S	2924217	bc	TPH Banding in Soil by FID	L076-PL	c
WS16	None Supplied	S	2924217	bc	TPHCWG (Soil)	L088/76-PL	bc
WS16	None Supplied	S	2924217	bc	Total cyanide in soil	L080-PL	c
WS17	None Supplied	S	2924218	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS17	None Supplied	S	2924218	c	TPH Banding in Soil by FID	L076-PL	c
WS17	None Supplied	S	2924218	c	Total cyanide in soil	L080-PL	c
WS18	None Supplied	S	2924219	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS18	None Supplied	S	2924219	c	TPH Banding in Soil by FID	L076-PL	c
WS18	None Supplied	S	2924219	c	Total cyanide in soil	L080-PL	c
WS21	None Supplied	S	2924220	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS21	None Supplied	S	2924220	c	TPH Banding in Soil by FID	L076-PL	c
WS21	None Supplied	S	2924220	c	Total cyanide in soil	L080-PL	c
WS22	None Supplied	S	2924221	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS22	None Supplied	S	2924221	c	TPH Banding in Soil by FID	L076-PL	c
WS22	None Supplied	S	2924221	c	Total cyanide in soil	L080-PL	c
WS25	None Supplied	S	2924222	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS25	None Supplied	S	2924222	c	TPH Banding in Soil by FID	L076-PL	c
WS25	None Supplied	S	2924222	c	Total cyanide in soil	L080-PL	c
WS40	None Supplied	S	2924223	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS40	None Supplied	S	2924223	c	TPH Banding in Soil by FID	L076-PL	c
WS40	None Supplied	S	2924223	c	Total cyanide in soil	L080-PL	c
WS41	None Supplied	S	2924224	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS41	None Supplied	S	2924224	c	TPH Banding in Soil by FID	L076-PL	c
WS41	None Supplied	S	2924224	c	Total cyanide in soil	L080-PL	c
WS46	None Supplied	S	2924225	c	Speciated EPA-16 PAHs in soil	L064-PL	c

Analytical Report Number : 24-77433

Project / Site name: Baldock

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS46	None Supplied	S	2924225	c	TPH Banding in Soil by FID	L076-PL	c
WS46	None Supplied	S	2924225	c	Total cyanide in soil	L080-PL	c
WS47	None Supplied	S	2924226	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS47	None Supplied	S	2924226	c	TPH Banding in Soil by FID	L076-PL	c
WS47	None Supplied	S	2924226	c	Total cyanide in soil	L080-PL	c
WS49	None Supplied	S	2924227	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS49	None Supplied	S	2924227	c	TPH Banding in Soil by FID	L076-PL	c
WS49	None Supplied	S	2924227	c	Total cyanide in soil	L080-PL	c

Stephen Fisk
The Shadbolt Group
18 Bewick Road
Gateshead
NE8 4DP

e: stephenf@shadboltgroup.net

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-77465-2

Replaces Analytical Report Number: 24-77465, issue no. 1
Additional analysis undertaken.
TPH: CWG added as per customers request

Project / Site name:	Baldock (Bridges)	Samples received on:	21/12/2023
Your job number:	2899	Samples instructed on/ Analysis started on:	09/01/2024
Your order number:	2812	Analysis completed by:	06/02/2024
Report Issue Number:	2	Report issued on:	16/02/2024
Samples Analysed:	13 soil samples		

Signed:

Adam Fenwick
Technical Reviewer
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: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number	2924386	2924387	2924388	2924389	2924390
Sample Reference	TP-R1-04	TP-R1-06	TP-R3-04	TP-R4-02	TP-R5-01
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled	13/12/2023	15/12/2023	15/12/2023	14/12/2023	14/12/2023
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	23	12
Total mass of sample received	kg	0.001	NONE	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	N/A	SCA	SCA	SCA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.1	8.3	8.1	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0115	0.0143	0.011	0.0203	0.0152
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	11.5	14.3	11	20.3	15.2
Organic Matter (automated)	%	0.1	MCERTS	3.7	3.2	2.5	5.1	3.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.12	0.15	< 0.05	0.1	0.22
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.28	0.19	0.11	0.18	0.48
Pyrene	mg/kg	0.05	MCERTS	0.26	0.16	0.11	0.16	0.43
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.17	0.08	< 0.05	0.09	0.23
Chrysene	mg/kg	0.05	MCERTS	0.18	0.1	< 0.05	0.09	0.24
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.25	0.15	< 0.05	0.14	0.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.08	< 0.05	< 0.05	< 0.05	0.1
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.22	0.11	< 0.05	0.12	0.24
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	0.07	0.12
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	0.08	0.14

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.8	0.94	< 0.80	1.03	2.55
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.4	9.1	13	8.3	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1.7	1.6	2.1	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.4	< 0.2	0.4	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	15	24	13	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	24	24	20	25	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	40	39	39	37	40
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	10	10	15	8.8	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	61	53	54	68	69

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924386	2924387	2924388	2924389	2924390
Sample Reference				TP-R1-04	TP-R1-06	TP-R3-04	TP-R4-02	TP-R5-01
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15	0.10-0.15
Date Sampled				13/12/2023	15/12/2023	15/12/2023	14/12/2023	14/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_1D_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
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TPH-CWG - Aliphatic >EC5 - EC6 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_1D_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_1D_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_1D_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_1D_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_1D_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_1D_AL	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_1D_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_1D_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_1D_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_1D_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_1D_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_1D_AR	mg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924391	2924392	2924393	2924394	2924395
Sample Reference				TP-R5-06	TP-R5-07	WS-R1-02	WS-R1-04	WS-R2-03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.10-0.15	0.10-0.20	0.50-0.60
Date Sampled				14/12/2023	14/12/2023	14/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	18	22	14	13
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	SCA	N/A	SCA	SCA	N/A

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8	8.3	8.6	8.5	9.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.11	0.0349	0.0187	0.0505	0.0077
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	110	34.9	18.7	50.5	7.7
Organic Matter (automated)	%	0.1	MCERTS	4.4	1.6	3.4	2	< 0.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.2	< 0.05	< 0.05	0.09	< 0.05
Pyrene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	0.09	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.14	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.17	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.08	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.13	< 0.80	< 0.80	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	6.1	9.6	8.3	6.1
Boron (water soluble)	mg/kg	0.2	MCERTS	2	1.2	1.7	2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.5	0.8	0.5	12	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	11	12	13	5
Copper (aqua regia extractable)	mg/kg	1	MCERTS	29	21	24	60	4.3
Lead (aqua regia extractable)	mg/kg	1	MCERTS	45	19	38	86	3.7
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	8.9	11	14	5.2
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.2	1.3	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	78	55	60	150	16

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	-	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-	-	-

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924391	2924392	2924393	2924394	2924395
Sample Reference				TP-R5-06	TP-R5-07	WS-R1-02	WS-R1-04	WS-R2-03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.10-0.15	0.10-0.20	0.50-0.60
Date Sampled				14/12/2023	14/12/2023	14/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Ethylbenzene	µg/kg	5	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	5	MCERTS	-	-	-	-	-
o-xylene	µg/kg	5	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-	-	-

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_ID_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
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TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.02	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	NONE	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.01	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.05	NONE	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	NONE	-	-	-	-	-

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

Analytical Report Number: 24-77465
Project / Site name: Baldock (Bridges)
Your Order No: 2812

Lab Sample Number				2924396	2924397	2924398
Sample Reference				WS-R5-02	WS-R5-03	WS-R5-04
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.15
Date Sampled				13/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	22	18
Total mass of sample received	kg	0.001	NONE	0.3	0.3	0.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	-	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	SCA	N/A	SCA

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.3	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0575	0.143	0.0933
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	57.5	143	93.3
Organic Matter (automated)	%	0.1	MCERTS	4.1	2	3.8

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.06
Phenanthrene	mg/kg	0.05	MCERTS	0.1	0.14	0.36
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.08
Fluoranthene	mg/kg	0.05	MCERTS	0.2	0.17	0.65
Pyrene	mg/kg	0.05	MCERTS	0.17	0.17	0.62
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	0.09	0.26
Chrysene	mg/kg	0.05	MCERTS	0.09	0.09	0.32
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.13	0.09	0.36
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.05	0.05	0.16
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.11	0.1	0.35
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.05	< 0.05	0.22
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.07
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.29

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.11	0.9	3.85
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.3	8	14
Boron (water soluble)	mg/kg	0.2	MCERTS	2.5	0.9	2.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.9	0.9	2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	17	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	45	77	76
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	27	80
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	14	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.3	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	96	140	160

Monoaromatics & Oxygenates

Benzene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	-	< 5.0	< 5.0

Analytical Report Number: 24-77465
 Project / Site name: Baldock (Bridges)
 Your Order No: 2812

Lab Sample Number				2924396	2924397	2924398
Sample Reference				WS-R5-02	WS-R5-03	WS-R5-04
Sample Number				None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.50-0.60	0.15
Date Sampled				13/12/2023	13/12/2023	13/12/2023
Time Taken				None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
p & m-xylene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
o-xylene	µg/kg	5	MCERTS	-	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH C10 - C40 EH_CU_ID_TOTAL	mg/kg	10	MCERTS	< 10	11	17
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TPH-CWG - Aliphatic >EC5 - EC6 HS_ID_AL	mg/kg	0.02	NONE	-	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC6 - EC8 HS_ID_AL	mg/kg	0.02	NONE	-	< 0.020	< 0.020
TPH-CWG - Aliphatic >EC8 - EC10 HS_ID_AL	mg/kg	0.05	NONE	-	< 0.050	< 0.050
TPH-CWG - Aliphatic >EC10 - EC12 EH_CU_ID_AL	mg/kg	1	MCERTS	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 EH_CU_ID_AL	mg/kg	2	MCERTS	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 EH_CU_ID_AL	mg/kg	8	MCERTS	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 EH_CU_ID_AL	mg/kg	8	MCERTS	-	10	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) EH_CU+HS_ID_AL	mg/kg	10	NONE	-	11	< 10

TPH-CWG - Aromatic >EC5 - EC7 HS_ID_AR	mg/kg	0.01	NONE	-	< 0.010	< 0.010
TPH-CWG - Aromatic >EC7 - EC8 HS_ID_AR	mg/kg	0.01	NONE	-	< 0.010	< 0.010
TPH-CWG - Aromatic >EC8 - EC10 HS_ID_AR	mg/kg	0.05	NONE	-	< 0.050	< 0.050
TPH-CWG - Aromatic >EC10 - EC12 EH_CU_ID_AR	mg/kg	1	MCERTS	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 EH_CU_ID_AR	mg/kg	2	MCERTS	-	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 EH_CU_ID_AR	mg/kg	10	MCERTS	-	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 EH_CU_ID_AR	mg/kg	10	MCERTS	-	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) EH_CU+HS_ID_AR	mg/kg	10	NONE	-	< 10	< 10

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

Analytical Report Number : 24-77465
Project / Site name: Baldock (Bridges)

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
2924386	TP-R1-04	None Supplied	0.10-0.15	Brown clay and sand with gravel.
2924387	TP-R1-06	None Supplied	0.40-0.50	Brown clay and sand with gravel and vegetation.
2924388	TP-R3-04	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924389	TP-R4-02	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924390	TP-R5-01	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation.
2924391	TP-R5-06	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation.
2924392	TP-R5-07	None Supplied	0.50-0.60	Brown clay and sand with chalk.
2924393	WS-R1-02	None Supplied	0.10-0.15	Brown clay with gravel.
2924394	WS-R1-04	None Supplied	0.10-0.20	Brown loam and sand with gravel and chalk.
2924395	WS-R2-03	None Supplied	0.50-0.60	Beige clay and sand with chalk.
2924396	WS-R5-02	None Supplied	0.10-0.15	Brown loam and clay with chalk.
2924397	WS-R5-03	None Supplied	0.50-0.60	Brown clay and sand with gravel.
2924398	WS-R5-04	None Supplied	0.15	Brown loam and clay with gravel and vegetation.

Analytical Report Number : 24-77465
Project / Site name: Baldock (Bridges)

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
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES.	In-house method based on Second Site Properties version 3	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards. Refer to CoA for analyte specific accreditation.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260. Refer to CoA for analyte specific accreditation	L073B-PL	W	MCERTS
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID. Refer to CoA for band specific accreditation.	In-house method with silica gel split/clean up.	L088/76-PL	D	MCERTS
TPH Banding in Soil by FID	Determination of hexane extractable hydrocarbons in soil by GC-FID.	In-house method, TPH with carbon banding and silica gel split/cleanup.	L076-PL	D	MCERTS
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

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 30oC.

Analytical Report Number : 24-77465
Project / Site name: Baldock (Bridges)

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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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
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 - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Analytical Report Number : 24-77465

Project / Site name: Baldock (Bridges)

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP-R1-04	None Supplied	S	2924386	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R1-04	None Supplied	S	2924386	c	TPH Banding in Soil by FID	L076-PL	c
TP-R1-04	None Supplied	S	2924386	c	Total cyanide in soil	L080-PL	c
TP-R1-06	None Supplied	S	2924387	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R1-06	None Supplied	S	2924387	c	TPH Banding in Soil by FID	L076-PL	c
TP-R1-06	None Supplied	S	2924387	c	Total cyanide in soil	L080-PL	c
TP-R3-04	None Supplied	S	2924388	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R3-04	None Supplied	S	2924388	c	TPH Banding in Soil by FID	L076-PL	c
TP-R3-04	None Supplied	S	2924388	c	Total cyanide in soil	L080-PL	c
TP-R4-02	None Supplied	S	2924389	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R4-02	None Supplied	S	2924389	c	TPH Banding in Soil by FID	L076-PL	c
TP-R4-02	None Supplied	S	2924389	c	Total cyanide in soil	L080-PL	c
TP-R5-01	None Supplied	S	2924390	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R5-01	None Supplied	S	2924390	c	TPH Banding in Soil by FID	L076-PL	c
TP-R5-01	None Supplied	S	2924390	c	Total cyanide in soil	L080-PL	c
TP-R5-06	None Supplied	S	2924391	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R5-06	None Supplied	S	2924391	c	TPH Banding in Soil by FID	L076-PL	c
TP-R5-06	None Supplied	S	2924391	c	Total cyanide in soil	L080-PL	c
TP-R5-07	None Supplied	S	2924392	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP-R5-07	None Supplied	S	2924392	c	TPH Banding in Soil by FID	L076-PL	c
TP-R5-07	None Supplied	S	2924392	c	Total cyanide in soil	L080-PL	c
WS-R1-02	None Supplied	S	2924393	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R1-02	None Supplied	S	2924393	c	TPH Banding in Soil by FID	L076-PL	c
WS-R1-02	None Supplied	S	2924393	c	Total cyanide in soil	L080-PL	c
WS-R1-04	None Supplied	S	2924394	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R1-04	None Supplied	S	2924394	c	TPH Banding in Soil by FID	L076-PL	c
WS-R1-04	None Supplied	S	2924394	c	Total cyanide in soil	L080-PL	c
WS-R2-03	None Supplied	S	2924395	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R2-03	None Supplied	S	2924395	c	TPH Banding in Soil by FID	L076-PL	c
WS-R2-03	None Supplied	S	2924395	c	Total cyanide in soil	L080-PL	c
WS-R5-02	None Supplied	S	2924396	c	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R5-02	None Supplied	S	2924396	c	TPH Banding in Soil by FID	L076-PL	c
WS-R5-02	None Supplied	S	2924396	c	Total cyanide in soil	L080-PL	c
WS-R5-03	None Supplied	S	2924397	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
WS-R5-03	None Supplied	S	2924397	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R5-03	None Supplied	S	2924397	bc	TPH Banding in Soil by FID	L076-PL	c
WS-R5-03	None Supplied	S	2924397	bc	TPHCWG (Soil)	L088/76-PL	bc
WS-R5-03	None Supplied	S	2924397	bc	Total cyanide in soil	L080-PL	c
WS-R5-04	None Supplied	S	2924398	bc	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	bc
WS-R5-04	None Supplied	S	2924398	bc	Speciated EPA-16 PAHs in soil	L064-PL	c
WS-R5-04	None Supplied	S	2924398	bc	TPH Banding in Soil by FID	L076-PL	c
WS-R5-04	None Supplied	S	2924398	bc	TPHCWG (Soil)	L088/76-PL	bc
WS-R5-04	None Supplied	S	2924398	bc	Total cyanide in soil	L080-PL	c



The Shadbolt Group
18 Bewick Road
Gateshead
NE8 4DP

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

e: stephenf@shadboltgroup.net

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-021016

Project / Site name:	Baldock (NW Area)	Samples received on:	22/05/2024
Your job number:	2899	Samples instructed on / Analysis started on:	22/05/2024
Your order number:	2958	Analysis completed by:	01/06/2024
Report Issue Number:	1	Report issued on:	03/06/2024
Samples Analysed:	19 soil samples		

Signed: _____

Joanna SzwaGrzak
Reporting Specialist
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: 24-021016
Project / Site name: Baldock (NW Area)
Your Order No: 2958

Lab Sample Number				206881	206882	206883	206884	206885
Sample Reference				TP-118	TP-118	TP-130	WS-14	WS-37
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.50-0.60	0.10-0.20	0.30-0.40	0.70-0.80
Date Sampled				14/05/2024	14/05/2024	14/05/2024	14/05/2024	14/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	14	11	13	20	16
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4	0.4	0.4

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	-	-	-
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	-	-	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.9	8.1	8.1	8.8	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	72	12	30	23	56
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	35.9	5.97	15.2	11.5	28.2
Organic Matter (automated)	%	0.1	MCERTS	4.7	1.9	2.7	0.4	0.6

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.49	< 0.05	0.25	< 0.05	< 0.05
Anthracene	mg/kg	0.05	MCERTS	0.13	< 0.05	0.07	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.8	0.11	0.62	< 0.05	< 0.05
Pyrene	mg/kg	0.05	MCERTS	1.7	0.12	0.55	< 0.05	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.1	0.06	0.35	< 0.05	< 0.05
Chrysene	mg/kg	0.05	MCERTS	1.3	0.07	0.39	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.5	0.09	0.42	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.71	< 0.05	0.18	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.4	< 0.05	0.34	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.71	< 0.05	0.19	< 0.05	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.24	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.81	< 0.05	0.24	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	12	< 0.80	3.59	< 0.80	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	12	10	4.8	4.3
Boron (water soluble)	mg/kg	0.2	MCERTS	1.2	0.4	0.7	< 0.2	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	0.3	0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	19	15	5.5	6.4
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25	15	19	6.6	5.5
Lead (aqua regia extractable)	mg/kg	1	MCERTS	50	18	30	4.2	4.3
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	15	13	6.2	7
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	58	72	21	16

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Lab Sample Number				206881	206882	206883	206884	206885
Sample Reference				TP-118	TP-118	TP-130	WS-14	WS-37
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.50-0.60	0.10-0.20	0.30-0.40	0.70-0.80
Date Sampled				14/05/2024	14/05/2024	14/05/2024	14/05/2024	14/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_10_TOTAL	mg/kg	10	MCERTS	20	< 10	< 10	< 10	< 10

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

Analytical Report Number: 24-021016
 Project / Site name: Baldock (NW Area)
 Your Order No: 2958

Lab Sample Number				206886	206887	206888	206889	206890
Sample Reference				WS-38	TP-119	WS-15	WS-29	WS-55
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.40-0.50
Date Sampled				14/05/2024	15/05/2024	15/05/2024	15/05/2024	15/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Limit of detection	Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	16	12	13	9.9
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4	0.4	0.4

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	-
Asbestos Analyst ID	N/A	N/A	N/A	SPU	SPU	SPU	SPU	-

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.1	7.9	8.3	8	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	25	36	50	14	7.8
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	12.4	18.2	24.9	6.82	3.88
Organic Matter (automated)	%	0.1	MCERTS	3.3	4.7	3.5	3.2	2.1

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.19	0.07	0.06	0.15	0.06
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.43	0.2	0.11	0.26	0.08
Pyrene	mg/kg	0.05	MCERTS	0.37	0.2	0.1	0.24	0.07
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.18	0.1	< 0.05	0.15	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.32	0.15	0.08	0.14	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.27	0.18	< 0.05	< 0.05	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.15	0.08	< 0.05	< 0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.23	0.13	< 0.05	< 0.05	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.13	0.08	< 0.05	0.09	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.17	0.09	< 0.05	0.11	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	2.44	1.28	< 0.80	1.14	< 0.80
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	11	12	12	10
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	1.2	0.9	1	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	0.4	0.4	0.3
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	19	16	16	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	28	22	24	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	43	39	49	45	30
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	15	16	14	13	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	110	110	64	65	55

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Lab Sample Number				206886	206887	206888	206889	206890
Sample Reference				WS-38	TP-119	WS-15	WS-29	WS-55
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.40-0.50
Date Sampled				14/05/2024	15/05/2024	15/05/2024	15/05/2024	15/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_10_TOTAL	mg/kg	10	MCERTS	14	< 10	< 10	< 10	< 10

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

Analytical Report Number: 24-021016
Project / Site name: Baldock (NW Area)
Your Order No: 2958

Lab Sample Number	206891	206892	206893	206894	206895
Sample Reference	TP-049	TP-066	TP-082	TP-096	TP-098
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50-0.60	0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15
Date Sampled	16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	13	19	12	13
Total mass of sample received	kg	0.1	NONE	0.4	0.4	0.4	0.4	0.4

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	-	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	-	SPU	-	IZJ	IZJ

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.4	8.3	9	8.3	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	6.5	18	9.5	20	16
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	3.27	9.06	4.73	9.98	8.06
Organic Matter (automated)	%	0.1	MCERTS	1.6	3	0.8	2.6	2.8

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.09	0.07	0.13	0.13	0.1
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	0.12	0.12	0.11	0.19	0.15
Pyrene	mg/kg	0.05	MCERTS	< 0.05	0.11	0.09	0.18	0.13
Benzo(a)anthracene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	0.11	0.06
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.07	< 0.05	0.13	0.09
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	0.08	< 0.05	0.18	0.12
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	0.05	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	< 0.05	0.08	< 0.05	0.14	0.09
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.08	0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.06	< 0.05	0.1	0.06

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	< 0.80	< 0.80	< 0.80	1.29	0.86
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.3	11	2.6	10	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	1.2	< 0.2	0.7	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	0.4	< 0.2	0.4	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	14	3.4	14	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	11	26	4.7	28	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	11	42	2.9	51	45
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	13	3.6	13	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	45	62	14	66	80

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Lab Sample Number				206891	206892	206893	206894	206895
Sample Reference				TP-049	TP-066	TP-082	TP-096	TP-098
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50-0.60	0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15
Date Sampled				16/05/2024	16/05/2024	16/05/2024	16/05/2024	16/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Petroleum Hydrocarbons								
TPH (C10 - C40) EH_CU_10_TOTAL	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	25

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

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Project / Site name: Baldock (NW Area)
Your Order No: 2958

Lab Sample Number	206896	206897	206898	206899
Sample Reference	TP-117	TP-070	TP-069	TP-083
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15
Date Sampled	16/05/2024	17/05/2024	17/05/2024	17/05/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	11	11	12	12
Total mass of sample received	kg	0.1	NONE	0.4	0.3	0.4	0.3

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	-	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	IZJ	-	IZJ	IZJ

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.3	8.2	8.3	8.3
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	6.9	13	14	25
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	3.44	6.6	6.81	12.2
Organic Matter (automated)	%	0.1	MCERTS	2.4	3.1	3.1	2.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.28	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.12	< 0.05	0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.45	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	2.9	0.23	0.21	0.33
Anthracene	mg/kg	0.05	MCERTS	0.61	0.06	< 0.05	0.07
Fluoranthene	mg/kg	0.05	MCERTS	2.9	0.27	0.18	0.29
Pyrene	mg/kg	0.05	MCERTS	2.3	0.22	0.15	0.24
Benzo(a)anthracene	mg/kg	0.05	MCERTS	1.2	0.09	0.06	0.1
Chrysene	mg/kg	0.05	MCERTS	1.3	0.12	0.08	0.13
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	1.3	0.1	0.09	0.12
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.46	0.06	< 0.05	0.06
Benzo(a)pyrene	mg/kg	0.05	MCERTS	1.1	0.1	< 0.05	0.11
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.51	< 0.05	< 0.05	0.06
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.52	0.06	< 0.05	0.08

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	16	1.31	0.82	1.61
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	11	13	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	0.9	0.3	0.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.4	0.5	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	16	17	22	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	19	23	21
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	34	47	31
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	14	15	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	88	60	66	65

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Lab Sample Number				206896	206897	206898	206899
Sample Reference				TP-117	TP-070	TP-069	TP-083
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.15	0.40-0.50	0.10-0.15	0.10-0.15
Date Sampled				16/05/2024	17/05/2024	17/05/2024	17/05/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status				
Petroleum Hydrocarbons							
TPH (C10 - C40) EH_CU_10_TOTAL	mg/kg	10	MCERTS	23	< 10	11	61

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

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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
206881	TP-118	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation
206882	TP-118	None Supplied	0.50-0.60	Brown loam and sand with gravel and vegetation
206883	TP-130	None Supplied	0.10-0.20	Brown loam and sand with gravel and vegetation
206884	WS-14	None Supplied	0.30-0.40	Beige clay and sand with chalk
206885	WS-37	None Supplied	0.70-0.80	Beige clay and sand with chalk
206886	WS-38	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation
206887	TP-119	None Supplied	0.10-0.15	Brown clay and loam with gravel and vegetation
206888	WS-15	None Supplied	0.10-0.15	Brown loam and sand with chalk and vegetation
206889	WS-29	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation
206890	WS-55	None Supplied	0.40-0.50	Brown loam and sand with gravel and vegetation
206891	TP-049	None Supplied	0.50-0.60	Brown loam and sand with gravel and vegetation
206892	TP-066	None Supplied	0.10-0.15	Brown loam and sand with gravel and vegetation
206893	TP-082	None Supplied	0.40-0.50	Beige sandy clay with chalk
206894	TP-096	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation
206895	TP-098	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation
206896	TP-117	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation
206897	TP-070	None Supplied	0.40-0.50	Brown loam and clay with gravel and vegetation
206898	TP-069	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation
206899	TP-083	None Supplied	0.10-0.15	Brown loam and clay with gravel and vegetation

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Project / Site name: Baldock (NW Area)

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
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS

Analytical Report Number : 24-021016
Project / Site name: Baldock (NW Area)

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
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

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 30oC.

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
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 - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Sample Deviation Report



Analytical Report Number : 24-021016

Project / Site name: Baldock (NW Area)

This deviation report indicates the sample and test deviations that apply to the samples submitted for analysis. Please note that the associated result(s) may be unreliable and should be interpreted with care.

Key: a - No sampling date b - Incorrect container c - Holding time d - Headspace e - Temperature

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP-118	N/A	S	206881	c	Total cyanide in soil	L080	c
TP-118	N/A	S	206882	c	Total cyanide in soil	L080	c
TP-119	N/A	S	206887	c	Total cyanide in soil	L080	c
TP-130	N/A	S	206883	c	Total cyanide in soil	L080	c
WS-14	N/A	S	206884	c	Total cyanide in soil	L080	c
WS-15	N/A	S	206888	c	Total cyanide in soil	L080	c
WS-29	N/A	S	206889	c	Total cyanide in soil	L080	c
WS-37	N/A	S	206885	c	Total cyanide in soil	L080	c
WS-38	N/A	S	206886	c	Total cyanide in soil	L080	c
WS-55	N/A	S	206890	c	Total cyanide in soil	L080	c

Test Results

Lead

Client/client ref: 2899

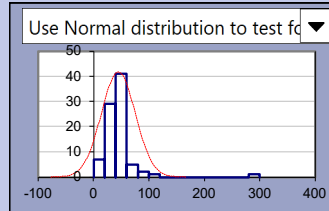
Site ref:

Date: 24-Jun-2024

Project ref: Baldock (Area BA1) Data description: Topsoil

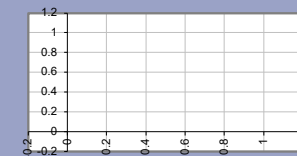
User details: SJF

Dataset:	Lead	
Sample mean	$\bar{x}$	45.024
Sample standard deviation, s		30.56
Sample size, n		86
Critical concentration, Cc		200



Outliers & non-detects

Outliers present?	Yes
Significance level	5%
Outliers excluded	0
Non-detects	0

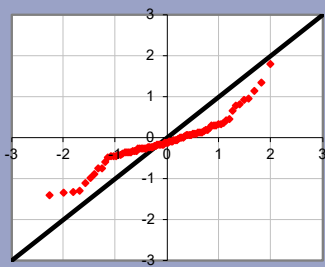


Normality test

Significance level: 5%

Non-normal distribution

Use: Auto: Chebychev



Test scenario:

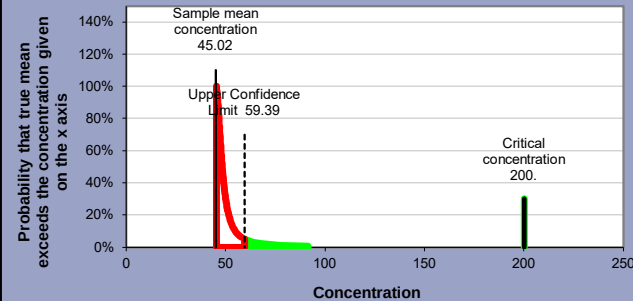
Planning: is true mean lower than critical concentration ($\mu < C_c$)?

Null hypothesis:

The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis:

The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

100%

Base decision on: evidence level

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? Yes

$\mu < C_c$ (re this dataset)

Back to data

Back to summary

Go to outlier test

Go to normality test

Test Results

Lead O/T:85/86

Client/client ref: 2899

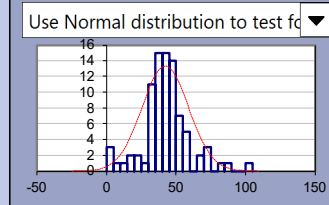
Site ref:

Date: 24-Jun-2024

Project ref: Baldock (Area BA1) Data description: Topsoil

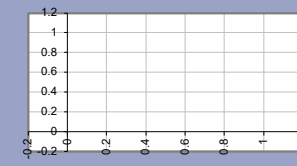
User details: SJF

Dataset:	Lead O/T:85/86	
Sample mean	$\bar{X}$	42.26
Sample standard deviation, s		16.733
Sample size, n		85
Critical concentration, Cc		200



Outliers & non-detects

Outliers present?	Yes
Significance level	5%
Outliers excluded	1
Non-detects	0

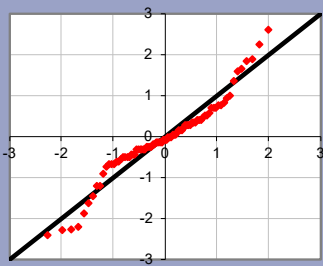


Normality test

Significance level: 5%

Non-normal distribution

Use: Auto: Chebychev



Test scenario:

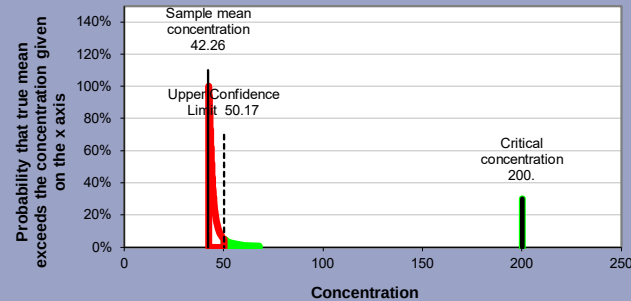
Planning: is true mean lower than critical concentration ($\mu < C_c$)?

Null hypothesis:

The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis:

The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

100%

Base decision on: evidence level

Evidence level required:

95%

Balance of probability?

N/A

Reject Null Hypothesis?

Yes

$\mu < C_c$ (re this dataset)

Back to data

Back to summary

Go to outlier test

Go to normality test

APPENDIX E

GEOTECHNICAL LABORATORY RESULTS



SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 3)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-001044-1
Date Sampled: Not Given
Date Received: 12/01/2023
Date Tested: 16/02 - 27/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
107203	RO-22	Not Given	8.65	8.80	C	White CHALK		13	2.25	2.01	12	
107204	RO-R1-01	Not Given	4.73	4.80	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.03	1.64	24	
107205	RO-R1-01	Not Given	6.20	6.38	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	19	2.11	1.79	18	
107206	RO-R1-01	Not Given	7.44	7.52	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.07	1.70	22	
107207	RO-R1-01	Not Given	9.18	9.30	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	23	2.01	1.68	20	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041
Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP
Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 3)

Client Reference: 2899
Job Number: 24-001044-1
Date Sampled: Not Given
Date Received: 12/01/2023
Date Tested: 15/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P	Equivalent diameter, De	Point Load Strength Index	
		Reference	Depth Top	Depth Base	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne	W	Dps	Dps'			Is	Is(50)
			m	m															
107204	RO-R1-01	Not Given	4.73	4.80	C	White CHALK	WC = 24.2%	1	A	U	YES	-	101.1	45.0	38.0	0.9	70.0	0.17	0.20
107206	RO-R1-01	Not Given	7.44	7.52	C	White CHALK	WC = 21.3%	1	A	U	YES	-	102.0	58.0	49.0	4.1	79.8	0.64	0.80

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed: Katarzyna Banyas
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,
cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 05/06/2024
Sampled By: Not Given

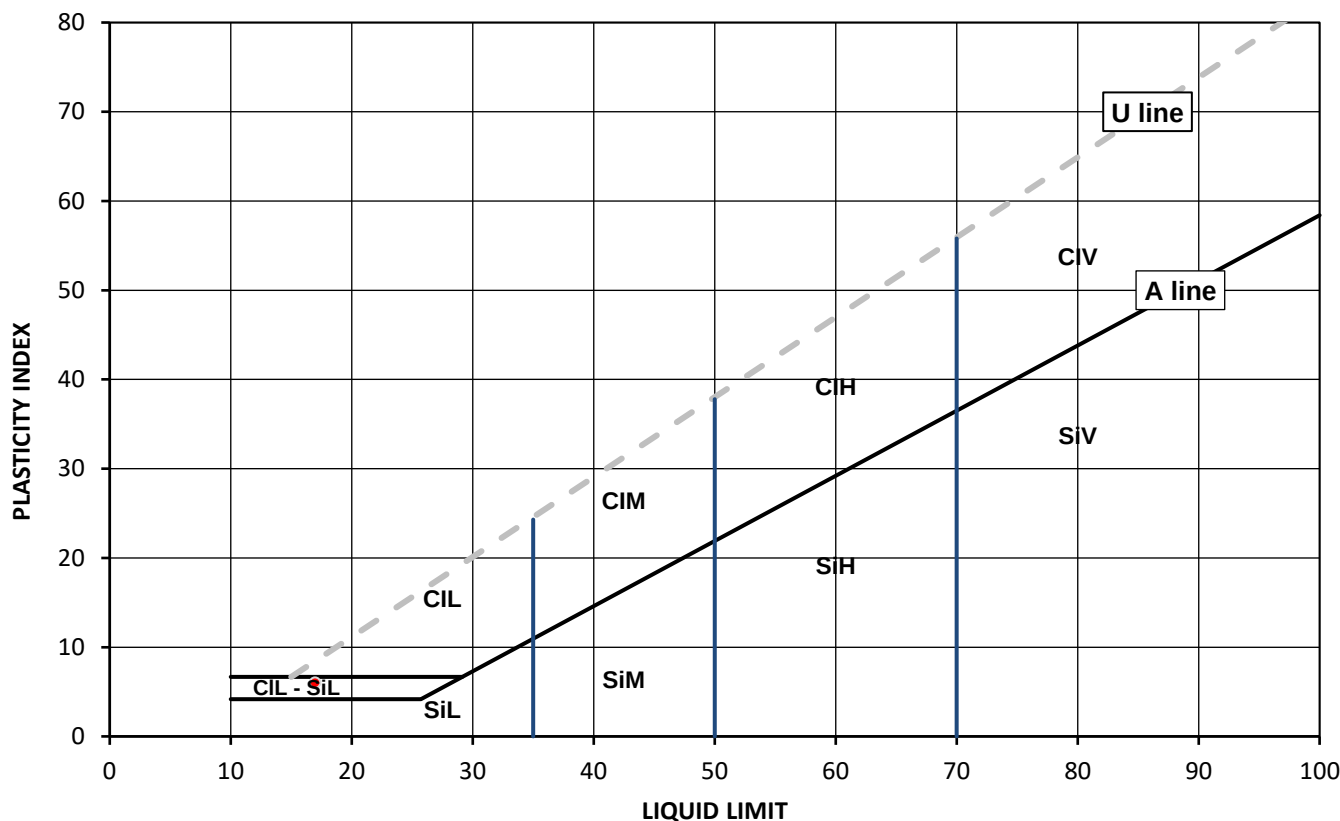
Test Results:

Laboratory Reference: 172914
Hole No.: TP-78
Sample Reference: Not Given
Sample Description: Brown gravelly very clayey SAND with fragments of chalk

Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased
Cone Type: 80g/30deg

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
12.1	17	11	6	0.17	0.83	75



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results of Atterberg 4P

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in accordance with: BS EN ISO 17892-12:2018+A2:2022,
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,
cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 05/06/2024
Sampled By: Not Given

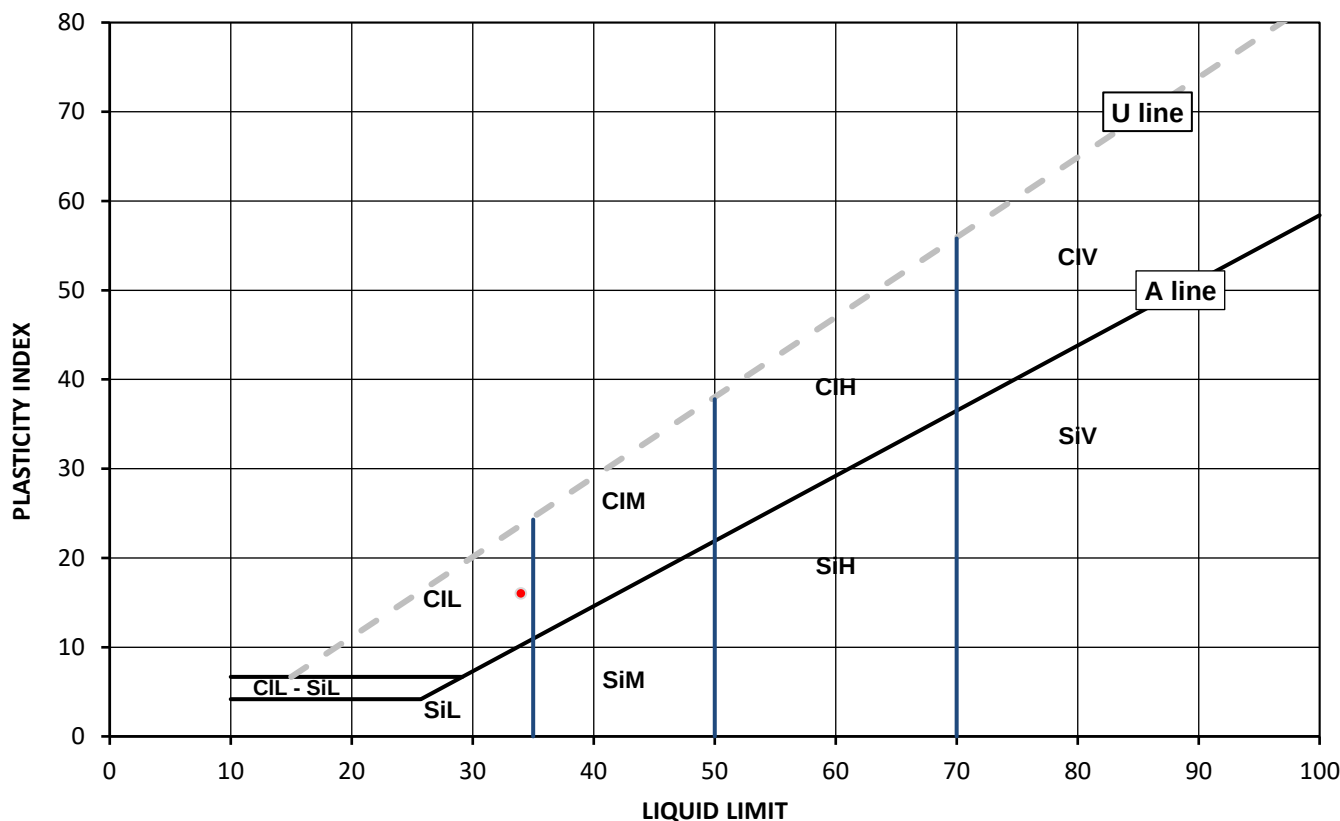
Test Results:

Laboratory Reference: 172921
Hole No.: TP-166
Sample Reference: Not Given
Sample Description: Yellowish brown gravelly very clayey SAND

Depth Top [m]: 1.90
Depth Base [m]: 2.00
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased
Cone Type: 80g/30deg

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
19.5	34	18	16	0.13	0.88	77



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results of Atterberg 4P

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,
cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 05/06/2024
Sampled By: Not Given

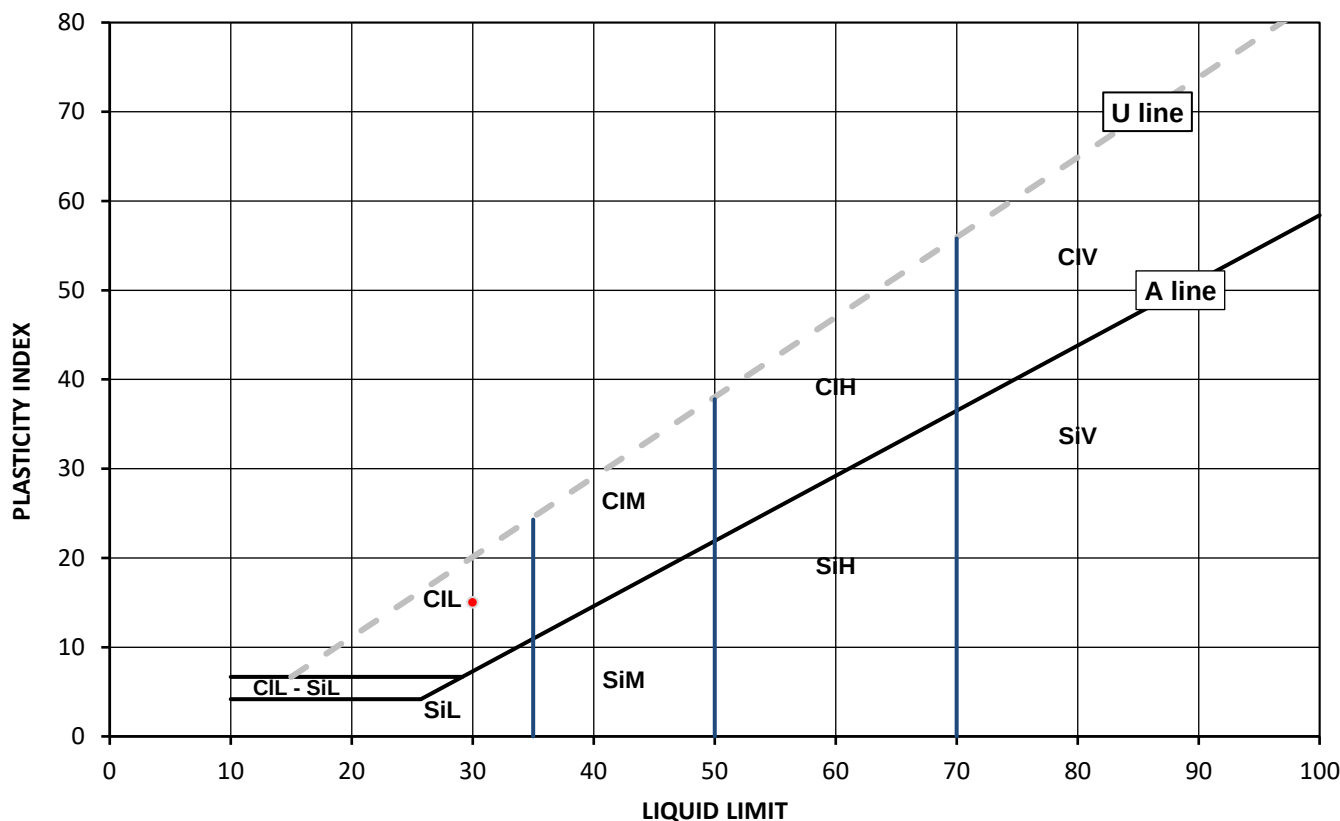
Test Results:

Laboratory Reference: 172922
Hole No.: TP-167
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased
Cone Type: 80g/30deg

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
16.6	30	15	15	0.13	0.87	75



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results of Atterberg 4P

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS EN ISO 17892-12:2018+A2:2022,
cl 5.3 and 5.5, Fall Cone Method, 4 Pt Test, BS 1377-2:2022,
cl 5.2 and 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 05/06/2024
Sampled By: Not Given

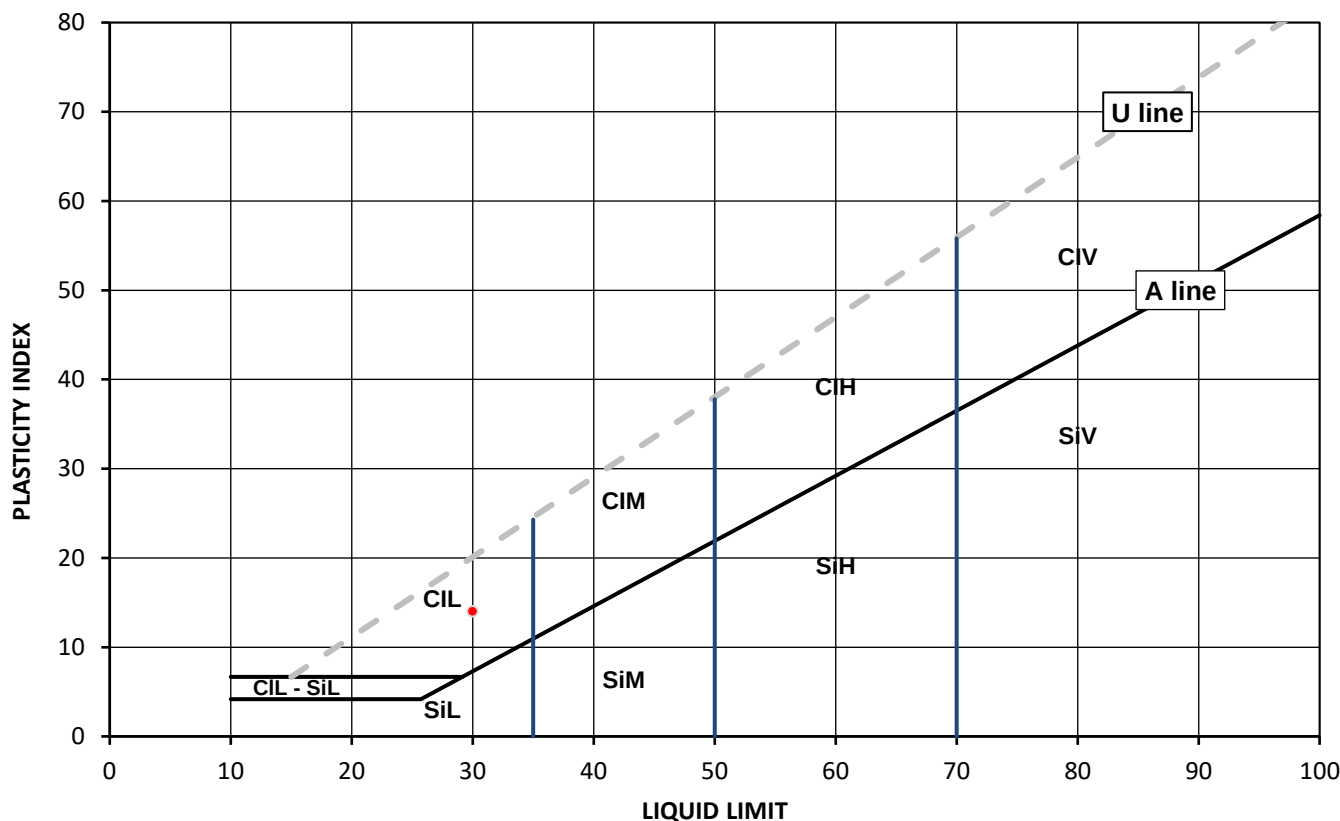
Test Results:

Laboratory Reference: 172926
Hole No.: TP-174
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Sample Preparation: Tested after washing to remove >0.425mm; The water content in the sample was increased
Cone Type: 80g/30deg

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	Liquidity Index [IL] % #	Consistency Index [IC] % #	% Passing 425µm BS Test Sieve
15.2	30	16	14	-0.07	1.07	84



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg ClHO)

Note: Water Content by BS EN 17892-1: 2014; # Non accredited

Remarks: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results of Atterberg 4P

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

BS EN ISO 17892-12:2018+A2:2022 cl 5.3 and 5.5, Fall Cone Method, 4 Pt
Test, BS 1377-2:2022, cl 5.2 and 6. W by BS EN 17892-1:2014.

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04 - 05/06/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	W	Liquid & Plastic Limit							Density		
		Reference	Depth Top	Depth Base	Type				% Passing 425um	WL*	Correlation Factor	Wp	Ip	Cone type	Sample Preparation	bulk	dry	PD
			m	m														
172914	TP-78	Not Given	1.10	1.20	B	Brown gravelly very clayey SAND with fragments of chalk	Atterberg 4 Point	12.1	75	17	-	11	6	80g/30 deg	W / I			
172915	TP-143	Not Given	1.60	1.70	B	White CHALK		27.4										
172916	TP-159	Not Given	1.70	1.80	B	White CHALK		20.3										
172917	TP-161	Not Given	1.80	1.90	B	White CHALK		26.2										
172918	TP-162	Not Given	0.90	1.00	B	Brown very clayey GRAVEL and SAND		10.5										
172919	TP-162	Not Given	1.60	1.70	B	Yellowish brown very gravelly very clayey SAND with fragments of chalk		10.0										
172920	TP-163	Not Given	2.30	2.40	B	White CHALK		26.5										
172921	TP-166	Not Given	1.90	2.00	B	Yellowish brown gravelly very clayey SAND	Atterberg 4 Point	19.5	77	34	-	18	16	80g/30 deg	W / I			
172922	TP-167	Not Given	1.10	1.20	B	Brown slightly gravelly slightly sandy CLAY	Atterberg 4 Point	16.6	75	30	-	15	15	80g/30 deg	W / I			
172923	TP-169	Not Given	1.30	1.40	B	White CHALK		23.4										

Note: # Non accredited; NP - Non plastic; N - Tested in natural condition, R - Tested after >0,425mm removed by hand, W - Tested after washing to remove >425mm; I - The water content in the sample was increased , D - The water content in the sample was decreased; * - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results for samples 172914, 172921, 172922

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

BS EN ISO 17892-12:2018+A2:2022 cl 5.3 and 5.5, Fall Cone Method, 4 Pt
Test, BS 1377-2:2022, cl 5.2 and 6. W by BS EN 17892-1:2014.

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04 - 05/06/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	W	Liquid & Plastic Limit								Density		
		Reference	Depth Top	Depth Base	Type				% Passing 425um	WL*	Correlation Factor	Wp	Ip	Cone type	Sample Preparation	bulk	dry	PD	
			m	m					%	%		%	%			deg	Mg/m3	Mg/m3	Mg/m3
172924	TP-170	Not Given	0.80	0.90	B	Brown slightly gravelly slightly sandy CLAY		21.8											
172925	TP-172	Not Given	1.20	1.30	B	White CHALK		30.9											
172926	TP-174	Not Given	1.00	1.20	B	Brown slightly gravelly slightly sandy CLAY	Atterberg 4 Point	15.2	84	30	-	16	14	80g/30 deg	W / I				
172927	TP-176	Not Given	2.90	3.00	B	White CHALK		31.6											
172928	TP-183	Not Given	2.00	2.20	B	White CHALK		28.1											
172929	TP-184	Not Given	3.00	3.10	B	White CHALK		29.3											
172930	TP-186	Not Given	2.30	2.50	B	White CHALK		30.4											
172931	TP-188	Not Given	1.20	1.30	B	Light grey CHALK		24.2											
172932	TP-188	Not Given	2.30	2.40	B	White CHALK		25.6											
172933	TP-189	Not Given	2.20	2.30	B	White CHALK		25.6											

Note: # Non accredited; NP - Non plastic; N - Tested in natural condition, R - Tested after >0,425mm removed by hand, W - Tested after washing to remove >425mm; I - The water content in the sample was increased ,
D - The water content in the sample was decreased; * - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results for sample 172926

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group

W by BS EN 17892-1:2014.

Client Reference: 2899

Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Job Number: 24-014569-2

Date Sampled: Not Given

Date Received: 26/03/2024

Contact: Stephen Fisk

Date Tested: 24/04 - 05/06/2024

Site Address: Baldock

Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	W	Liquid & Plastic Limit								Density		
		Reference	Depth Top	Depth Base	Type				% Passing 425um	WL*	Correlation Factor	Wp	Ip	Cone type	Sample Preparation	bulk	dry	PD	
			m	m					%	%		%	%			Mg/m3	Mg/m3	Mg/m3	
172934	TP-191	Not Given	1.10	1.20	B	White CHALK		29.9											
172935	TP-194	Not Given	2.00	2.20	B	White CHALK		24.0											
172936	TP-196	Not Given	2.20	2.30	B	White CHALK		30.6											
172937	TP-197	Not Given	2.10	2.20	B	White CHALK		30.2											
172938	TP-200	Not Given	1.40	1.50	B	White CHALK		29.6											
172939	TP-201	Not Given	2.00	2.10	B	White CHALK		30.3											
172940	TP-202	Not Given	2.10	2.20	B	White CHALK		29.9											
172941	TP-204	Not Given	1.40	1.50	B	White CHALK		32.7											
172942	TP-206	Not Given	3.50	3.60	B	White CHALK		33.3											

Note: # Non accredited; NP - Non plastic; N - Tested in natural condition, R - Tested after >0,425mm removed by hand, W - Tested after washing to remove >425mm; I - The water content in the sample was increased , D - The water content in the sample was decreased; * - One point liquid limit corrected as per the report Correlation Factor by Clayton C.R.I and Jukes A.W (1978)

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

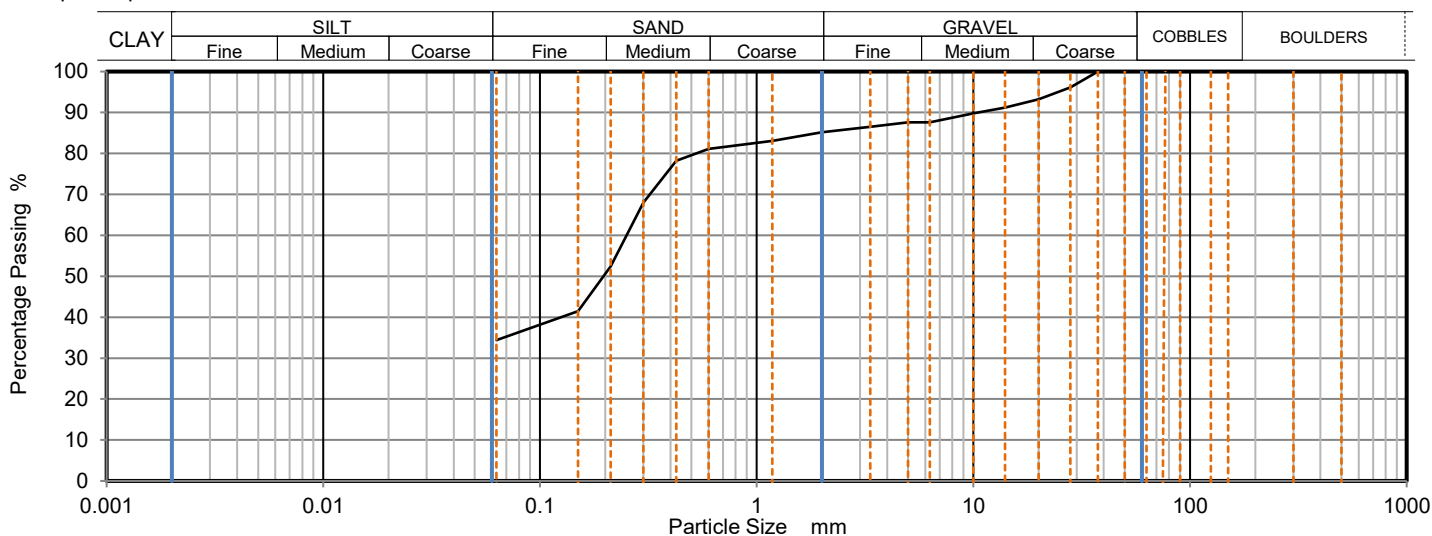
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4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172914
Hole No.: TP-78
Sample Reference: Not Given
Sample Description: Brown gravelly very clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	96		
20	93		
14	91		
10	90		
6.3	88		
5	88		
3.35	87		
2	85		
1.18	83		
0.6	81		
0.425	78		
0.3	68		
0.212	52		
0.15	42		
0.063	34		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	15.00
Sand	51.00
Fines <0.063 mm	34.00

Grading Analysis	
D100	mm 37.5
D60	mm 0.251
D30	mm
D10	mm
Uniformity Coefficient	4
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results of PSD

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

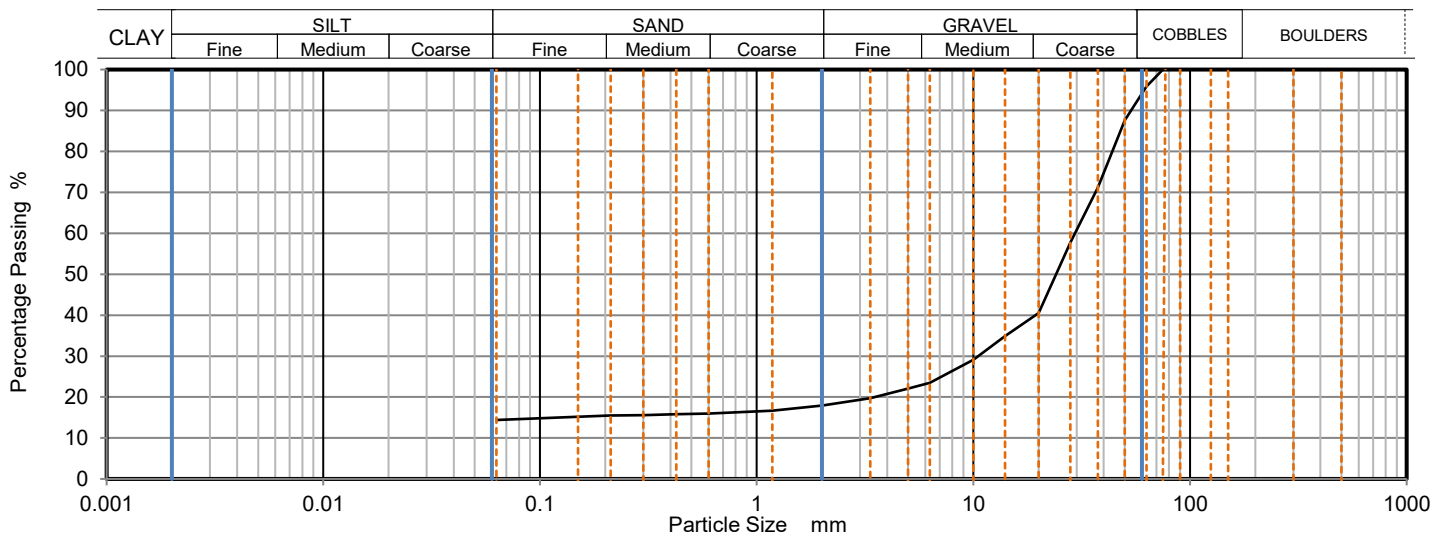
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**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172915
Hole No.: TP-143
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered, oven dried at 106.4 °C and broken down by hand.Depth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	96		
50	88		
37.5	71		
28	58		
20	41		
14	35		
10	29		
6.3	24		
5	22		
3.35	20		
2	18		
1.18	17		
0.6	16		
0.425	16		
0.3	16		
0.212	16		
0.15	15		
0.063	14		

Sample Proportions	% dry mass
Very coarse	4.00
Gravel	79.00
Sand	3.00
Fines <0.063 mm	14.00

Grading Analysis	
D100	mm 75
D60	mm 29.4
D30	mm 10.5
D10	mm
Uniformity Coefficient	470
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks: The material submitted - fails to meet the minimum mass requirements as stated in BS EN ISO 17892-4:2016 Table 1.

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

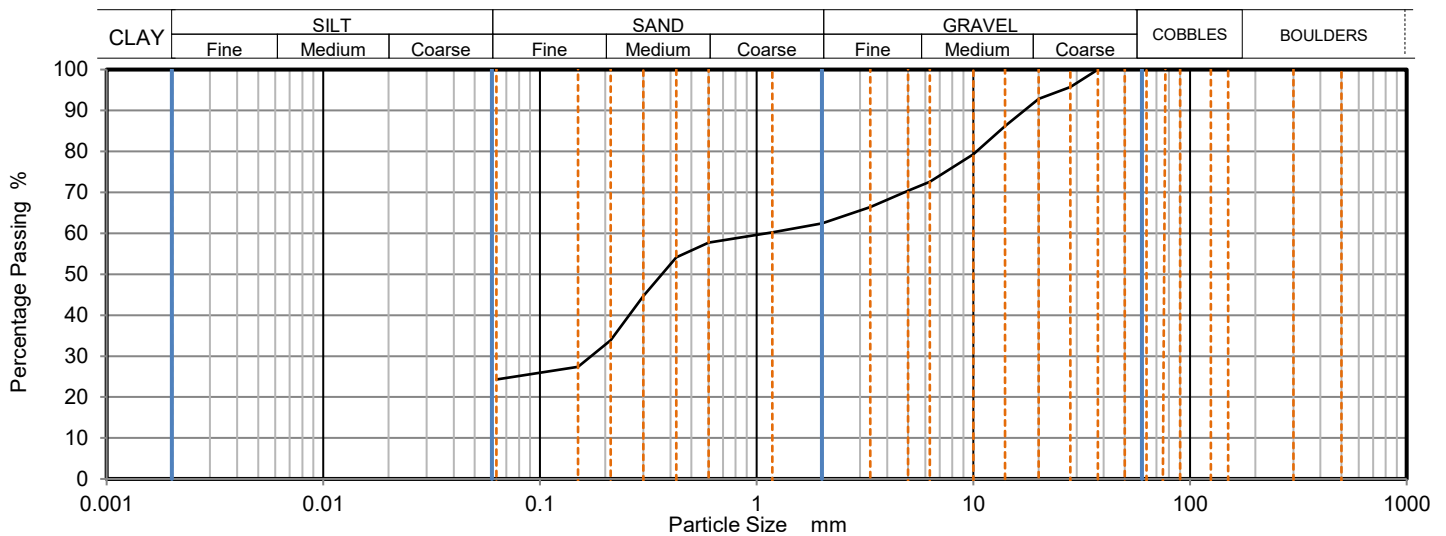
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**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172918
Hole No.: TP-162
Sample Reference: Not Given
Sample Description: Brown very clayey GRAVEL and SAND
Sample Preparation: Sample was quartered, oven dried at 106.4 °C and broken down by hand.Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	96		
20	93		
14	86		
10	79		
6.3	73		
5	70		
3.35	66		
2	62		
1.18	60		
0.6	58		
0.425	54		
0.3	45		
0.212	34		
0.15	27		
0.063	24		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	38.00
Sand	38.00
Fines <0.063 mm	24.00

Grading Analysis	
D100	mm 37.5
D60	mm 1.12
D30	mm 0.172
D10	mm
Uniformity Coefficient	18
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

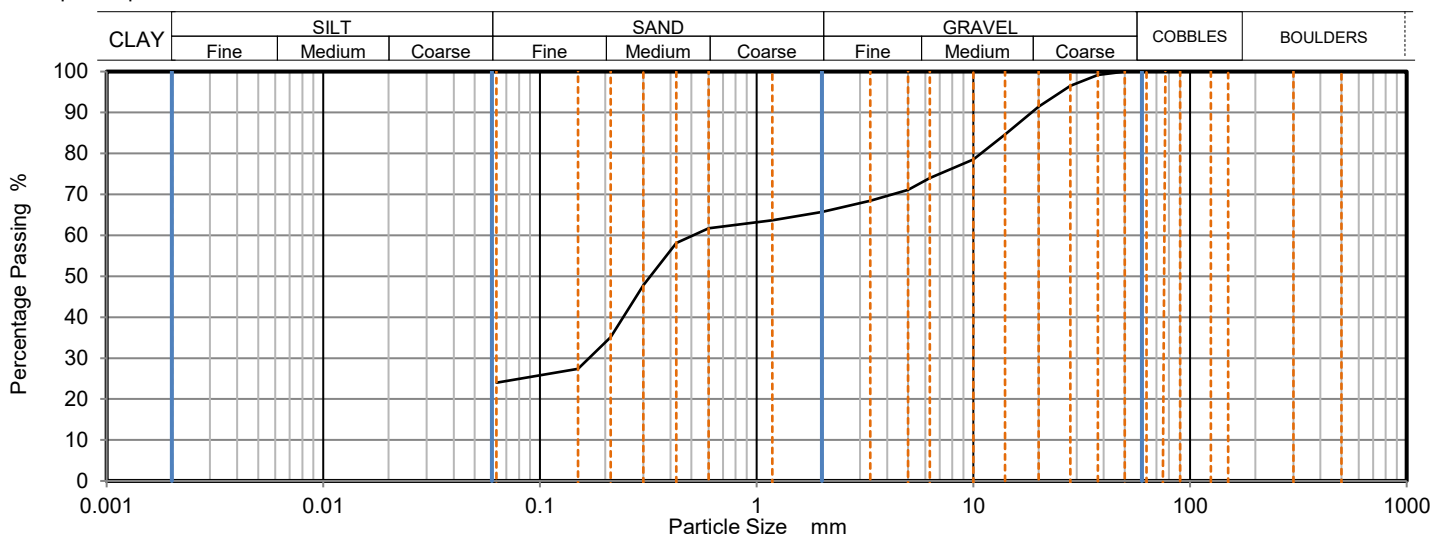
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Reporting Specialist
for and on behalf of i2 Analytical LtdOpinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This
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**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172919
Hole No.: TP-162
Sample Reference: Not Given
Sample Description: Yellowish brown very gravelly very clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 106.4 °C and broken down by hand.Depth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	99		
28	97		
20	91		
14	85		
10	79		
6.3	74		
5	71		
3.35	68		
2	66		
1.18	64		
0.6	62		
0.425	58		
0.3	48		
0.212	35		
0.15	27		
0.063	24		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	34.00
Sand	42.00
Fines <0.063 mm	24.00

Grading Analysis		
D100	mm	50
D60	mm	0.511
D30	mm	0.169
D10	mm	
Uniformity Coefficient		8.1
Curvature Coefficient		

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:**Signed:**Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

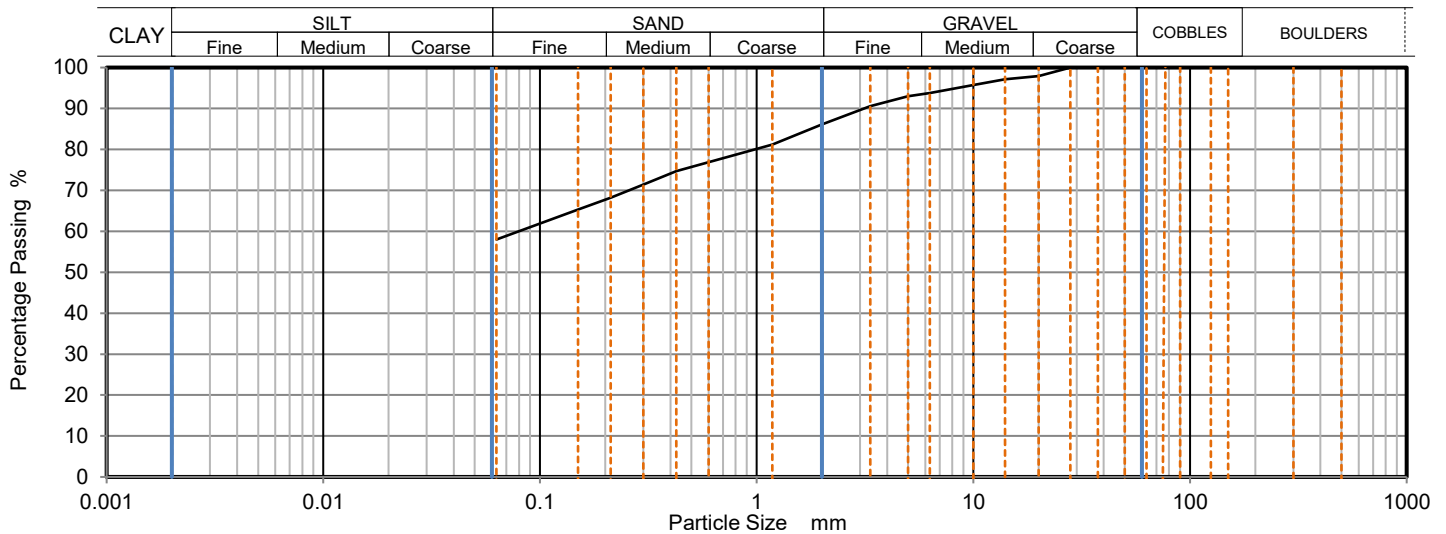
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**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 05/06/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172921
Hole No.: TP-166
Sample Reference: Not Given
Sample Description: Yellowish brown gravelly very clayey SAND
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.Depth Top [m]: 1.90
Depth Base [m]: 2.00
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	97		
10	96		
6.3	94		
5	93		
3.35	91		
2	86		
1.18	81		
0.6	77		
0.425	75		
0.3	71		
0.212	68		
0.15	65		
0.063	58		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	14.00
Sand	28.00
Fines <0.063 mm	58.00

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	1.3
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results of PSD

Signed:

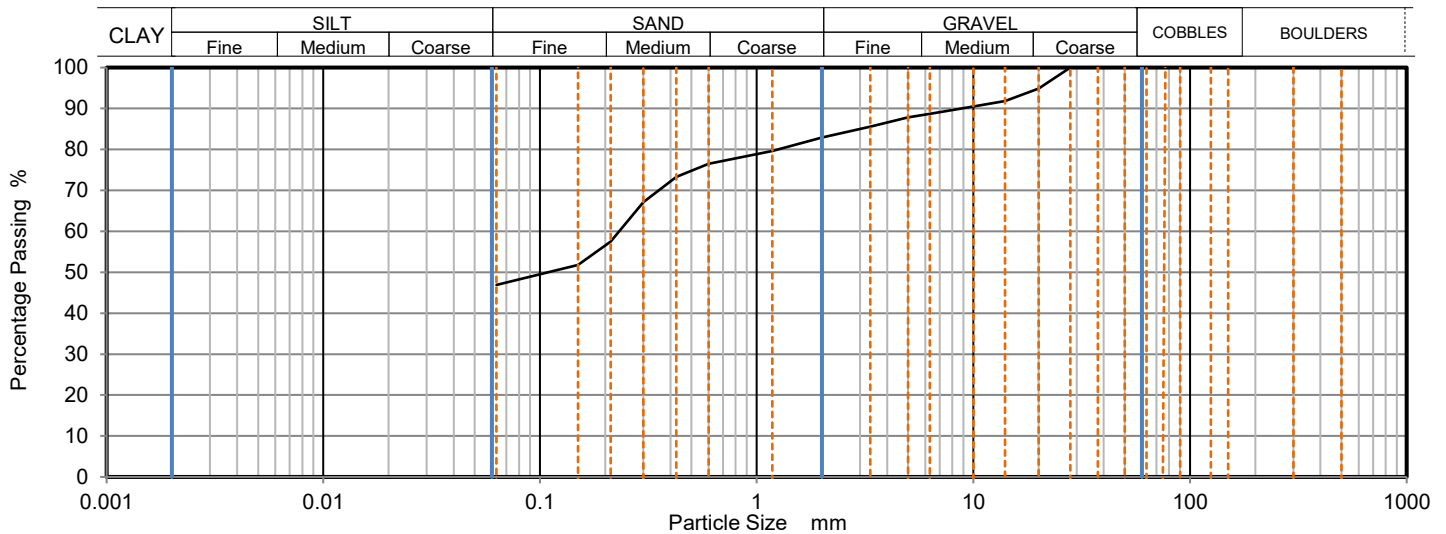
Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical LtdOpinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This
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**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 05/06/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172922
Hole No.: TP-167
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	95		
14	92		
10	91		
6.3	89		
5	88		
3.35	86		
2	83		
1.18	80		
0.6	77		
0.425	73		
0.3	67		
0.212	58		
0.15	52		
0.063	47		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	17.00
Sand	36.00
Fines <0.063 mm	47.00

Grading Analysis		
D100	mm	28
D60	mm	0.232
D30	mm	
D10	mm	
Uniformity Coefficient		3.7
Curvature Coefficient		

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks: Replaces Analytical Report Number 24-014569, issue no. 1; Additional results of PSD

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

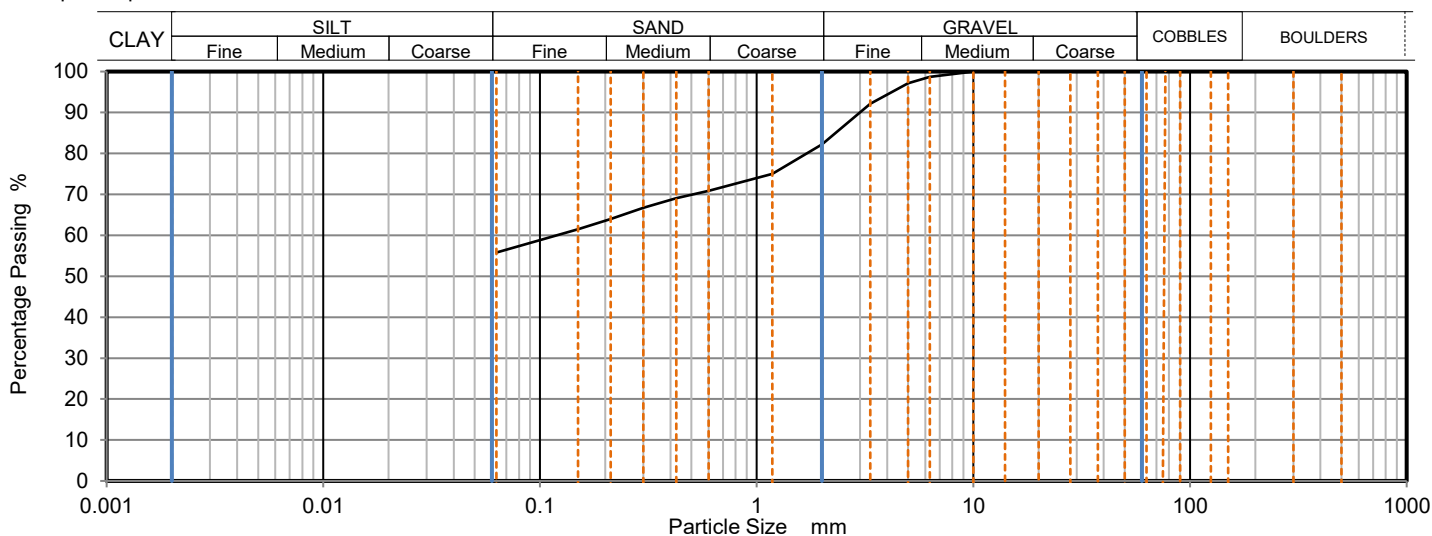
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**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172924
Hole No.: TP-170
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.Depth Top [m]: 0.80
Depth Base [m]: 0.90
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	97		
3.35	92		
2	82		
1.18	75		
0.6	71		
0.425	69		
0.3	67		
0.212	64		
0.15	62		
0.063	56		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	18.00
Sand	26.00
Fines <0.063 mm	56.00

Grading Analysis	
D100	mm 10
D60	mm 0.12
D30	mm
D10	mm
Uniformity Coefficient	1.9
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

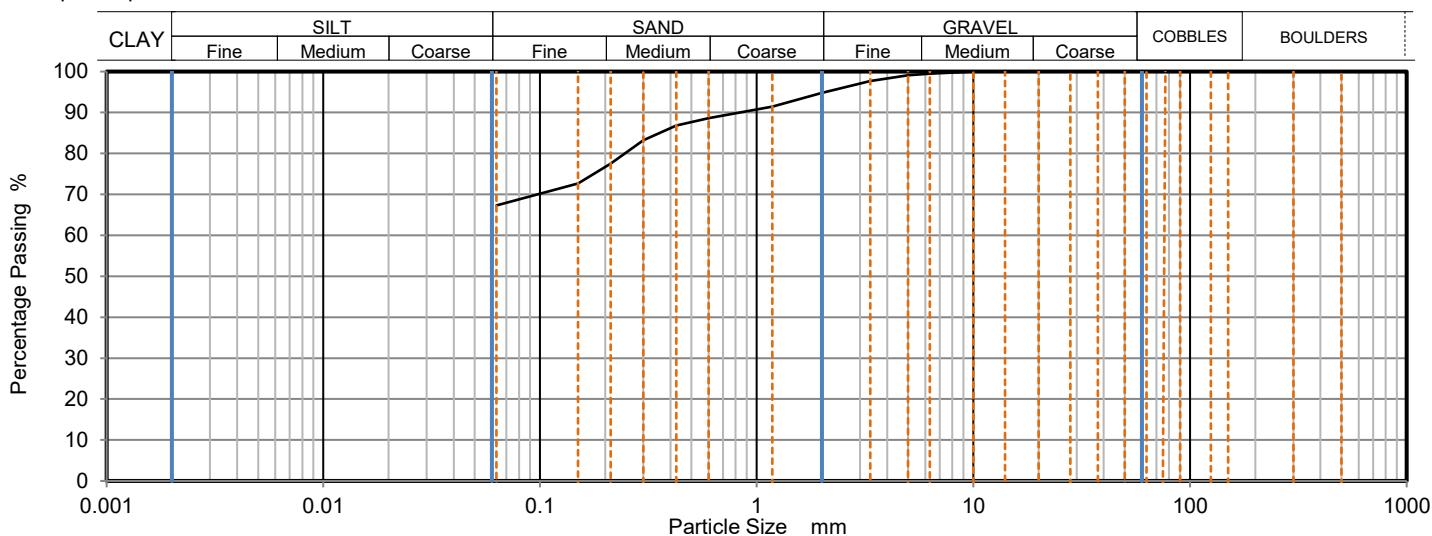
Remarks:**Signed:**Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical LtdOpinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This
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4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE
SIZE DISTRIBUTION**Tested in Accordance with: BS EN ISO 17892-4:2016,
BS 1377-2:2022 cl. 10i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172926
Hole No.: TP-174
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 106.2 °C and broken down by hand.Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	99		
3.35	98		
2	95		
1.18	91		
0.6	89		
0.425	87		
0.3	83		
0.212	78		
0.15	73		
0.063	67		

Sample Proportions	% dry mass
Very coarse	0.00
Gravel	5.00
Sand	28.00
Fines <0.063 mm	67.00

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance
with BS EN ISO 14688-2:2018

Note: Tested in Accordance with ISO 17892 -4, by sieving on as received or wet sample

Remarks:**Signed:**Monika Siewior
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SUMMARY REPORT

METHOD FOR SATURATION WATER CONTENT OF CHALK

Tested in Accordance with: BS EN ISO 17892-2:2014, clause 5.2 and BS 1377: Part 2:2022, clause 4.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04 - 31/05/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
172947	RC-35	Not Given	5.52	5.68	C	White CHALK		27.4	1.97	1.55	27.1	
172946	RC-35	Not Given	6.60	6.80	C	White CHALK		31.7	1.91	1.46	31.2	
172945	RC-35	Not Given	8.30	8.60	C	White CHALK		31.6	1.92	1.46	31.5	
172943	RC-36	Not Given	4.10	4.23	C	White CHALK		30.2	1.93	1.49	29.9	
172944	RC-36	Not Given	5.13	5.22	C	White CHALK		28.5	1.94	1.53	27.3	
172916	TP-159	Not Given	1.70	1.80	B	White CHALK		26.3	1.93	1.58	22.0	
172917	TP-161	Not Given	1.80	1.90	B	White CHALK		28.8	1.94	1.52	27.7	
172920	TP-163	Not Given	2.30	2.40	B	White CHALK		25.7	1.99	1.59	24.9	
172923	TP-169	Not Given	1.30	1.40	B	White CHALK		27.3	1.96	1.55	26.1	
172925	TP-172	Not Given	1.20	1.30	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS EN ISO 17892-2: 2014, clause 5	30.3	1.92	1.49	29.0	

Note: SWC - Saturation Water Content; WC - Water Content

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION WATER CONTENT OF CHALK

Tested in Accordance with: BS EN ISO 17892-2:2014, clause 5.2 and BS 1377: Part 2:2022, clause 4.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 25/04 - 29/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
172927	TP-176	Not Given	2.90	3.00	B	White CHALK		34.9	1.87	1.39	34.1	
172928	TP-183	Not Given	2.00	2.20	B	White CHALK		27.6	1.97	1.55	27.1	
172929	TP-184	Not Given	3.00	3.10	B	White CHALK		31.9	1.91	1.45	31.5	
172930	TP-186	Not Given	2.30	2.50	B	White CHALK		31.8	1.90	1.45	31.0	
172932	TP-188	Not Given	2.30	2.40	B	White CHALK		28.0	1.96	1.54	27.7	
172933	TP-189	Not Given	2.20	2.30	B	White CHALK		30.9	1.92	1.47	30.5	
172934	TP-191	Not Given	1.10	1.20	B	White CHALK		28.0	1.96	1.54	27.6	
172935	TP-194	Not Given	2.00	2.20	B	White CHALK		23.3	2.04	1.66	22.8	
172936	TP-196	Not Given	2.20	2.30	B	White CHALK		28.6	1.95	1.52	28.4	
172937	TP-197	Not Given	2.10	2.20	B	White CHALK		31.3	1.92	1.46	31.2	

Note: SWC - Saturation Water Content; WC - Water Content

Comments:

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Reporting Specialist
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SUMMARY REPORT

METHOD FOR SATURATION WATER CONTENT OF CHALK

Tested in Accordance with: BS EN ISO 17892-2:2014, clause 5.2 and BS 1377: Part 2:2022, clause 4.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m								
172938	TP-200	Not Given	1.40	1.50	B	White CHALK		29.1	1.94	1.51	28.6	
172939	TP-201	Not Given	2.00	2.10	B	White CHALK		30.5	1.91	1.48	28.9	
172940	TP-202	Not Given	2.10	2.20	B	White CHALK		29.5	1.94	1.50	29.3	
172941	TP-204	Not Given	1.40	1.50	B	White CHALK		32.1	1.91	1.45	31.7	
172942	TP-206	Not Given	3.50	3.60	B	White CHALK		32.9	1.89	1.43	32.5	

Note: SWC - Saturation Water Content; WC - Water Content

Comments:

Signed:

Monika Siewior
Reporting Specialist
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SUMMARY REPORT
DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-2:2022 Cl. 14

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 02/05 - 07/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Water Content %	Saturated Water Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
172916	TP-159	Not Given	1.70	1.80	B	White CHALK		18	22	26	2.7	
172917	TP-161	Not Given	1.80	1.90	B	White CHALK	Water ooze from mould after 20 blows	63	26	29	2.6	
172920	TP-163	Not Given	2.30	2.40	B	White CHALK		52	25	26	2.4	
172923	TP-169	Not Given	1.30	1.40	B	White CHALK	Water ooze from mould	7	24	27	3.0	
172925	TP-172	Not Given	1.20	1.30	B	White CHALK	Water ooze from mould after 40 blows	5	30	30	3.3	
172927	TP-176	Not Given	2.90	3.00	B	White CHALK	Water ooze from mould after 40 blows	44	30	35	3.1	
172928	TP-183	Not Given	2.00	2.20	B	White CHALK		25	28	28	3.0	
172929	TP-184	Not Given	3.00	3.10	B	White CHALK	Water ooze from mould	2	30	32	3.5	
172930	TP-186	Not Given	2.30	2.50	B	White CHALK	Water ooze from mould after 50 blows	5	29	32	3.5	
172931	TP-188	Not Given	1.20	1.30	B	Light grey CHALK		5	26	N/A	3.0	

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-2:2022 Cl. 14

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 07/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Water Content %	Saturated Water Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
172932	TP-188	Not Given	2.30	2.40	B	White CHALK		12	26	28	2.9	
172933	TP-189	Not Given	2.20	2.30	B	White CHALK	Water ooze from mould after 30 blows	73	29	31	2.6	
172934	TP-191	Not Given	1.10	1.20	B	White CHALK	Water ooze from mould after 30 blows	7	30	28	2.8	
172935	TP-194	Not Given	2.00	2.20	B	White CHALK		95	26	23	3.3	
172936	TP-196	Not Given	2.20	2.30	B	White CHALK		98	30	29	3.3	
172937	TP-197	Not Given	2.10	2.20	B	White CHALK	Water ooze from mould after 40 blows	6	29	31	3.4	
172938	TP-200	Not Given	1.40	1.50	B	White CHALK	Water ooze from mould after 10 blows	8	28	29	3.9	
172939	TP-201	Not Given	2.00	2.10	B	White CHALK	Water ooze from mould after 20 blows	22	30	31	3.1	
172940	TP-202	Not Given	2.10	2.20	B	White CHALK		31	29	29	2.6	
172941	TP-204	Not Given	1.40	1.50	B	White CHALK	Water ooze from mould after 7 blows	9	32	32	4.9	

Comments:

Signed:

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Reporting Specialist
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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-2:2022 Cl. 14

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 07/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Water Content %	Saturated Water Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
172942	TP-206	Not Given	3.50	3.60	B	White CHALK	Water ooze from mould after 40 blows	0	29	33	3.5	

Comments:

Signed:

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Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

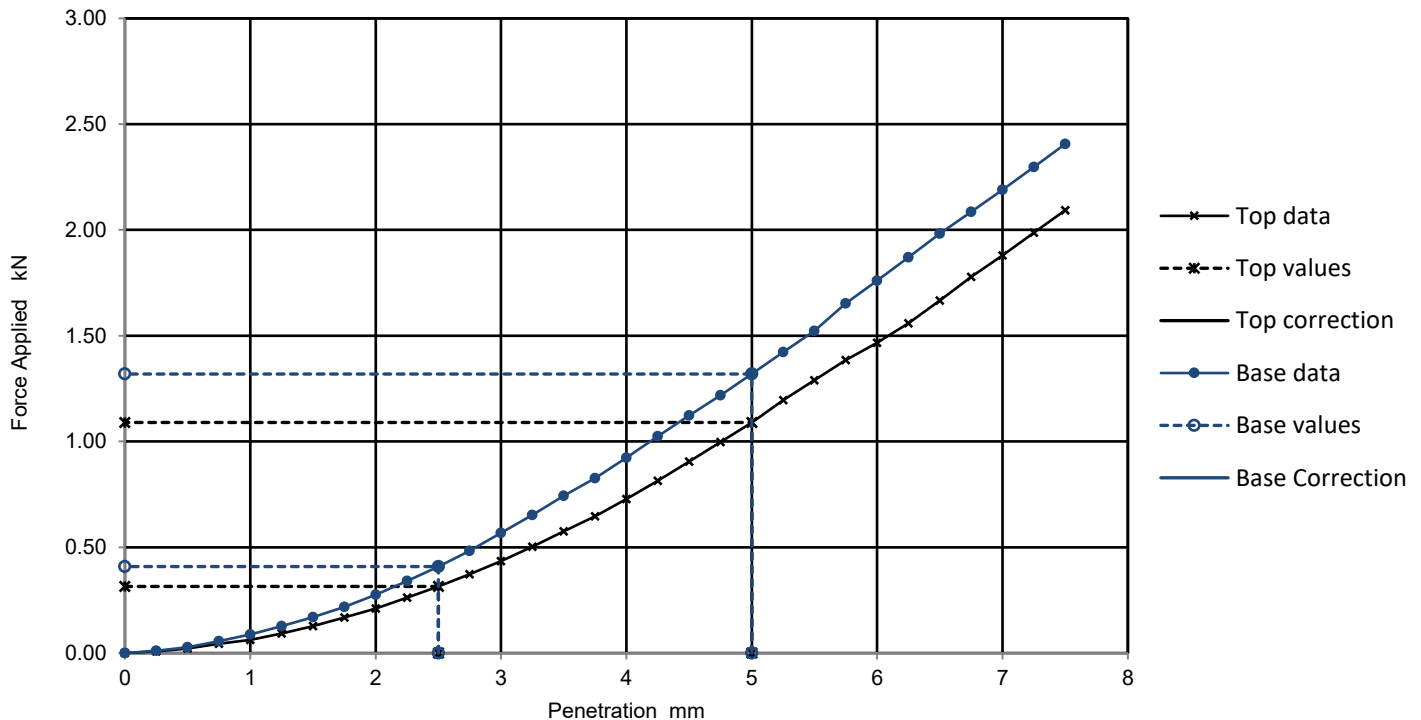
Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 07/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172918
Hole No.: TP-162
Sample Reference: Not Given
Sample Description: Brown very clayey GRAVEL and SANDDepth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B**Specimen Preparation:**Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammerSoaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 7 %

Initial Specimen details Bulk density 2.22 Mg/m3
Dry density 2.00 Mg/m3
Water content 11 %
Surcharge applied 8 kg
4.9 kPa**Force v Penetration Plots****Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	2.4	5.5	5.5	6
No	3.1	6.6	6.6	

Water Content %
11
11

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

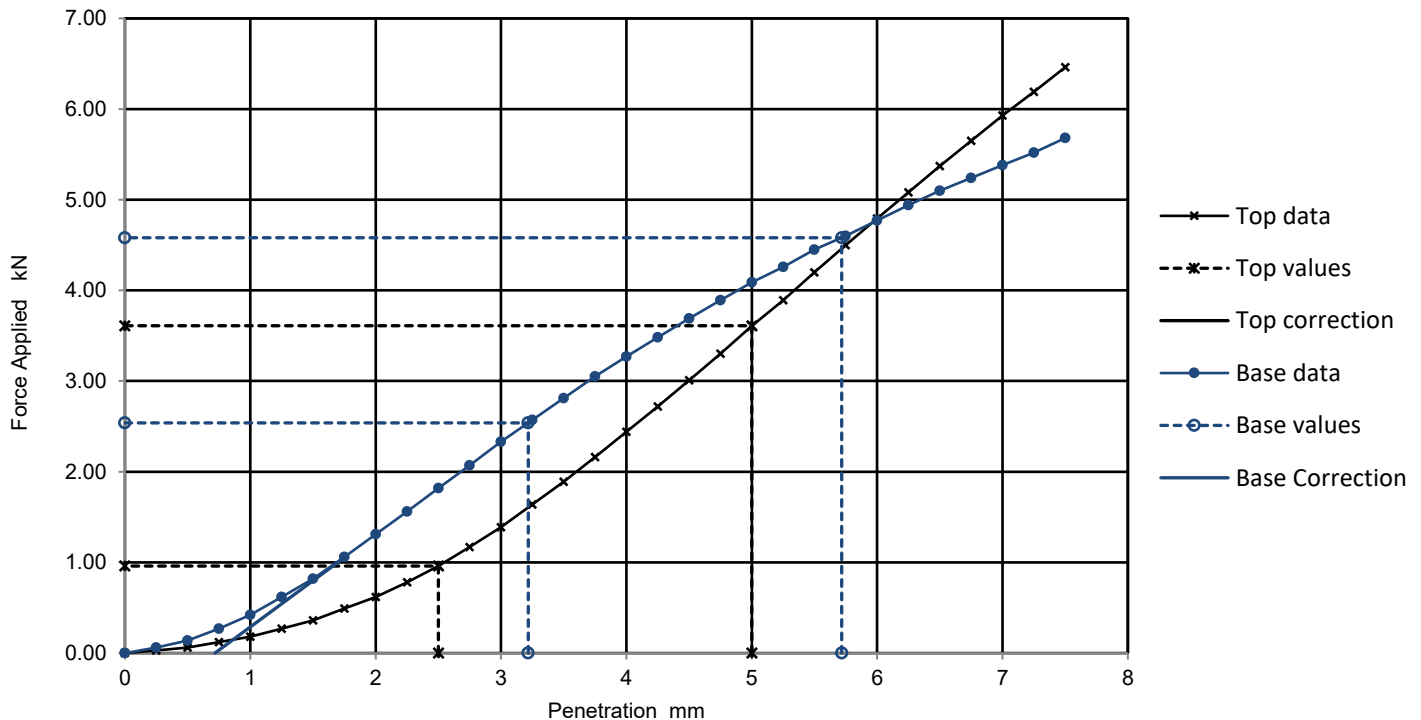
Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 02/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172919
Hole No.: TP-162
Sample Reference: Not Given
Sample Description: Yellowish brown very gravelly very clayey SAND with fragments of chalkDepth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B**Specimen Preparation:**

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	9 %		
Initial Specimen details	Bulk density 2.18 Mg/m3	Surcharge applied	8 kg
	Dry density 1.97 Mg/m3		4.9 kPa
	Water content 11 %		

Force v Penetration Plots**Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	7.3	18	18	
Yes	19	23	23	

Water Content %
10
11

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 29/04/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 172924
Hole No.: TP-170
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 0.80
Depth Base [m]: 0.90
Sample Type: B

Specimen Preparation:

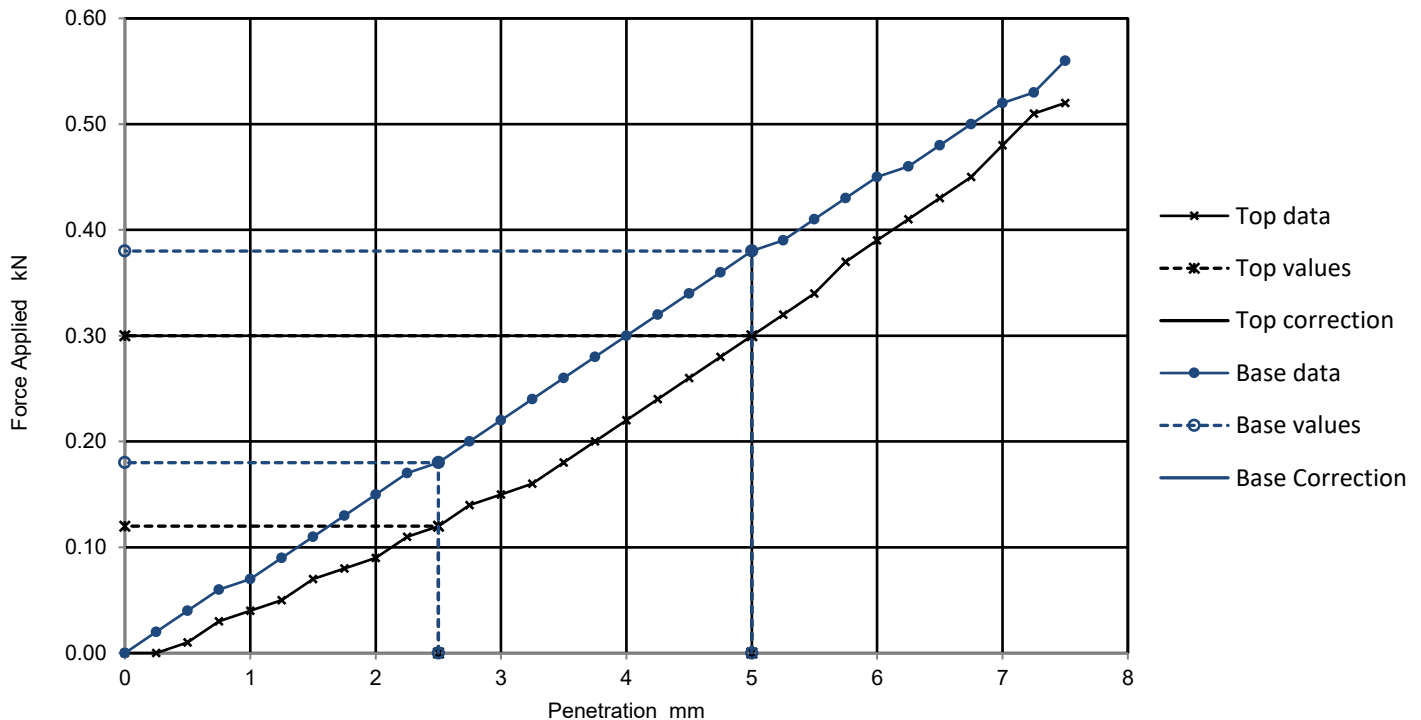
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 0 %

Initial Specimen details Bulk density 1.99 Mg/m3
Dry density 1.64 Mg/m3
Water content 21 %
Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.91	1.5	1.5	
No	1.4	1.9	1.9	

Water Content %
22
22

Remarks:

Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 03/05/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 172925
Hole No.: TP-172
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B

Specimen Preparation:

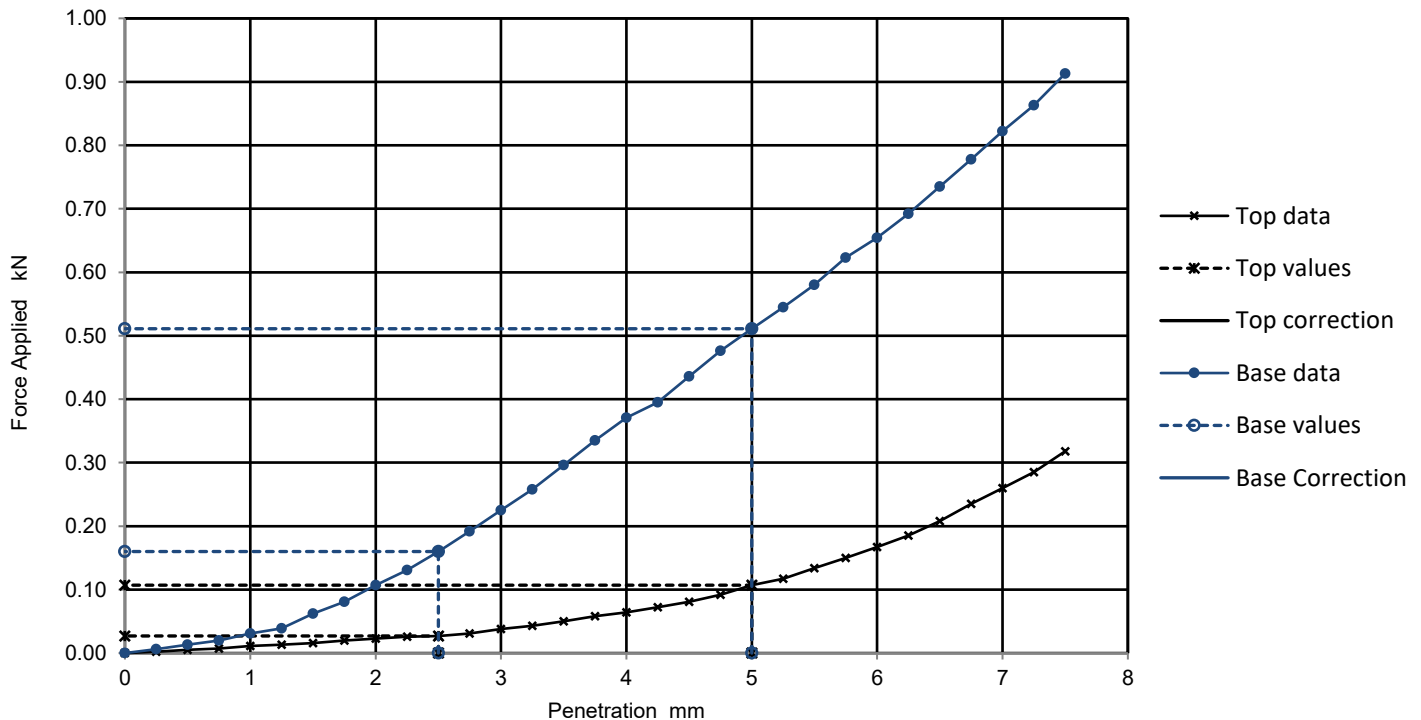
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 24 %

Initial Specimen details Bulk density 1.89 Mg/m3
Dry density 1.44 Mg/m3
Water content 31 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.2	0.54	0.54	
No	1.2	2.6	2.6	

Water Content %
31
31

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 29/04/2024
Sampled By: Not Given

Test Results:

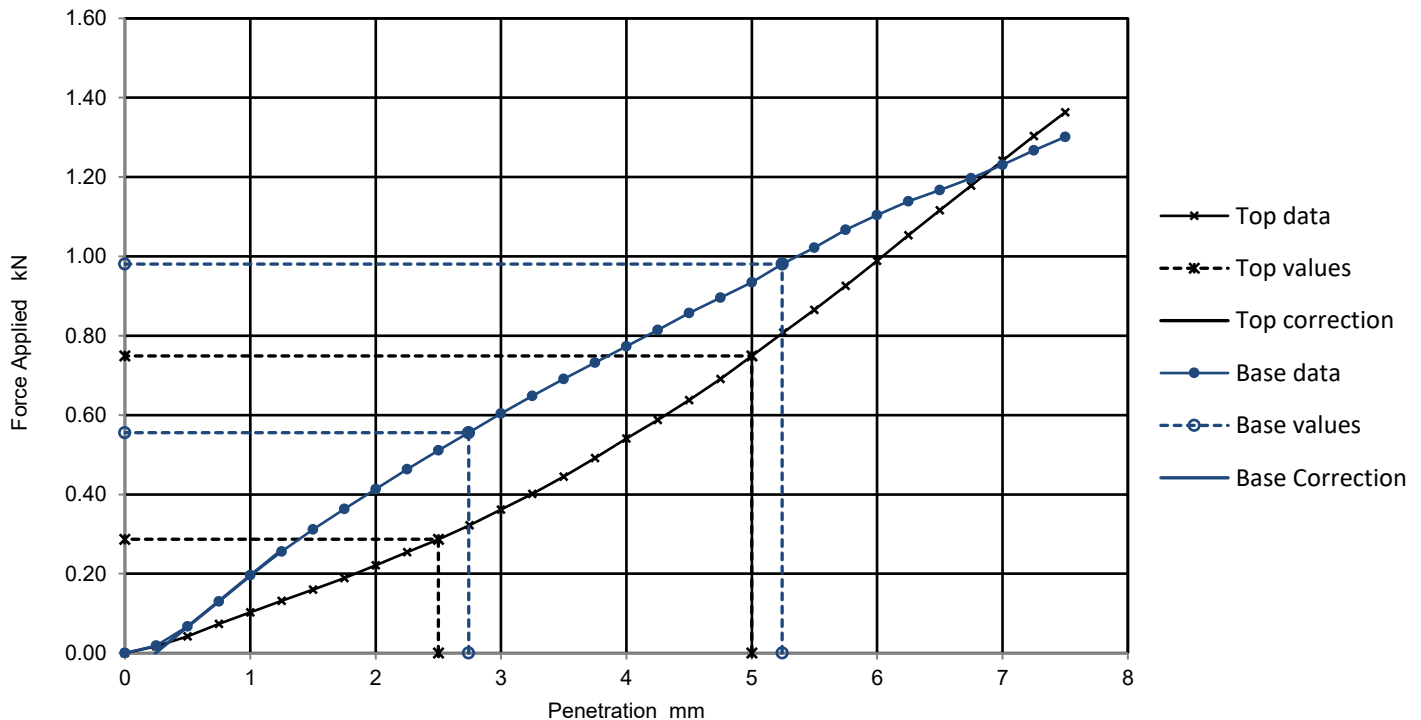
Laboratory Reference: 172926
Hole No.: TP-174
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	0 %		
Initial Specimen details	Bulk density	2.10	Mg/m3
	Dry density	1.81	Mg/m3
	Water content	16	%
		Surcharge applied	8 kg
			4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	2.2	3.7	3.7	
Yes	4.2	4.9	4.9	

Water Content %
16
17

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 03/05/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 172931
Hole No.: TP-188
Sample Reference: Not Given
Sample Description: Light grey CHALK

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B

Specimen Preparation:

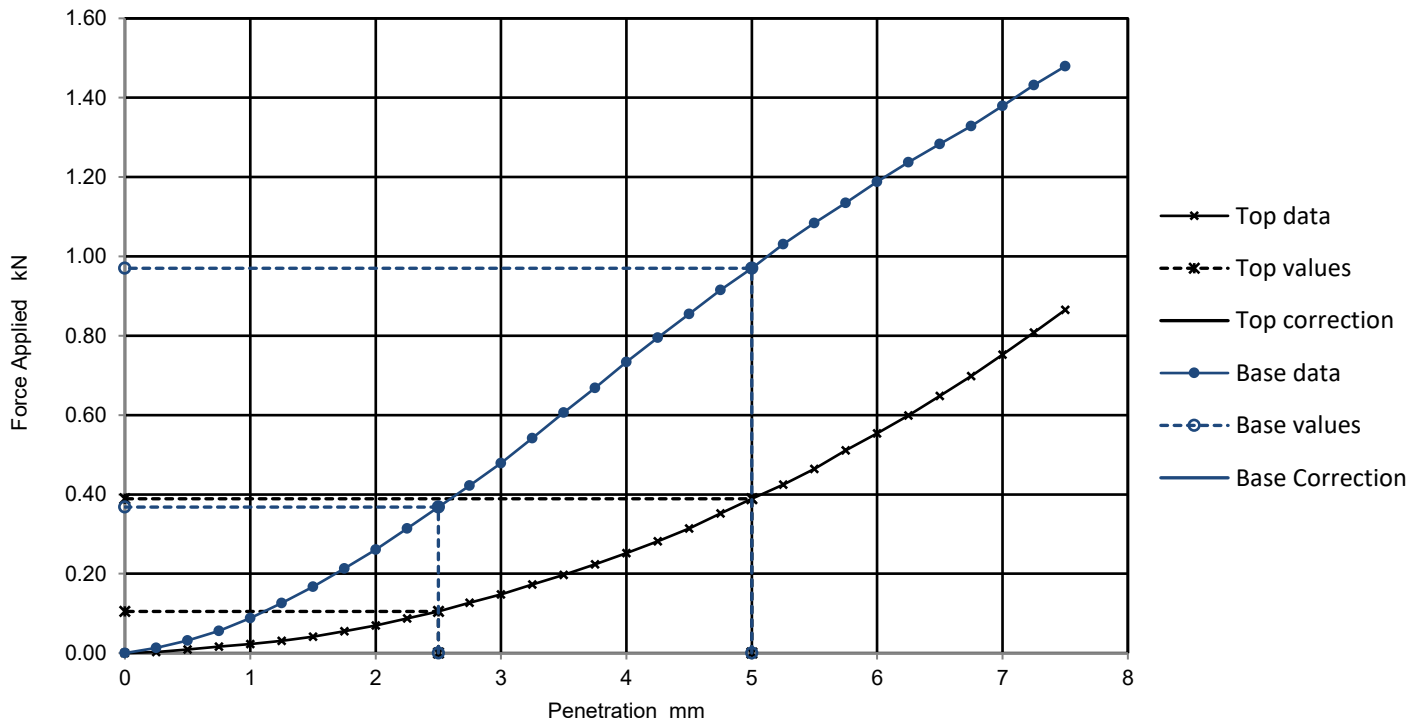
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 7 %

Initial Specimen details Bulk density 1.97 Mg/m³
Dry density 1.62 Mg/m³
Water content 22 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.8	1.9	1.9	
No	2.8	4.9	4.9	

Water Content %
21
22

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 06/05/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 172934
Hole No.: TP-191
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B

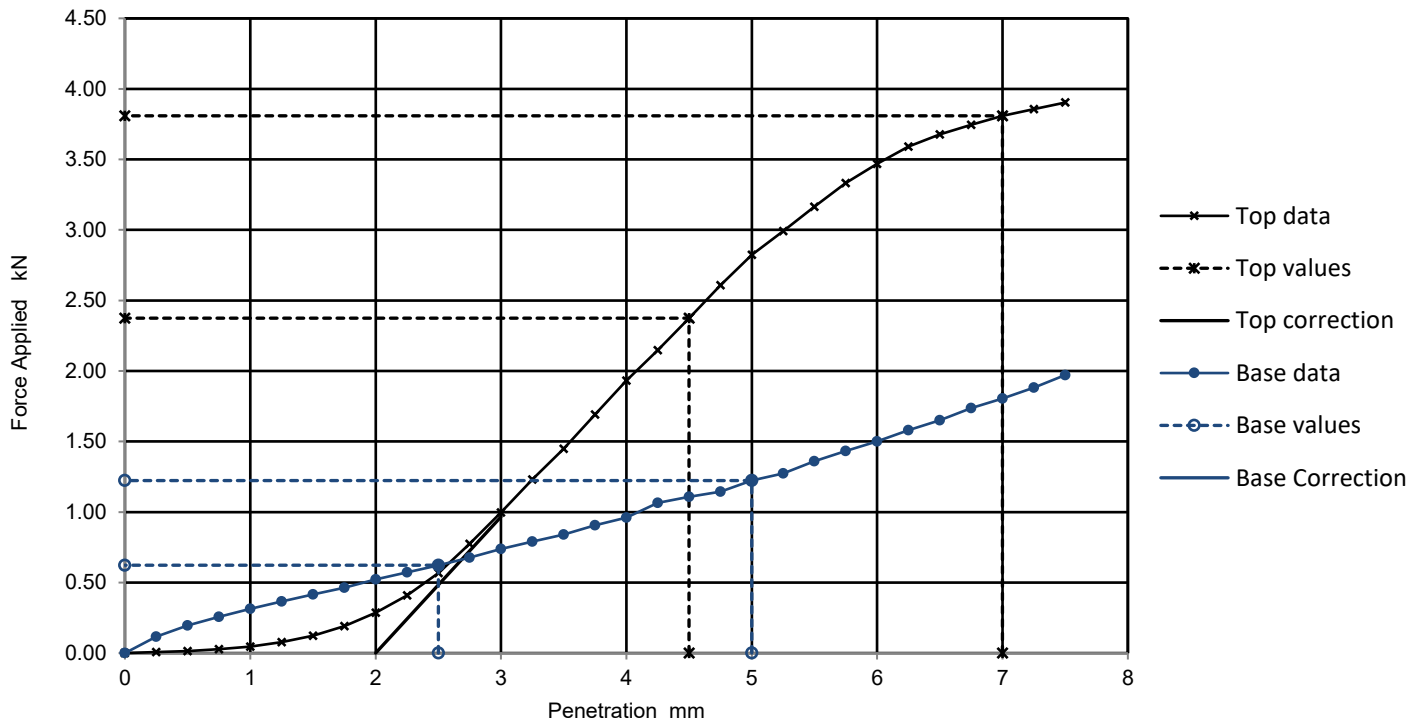
Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 0 %

Initial Specimen details	Bulk density	1.80	Mg/m ³	Surcharge applied	8	kg
	Dry density	1.39	Mg/m ³		4.9	kPa
	Water content	30	%			

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	18	19	19	
No	4.7	6.1	6.1	

Water Content %
30
31

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 06/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 172938
Hole No.: TP-200
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B

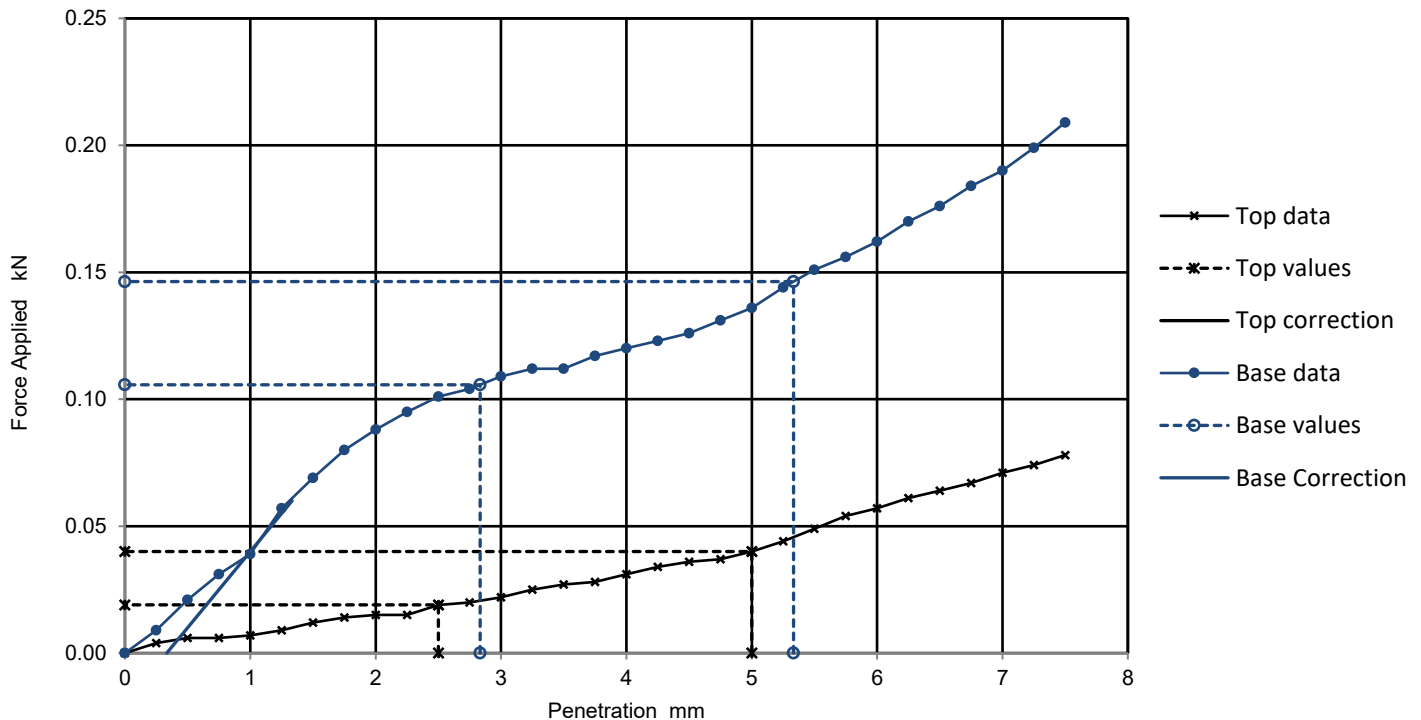
Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 0 %

Initial Specimen details	Bulk density	1.93	Mg/m3	Surcharge applied	8	kg
	Dry density	1.49	Mg/m3		4.9	kPa
	Water content	30	%			

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.14	0.2	0.2	
Yes	0.8	0.73	0.8	

Water Content %
29
29

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

Tested in Accordance with: BS 1377-2:2022 Cl. 15

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

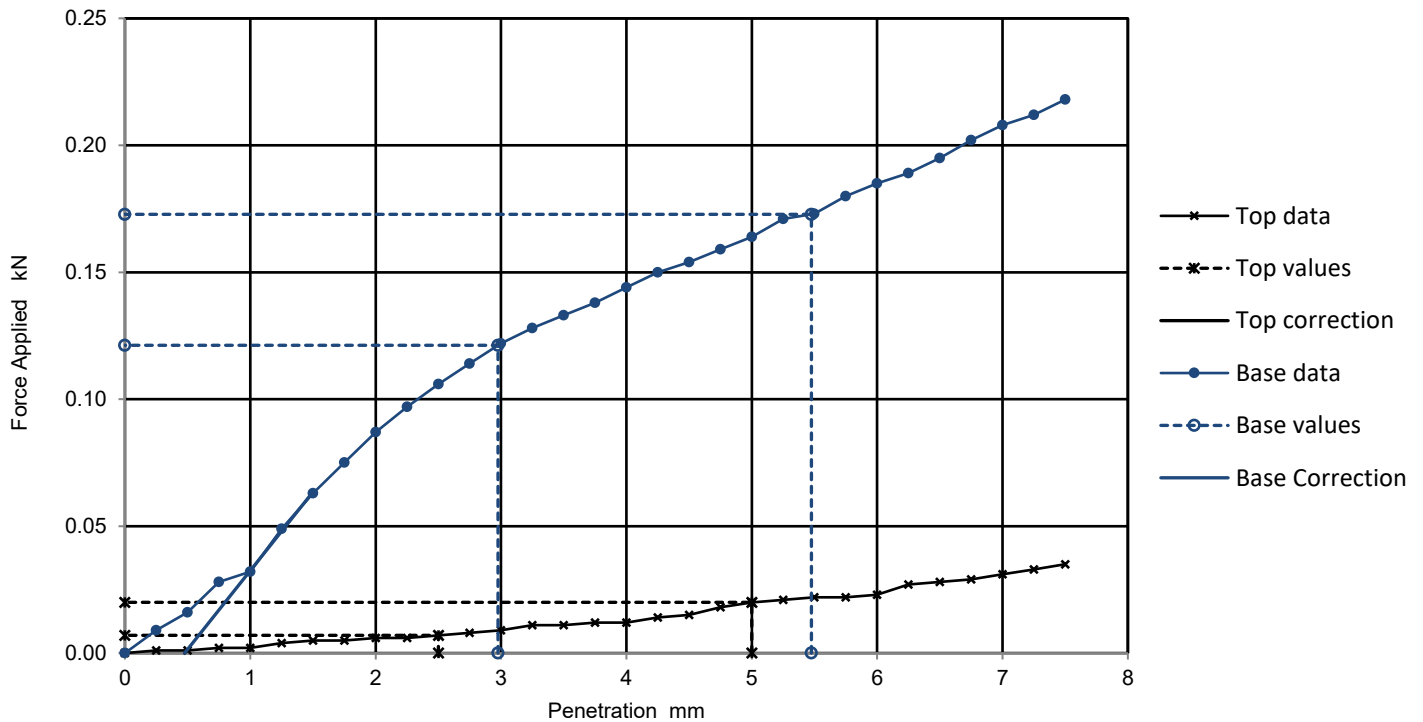
Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 06/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 172941
Hole No.: TP-204
Sample Reference: Not Given
Sample Description: White CHALKDepth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B**Specimen Preparation:**Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammerSoaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 0 %

Initial Specimen details Bulk density 1.88 Mg/m3
Dry density 1.41 Mg/m3
Water content 33 %
Surcharge applied 8 kg
4.9 kPa**Force v Penetration Plots****Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.053	0.1	0.1	
Yes	0.92	0.86	0.92	

Water Content %
32
33

Remarks:Test/ Specimen
specific remarks:**Signed:**Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04 - 31/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
172947	RC-35	Not Given	5.52	5.68	C	White CHALK	WC = 28.1%	1	A	U	YES	-	100.4	80.0	76.0	2.0	98.6	0.20	0.27
172946	RC-35	Not Given	6.60	6.80	C	White CHALK	WC = 35.0%	1	D	U	YES	70.2	100.1	100.0	98.0	0.7	99.1	0.07	0.09
172943	RC-36	Not Given	4.10	4.23	C	White CHALK	WC = 31.3%	1	A	U	YES	-	98.7	70.0	62.0	0.3	88.3	0.03	0.04
172944	RC-36	Not Given	5.13	5.22	C	White CHALK	WC = 25.8%	1	I	U	YES	61.4	99.8	86.0	84.0	0.2	103.3	0.02	0.03
172923	TP-169	Not Given	1.30	1.40	B	White CHALK	WC = 16.8%	1	I	U	YES	60.9	89.7	55.0	47.0	7.3	73.3	1.35	1.60
172927	TP-176	Not Given	2.90	3.00	B	White CHALK	WC = 26.4%	1	I	U	YES	80.1	76.4	41.0	37.0	1.5	60.0	0.40	0.44
172928	TP-183	Not Given	2.00	2.20	B	White CHALK	WC = 27.5%	1	I	U	YES	38.3	67.7	47.0	42.0	1.0	60.2	0.28	0.30
172929	TP-184	Not Given	3.00	3.10	B	White CHALK	WC = 28.5%	1	I	U	YES	82.6	57.7	43.0	38.0	0.6	52.8	0.20	0.20
172930	TP-186	Not Given	2.30	2.50	B	White CHALK	WC = 32.3%	1	I	U	YES	60.4	80.0	40.0	35.0	0.6	59.7	0.15	0.17
172932	TP-188	Not Given	2.30	2.40	B	White CHALK	WC = 36.7%	1	I	U	YES	42.6	39.9	37.0	34.0	0.9	41.6	0.49	0.45

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-014569-2
Date Sampled: Not Given
Date Received: 26/03/2024
Date Tested: 24/04/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top	Depth Base	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne	W	Dps	Dps'			Is	Is(50)
			m	m															
172933	TP-189	Not Given	2.20	2.30	B	White CHALK	WC = 32.3%	1	I	U	YES	32.8	50.1	60.0	57.0	0.7	60.3	0.18	0.19
172935	TP-194	Not Given	2.00	2.20	B	White CHALK	WC = 25.9%	1	I	U	YES	72.8	56.8	42.0	38.0	1.4	52.4	0.51	0.52
172936	TP-196	Not Given	2.20	2.30	B	White CHALK	WC = 28.3%	1	I	U	YES	35.9	58.9	46.0	40.0	0.9	54.8	0.28	0.30
172937	TP-197	Not Given	2.10	2.20	B	White CHALK	WC = 29.9%	1	I	U	YES	76.6	57.4	47.0	42.0	0.8	55.4	0.24	0.26
172938	TP-200	Not Given	1.40	1.50	B	White CHALK	WC = 30.4%	1	I	U	YES	39.9	57.6	50.0	42.0	0.8	55.5	0.24	0.26
172939	TP-201	Not Given	2.00	2.10	B	White CHALK	WC = 30.1%	1	I	U	YES	36.7	58.6	40.0	36.0	0.9	51.8	0.32	0.32
172940	TP-202	Not Given	2.10	2.20	B	White CHALK	WC = 29.3%	1	I	U	YES	51.9	107.9	39.0	37.0	0.8	71.3	0.16	0.18
172941	TP-204	Not Given	1.40	1.50	B	White CHALK	WC = 32.6%	1	I	U	YES	38.3	40.8	38.0	35.0	0.8	42.6	0.44	0.41
172942	TP-206	Not Given	3.50	3.60	B	White CHALK	WC = 32.6%	1	I	U	YES	68.3	112.2	62.0	48.0	0.8	82.8	0.11	0.14

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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DETERMINATION OF UNIAXIAL COMPRESSIVE STRENGTH OF ROCK MATERIALS

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group

Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk

Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899

Job Number: 24-014569-2

Date Sampled: Not Given

Date Received: 26/03/2024

Date Tested: 31/05/2024

Sampled By: Not Given

Test results

[illegible]

Note: 1 - ISRM p87 test 1, water content at $105 \pm 3^\circ\text{C}$ - not accredited, specimen as tested for UCS, 2 - ISRM p86 clause (vii), Caliper method used for determination of bulk volume and derivation of bulk density, 3 - ISRM p153 part 1, determination of Uniaxial Compressive Strength (UCS) of Rock Materials, above notes apply unless annotated otherwise in the remarks. Compaction machine: VJ Tech AUTOCON - VJT 51-3011; Mode of failure legend: S - Single shear, MS - multiple shear, AC - Axial cleavage, F - Fragmented

Comments: * Sample is below recommended length to diameter ratio. Duration of test, fell below time specified in ISRM method, 2007, p153, part1.

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT
METHOD FOR SATURATION WATER CONTENT OF CHALK

Tested in Accordance with: BS EN ISO 17892-2:2014, clause 5.2 and BS 1377: Part 2:2022, clause 4.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP
Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-019789-1
Date Sampled: Not Given
Date Received: 13/05/2024
Date Tested: 03/06/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
199863	RC-34	Not Given	9.00	9.10	C	White CHALK		37.4	1.78	1.34	32.7	
199864	RC-36	Not Given	7.64	7.78	C	White CHALK		30.9	1.92	1.47	30.4	
199865	RC-36	Not Given	8.16	8.26	C	White CHALK		29.7	1.93	1.50	29.1	
199866	RC-37	Not Given	1.80	1.90	C	White CHALK		33.3	1.87	1.42	31.8	
199867	RC-37	Not Given	2.55	2.65	C	White CHALK		34.2	1.86	1.40	32.7	
199868	RC-37	Not Given	4.83	4.93	C	White CHALK		34.8	1.86	1.39	33.4	
199869	RC-37	Not Given	7.35	7.55	C	White CHALK		33.1	1.89	1.43	32.3	
199870	RC-37	Not Given	8.68	9.06	C	White CHALK		33.4	1.89	1.42	32.9	
199862	RO-02	Not Given	10.31	10.46	C	White CHALK		10.0	2.33	2.12	9.6	

Note: SWC - Saturation Water Content; WC - Water Content

Comments:

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.

Signed: Katarzyna Koziel
Senior Reporting Specialist

for and on behalf of i2 Analytical Ltd



4041



SUMMARY REPORT
DETERMINATION OF POINT LOAD STRENGTH
Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP
Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-019789-1
Date Sampled: Not Given
Date Received: 13/05/2024
Date Tested: 29/05/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P	Equivalent diameter, De	Point Load Strength Index	
		Reference	Depth Top	Depth Base	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne	W	Dps	Dps'				
			m	m														mm	mm
199863	RC-34	Not Given	9.00	9.10	C	White CHALK	WC = 31.8%	1	I	U	YES	47.9	59.6	60.0	52.0	0.5	62.8	0.11	0.13
199864	RC-36	Not Given	7.64	7.78	C	White CHALK	WC = 31.9%	1	D	U	YES	73.0	100.9	96.0	94.0	0.3	97.4	0.03	0.04
199865	RC-36	Not Given	8.16	8.26	C	White CHALK	WC = 29.4%	1	D	U	YES	86.7	100.4	98.0	90.0	0.6	95.0	0.06	0.08
199866	RC-37	Not Given	1.80	1.90	C	White CHALK	WC = 31.8%	1	A	U	YES	-	104.5	78.0	66.0	0.3	93.7	0.03	0.05
199867	RC-37	Not Given	2.55	2.65	C	White CHALK	WC = 33.0%	1	I	U	YES	50.7	51.3	40.0	36.0	0.8	48.5	0.34	0.34
199868	RC-37	Not Given	4.83	4.93	C	White CHALK	WC = 33.4%	1	A	U	YES	-	100.9	70.0	52.0	0.8	81.7	0.11	0.14
199869	RC-37	Not Given	7.35	7.55	C	White CHALK	WC = 33.5%	1	D	U	YES	99.1	100.2	98.0	82.0	1.1	90.7	0.13	0.17
199862	RO-02	Not Given	10.31	10.46	C	White CHALK	WC = 10.5%	1	A	U	YES	-	100.5	56.0	43.0	4.2	74.2	0.75	0.90

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed: Katarzyna Koziel
Senior Reporting Specialist

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for and on behalf of i2 Analytical Ltd



SUMMARY REPORT

DETERMINATION OF UNIAXIAL COMPRESSIVE STRENGTH OF ROCK MATERIALS

Tested in Accordance with: ISRM, 2007, p153, part 1

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Client Reference: 2899
Job Number: 24-019789-1
Date Sampled: Not Given
Date Received: 13/05/2024
Date Tested: 29/05/2024
Sampled By: Not Given

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP
Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Specimen Dimensions (2)				Bulk density (2) Mg/m3	Water Content (1) %	Uniaxial Compression (3)			
		Reference	Depth Top	Depth Base	Type			Diameter	Length	H/D	Orientation of sample			Condition	Stress Rate	Mode of failure	UCS
			m	m													
199870	RC-37	Not Given	8.68	9.06	C	White CHALK	Duration of test fell below time specified in ISRM method, 2007, p153, part1.	100.8	272.6	2.7	Vertical	1.89	32.1	as received	0.0125	MS	3.73

Note: 1 - ISRM p87 test 1, water content at 105 ± 3 °C - not accredited, specimen as tested for UCS, 2 - ISRM p86 clause (vii), Caliper method used for determination of bulk volume and derivation of bulk density, 3 - ISRM p153 part 1, determination of Uniaxial Compressive Strength (UCS) of Rock Materials, above notes apply unless annotated otherwise in the remarks. Compaction machine: VJ Tech AUTOCON - VJT 51-3011; Mode of failure legend: S - Single shear, MS - multiple shear, AC - Axial cleavage, F - Fragmented

Comments:

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Signed: Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd



TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

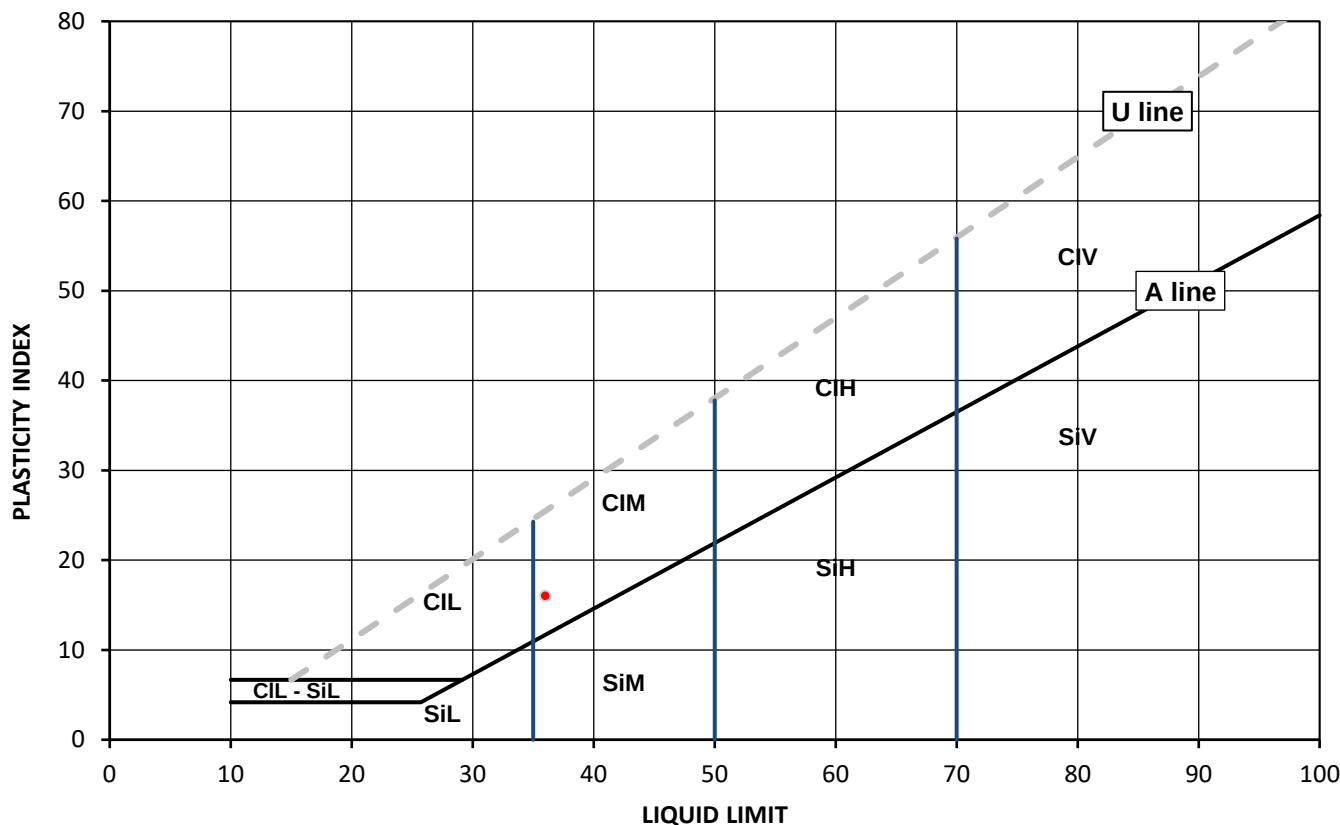
Test Results:

Laboratory Reference: 2926743
Hole No.: TP-R1-01
Sample Reference: Not Given
Sample Description: Brown sandy CLAY

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
28	36	20	16	76



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2926395	TP-R1-02	Not Given	1.00	1.20	B	White CHALK with fragments of roots		23	Sample was quartered, oven dried at 106 °C			
2926396	TP-R1-04	Not Given	3.00	3.20	B	White CHALK		27	Sample was quartered, oven dried at 108.7 °C			
2926397	TP-R1-05	Not Given	1.00	1.20	B	White CHALK		28	Sample was quartered, oven dried at 108.7 °C			
2926398	TP-R1-06	Not Given	2.50	2.60	B	White CHALK		31	Sample was quartered, oven dried at 108.7 °C			
2926399	TP-R1-07	Not Given	1.50	Not Given	B	White CHALK with fragments of plants		27	Sample was quartered, oven dried at 108.7 °C			
2926400	TP-R1-08	Not Given	2.00	Not Given	B	White CHALK		29	Sample was quartered, oven dried at 108.7 °C			
2926401	TP-R1-09	Not Given	1.50	Not Given	B	White CHALK		31	Sample was quartered, oven dried at 108.7 °C			
2926743	TP-R1-01	Not Given	0.40	0.50	B	Brown sandy CLAY		28	Sample was quartered, oven dried at 108.7 °C			

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

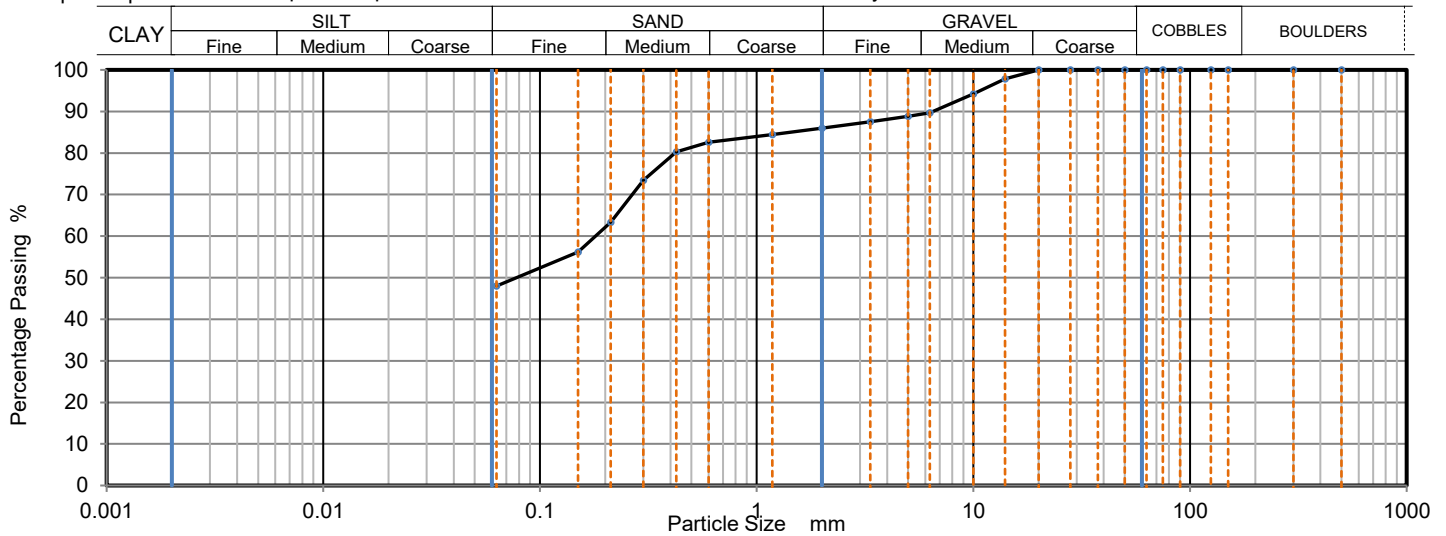
Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2926743
Hole No.: TP-R1-01
Sample Reference: Not Given
Sample Description: Brown sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	98		
10	94		
6.3	90		
5	89		
3.35	88		
2	86		
1.18	84		
0.6	83		
0.425	80		
0.3	73		
0.212	63		
0.15	56		
0.063	48		

Sample Proportions	% dry mass
Very coarse	0
Gravel	14
Sand	38
Fines <0.063mm	48

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 2.9
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

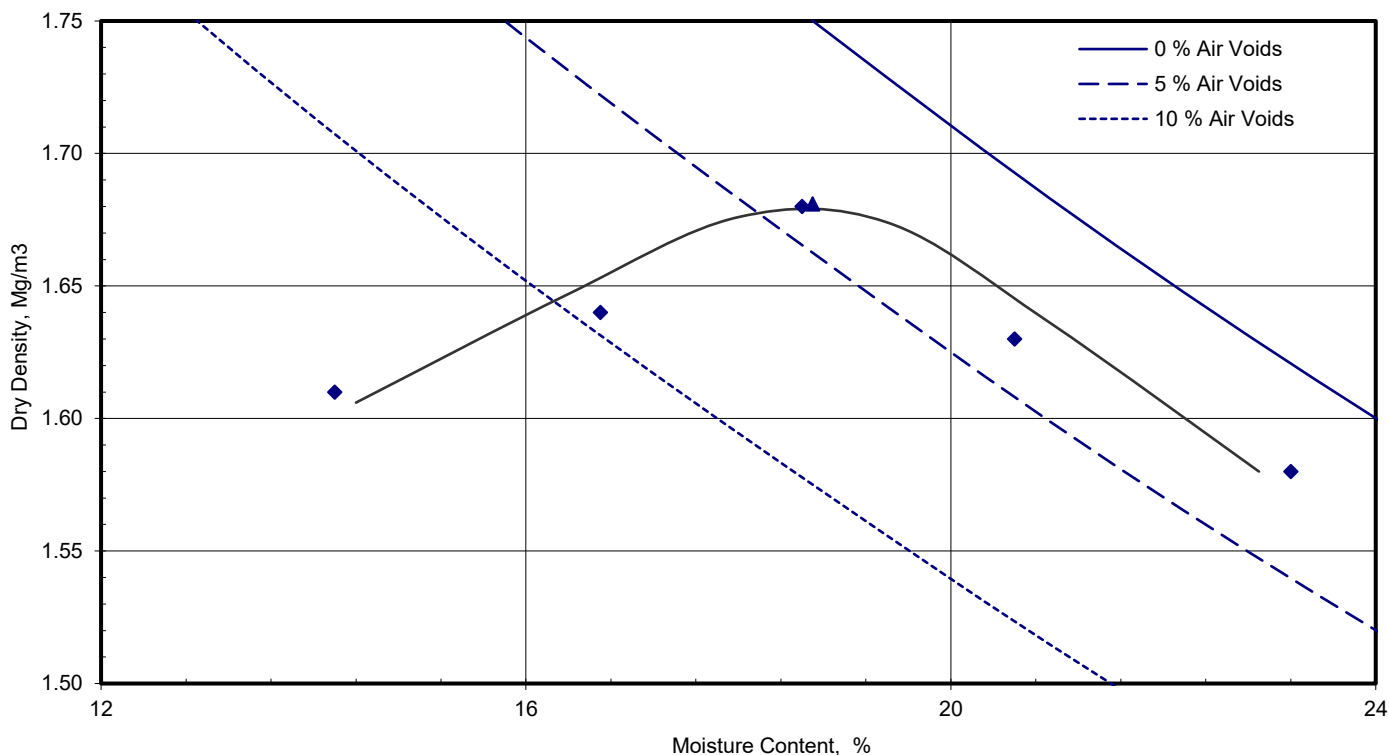
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2926395
Hole No.: TP-R1-02
Sample Reference: Not Given
Sample Description: White CHALK with fragments of roots
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	14	17	19	21	23
Dry Density	Mg/m³	1.61	1.64	1.68	1.63	1.58

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	39
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	23
Maximum Dry Density	Mg/m³	1.68

Optimum Moisture Content	%	19
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed at per client request.

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

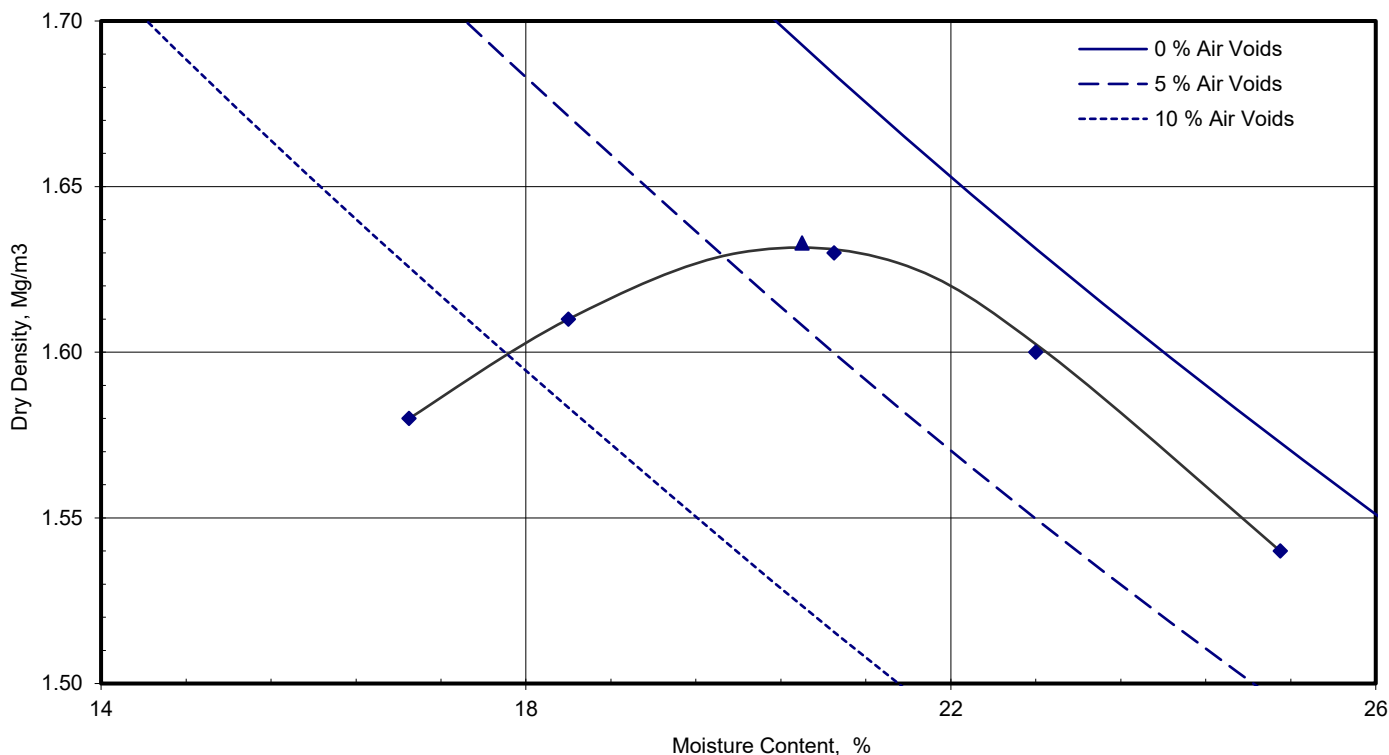
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2926399
Hole No.: TP-R1-07
Sample Reference: Not Given
Sample Description: White CHALK with fragments of plants
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	17	18	21	23	25
Dry Density	Mg/m³	1.58	1.61	1.63	1.60	1.54

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	36
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	28
Maximum Dry Density	Mg/m³	1.63

Optimum Moisture Content	%	21
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed at per client request

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2926397
Hole No.: TP-R1-05
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

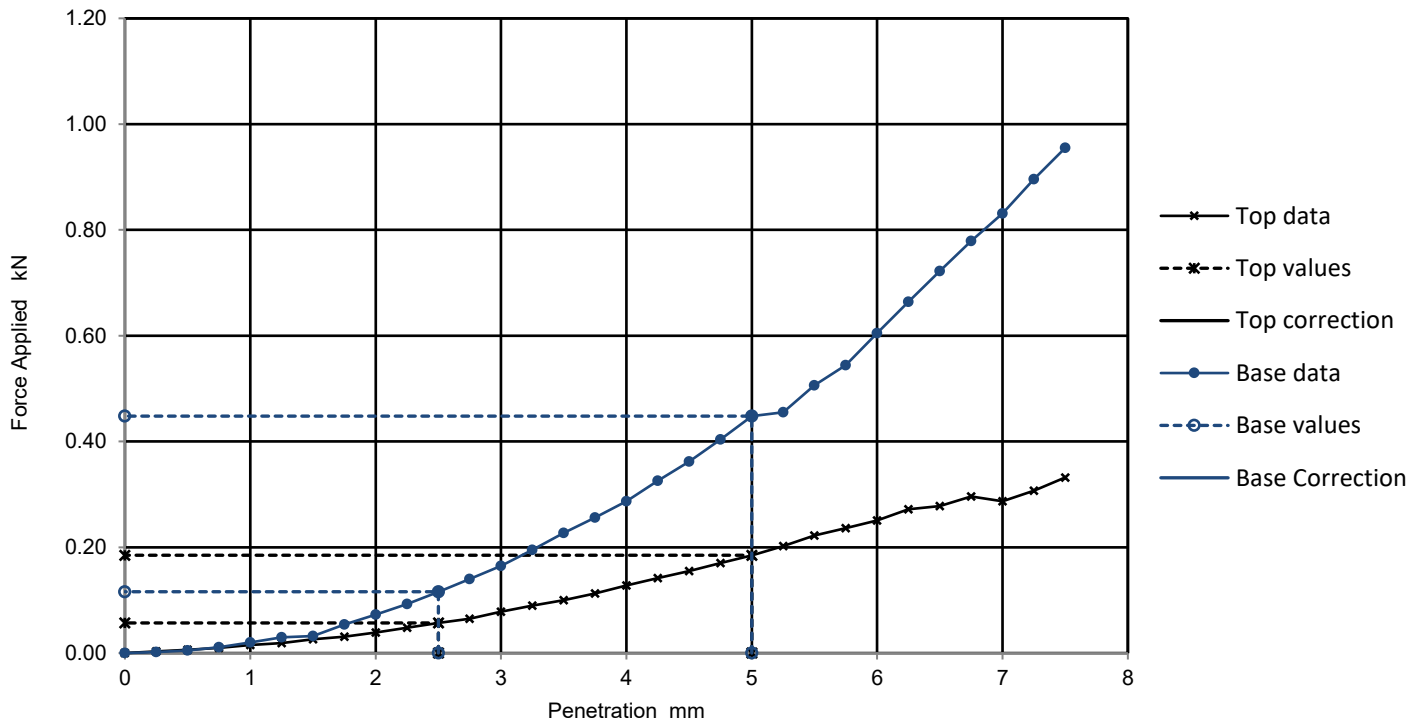
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 52 %

Initial Specimen details Bulk density 1.98 Mg/m³
Dry density 1.54 Mg/m³
Moisture content 29 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.43	0.93	0.93	
No	0.88	2.2	2.2	

Moisture Content %
28
30

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2926401
Hole No.: TP-R1-09
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

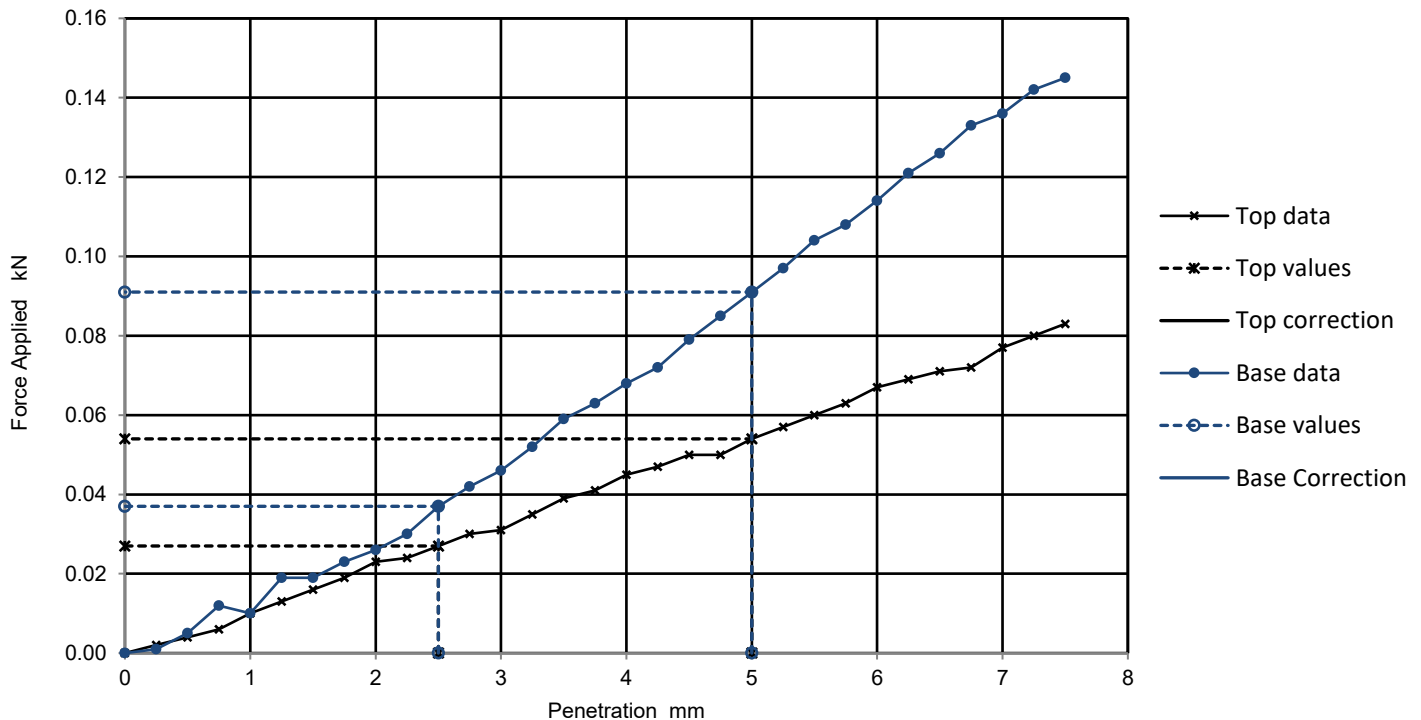
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 43 %

Initial Specimen details Bulk density 1.90 Mg/m³
Dry density 1.44 Mg/m³
Moisture content 32 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.2	0.27	0.27	
No	0.28	0.46	0.46	

Moisture Content %
30
33

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Test/ Specimen specific remarks:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-4: 1990: Clause 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Moisture Content %	Saturated Moisture Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
2926395	TP-R1-02	Not Given	1.00	1.20	B	White CHALK with fragments of roots		55	27	26	2.6	
2926396	TP-R1-04	Not Given	3.00	3.20	B	White CHALK	Water ooze out of the mould after 30 blows	21	27	25	2.1	
2926398	TP-R1-06	Not Given	2.50	2.60	B	White CHALK	Water ooze out of the mould after 40 blows	34	30	31	3.2	

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-77864-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2926395	TP-R1-02	Not Given	1.00	1.20	B	White CHALK with fragments of roots	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.95	1.60	22	
2926396	TP-R1-04	Not Given	3.00	3.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	25	1.99	1.61	24	
2926397	TP-R1-05	Not Given	1.00	1.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	25	1.99	1.60	24	
2926398	TP-R1-06	Not Given	2.50	2.60	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	31	1.90	1.47	30	
2926399	TP-R1-07	Not Given	1.50	Not Given	B	White CHALK with fragments of plants	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.99	1.59	25	
2926400	TP-R1-08	Not Given	2.00	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	29	1.93	1.50	28	
2926401	TP-R1-09	Not Given	1.50	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	28	1.96	1.55	27	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

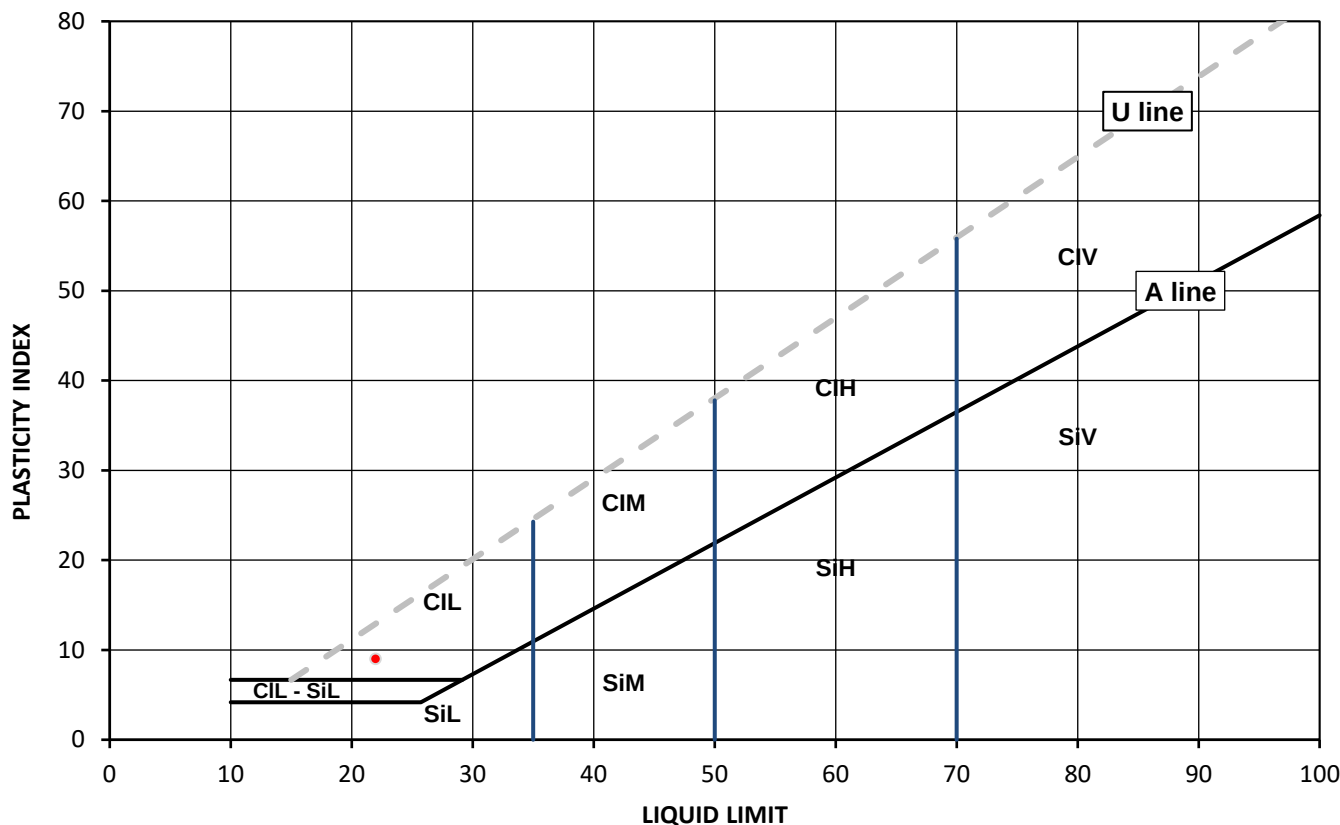
Test Results:

Laboratory Reference: 2927114
Hole No.: TP-R2/R3-10
Sample Reference: Not Given
Sample Description: Light brown sandy CLAY with fragments of chalk, plants

Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	22	13	9	78



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

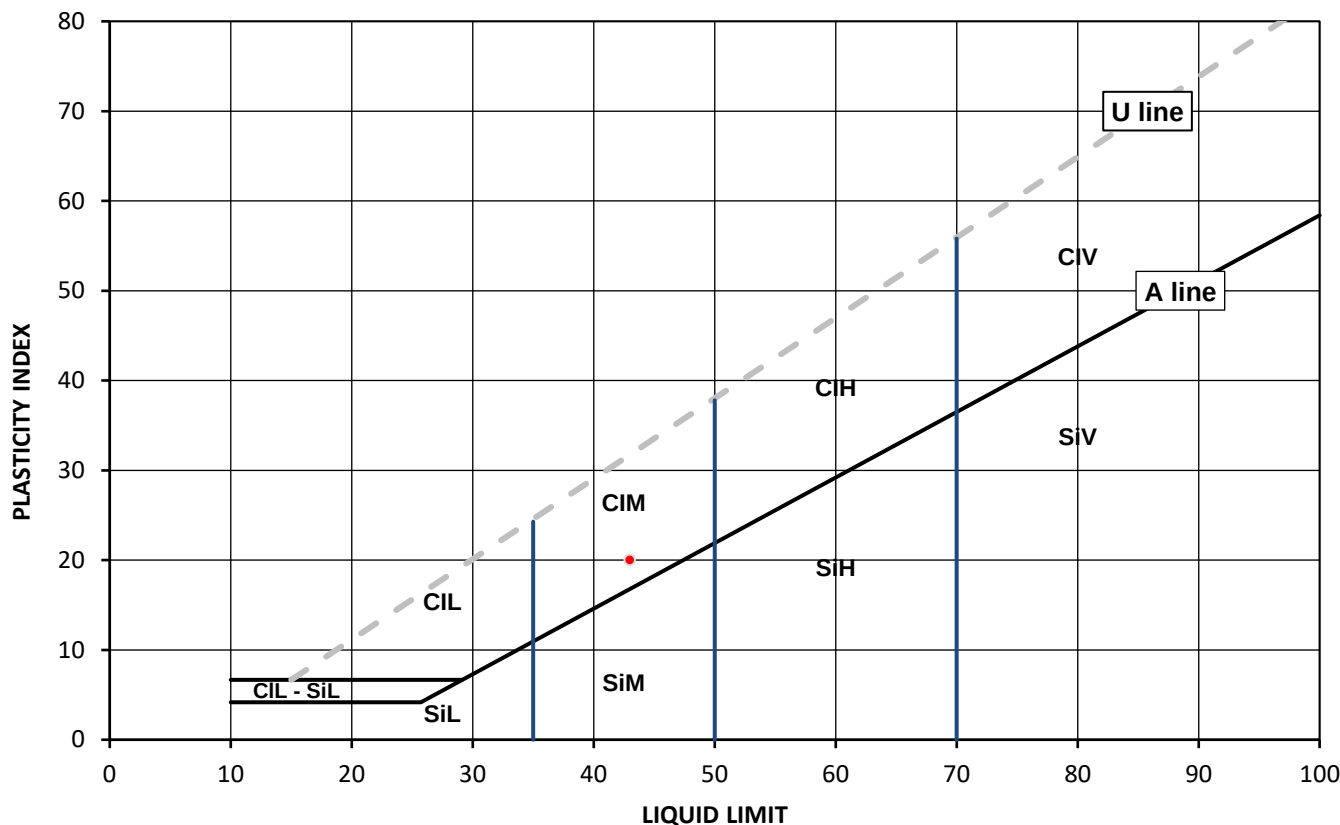
Test Results:

Laboratory Reference: 2927122
Hole No.: TP-R5-06
Sample Reference: Not Given
Sample Description: Light brown clayey GRAVEL with fragments of chalk

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
21	43	23	20	36



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

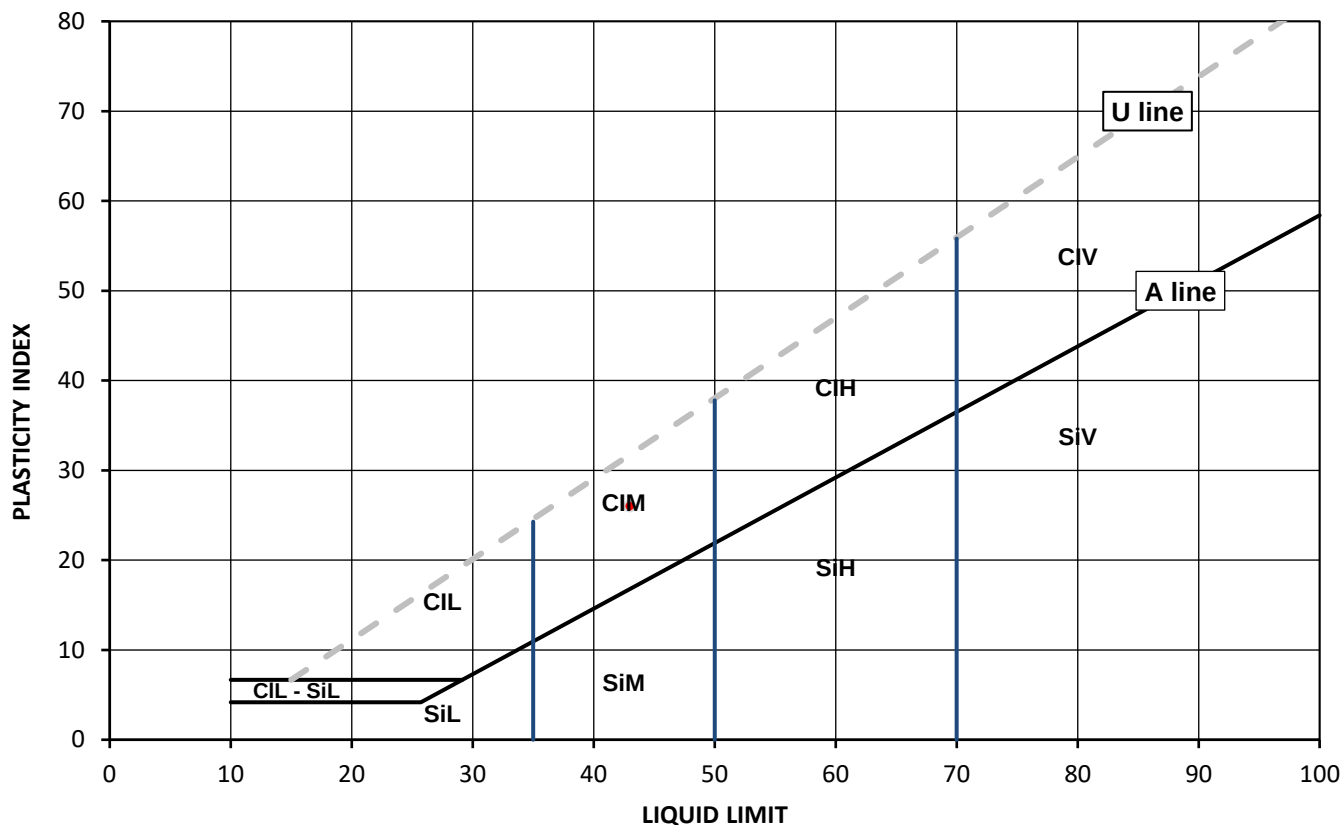
Test Results:

Laboratory Reference: 2927123
Hole No.: TP-R5-08
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of chalk

Depth Top [m]: 0.70
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	43	17	26	79



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L Low	50 to 70
	M Medium	exceeding 70
	H High	append to classification for organic material (eg CIHO)
	V Very high	
	O Organic	

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

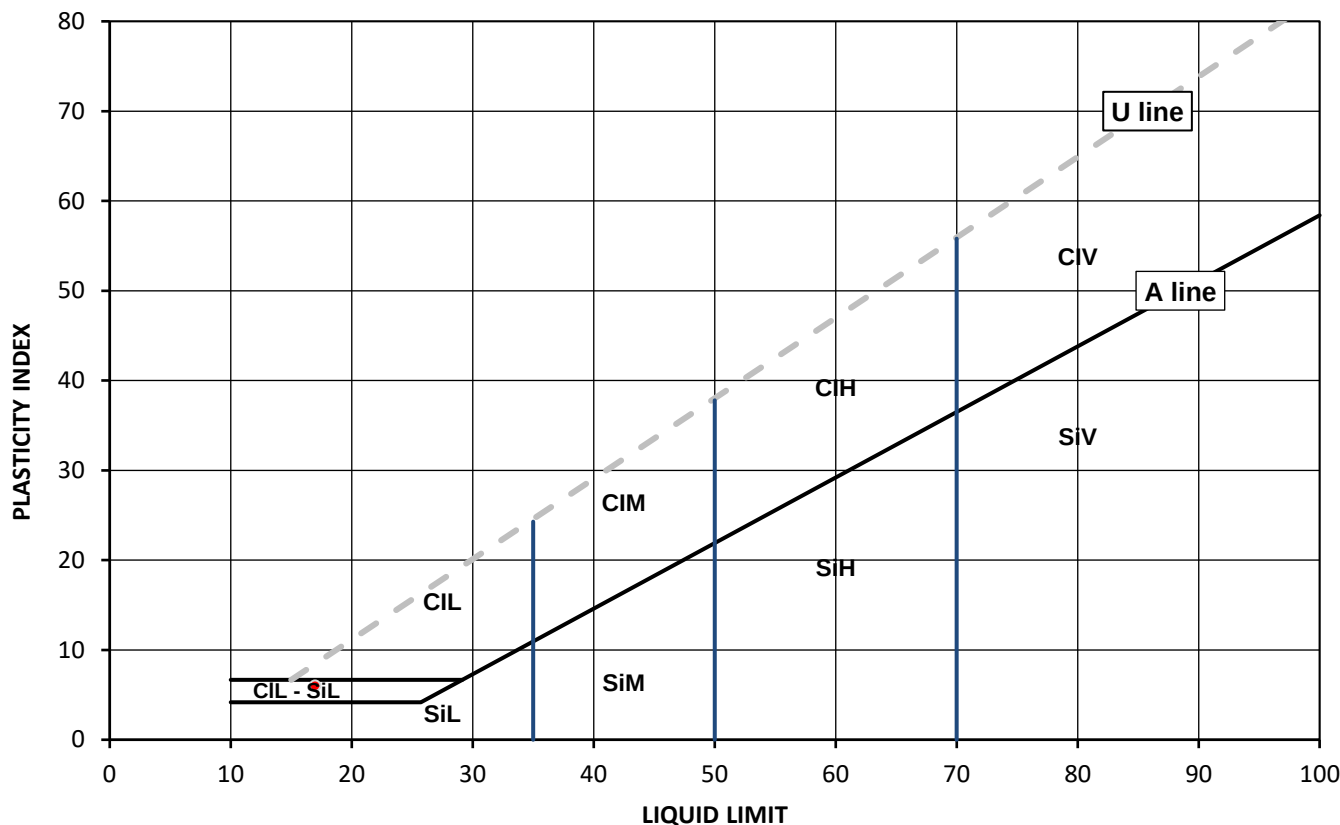
Test Results:

Laboratory Reference: 2930350
Hole No.: TP-R2/R3-08
Sample Reference: Not Given
Sample Description: Light brown clayey SAND with fragments of chalk

Depth Top [m]: 1.40
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after >425um removed by hand

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
15	17	11	6	81



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.3 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

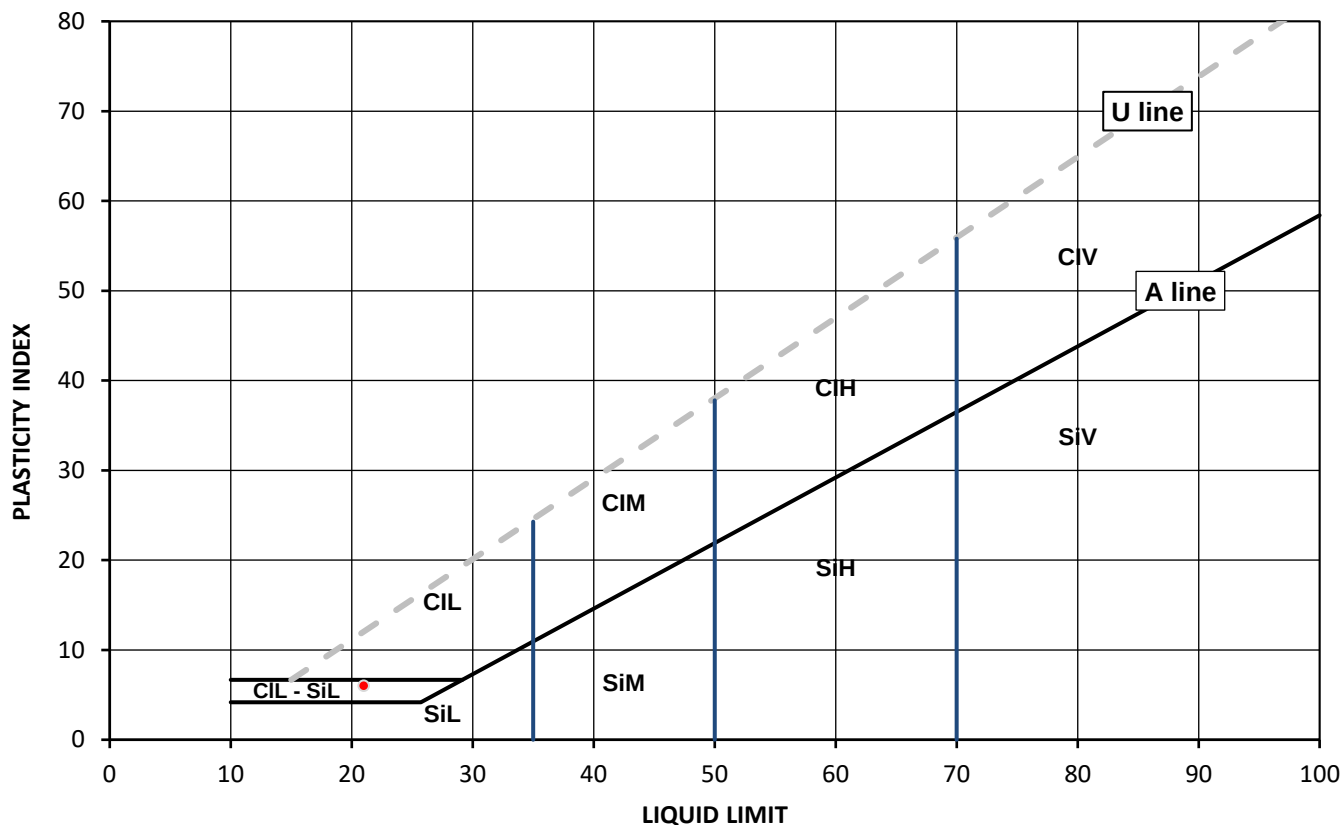
Test Results:

Laboratory Reference: 2930351
Hole No.: TP-R2/R3-09
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of plants

Depth Top [m]: 0.65
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425um

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
19	21	15	6	90



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Water Content by BS 1377-2:1990: Clause 3.2
Atterberg by BS 1377-2: 1990:
Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 23/01/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-2 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2927110	TP-R2-01	Not Given	0.40	0.50	B	Brown clayey SAND with fragments of chalk		19											
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK		22											
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		14											
2927113	TP-R2-06	Not Given	1.00	1.20	B	Light brown CLAY with fragments of chalk		20											
2927114	TP-R2/R3-10	Not Given	0.80	Not Given	B	Light brown sandy CLAY with fragments of chalk, plants	Atterberg 4 Point	18		78	22	13	9						
2927115	TP-R3-01	Not Given	1.40	1.50	B	White CHALK		19											
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK		22											
2927117	TP-R4-01	Not Given	1.00	1.20	B	White sandy gravelly CLAY with fragments of chalk		15											
2927118	TP-R4-01	Not Given	2.00	2.20	B	White CHALK		25											
2927119	TP-R4-02	Not Given	0.50	0.60	B	White sandy CHALK		25											

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Water Content by BS 1377-2:1990: Clause 3.2
Atterberg by BS 1377-2: 1990:
Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-2 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m															
2927120	TP-R4-07	Not Given	1.70	Not Given	B	White CHALK		25											
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK		21											
2927122	TP-R5-06	Not Given	0.40	0.50	B	Light brown clayey GRAVEL with fragments of chalk	Atterberg 4 Point	21		36	43	23	20						
2927123	TP-R5-08	Not Given	0.70	Not Given	B	Brown sandy CLAY with fragments of chalk	Atterberg 4 Point	27		79	43	17	26						
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK		26											
2930350	TP-R2/R3-08	Not Given	1.40	Not Given	B	Light brown clayey SAND with fragments of chalk	Atterberg 4 Point	15		81	17	11	6						
2930351	TP-R2/R3-09	Not Given	0.65	Not Given	B	Brown sandy CLAY with fragments of plants	Atterberg 4 Point	19		90	21	15	6						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

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SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2927110	TP-R2-01	Not Given	0.40	0.50	B	Brown clayey SAND with fragments of chalk		19	Sample was quartered, oven dried at 108.7 °C			
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK		22	Sample was quartered, oven dried at 108.7 °C			
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		14	Sample was quartered, oven dried at 108.7 °C			
2927113	TP-R2-06	Not Given	1.00	1.20	B	Light brown CLAY with fragments of chalk		20	Sample was quartered, oven dried at 108.7 °C			
2927114	TP-R2/R3-10	Not Given	0.80	Not Given	B	Light brown sandy CLAY with fragments of chalk, plants		18	Sample was quartered, oven dried at 108.7 °C			
2927115	TP-R3-01	Not Given	1.40	1.50	B	White CHALK		19	Sample was quartered, oven dried at 108.7 °C			
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK		22	Sample was quartered, oven dried at 108.7 °C			
2927117	TP-R4-01	Not Given	1.00	1.20	B	White sandy gravelly CLAY with fragments of chalk		15	Sample was quartered, oven dried at 108.7 °C			
2927118	TP-R4-01	Not Given	2.00	2.20	B	White CHALK		25	Sample was quartered, oven dried at 108.7 °C			
2927119	TP-R4-02	Not Given	0.50	0.60	B	White sandy CHALK		25	Sample was quartered, oven dried at 108.7 °C			

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 23/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2927120	TP-R4-07	Not Given	1.70	Not Given	B	White CHALK		25	Sample was quartered, oven dried at 108.7 °C			
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK		21	Sample was quartered, oven dried at 108.7 °C			
2927122	TP-R5-06	Not Given	0.40	0.50	B	Light brown clayey GRAVEL with fragments of chalk		21	Sample was quartered, oven dried at 108.7 °C			
2927123	TP-R5-08	Not Given	0.70	Not Given	B	Brown sandy CLAY with fragments of chalk		27	Sample was quartered, oven dried at 108.7 °C			
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK		26	Sample was quartered, oven dried at 106.6 °C			
2930350	TP-R2/R3-08	Not Given	1.40	Not Given	B	Light brown clayey SAND with fragments of chalk		15	Sample was quartered, oven dried at 106.6 °C			
2930351	TP-R2/R3-09	Not Given	0.65	Not Given	B	Brown sandy CLAY with fragments of plants		19	Sample was quartered, oven dried at 106.6 °C			

Comments:

Signed: Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

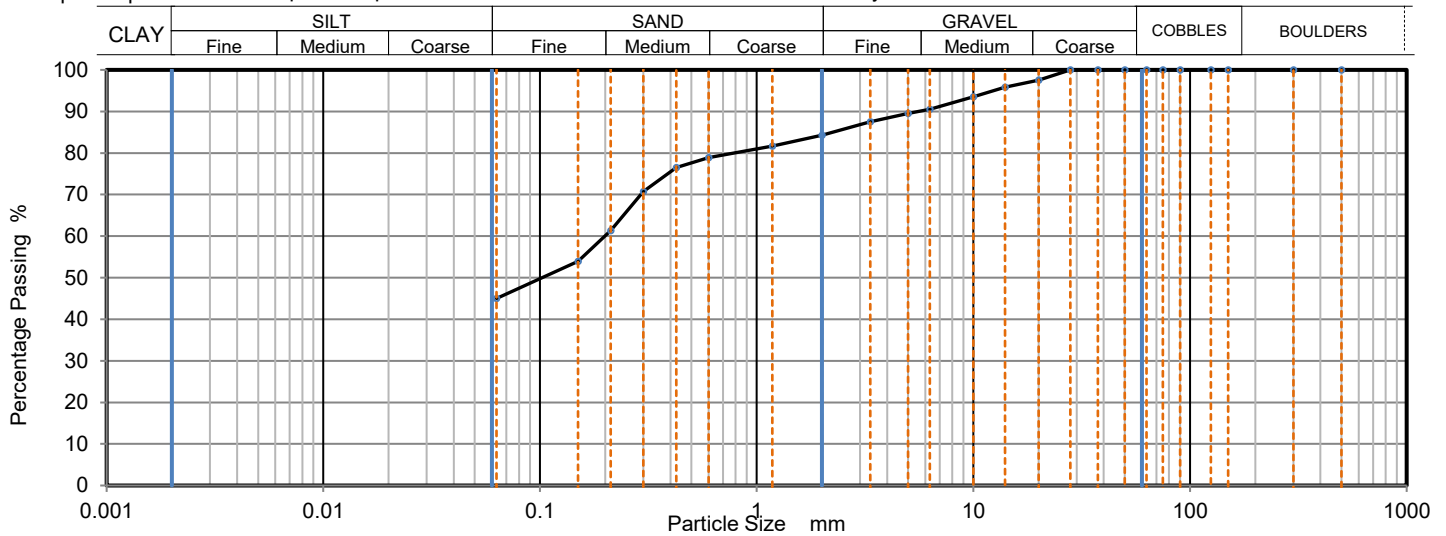
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2927114
Hole No.: TP-R2/R3-10
Sample Reference: Not Given
Sample Description: Light brown sandy CLAY with fragments of chalk, plants
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	96		
10	94		
6.3	91		
5	90		
3.35	88		
2	84		
1.18	82		
0.6	79		
0.425	77		
0.3	71		
0.212	61		
0.15	54		
0.063	45		

Sample Proportions	% dry mass
Very coarse	0
Gravel	16
Sand	39
Fines <0.063mm	45

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 3.2
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

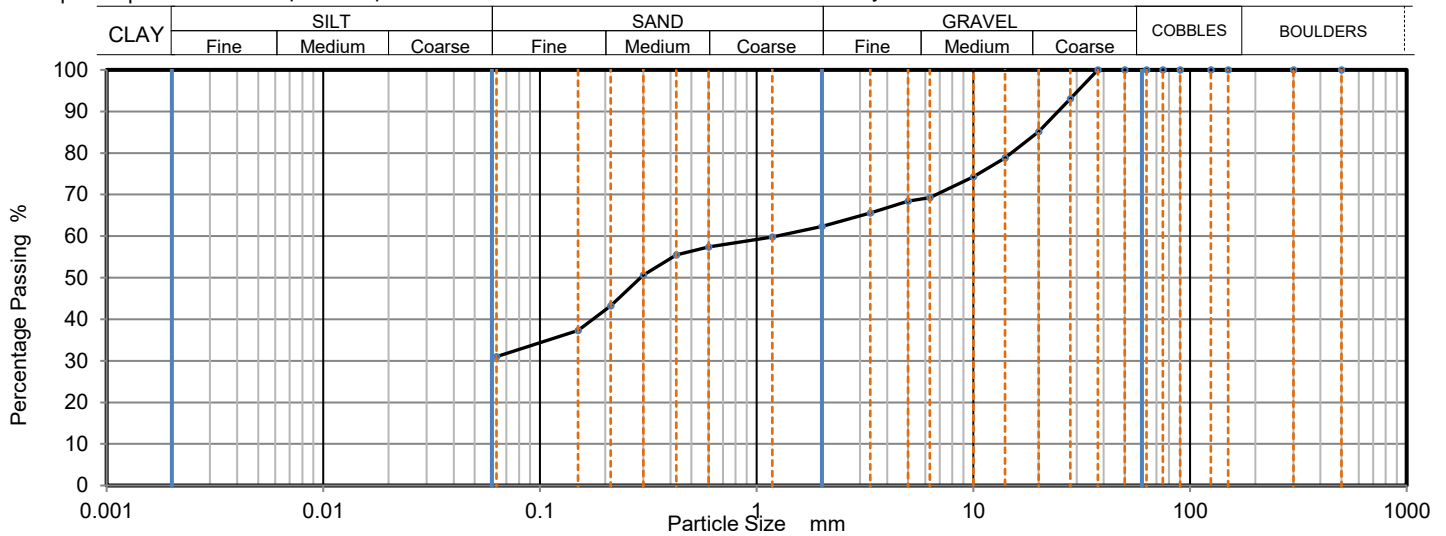
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2927117
Hole No.: TP-R4-01
Sample Reference: Not Given
Sample Description: White sandy gravelly CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	93		
20	85		
14	79		
10	74		
6.3	69		
5	68		
3.35	66		
2	62		
1.18	60		
0.6	57		
0.425	56		
0.3	51		
0.212	43		
0.15	37		
0.063	32		

Sample Proportions	% dry mass
Very coarse	0
Gravel	38
Sand	31
Fines <0.063mm	32

Grading Analysis	
D100	mm 37.5
D60	mm 1.22
D30	mm
D10	mm
Uniformity Coefficient	> 19
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

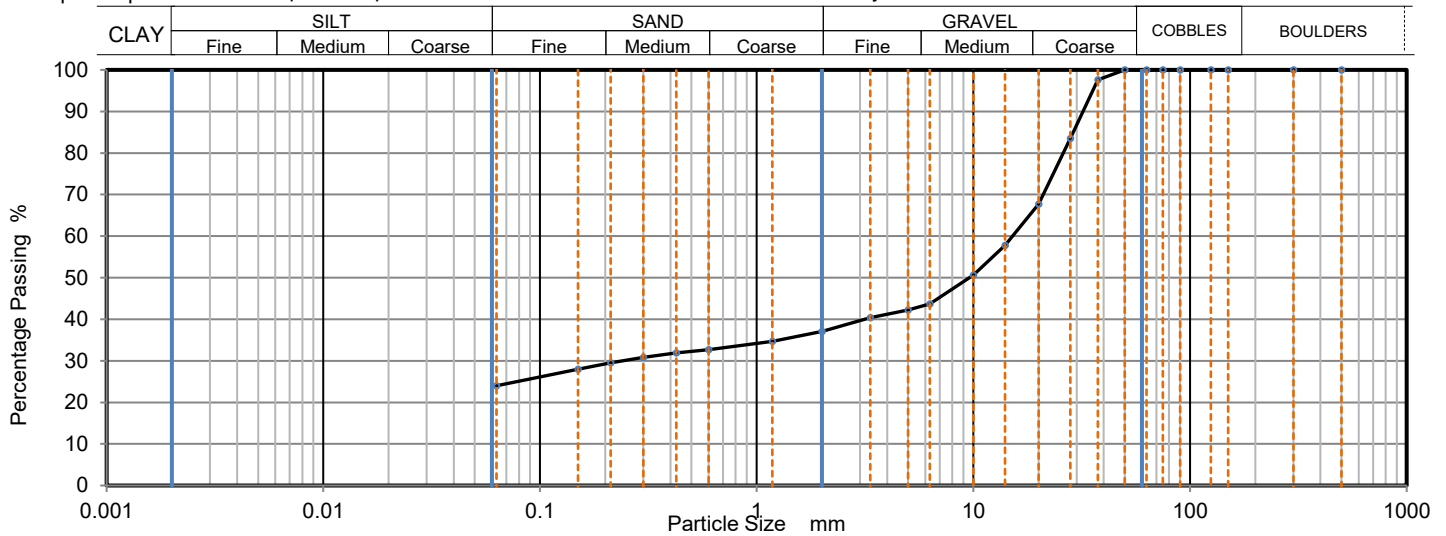
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2927122
Hole No.: TP-R5-06
Sample Reference: Not Given
Sample Description: Light brown clayey GRAVEL with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	98		
28	84		
20	68		
14	58		
10	51		
6.3	44		
5	42		
3.35	40		
2	37		
1.18	35		
0.6	33		
0.425	32		
0.3	31		
0.212	30		
0.15	28		
0.063	25		

Sample Proportions	% dry mass
Very coarse	0
Gravel	63
Sand	13
Fines <0.063mm	25

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 240
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

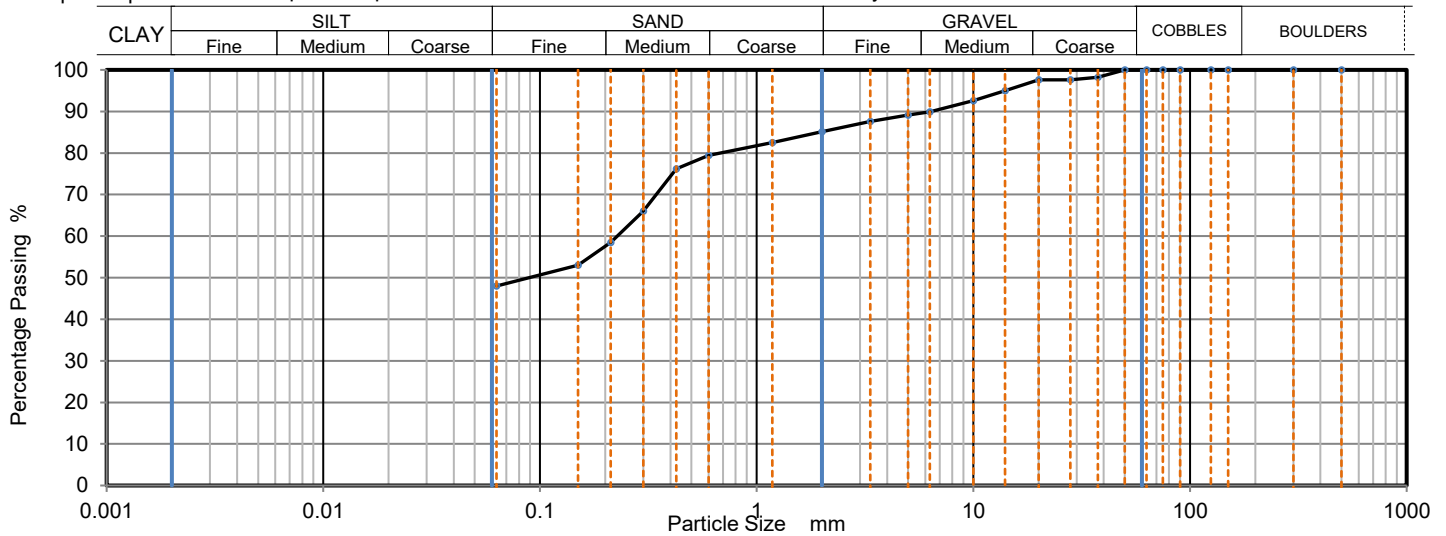
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2927123
Hole No.: TP-R5-08
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.70
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	98		
28	98		
20	98		
14	95		
10	93		
6.3	90		
5	89		
3.35	88		
2	85		
1.18	83		
0.6	79		
0.425	76		
0.3	66		
0.212	59		
0.15	53		
0.063	48		

Sample Proportions	% dry mass
Very coarse	0
Gravel	15
Sand	37
Fines <0.063mm	48

Grading Analysis	
D100	mm 50
D60	mm 0.227
D30	mm
D10	mm
Uniformity Coefficient	> 3.6
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

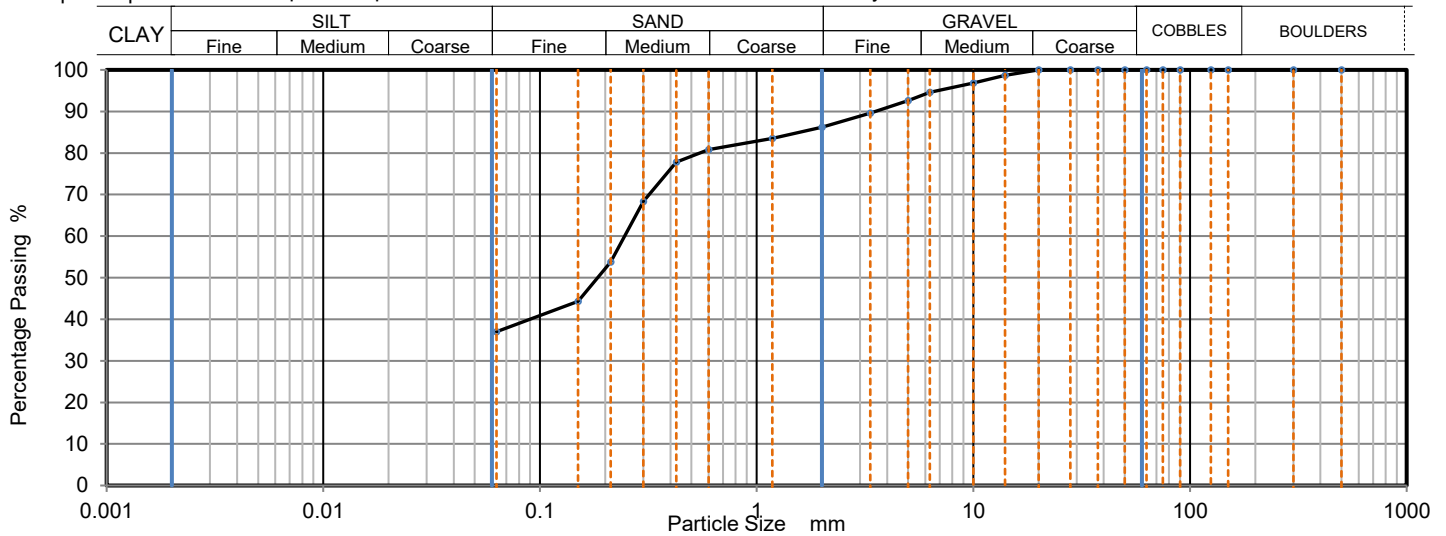
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2930350
Hole No.: TP-R2/R3-08
Sample Reference: Not Given
Sample Description: Light brown clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 1.40
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	97		
6.3	95		
5	93		
3.35	90		
2	86		
1.18	84		
0.6	81		
0.425	78		
0.3	68		
0.212	54		
0.15	44		
0.063	37		

Sample Proportions	% dry mass
Very coarse	0
Gravel	14
Sand	49
Fines <0.063mm	37

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 3.9
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

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TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

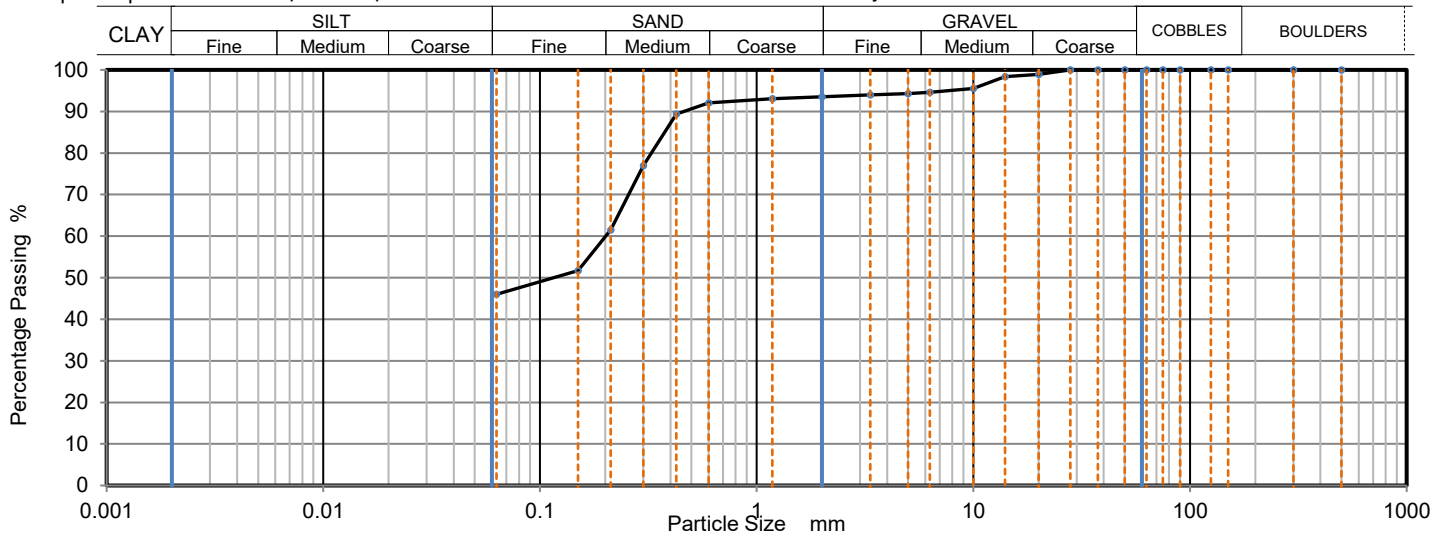
Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2930351
Hole No.: TP-R2/R3-09
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of plants
Sample Preparation: Sample was quartered, oven dried at 108.7 °C and broken down by hand.

Depth Top [m]: 0.65
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	99		
14	98		
10	96		
6.3	95		
5	94		
3.35	94		
2	94		
1.18	93		
0.6	92		
0.425	89		
0.3	77		
0.212	62		
0.15	52		
0.063	47		

Sample Proportions	% dry mass
Very coarse	0
Gravel	6
Sand	47
Fines <0.063mm	46

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 3.2
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

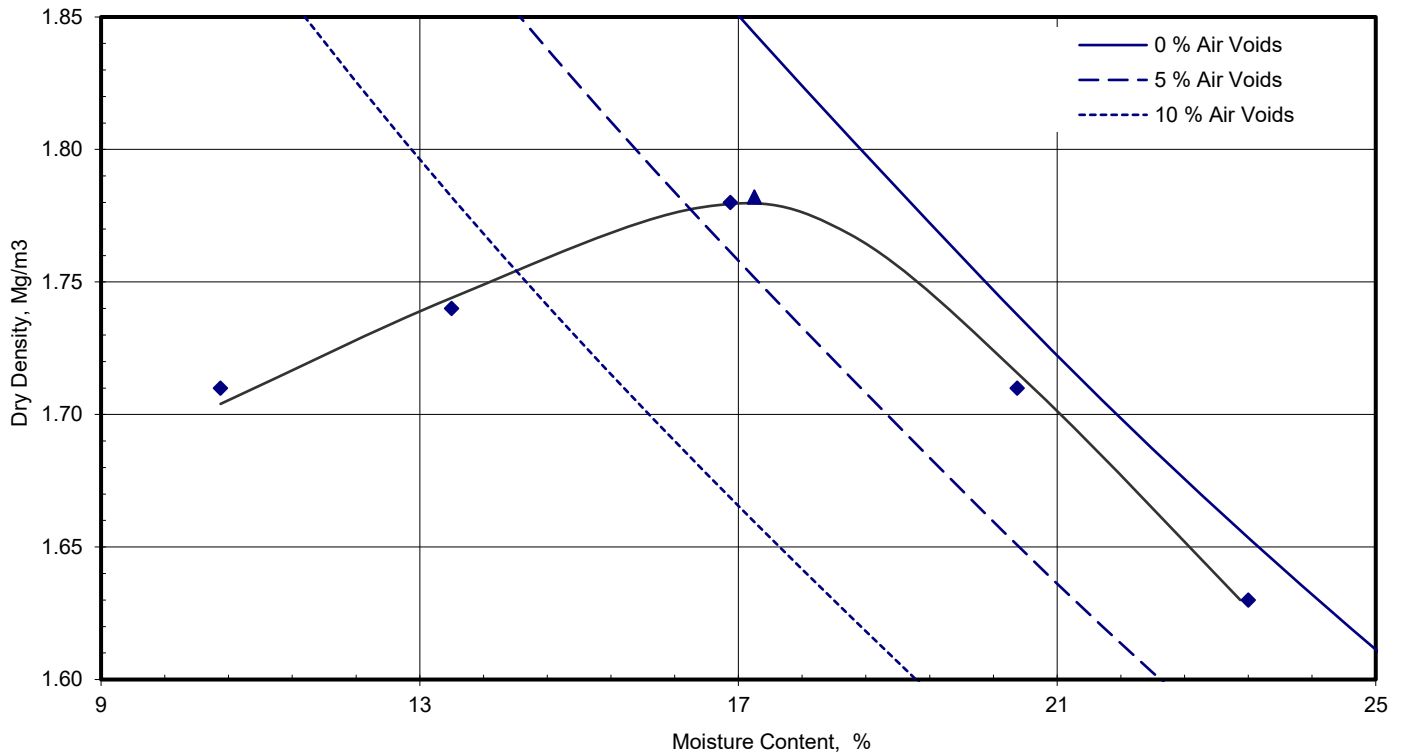
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock BridgesClient Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2927111
Hole No.: TP-R2/R3-03
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.50
Depth Base [m]: 2.60
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	11	13	17	21	23
Dry Density	Mg/m³	1.71	1.74	1.78	1.71	1.63

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	2
Particle Density - Assumed	Mg/m³	2.70
As received Moisture Content	%	21
Maximum Dry Density	Mg/m³	1.78

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

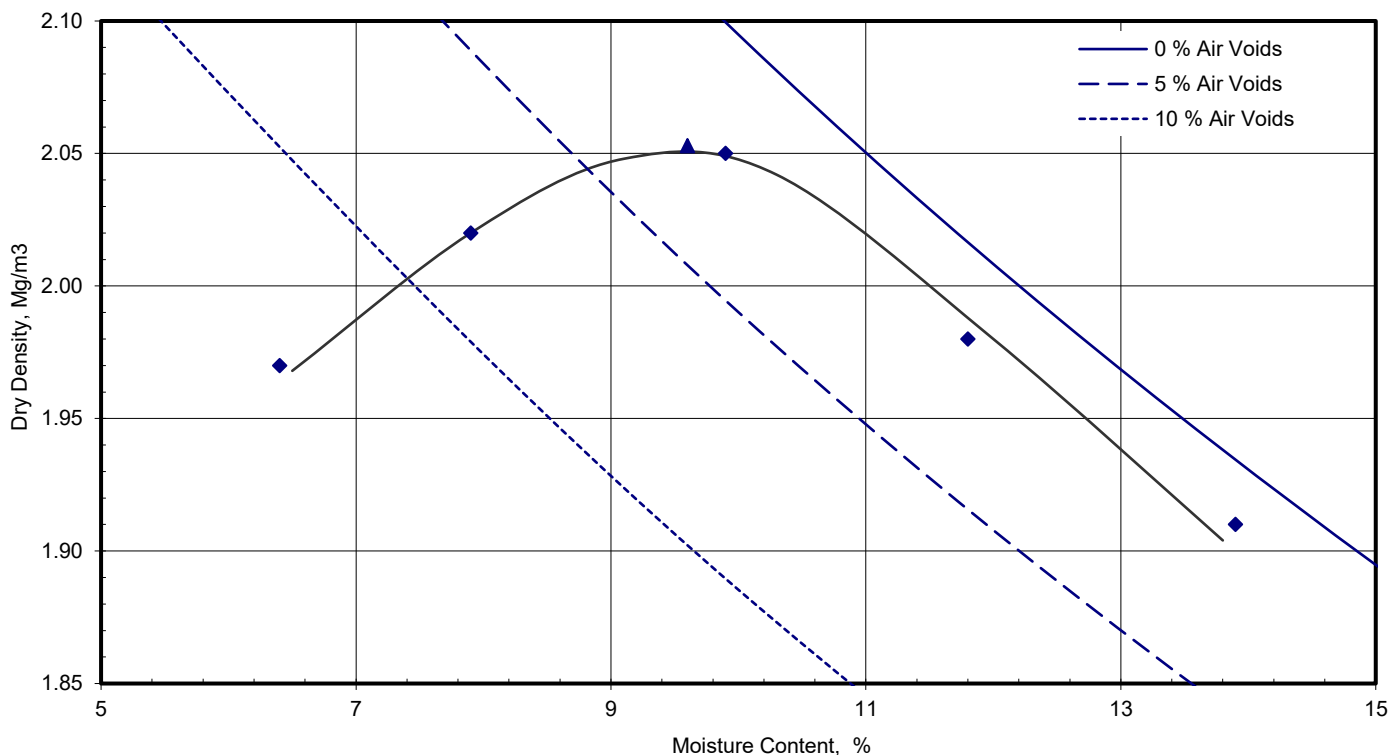
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927112
Hole No.: TP-R2-04
Sample Reference: Not Given
Sample Description: Light brown very gravelly clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	6.4	7.9	9.9	12	14
Dry Density	Mg/m³	1.97	2.02	2.05	1.98	1.91

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	7
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	14
Maximum Dry Density	Mg/m³	2.05

Optimum Moisture Content	%	9.6
--------------------------	---	-----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

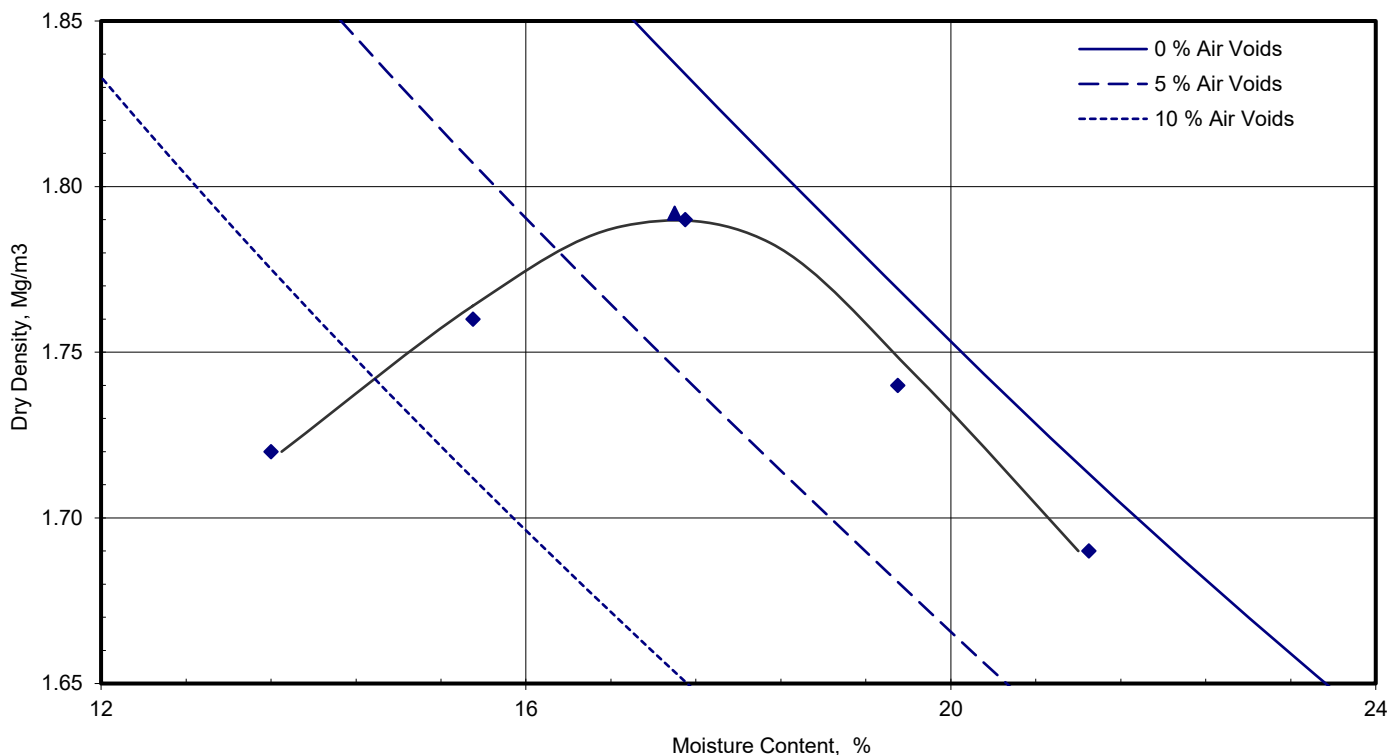
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927115
Hole No.: TP-R3-01
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	14	16	18	20	21
Dry Density	Mg/m³	1.72	1.76	1.79	1.74	1.69

Mould Type	CBR
Samples Used	Single sample tested
Dry Mass Retained on 37.5 mm Sieve	4
Dry Mass Retained on 20.0 mm Sieve	25
Particle Density - Assumed	2.70
As received Moisture Content	20
Maximum Dry Density	1.79

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

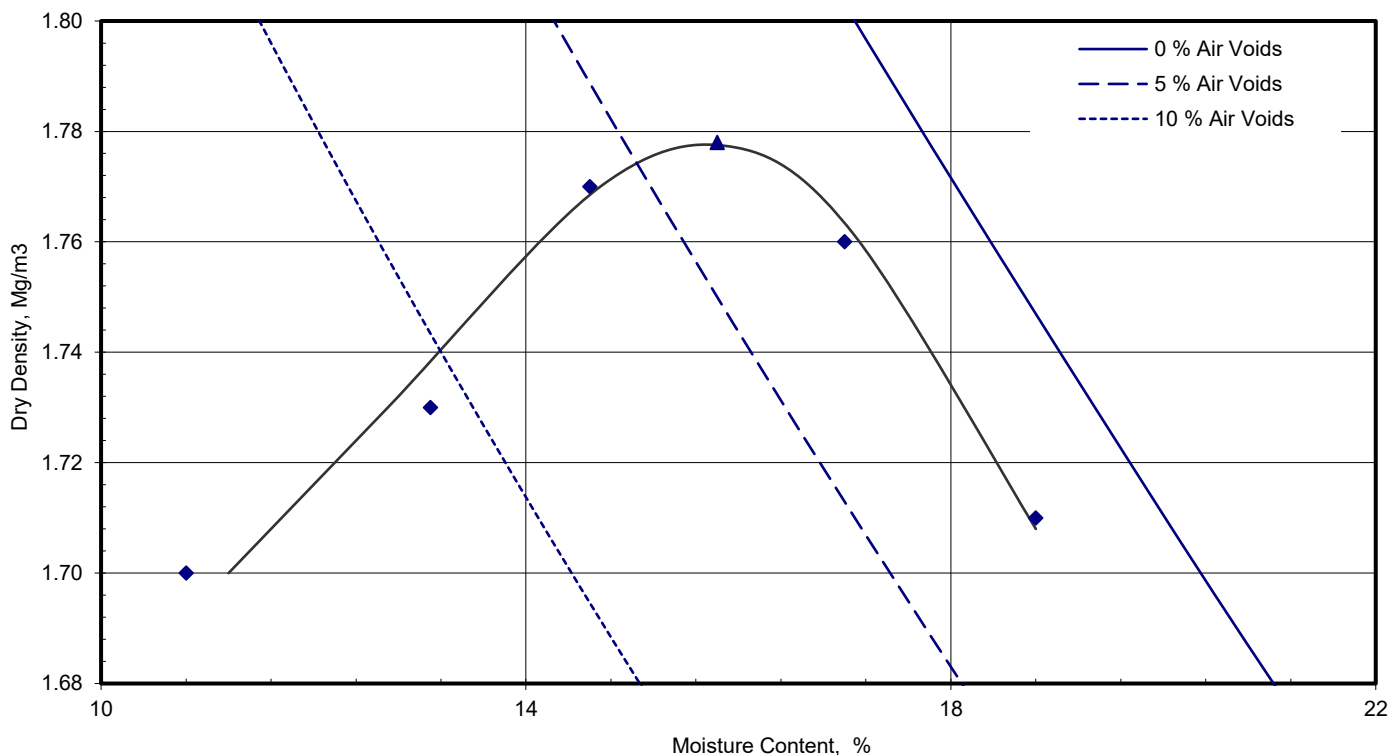
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given**Test Results:**Laboratory Reference: 2927116
Hole No.: TP-R3-04
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	11	13	15	17	19
Dry Density	Mg/m³	1.70	1.73	1.77	1.76	1.71

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	4
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	22
Maximum Dry Density	Mg/m³	1.78

Optimum Moisture Content	%	16
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

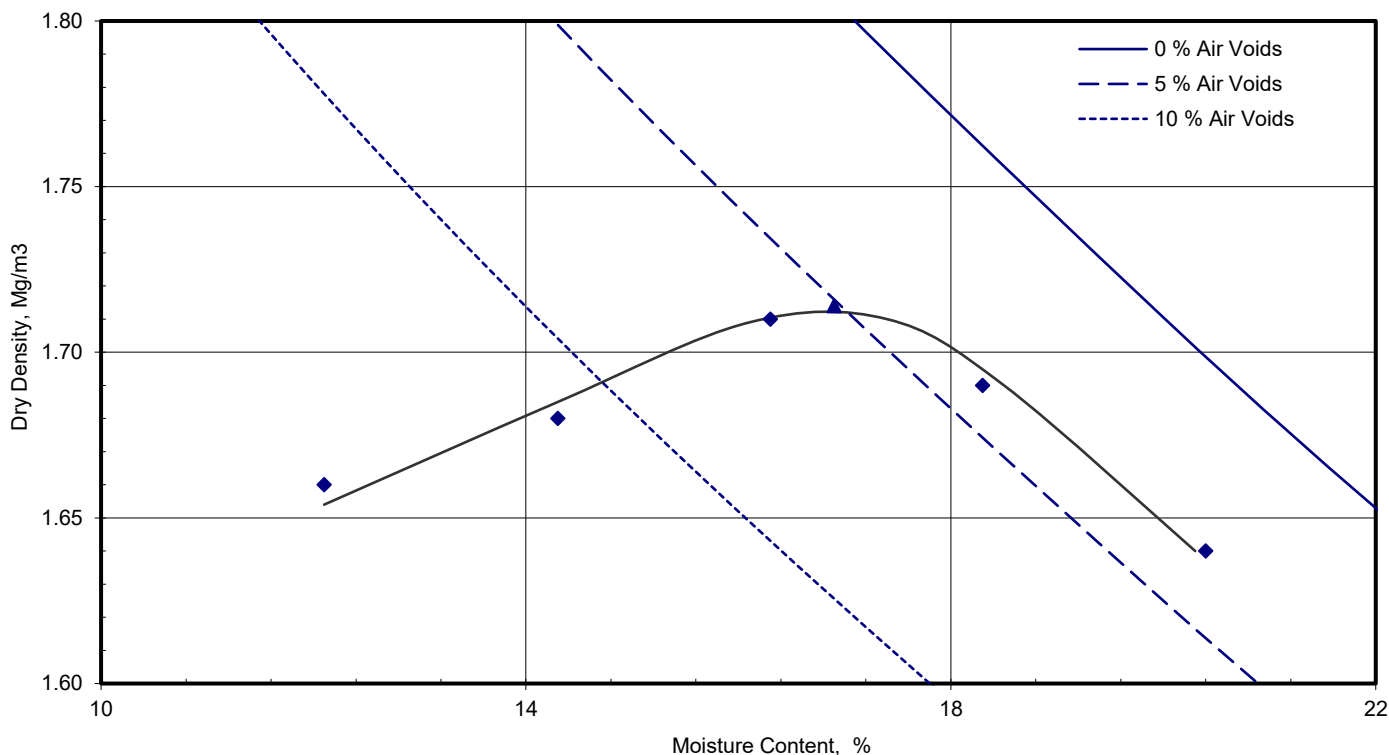
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927118
Hole No.: TP-R4-01
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 2.00
Depth Base [m]: 2.20
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	12	14	16	18	20
Dry Density	Mg/m³	1.66	1.68	1.71	1.69	1.64

Mould Type	CBR	
Samples Used	Single sample tested	
Dry Mass Retained on 37.5 mm Sieve	%	10
Dry Mass Retained on 20.0 mm Sieve	%	43
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	26
Maximum Dry Density	Mg/m³	1.71

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test as per client request.

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

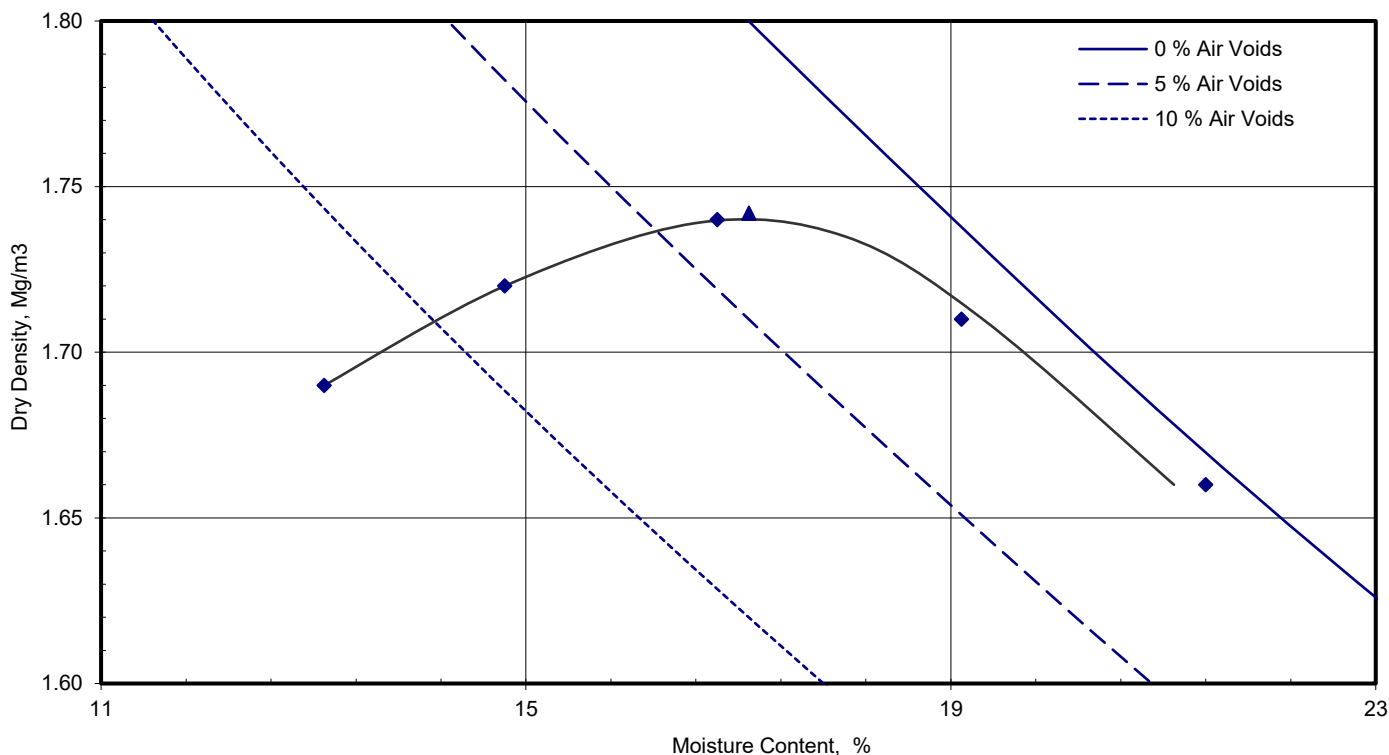
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927120
Hole No.: TP-R4-07
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.70
Depth Base [m]: Not Given
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	13	15	17	19	21
Dry Density	Mg/m³	1.69	1.72	1.74	1.71	1.66

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	20
Dry Mass Retained on 20.0 mm Sieve	%	71
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	25
Maximum Dry Density	Mg/m³	1.74

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test as per client request

Signed:

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TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

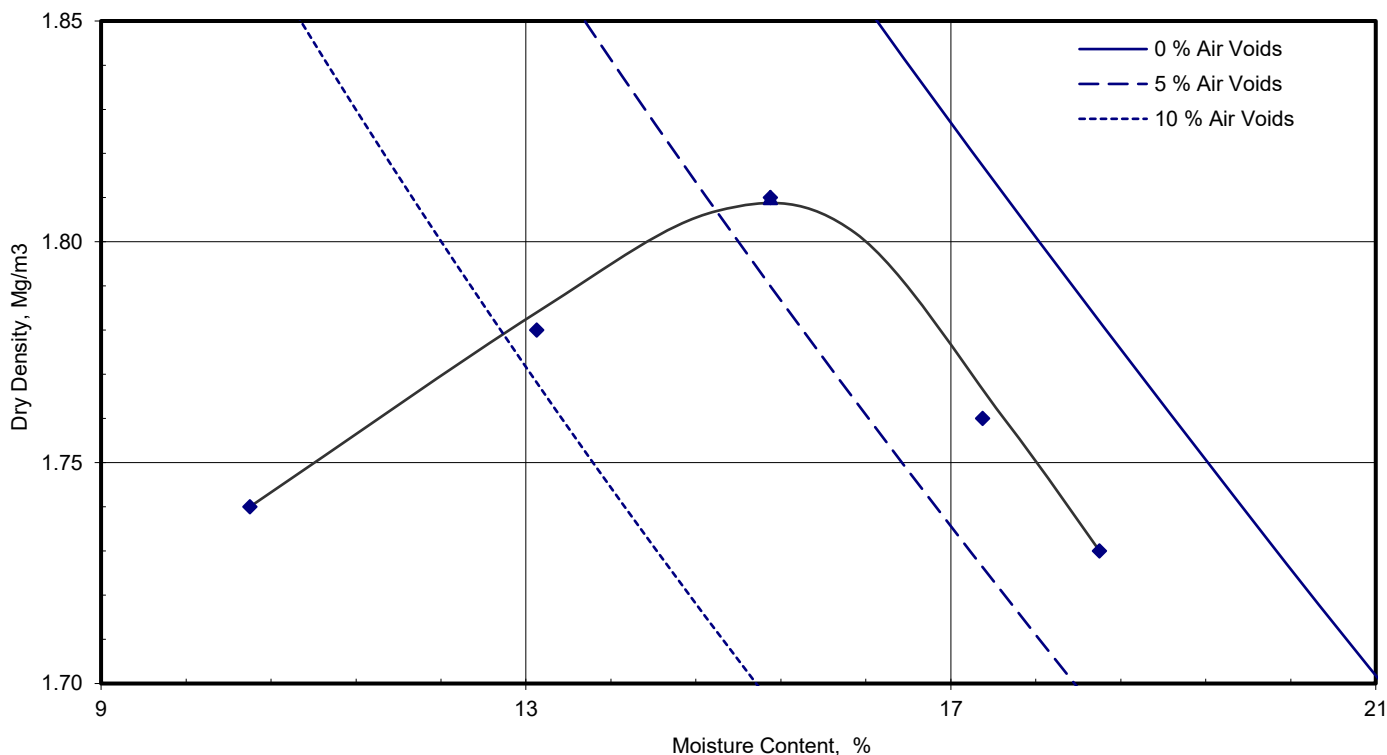
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock BridgesClient Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2927121
Hole No.: TP-R5-03
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.30
Depth Base [m]: 1.40
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	10	13	15	17	18
Dry Density	Mg/m³	1.74	1.78	1.81	1.76	1.73

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	4
Dry Mass Retained on 20.0 mm Sieve	%	7
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	18
Maximum Dry Density	Mg/m³	1.81

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

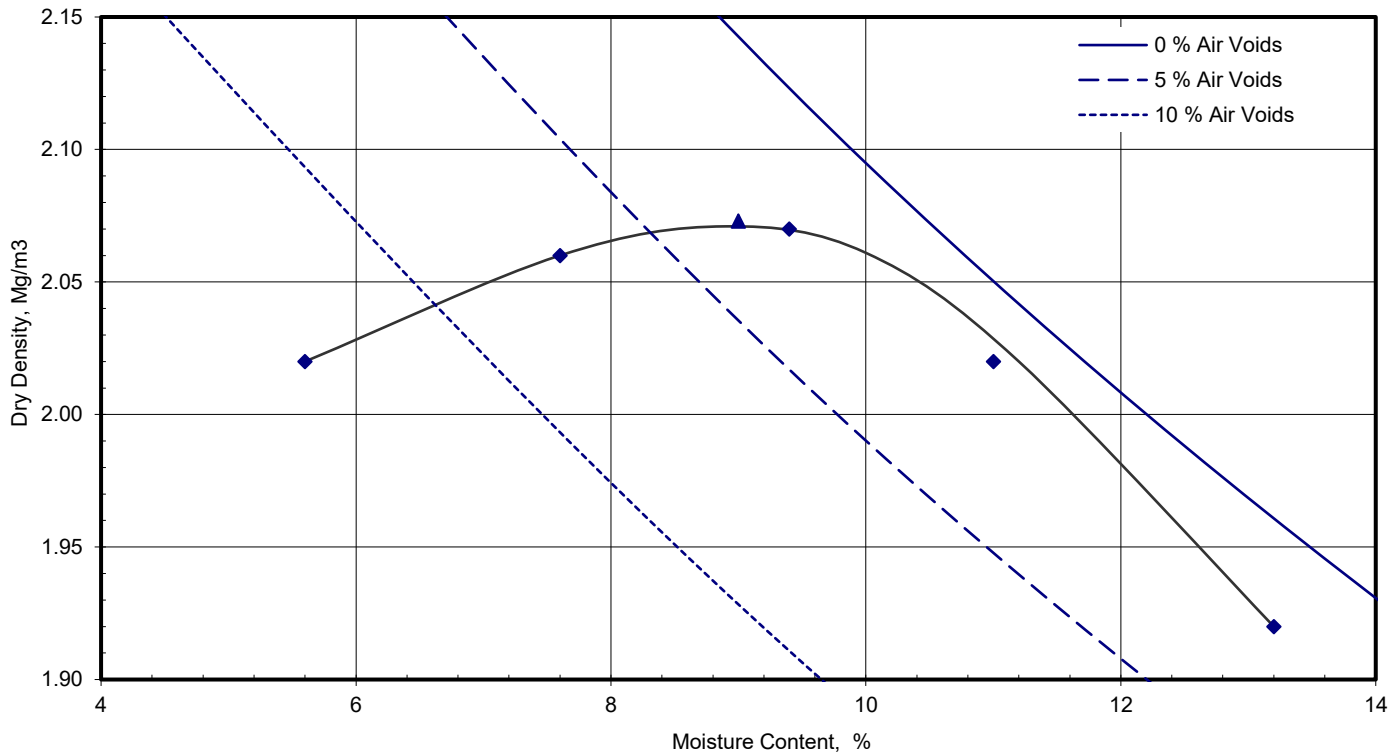
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2930350
Hole No.: TP-R2/R3-08
Sample Reference: Not Given
Sample Description: Light brown clayey SAND with fragments of chalk
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.40
Depth Base [m]: Not Given
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	5.6	7.6	9.4	11	13
Dry Density	Mg/m³	2.02	2.06	2.07	2.02	1.92

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	2
Dry Mass Retained on 20.0 mm Sieve	%	6
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	15
Maximum Dry Density	Mg/m³	2.07

Optimum Moisture Content	%	9.0
--------------------------	---	-----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 02/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927110
Hole No.: TP-R2-01
Sample Reference: Not Given
Sample Description: Brown clayey SAND with fragments of chalk

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

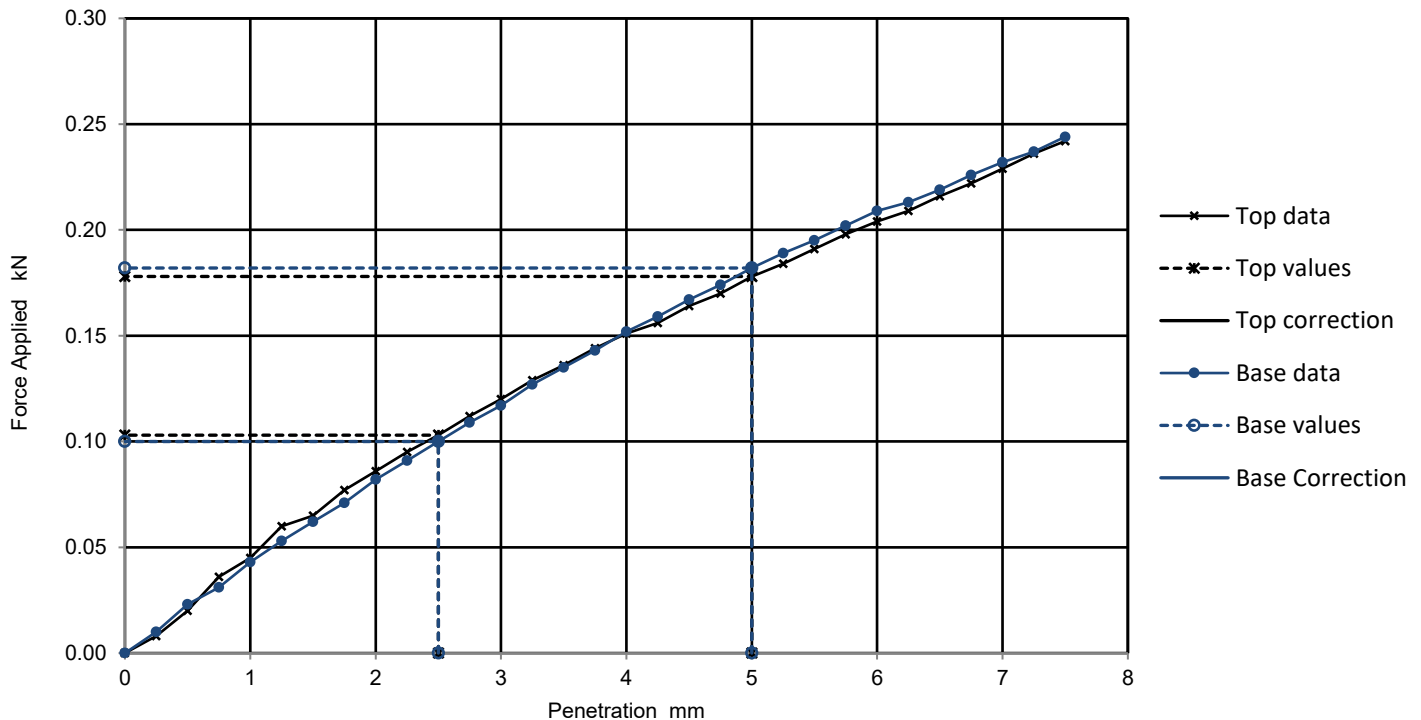
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 1 %

Initial Specimen details Bulk density 2.02 Mg/m³
Dry density 1.69 Mg/m³
Moisture content 20 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.78	0.89	0.89	0.9
No	0.76	0.91	0.91	

Moisture Content %
19
19

Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927113
Hole No.: TP-R2-06
Sample Reference: Not Given
Sample Description: Light brown CLAY with fragments of chalk

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

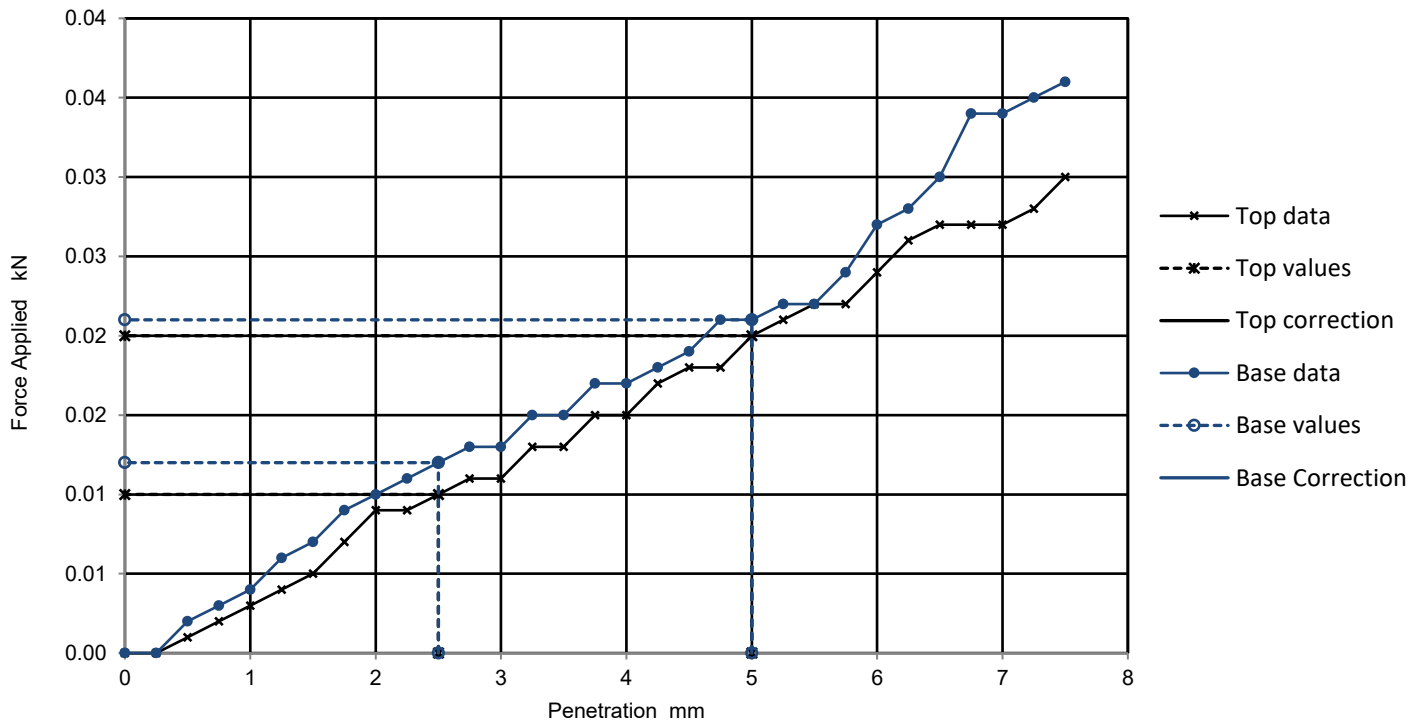
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 17 %

Initial Specimen details Bulk density 2.09 Mg/m³
Dry density 1.78 Mg/m³
Moisture content 18 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.076	0.1	0.1	0.1
No	0.091	0.11	0.11	

Moisture Content %
18
19

Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927114
Hole No.: TP-R2/R3-10
Sample Reference: Not Given
Sample Description: Light brown sandy CLAY with fragments of chalk, plants

Depth Top [m]: 0.80
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

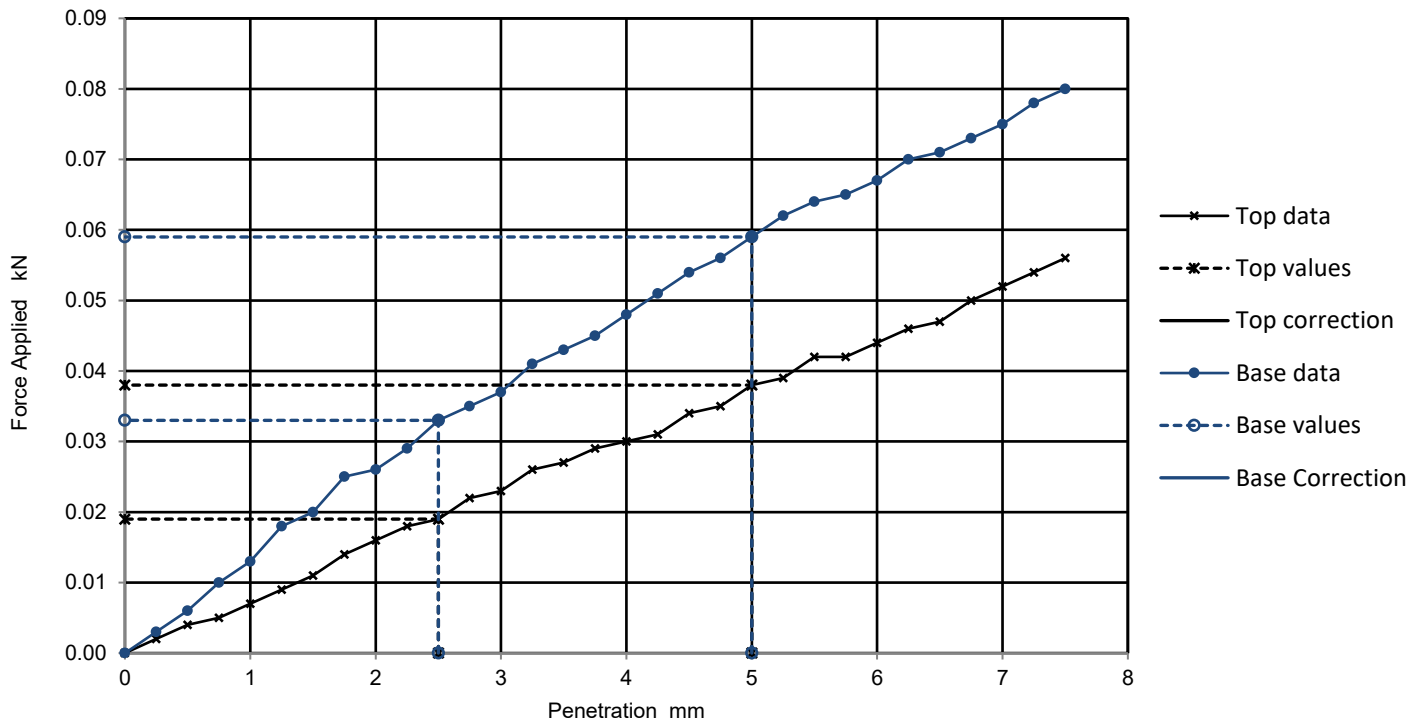
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 3 %

Initial Specimen details Bulk density 2.11 Mg/m³
Dry density 1.80 Mg/m³
Moisture content 17 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.14	0.19	0.19	
No	0.25	0.3	0.3	

Moisture Content %
17
17

Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927117
Hole No.: TP-R4-01
Sample Reference: Not Given
Sample Description: White sandy gravelly CLAY with fragments of chalk

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Specimen Preparation:

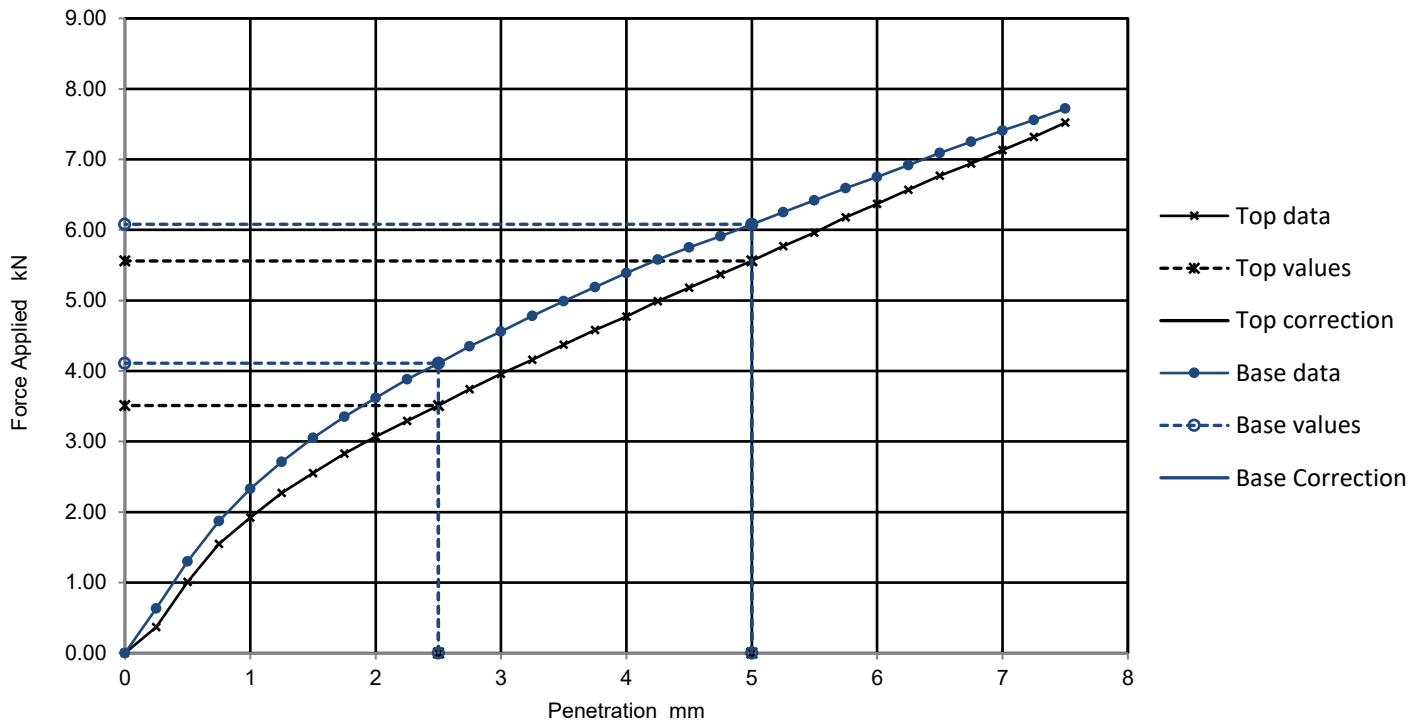
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 15 %

Initial Specimen details Bulk density 2.04 Mg/m³
Dry density 1.78 Mg/m³
Moisture content 14 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	27	28	28	29
No	31	30	31	

Moisture Content %
0.1
0.1

Remarks:

Test/ Specimen
specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927119
Hole No.: TP-R4-02
Sample Reference: Not Given
Sample Description: White sandy CHALK

Depth Top [m]: 0.50
Depth Base [m]: 0.60
Sample Type: B

Specimen Preparation:

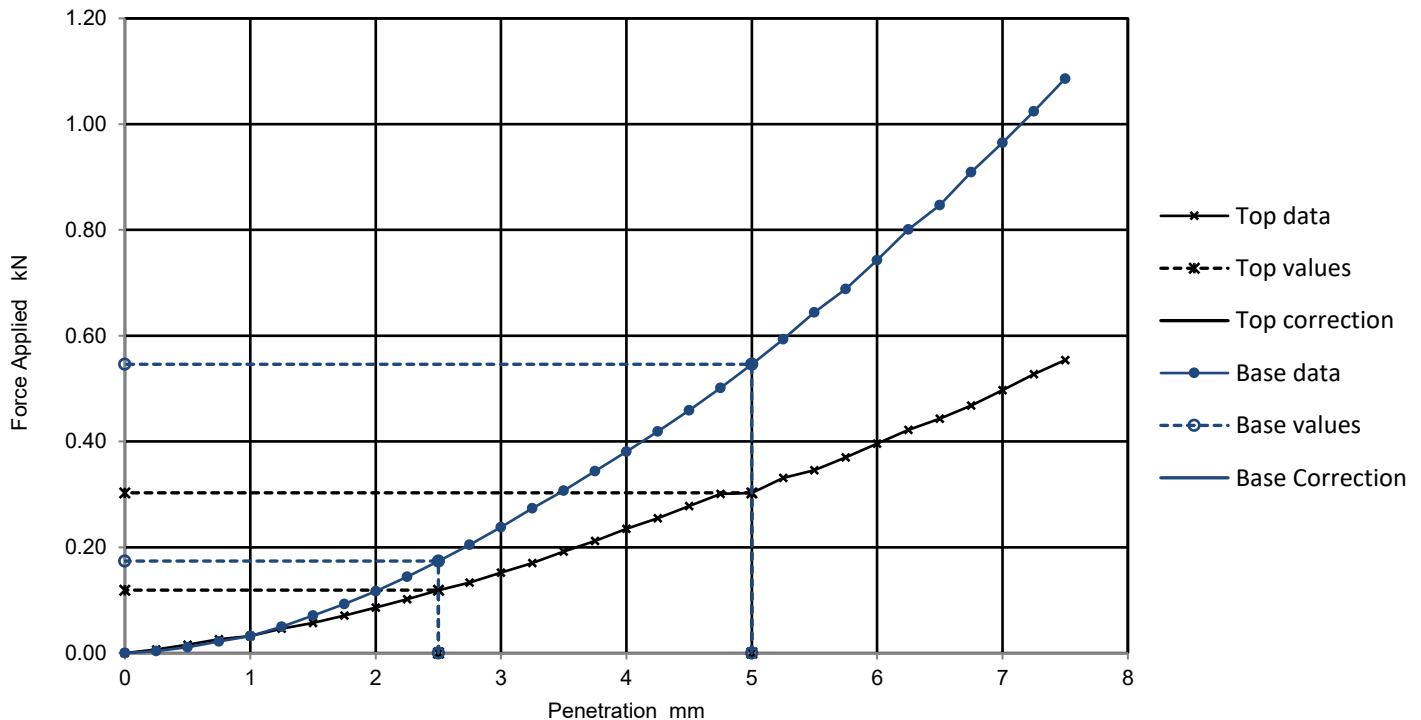
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 52 %

Initial Specimen details Bulk density 1.95 Mg/m3
Dry density 1.54 Mg/m3
Moisture content 26 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.9	1.5	1.5	
No	1.3	2.7	2.7	

Moisture Content %
25
26

Remarks:**Test/ Specimen specific remarks:**

Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927122
Hole No.: TP-R5-06
Sample Reference: Not Given
Sample Description: Light brown clayey GRAVEL with fragments of chalk

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

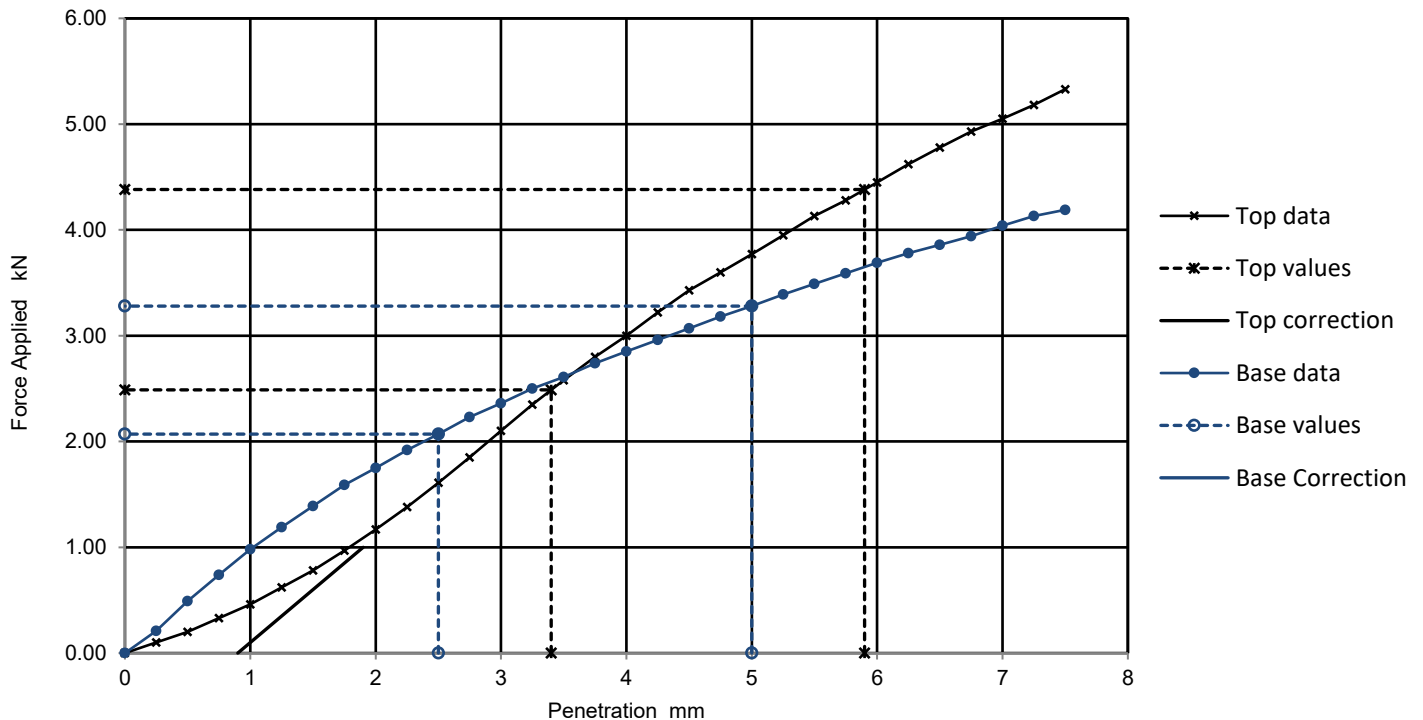
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 32 %

Initial Specimen details Bulk density 1.91 Mg/m³
Dry density 1.55 Mg/m³
Moisture content 23 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	19	22	22	
No	16	16	16	

Moisture Content %
22
23

Remarks:

Test/ Specimen specific remarks:

Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2927123
Hole No.: TP-R5-08
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of chalk

Depth Top [m]: 0.70
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

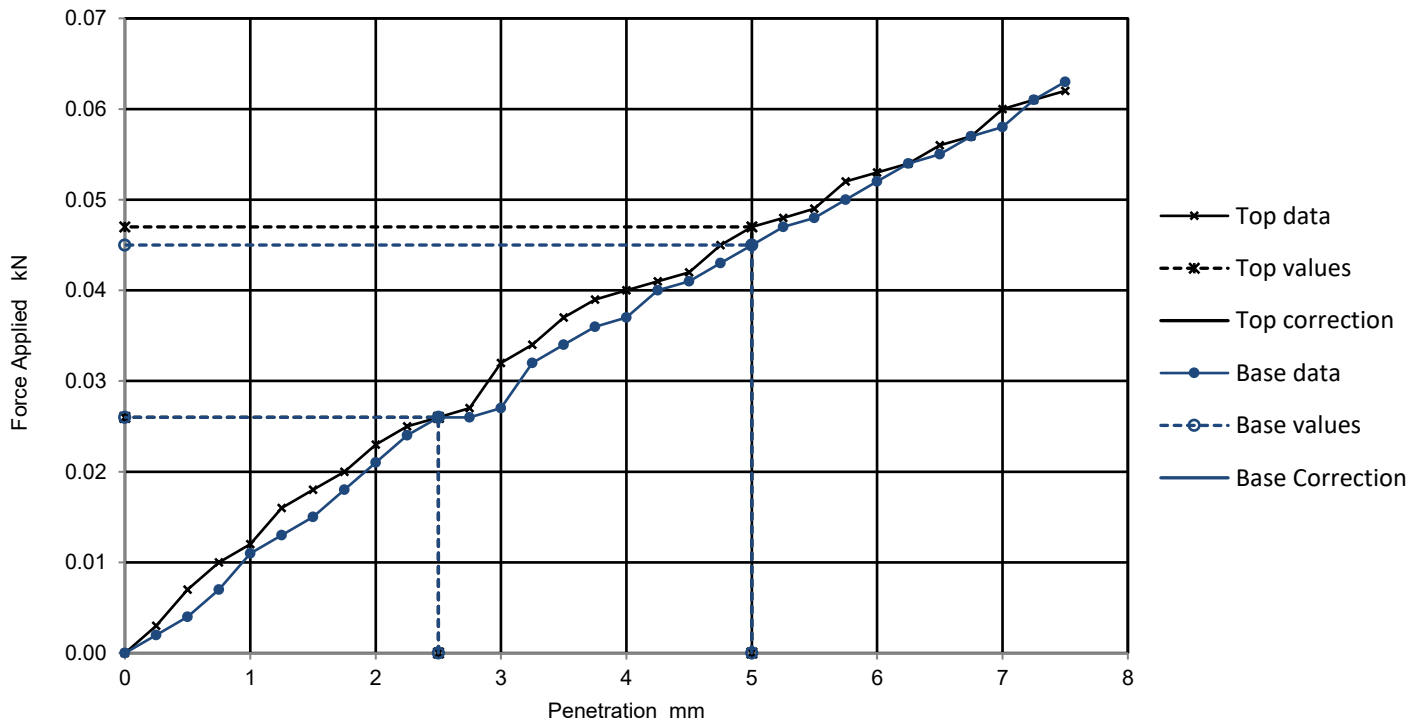
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 3 %

Initial Specimen details Bulk density 1.93 Mg/m³
Dry density 1.53 Mg/m³
Moisture content 27 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.2	0.24	0.24	0.23
No	0.2	0.23	0.23	

Moisture Content %
27
26

Remarks:

Test/ Specimen
specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2930351
Hole No.: TP-R2/R3-09
Sample Reference: Not Given
Sample Description: Brown sandy CLAY with fragments of plants

Depth Top [m]: 0.65
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

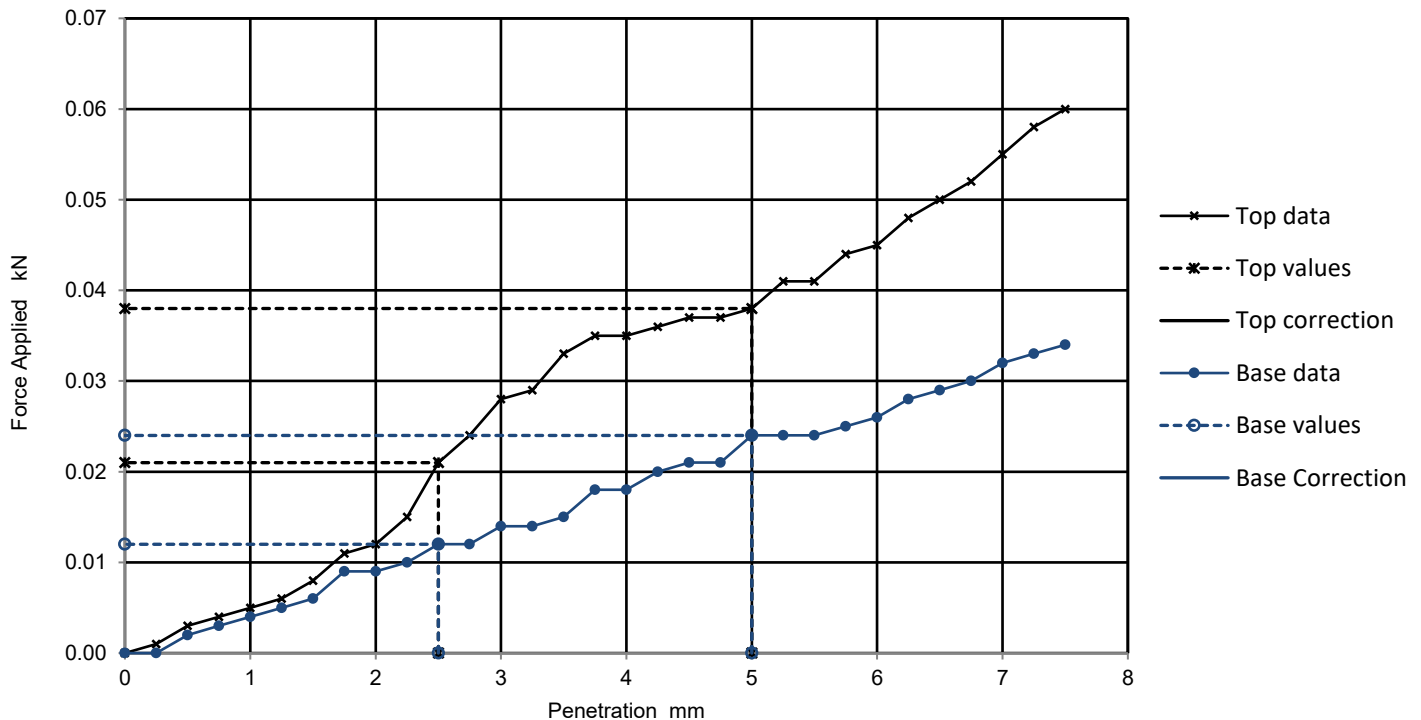
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 1 %

Initial Specimen details Bulk density 2.01 Mg/m³
Dry density 1.68 Mg/m³
Moisture content 19 %
Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.16	0.19	0.19	
No	0.091	0.12	0.12	

Moisture Content %
20
20

Remarks:

Test/ Specimen specific remarks:

Signed:

Katarzyna Banys
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF BULK DENSITY - IMMERSION IN FLUID METHOD

Tested in Accordance with: BS EN ISO 17892-2: 2014: Clause 5.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041
Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Bulk density	Dry density	WC	Preparation		
		Reference	Depth Top	Depth Base	Type								
			m	m				Mg/m3	Mg/m3	%			
2927110	TP-R2-01	Not Given	0.40	0.50	B	Brown clayey SAND with fragments of chalk		2.01	1.70	18.3			
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		1.53	1.35	12.9			
2927113	TP-R2-06	Not Given	1.00	1.20	B	Light brown CLAY with fragments of chalk		2.12	1.82	16.5			

Note: WC - Water Content by BS EN ISO 17892-1

Comments:

Signed: Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.09	1.75	20	
2927115	TP-R3-01	Not Given	1.40	1.50	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	16	2.18	1.88	16	
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.10	1.77	19	
2927118	TP-R4-01	Not Given	2.00	2.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	21	2.08	1.73	20	
2927119	TP-R4-02	Not Given	0.50	0.60	B	White sandy CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.03	1.69	20	
2927120	TP-R4-07	Not Given	1.70	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	23	2.05	1.67	23	
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	23	2.03	1.67	21	
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.02	1.63	24	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-4: 1990: Clause 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges

Client Reference: 2899
Job Number: 24-78011-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01 - 31/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Moisture Content %	Saturated Moisture Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
2927111	TP-R2/R3-03	Not Given	2.50	2.60	B	White CHALK		36	19	20	2.2	
2927112	TP-R2-04	Not Given	1.00	1.20	B	Light brown very gravelly clayey SAND with fragments of chalk		12	17	N/A	1.8	
2927116	TP-R3-04	Not Given	1.40	1.50	B	White CHALK		47	19	20	2.5	
2927121	TP-R5-03	Not Given	1.30	1.40	B	White CHALK		46	20	23	2.4	
2927122	TP-R5-06	Not Given	0.40	0.50	B	Light brown clayey GRAVEL with fragments of chalk		21	19	N/A	2.3	
2927124	TP-R5-09	Not Given	1.60	Not Given	B	White CHALK	Water ooze out from the mould at 40 blows	20	24	24	2.7	

Comments:

Signed:

Katarzyna Banyś
Junior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.4 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

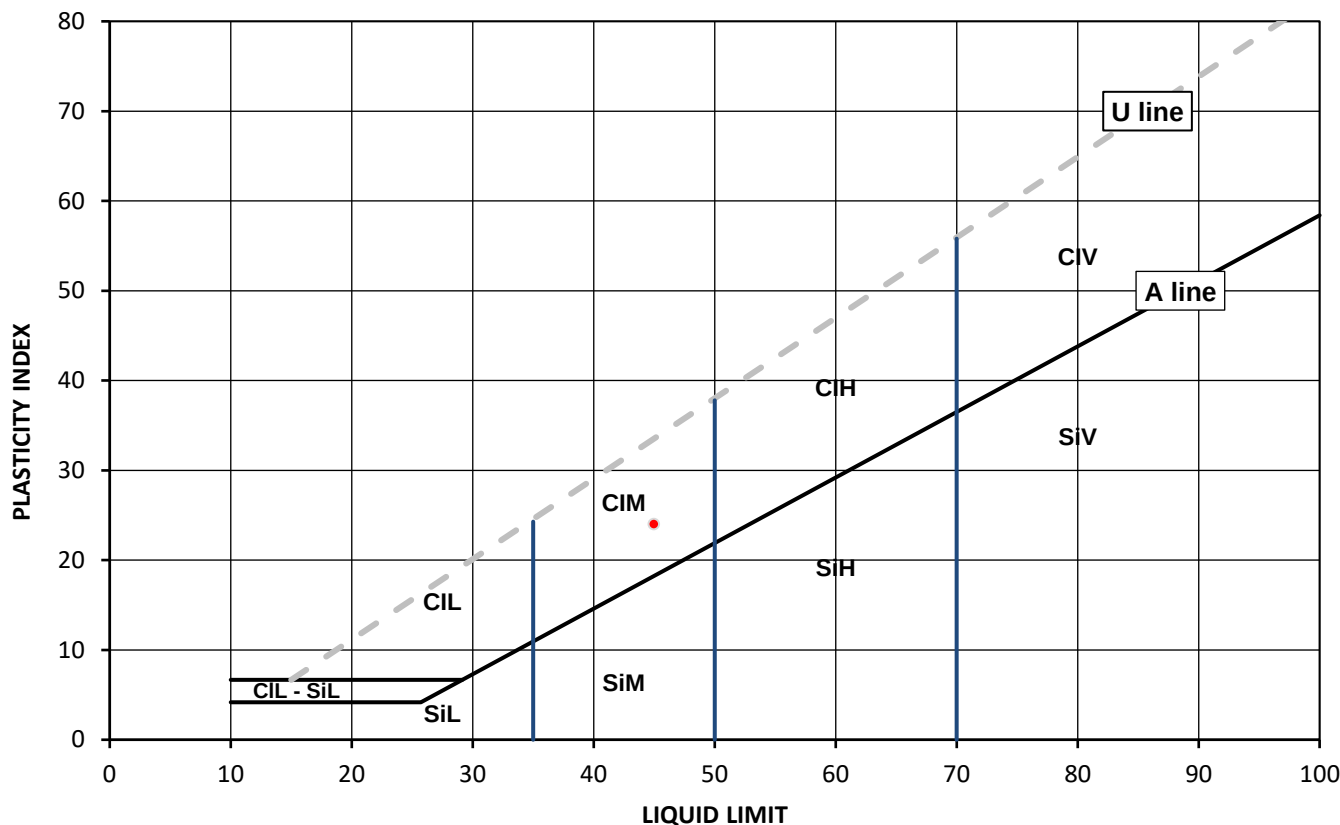
Test Results:

Laboratory Reference: 2928163
Hole No.: TP-004
Sample Reference: Not Given
Sample Description: Light brown slightly gravelly slightly sandy CLAY with fragments of chalk, plants

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	45	21	24	84



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.4 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

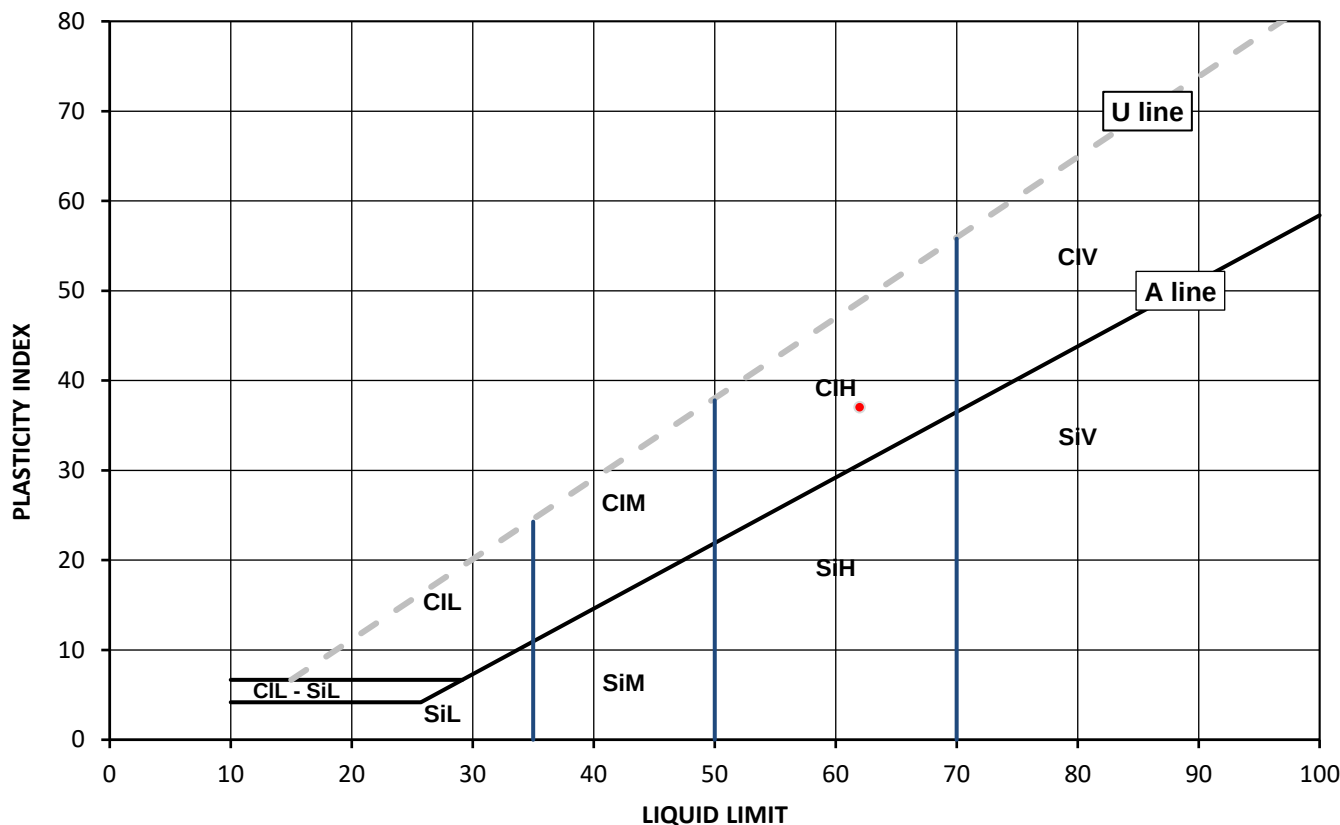
Test Results:

Laboratory Reference: 2928164
Hole No.: TP-007
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY

Depth Top [m]: 1.90
Depth Base [m]: 2.00
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	62	25	37	90



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



Environmental Science

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Client Reference: 2899
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Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

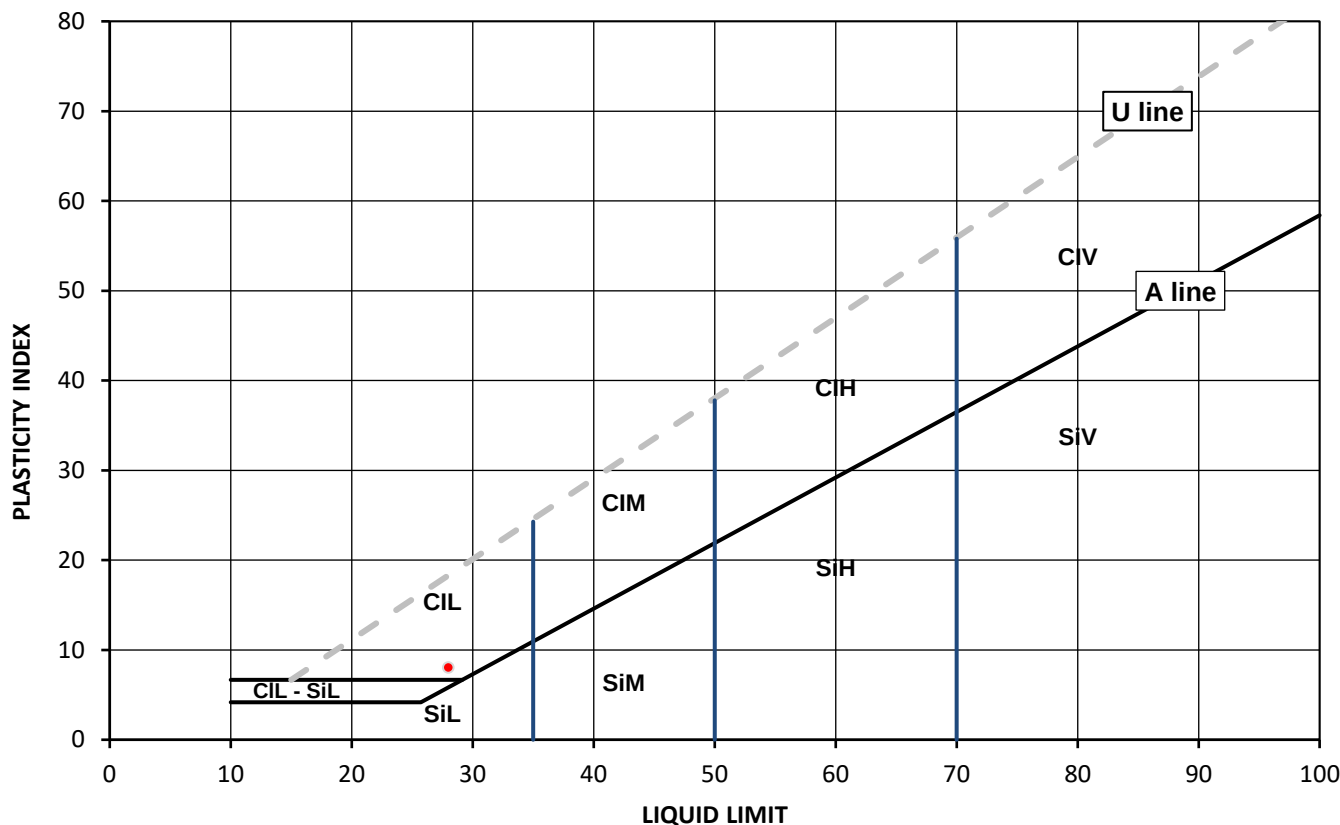
Test Results:

Laboratory Reference: 2928166
Hole No.: TP-009
Sample Reference: Not Given
Sample Description: Light brown slightly gravelly slightly sandy CLAY with fragments of chalk

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	28	20	8	59



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Northampton NN4 7EB



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4041

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NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

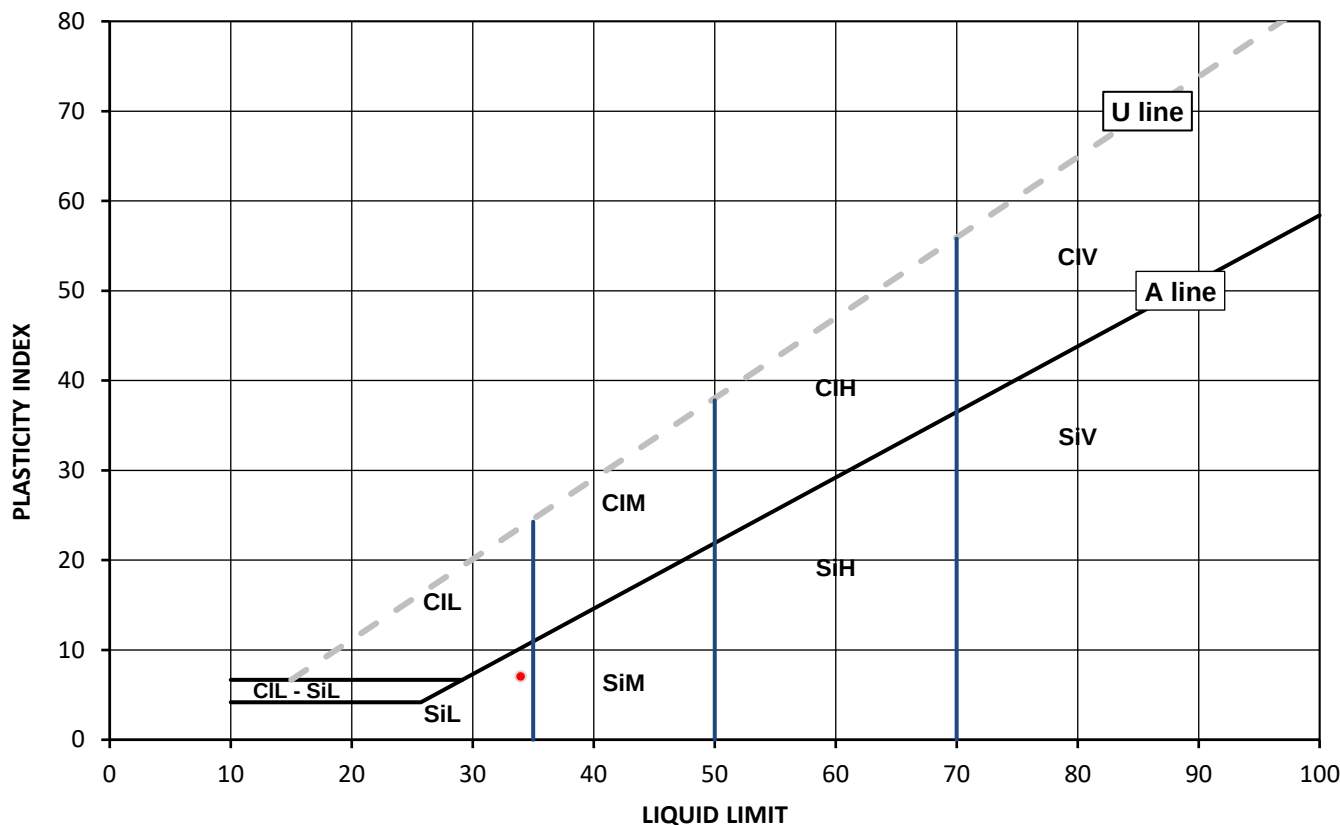
Test Results:

Laboratory Reference: 2928168
Hole No.: TP-012
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B

Sample Preparation: Tested after >425 µm removed by hand

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
32	34	27	7	21



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Baldock

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 12/02/2024
Sampled By: Not Given

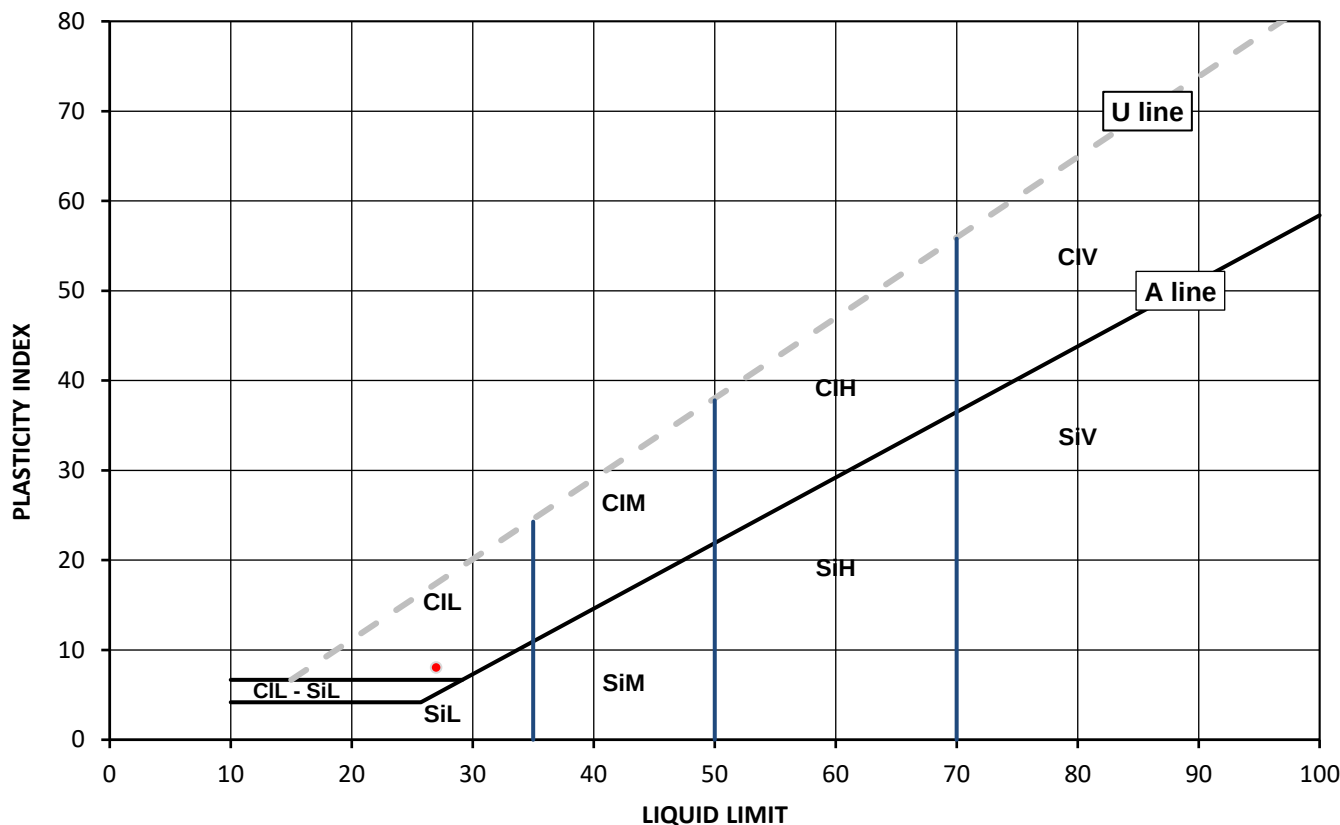
Test Results:

Laboratory Reference: 2928170
Hole No.: TP-019
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 2.10
Depth Base [m]: 2.20
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
25	27	19	8	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Northampton NN4 7EB



Environmental Science

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Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 12/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

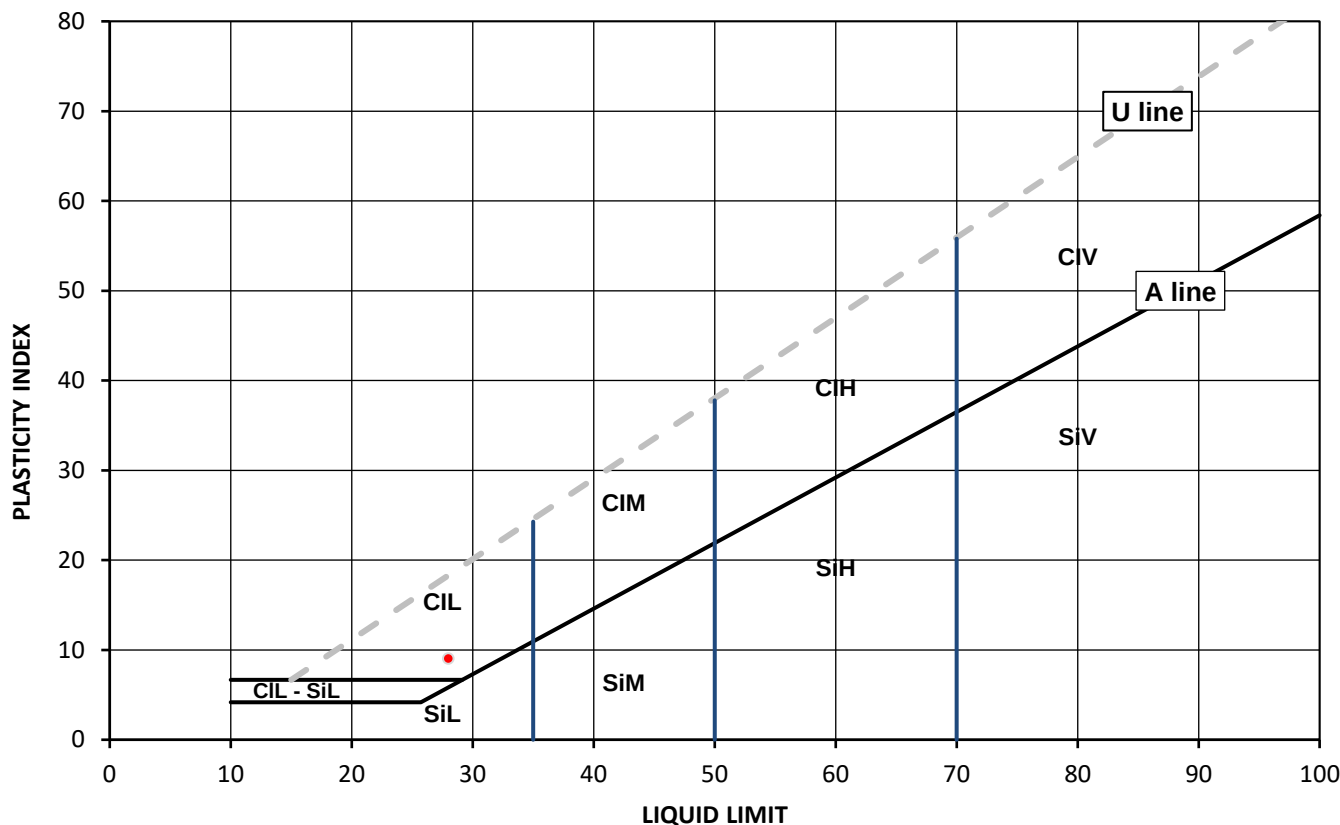
Test Results:

Laboratory Reference: 2928171
Hole No.: TP-020
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
24	28	19	9	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	O append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Environmental Science

4041

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Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 12/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

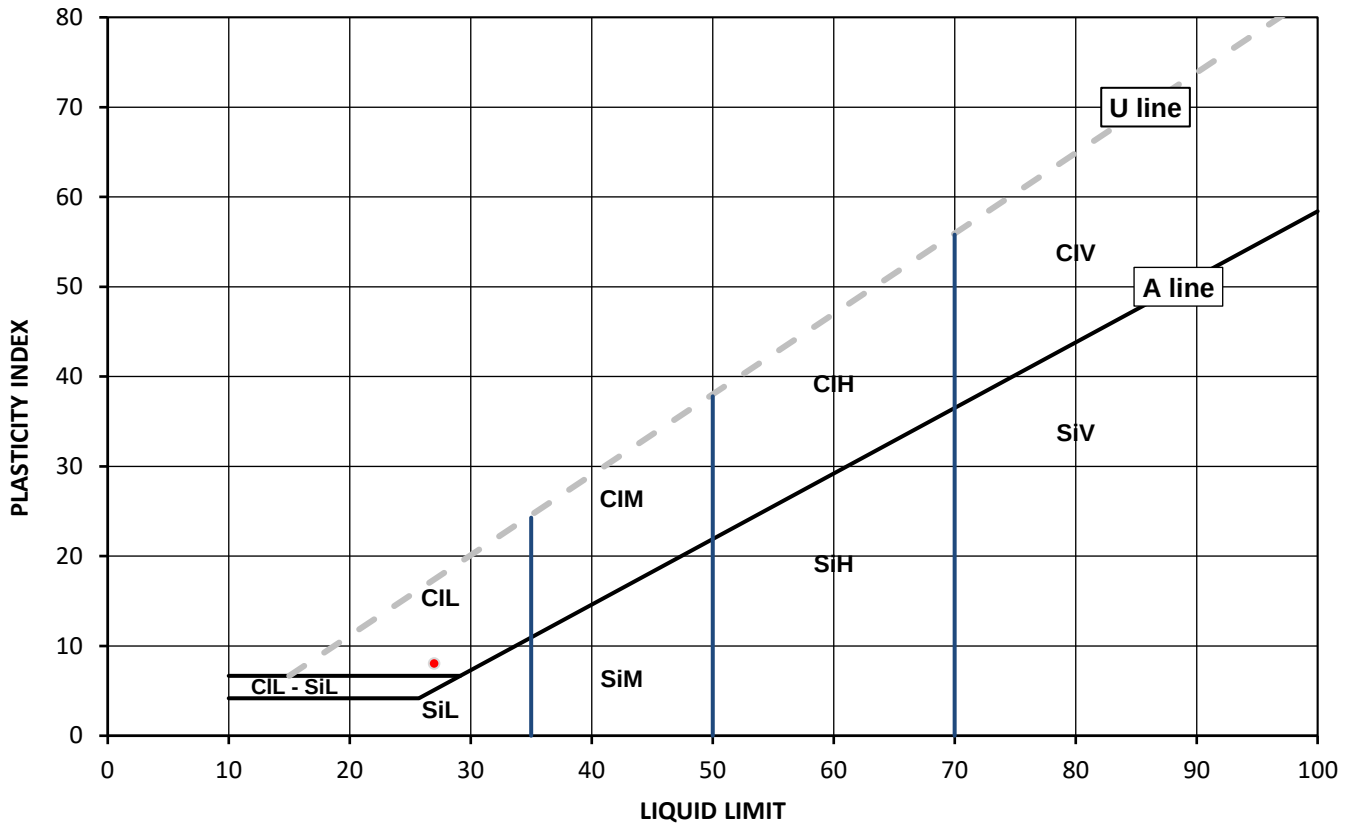
Test Results:

Laboratory Reference: 2928173
Hole No.: TP-028
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 2.10
Depth Base [m]: 2.20
Sample Type: B

Sample Preparation: Tested in natural condition

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
23	27	19	8	100



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	below 35
Si	Silt	35 to 50
	L	Low
	M	Medium
	H	High
	V	Very high
	O	Organic
		append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Site Address: Baldock

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

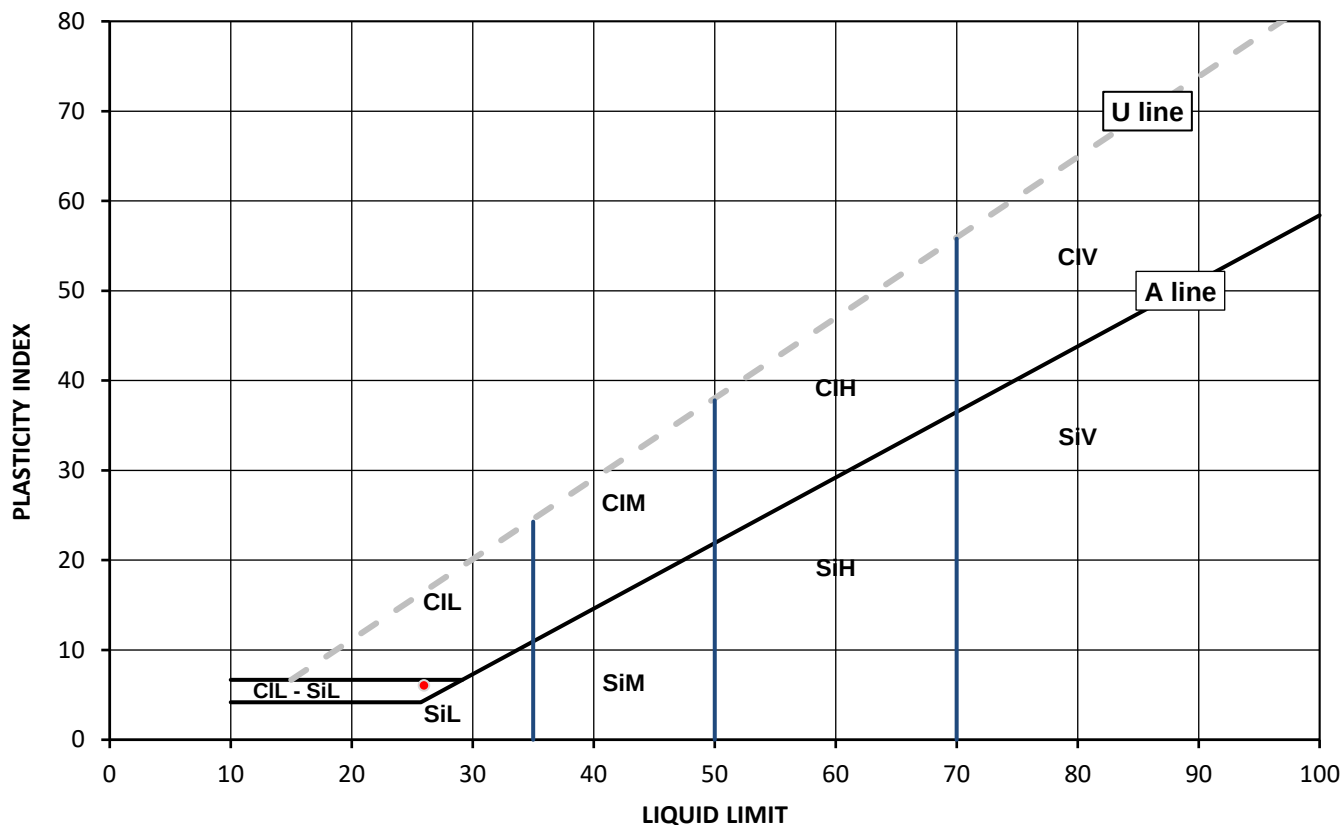
Test Results:

Laboratory Reference: 2928174
Hole No.: TP-029
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B

Sample Preparation: Tested after >425 µm removed by hand

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
21	26	20	6	19



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	O append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Baldock

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

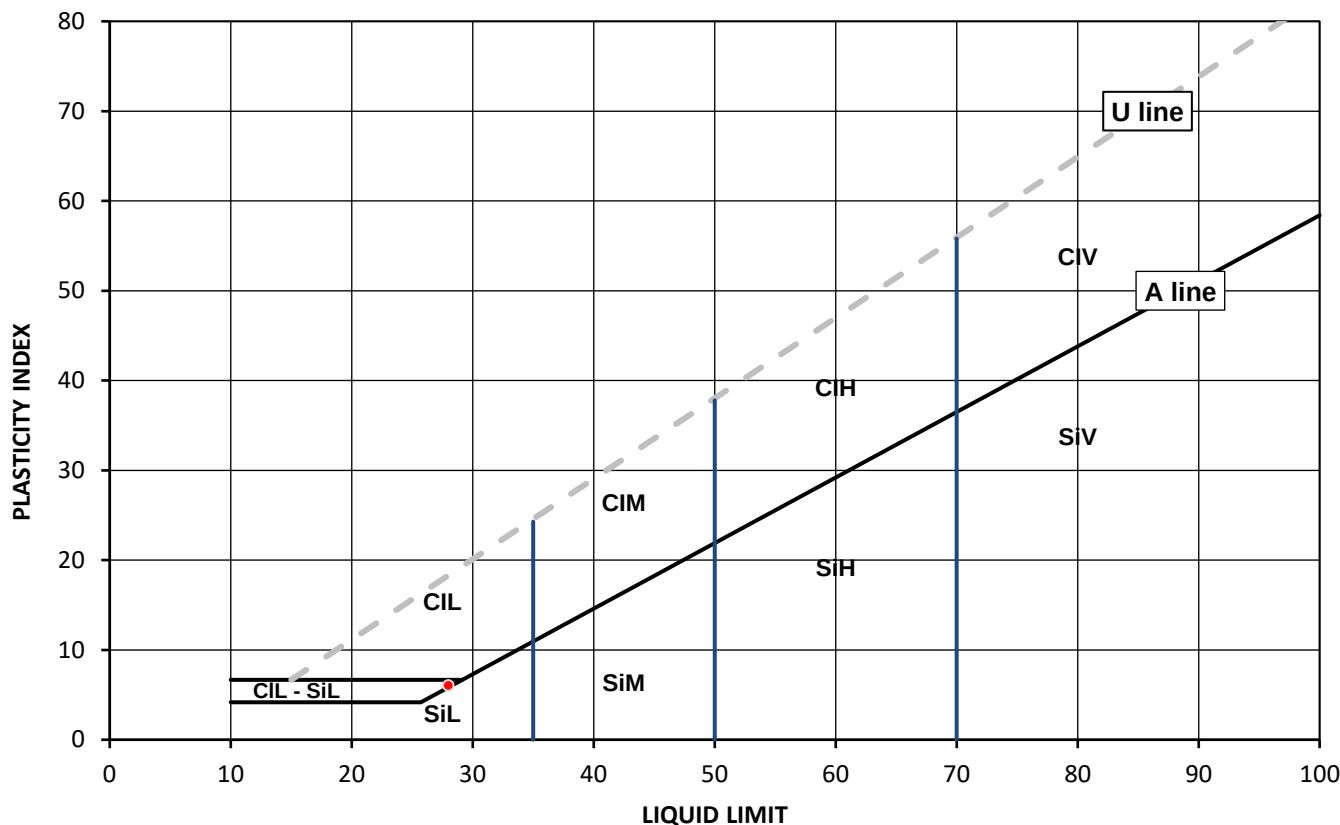
Test Results:

Laboratory Reference: 2928175
Hole No.: TP-031
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B

Sample Preparation: Tested after >425 µm removed by hand

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
26	28	22	6	23



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	O append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

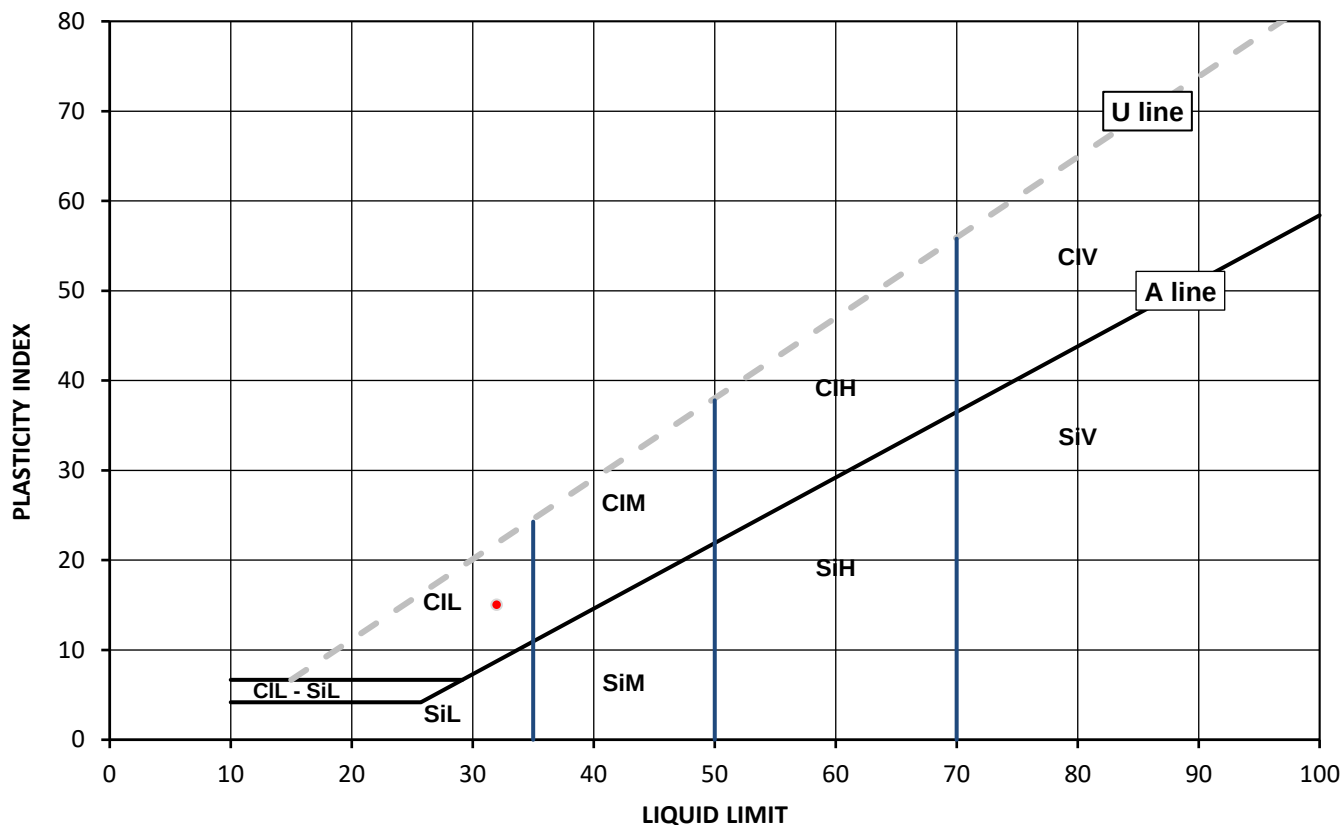
Test Results:

Laboratory Reference: 2928183
Hole No.: TP-043
Sample Reference: Not Given
Sample Description: Brown slightly gravelly sandy CLAY with fragments of chalk, plants

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	32	17	15	77



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl Clay	L Low	below 35
Si Silt	M Medium	35 to 50
	H High	50 to 70
	V Very high	exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

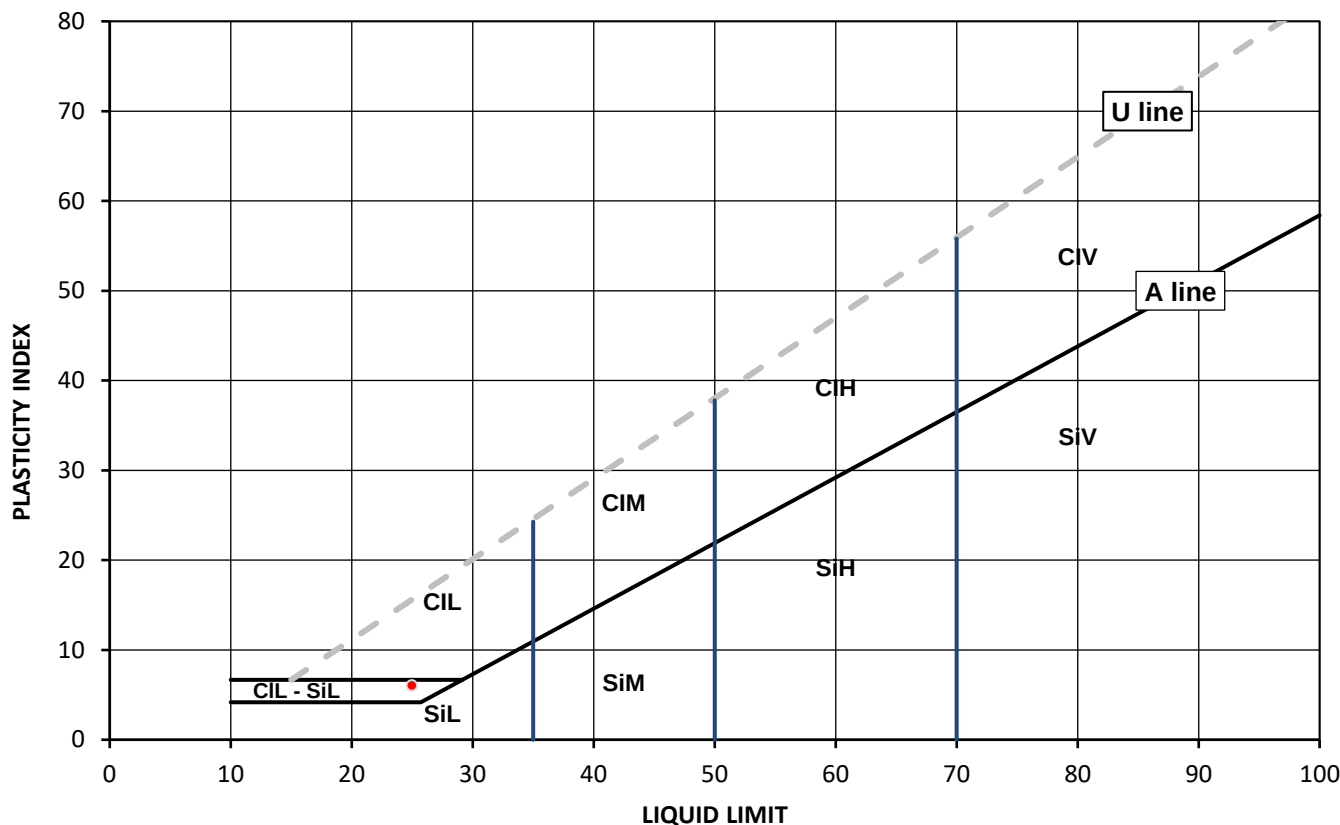
Test Results:

Laboratory Reference: 2928184
Hole No.: TP-043
Sample Reference: Not Given
Sample Description: Light brown slightly sandy gravelly CLAY with fragments of chalk

Depth Top [m]: 1.20
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
23	25	19	6	60



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	O append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

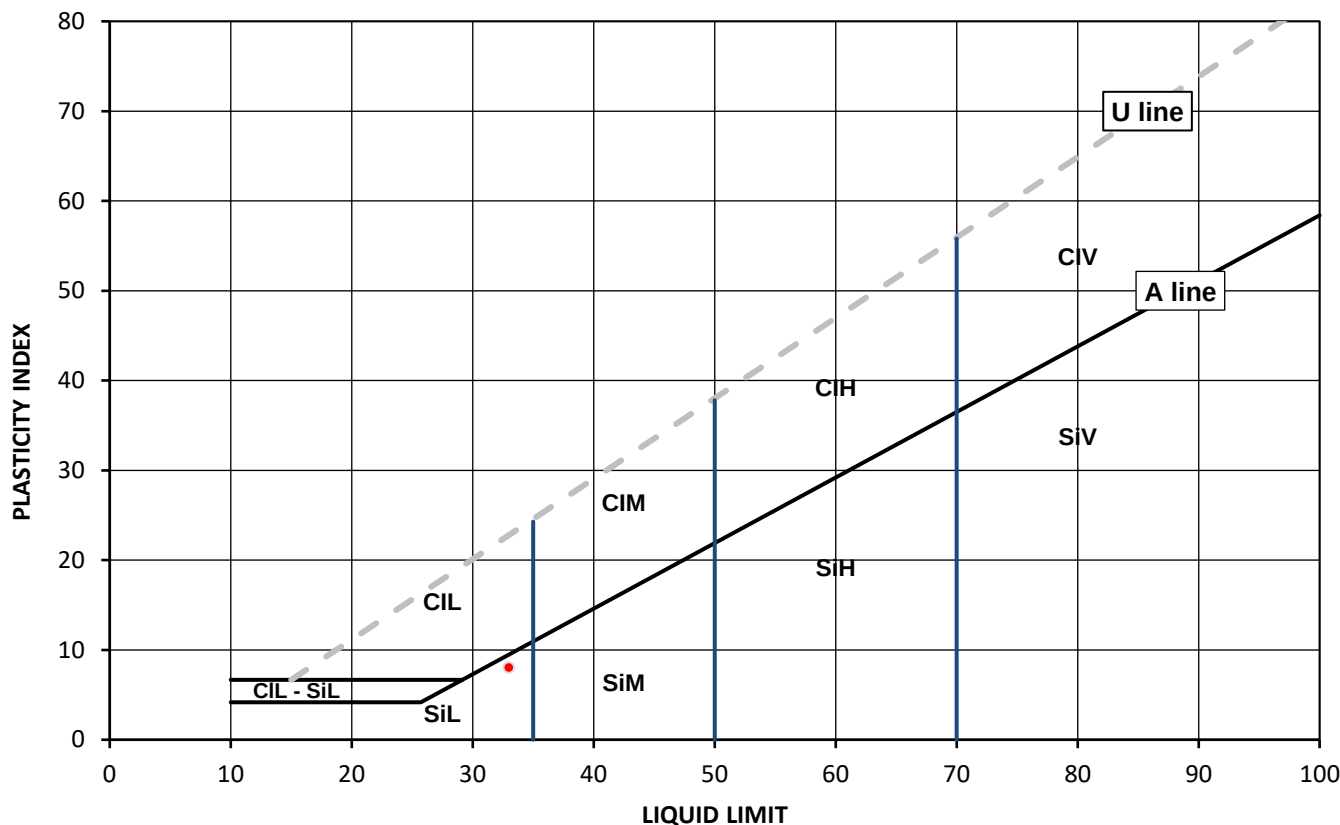
Test Results:

Laboratory Reference: 2928187
Hole No.: TP-046
Sample Reference: Not Given
Sample Description: White very clayey CHALK

Depth Top [m]: 1.70
Depth Base [m]: 1.80
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	33	25	8	27



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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4041

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Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

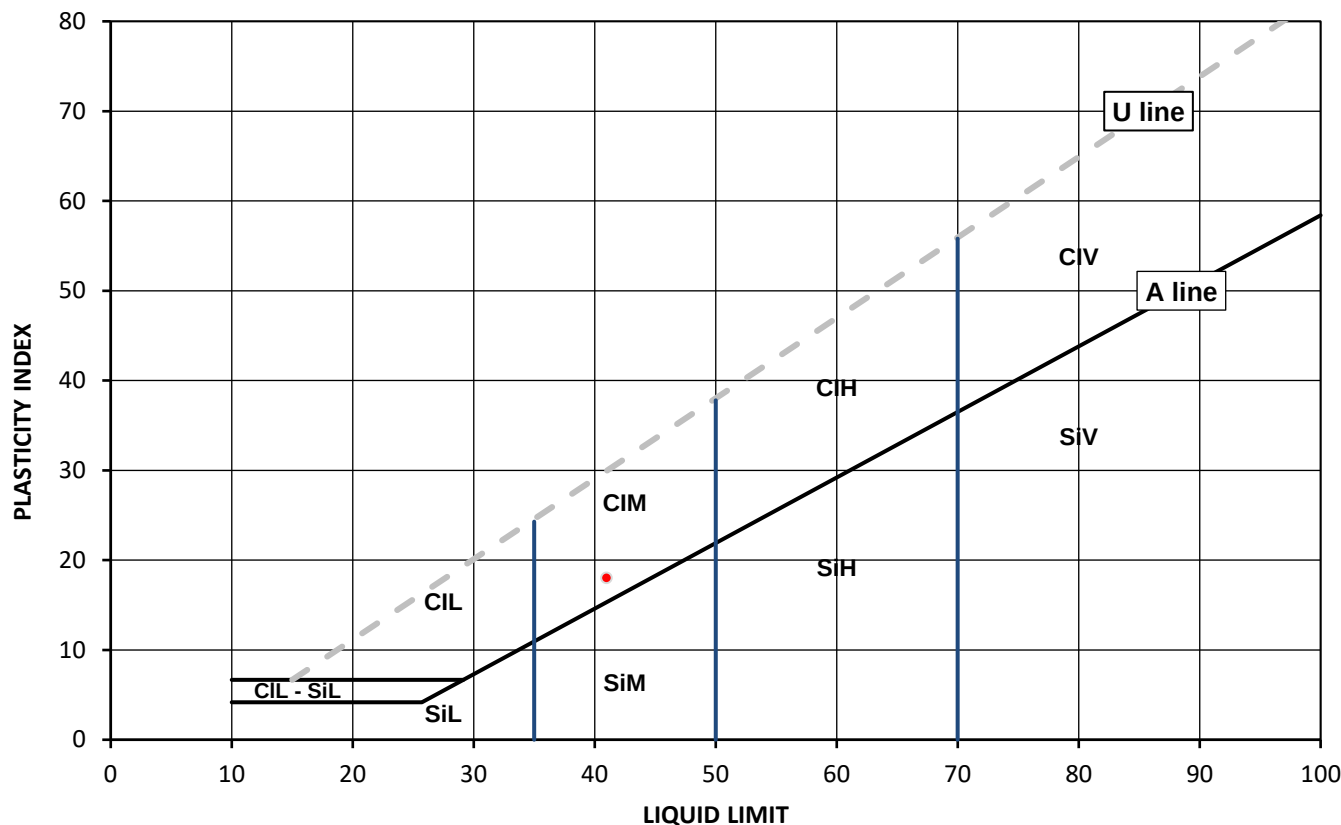
Test Results:

Laboratory Reference: 2928194
Hole No.: TP-75
Sample Reference: Not Given
Sample Description: Brown organic slightly gravelly slightly sandy CLAY with fragments of chalk

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	41	23	18	69



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	O append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF LIQUID AND PLASTIC LIMITS

Tested in Accordance with: BS 1377-2:1990: Clause 4.4 and 5

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01/2024
Sampled By: Not Given

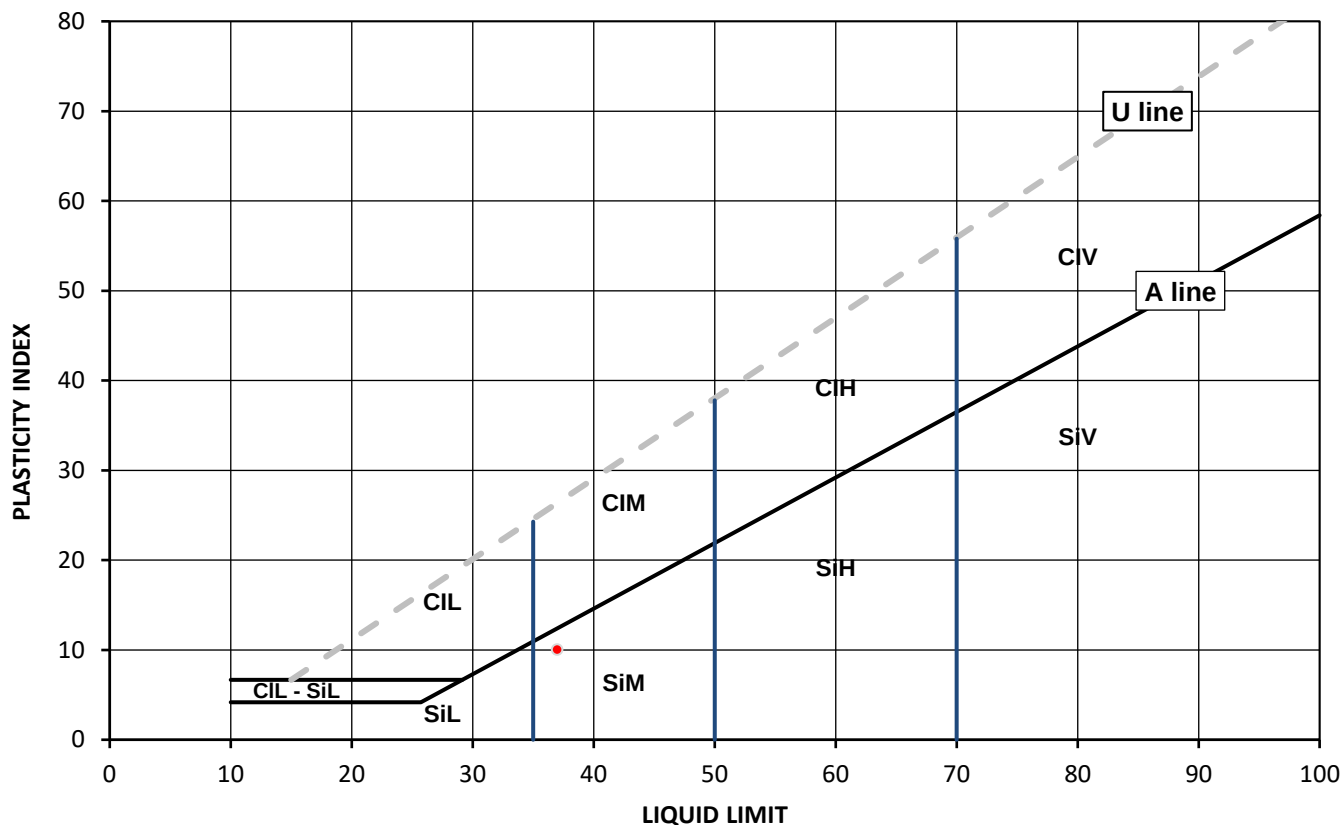
Test Results:

Laboratory Reference: 2928206
Hole No.: TP-102
Sample Reference: Not Given
Sample Description: White clayey CHALK with fragments of flintstones

Depth Top [m]: 1.50
Depth Base [m]: 1.60
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
31	37	27	10	90



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

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Client Reference: 2899
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Date Received: 09/01/2024
Date Tested: 18/01/2024
Sampled By: Not Given

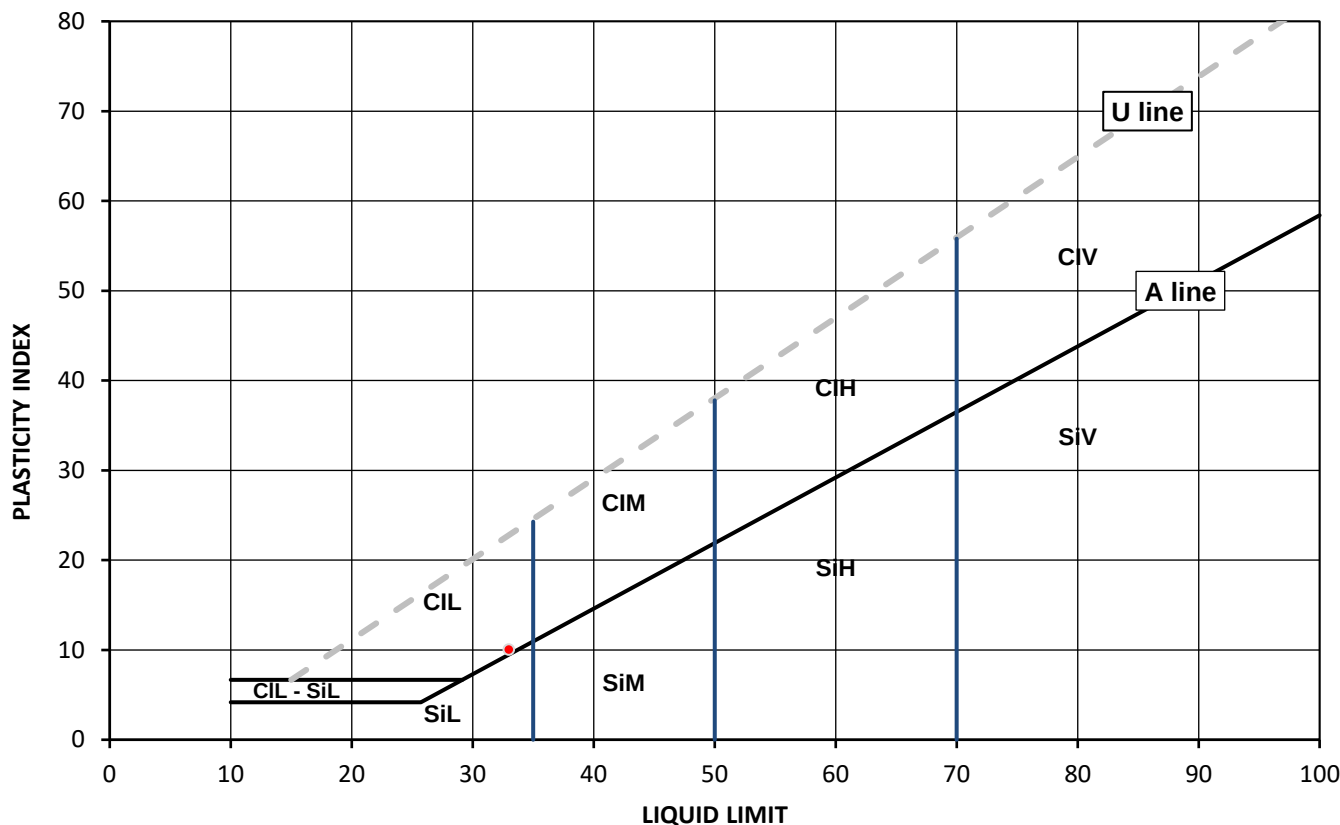
Test Results:

Laboratory Reference: 2928208
Hole No.: TP-110
Sample Reference: Not Given
Sample Description: White mottled grey clayey CHALK with fragments of flintstones

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
25	33	23	10	79



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Site Address: Baldock

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01/2024
Sampled By: Not Given

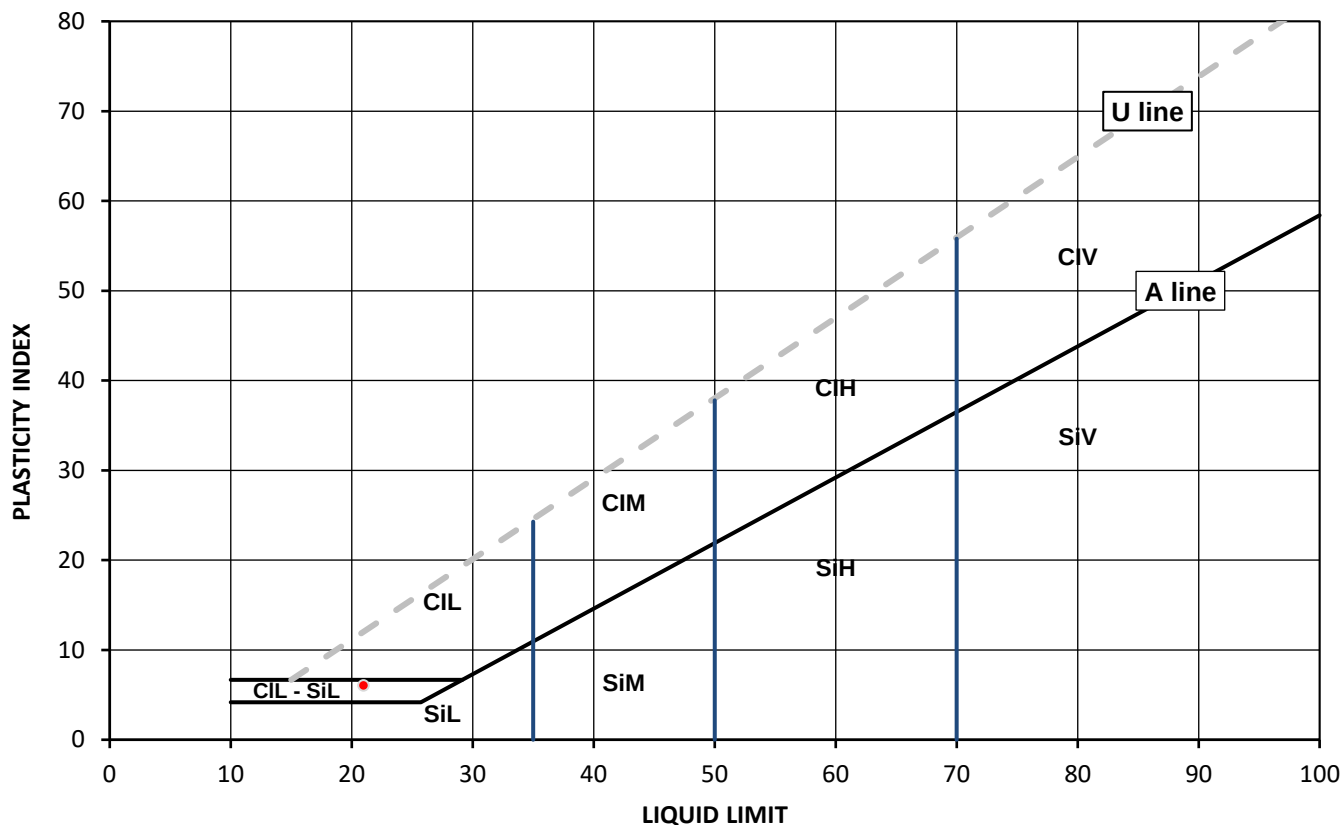
Test Results:

Laboratory Reference: 2928210
Hole No.: TP-113
Sample Reference: Not Given
Sample Description: Cream colour CHALK with fragments of flintstones

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
15	21	15	6	71



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01/2024
Sampled By: Not Given

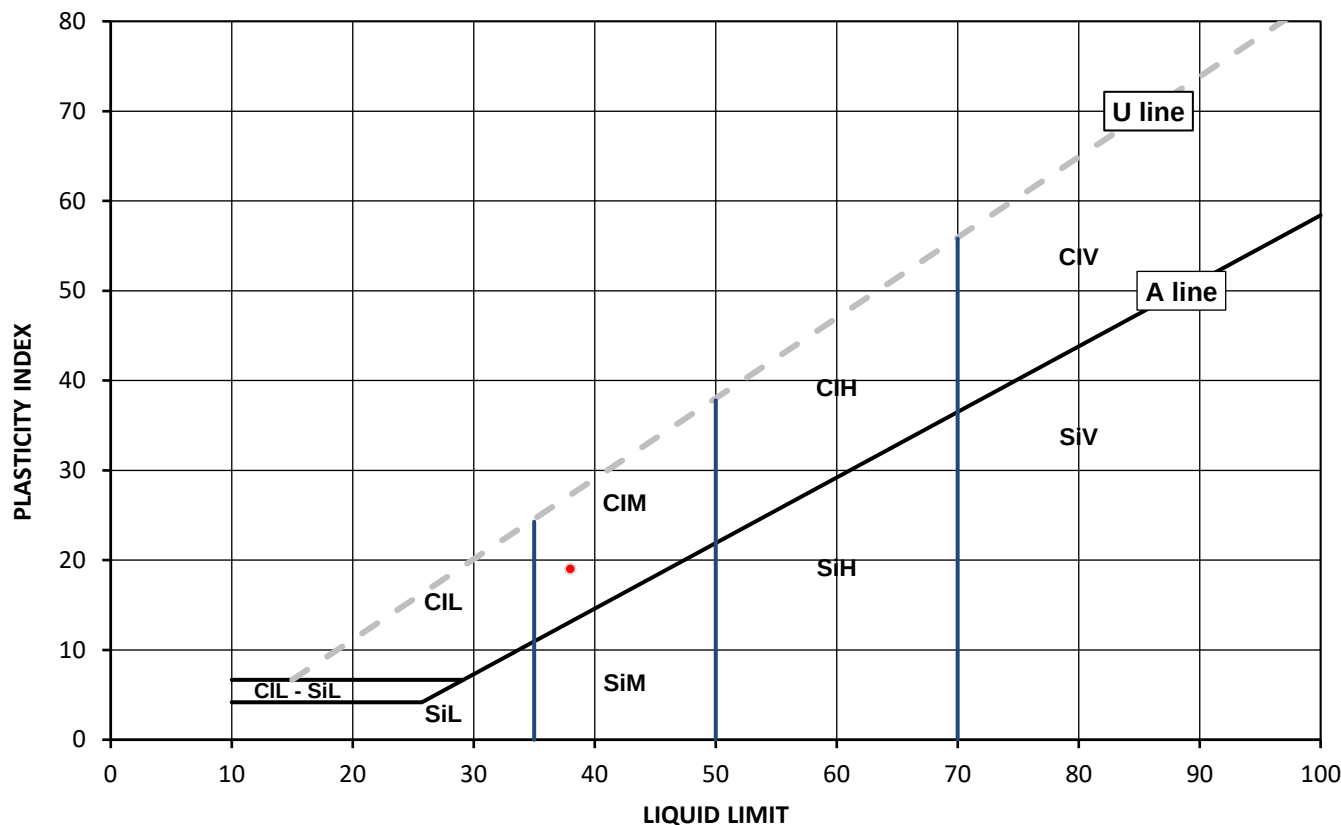
Test Results:

Laboratory Reference: 2928217
Hole No.: TP-132
Sample Reference: Not Given
Sample Description: Brown very sandy very clayey GRAVEL

Depth Top [m]: 0.45
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
23	38	19	19	57



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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i2 Analytical Ltd
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Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

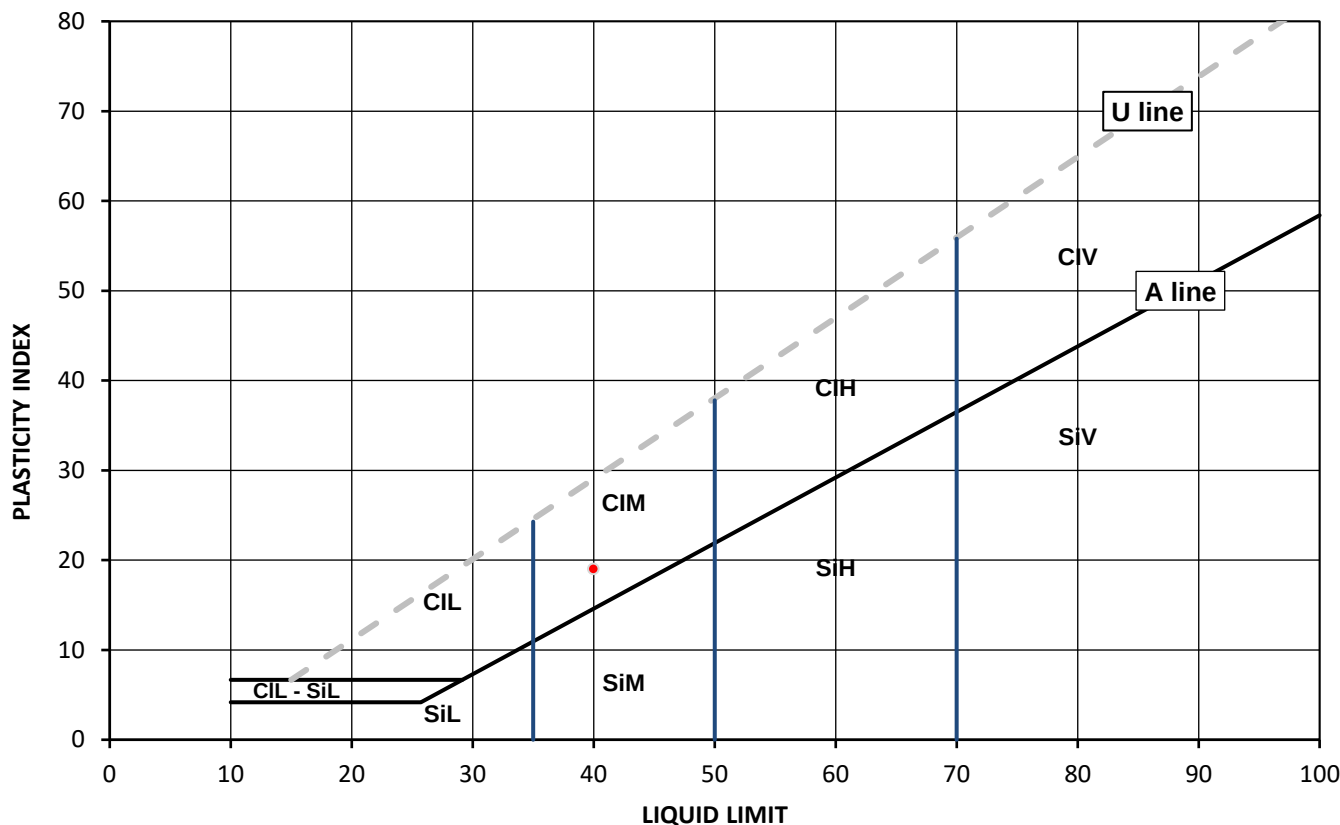
Test Results:

Laboratory Reference: 2928218
Hole No.: TP-133
Sample Reference: Not Given
Sample Description: White CHALK with fragments of flintstones

Depth Top [m]: 2.00
Depth Base [m]: 2.10
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
15	40	21	19	30



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Contact: Stephen Fisk
Site Address: Baldock

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

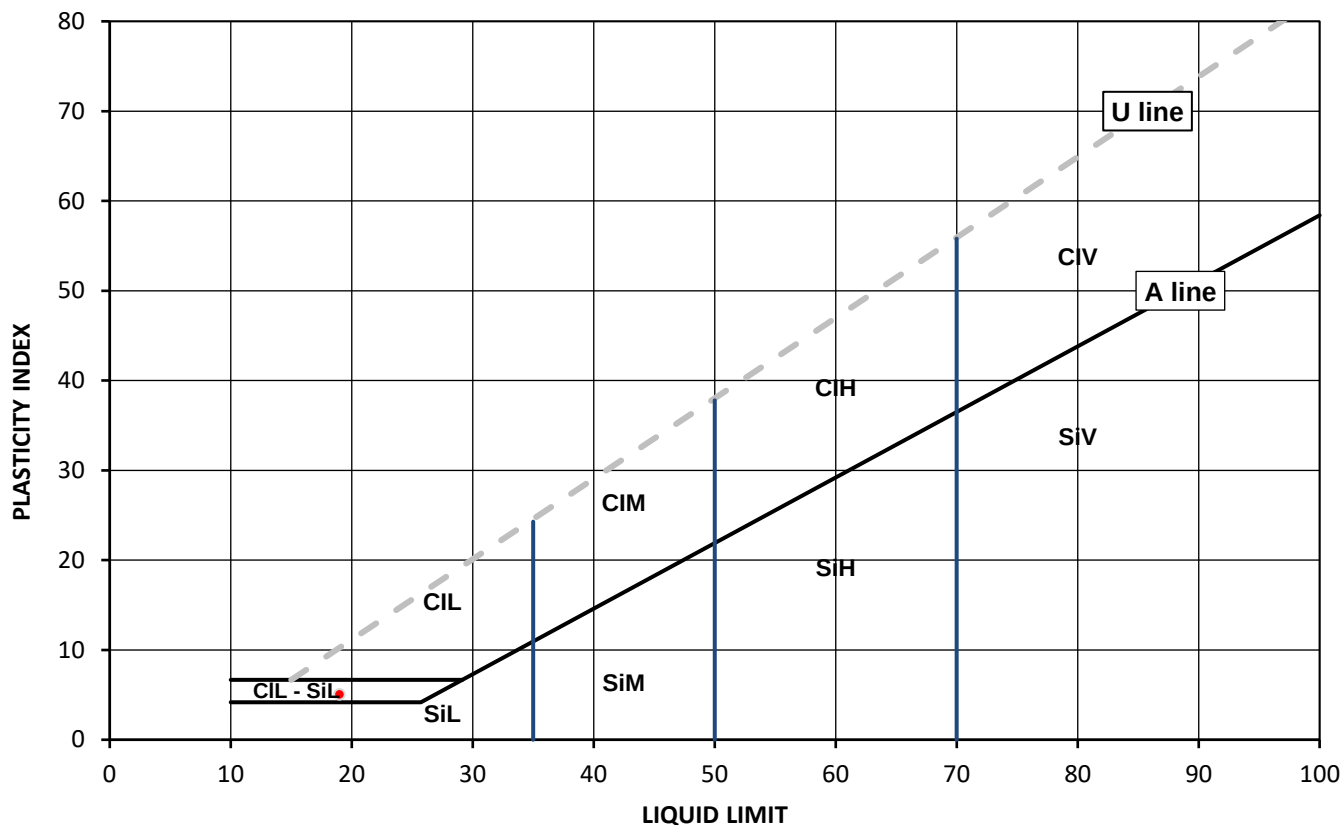
Test Results:

Laboratory Reference: 2928220
Hole No.: TP-137
Sample Reference: Not Given
Sample Description: Cream colour slightly gravelly clayey SAND with fragments of chalk

Depth Top [m]: 1.10
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
16	19	14	5	76



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

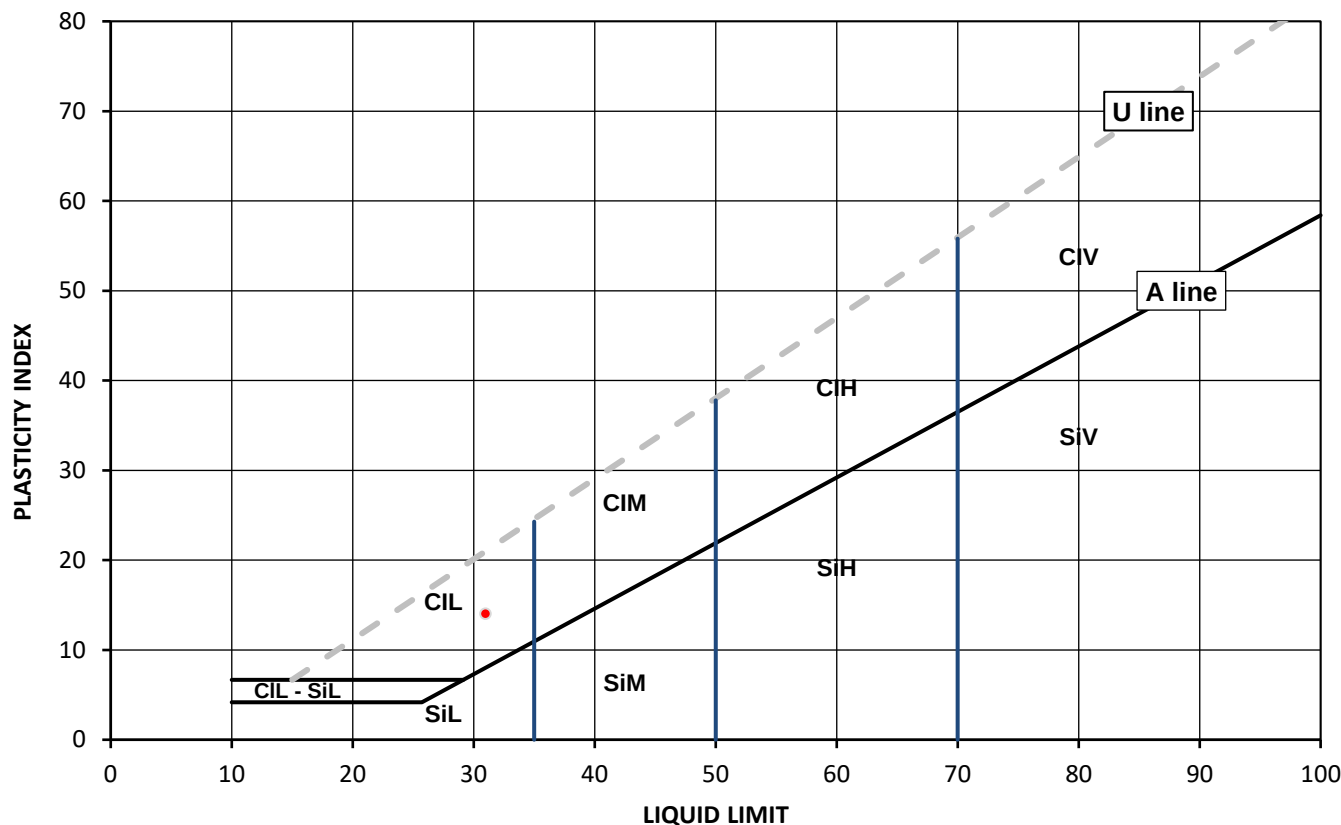
Test Results:

Laboratory Reference: 2928223
Hole No.: TP-143
Sample Reference: Not Given
Sample Description: Brown very gravelly very clayey SAND with fragments of chalk, plants

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
18	31	17	14	73



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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Environmental Science

4041

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Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

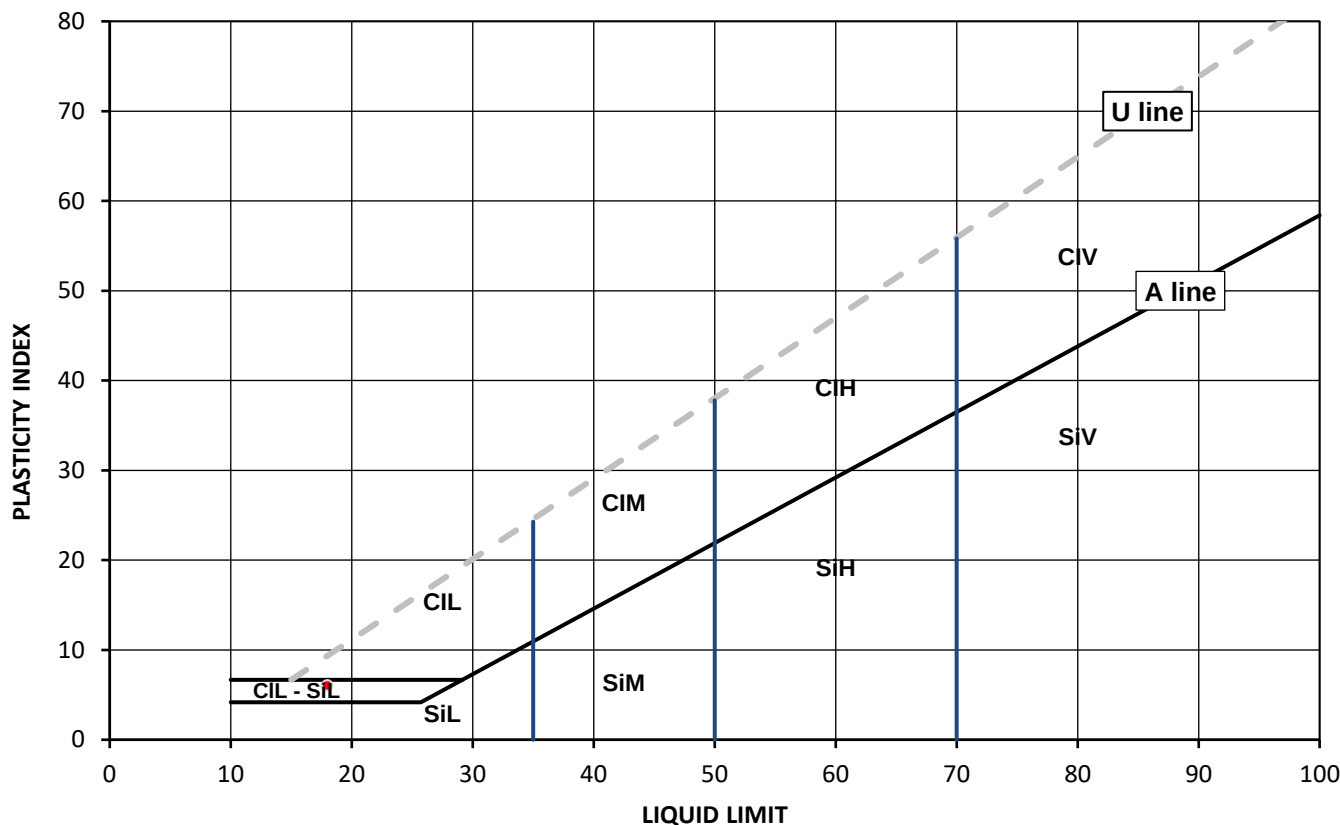
Test Results:

Laboratory Reference: 2928224
Hole No.: TP-143
Sample Reference: Not Given
Sample Description: Light brown slightly gravelly clayey SAND with fragments of chalk

Depth Top [m]: 1.50
Depth Base [m]: 1.60
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
16	18	12	6	81



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity	Liquid Limit
Cl	Clay	L Low	below 35
Si	Silt	M Medium	35 to 50
		H High	50 to 70
		V Very high	exceeding 70
		O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

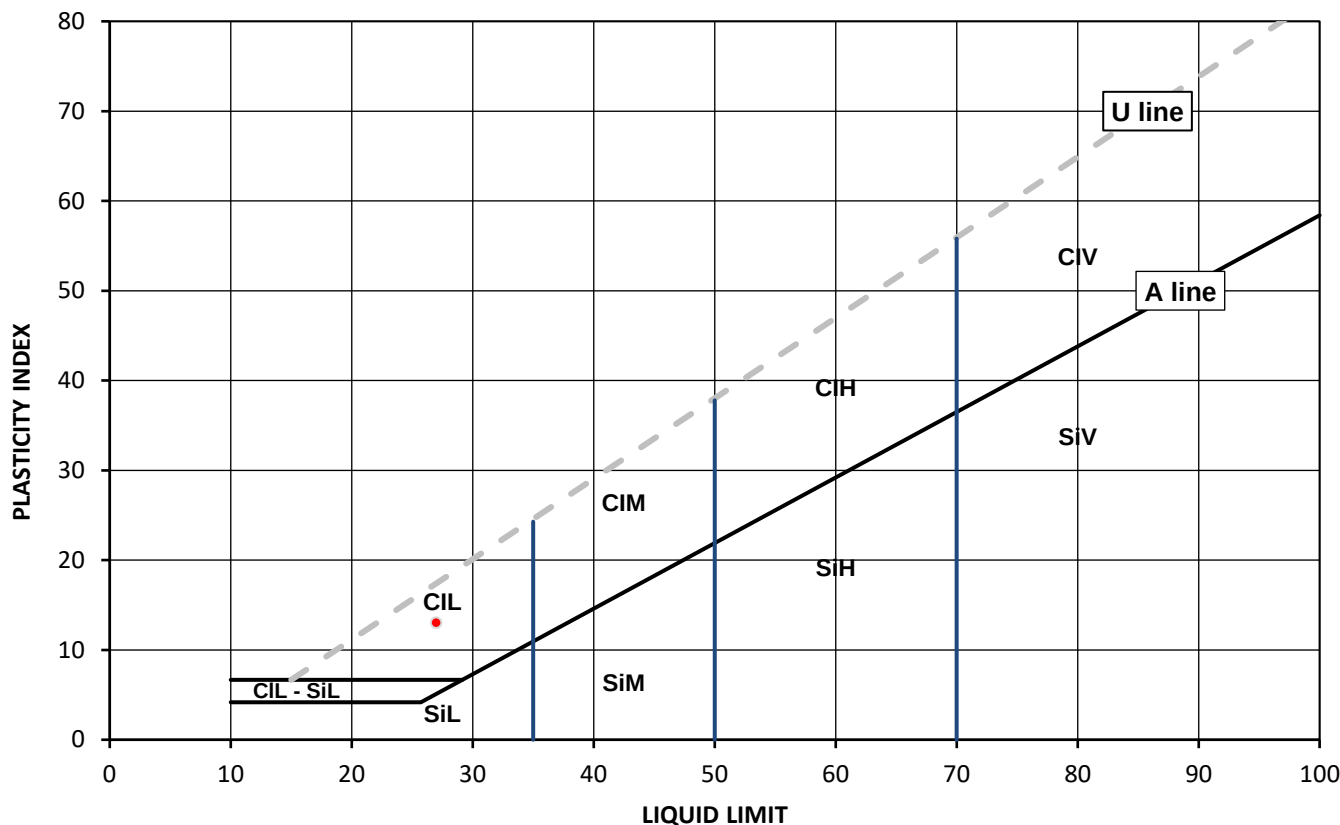
Test Results:

Laboratory Reference: 2928225
Hole No.: TP-145
Sample Reference: Not Given
Sample Description: Brown very gravelly very sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
17	27	14	13	63



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

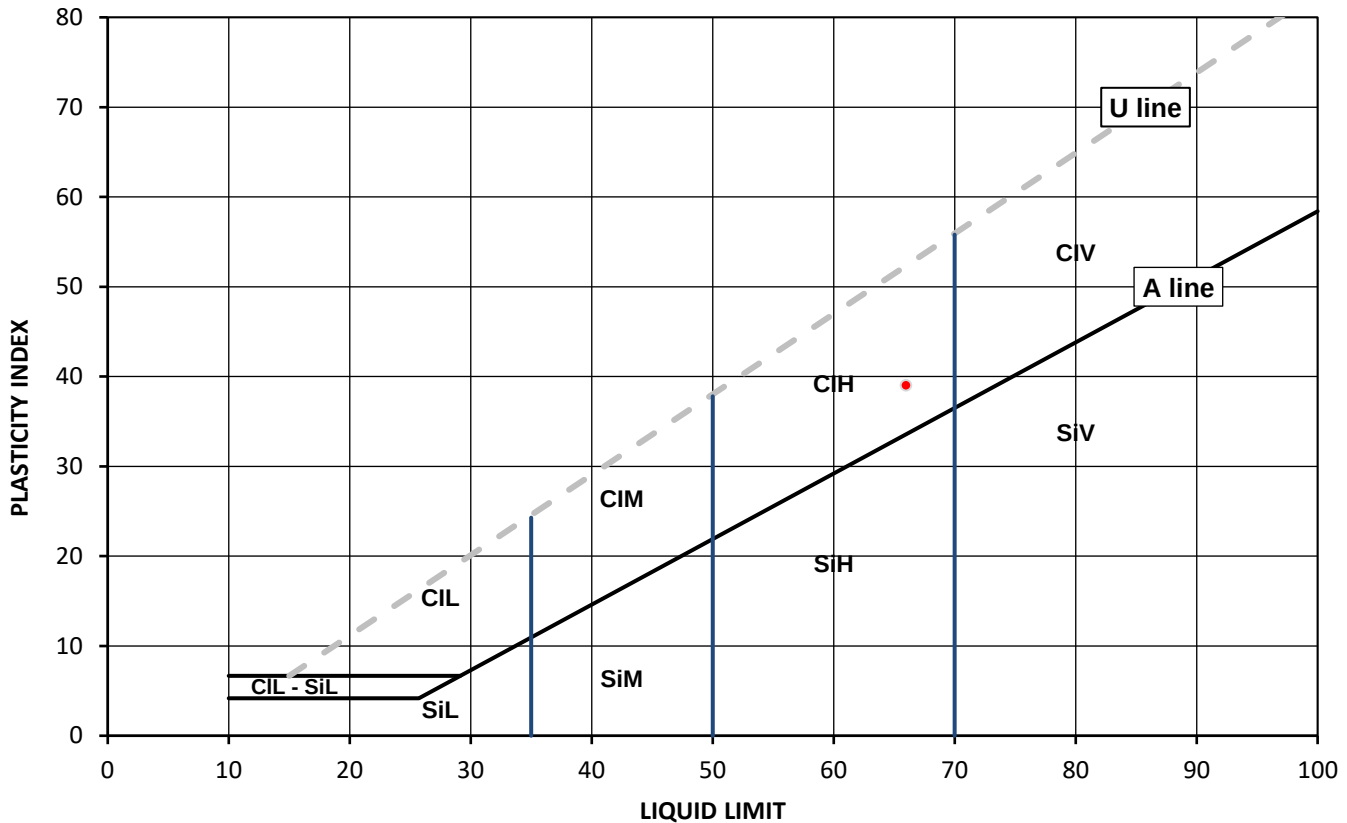
Test Results:

Laboratory Reference: 2928226
Hole No.: TP-146
Sample Reference: Not Given
Sample Description: Yellowish brown slightly gravelly slightly sandy CLAY with fragments of chalk

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B

Sample Preparation: Tested after washing to remove >425 µm

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
24	66	27	39	87



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

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Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

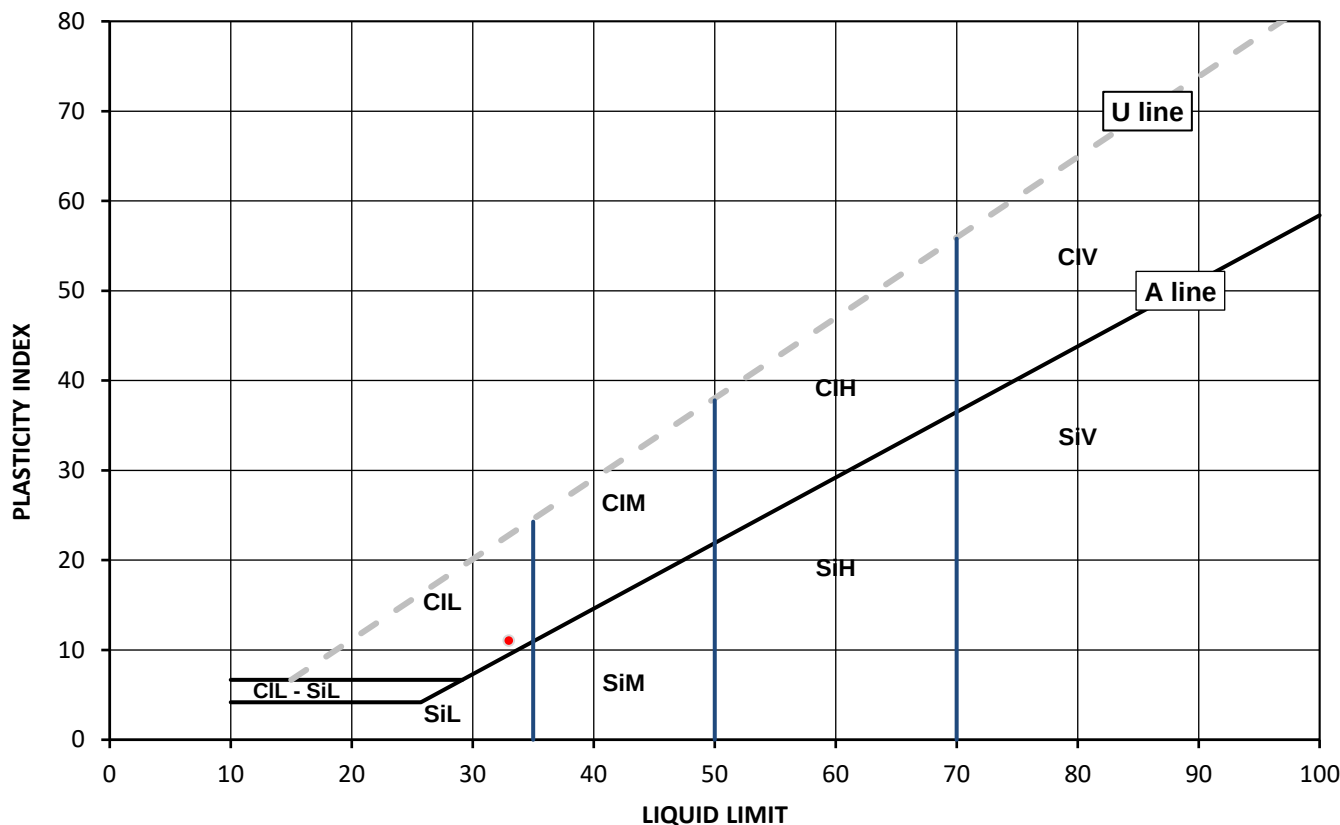
Test Results:

Laboratory Reference: 2928230
Hole No.: TP-154
Sample Reference: Not Given
Sample Description: Light grey clayey CHALK with fragments of flintstones

Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B

Sample Preparation: Tested after >425 µm removed by hand

As Received Water Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	33	22	11	17



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

	Plasticity	Liquid Limit
Cl	Clay	L Low below 35
Si	Silt	M Medium 35 to 50
		H High 50 to 70
		V Very high exceeding 70
	O Organic	O append to classification for organic material (eg CIHO)

Note: Water Content by BS 1377-2: 1990: Clause 3.2

Remarks:

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Water Content by BS 1377-2:1990: Clause 3.2
Atterberg by BS 1377-2: 1990:
Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 22/01/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-1 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2928162	TP-F1	Not Given	1.40	1.50	B	White CHALK		15											
2928163	TP-004	Not Given	1.20	1.30	B	Light brown slightly gravelly slightly sandy CLAY with fragments of chalk, plants	Atterberg 1 Point	27		84	45	21	24						
2928164	TP-007	Not Given	1.90	2.00	B	Brown slightly gravelly slightly sandy CLAY	Atterberg 1 Point	30		90	62	25	37						
2928165	TP-008	Not Given	0.70	0.80	B	White CHALK		21											
2928166	TP-009	Not Given	0.60	0.70	B	Light brown slightly gravelly slightly sandy CLAY with fragments of chalk	Atterberg 1 Point	18		59	28	20	8						
2928167	TP-011	Not Given	1.30	1.40	B	White CHALK		28											
2928168	TP-012	Not Given	1.40	1.50	B	White CHALK	Atterberg 1 Point	32		21	34	27	7						
2928169	TP-014	Not Given	1.20	1.30	B	White CHALK		29											
2928170	TP-019	Not Given	2.10	2.20	B	White CHALK	Atterberg 1 Point	25		100	27	19	8						
2928171	TP-020	Not Given	1.00	1.20	B	White CHALK	Atterberg 1 Point	24		100	28	19	9						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

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for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Water Content by BS 1377-2:1990: Clause 3.2 Atterberg by BS 1377-2: 1990:
Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 22/01/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-1 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2928172	TP-023	Not Given	2.10	2.20	B	White CHALK		22											
2928173	TP-028	Not Given	2.10	2.20	B	White CHALK	Atterberg 1 Point	23		100	27	19	8						
2928174	TP-029	Not Given	1.60	1.70	B	White CHALK	Atterberg 1 Point	21		19	26	20	6						
2928175	TP-031	Not Given	1.20	1.30	B	White CHALK	Atterberg 1 Point	26		23	28	22	6						
2928176	TP-032	Not Given	1.80	1.90	B	White CHALK		30											
2928177	TP-034	Not Given	1.20	1.30	B	White slightly clayey CHALK		30											
2928178	TP-035	Not Given	1.10	2.00	B	White CHALK		30											
2928179	TP-036	Not Given	0.90	1.00	B	White CHALK		23											
2928180	TP-039	Not Given	1.20	1.30	B	White CHALK		31											
2928181	TP-040	Not Given	1.50	1.60	B	White CHALK		25											

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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Environmental Science

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Client Reference: 2899
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Date Tested: 19/01 - 22/01/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock

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Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-1 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2928182	TP-042	Not Given	1.60	1.70	B	White CHALK		19											
2928183	TP-043	Not Given	0.60	0.70	B	Brown slightly gravelly sandy CLAY with fragments of chalk, plants	Atterberg 1 Point	18		77	32	17	15						
2928184	TP-043	Not Given	1.20	Not Given	B	Light brown slightly sandy gravelly CLAY with fragments of chalk	Atterberg 1 Point	23		60	25	19	6						
2928185	TP-044	Not Given	0.80	0.90	B	White CHALK		15											
2928187	TP-046	Not Given	1.70	1.80	B	White very clayey CHALK	Atterberg 1 Point	31		27	33	25	8						
2928188	TP-054	Not Given	0.90	1.00	B	White CHALK		17											
2928189	TP-60	Not Given	1.70	1.80	B	White CHALK		25											
2928190	TP-61	Not Given	1.90	2.00	B	White CHALK		25											
2928191	TP-72	Not Given	0.70	0.80	B	Light brown CLAY with fragments of chalk		20											
2928192	TP-73A	Not Given	0.40	0.50	B	Light brown CLAY with fragments of chalk		23											

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Environmental Science

4041

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Atterberg by BS 1377-2: 1990:
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Sampled By: Not Given

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Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-1 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2928193	TP-75	Not Given	0.40	0.50	B	White CHALK		32											
2928194	TP-75	Not Given	0.40	0.50	B	Brown organic slightly gravelly slightly sandy CLAY with fragments of chalk	Atterberg 1 Point	31		69	41	23	18						
2928195	TP-76	Not Given	2.50	2.60	B	White CHALK		22											
2928196	TP-78	Not Given	1.90	2.00	B	White CHALK		21											
2928197	TP-85	Not Given	2.10	2.20	B	White CHALK		17											
2928198	TP-86	Not Given	1.60	1.70	B	White CHALK		18											
2928199	TP-87	Not Given	1.40	1.50	B	Light brown slightly clayey CHALK		25											
2928200	TP-88	Not Given	1.00	1.20	B	White CHALK		25											
2928201	TP-89	Not Given	1.00	1.10	B	White CHALK		20											
2928202	TP-90	Not Given	1.70	1.80	B	White CHALK		26											

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Comments:

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Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-1 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2928203	TP-91	Not Given	1.20	1.30	B	White CHALK		22											
2928204	TP-92	Not Given	1.00	Not Given	B	White CHALK		30											
2928205	TP-94	Not Given	1.20	Not Given	B	White CHALK		30											
2928206	TP-102	Not Given	1.50	1.60	B	White clayey CHALK with fragments of flintstones	Atterberg 1 Point	31		90	37	27	10						
2928208	TP-110	Not Given	0.40	0.50	B	White mottled grey clayey CHALK with fragments of flintstones	Atterberg 1 Point	25		79	33	23	10						
2928209	TP-111	Not Given	1.00	1.20	B	White CHALK		21											
2928210	TP-113	Not Given	0.90	1.00	B	Cream colour CHALK with fragments of flintstones	Atterberg 1 Point	15		71	21	15	6						
2928211	TP-114	Not Given	0.50	Not Given	B	White mottled grey CHALK		31											
2928212	TP-119	Not Given	0.90	1.00	B	White CHALK		26											
2928213	TP-125	Not Given	0.40	Not Given	B	White CHALK		24											

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
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Date Tested: 18/01 - 22/01/2024
Sampled By: Not Given

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-1 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top	Depth Base	Type					% Passing 425um	WL	Wp	Ip	bulk	dry	PD			
			m	m						%	%	%	%	Mg/m3	Mg/m3	Mg/m3			
2928214	TP-126	Not Given	1.50	Not Given	B	White CHALK		30											
2928215	TP-127	Not Given	0.90	Not Given	B	White mottled grey CHALK		31											
2928216	TP-128	Not Given	1.30	Not Given	B	White CHALK		32											
2928217	TP-132	Not Given	0.45	Not Given	B	Brown very sandy very clayey GRAVEL	Atterberg 1 Point	23		57	38	19	19						
2928218	TP-133	Not Given	2.00	2.10	B	White CHALK with fragments of flintstones	Atterberg 1 Point	15		30	40	21	19						
2928220	TP-137	Not Given	1.10	Not Given	B	Cream colour slightly gravelly clayey SAND with fragments of chalk	Atterberg 1 Point	16		76	19	14	5						
2928222	TP-140	Not Given	2.00	2.10	B	White CHALK		29											
2928223	TP-143	Not Given	0.90	1.00	B	Brown very gravelly very clayey SAND with fragments of chalk, plants	Atterberg 1 Point	18		73	31	17	14						
2928224	TP-143	Not Given	1.50	1.60	B	Light brown slightly gravelly clayey SAND with fragments of chalk	Atterberg 1 Point	16		81	18	12	6						
2928225	TP-145	Not Given	0.60	Not Given	B	Brown very gravelly very sandy CLAY	Atterberg 1 Point	17		63	27	14	13						

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SUMMARY REPORT

SUMMARY OF CLASSIFICATION TEST RESULTS

Tested in Accordance with:

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Water Content by BS 1377-2:1990: Clause 3.2
Atterberg by BS 1377-2: 1990:
Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Water Content BS 1377-2 [W] %	Water Content BS EN ISO 17892-1 [W] %	Atterberg				Density			Total Porosity# %		
		Reference	Depth Top m	Depth Base m	Type					% Passing 425um %	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3			
2928226	TP-146	Not Given	0.60	0.70	B	Yellowish brown slightly gravelly slightly sandy CLAY with fragments of chalk	Atterberg 1 Point	24		87	66	27	39						
2928227	TP-148	Not Given	1.20	Not Given	B	Cream colour CHALK		17											
2928228	TP-151	Not Given	1.60	1.70	B	White slightly clayey CHALK		19											
2928229	TP-153	Not Given	1.70	1.80	B	White CHALK		23											
2928230	TP-154	Not Given	1.10	1.20	B	Light grey clayey CHALK with fragments of flintstones	Atterberg 1 Point	27		17	33	22	11						

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SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2928162	TP-F1	Not Given	1.40	1.50	B	White CHALK		15	Sample was quartered, oven dried at 109 °C			
2928163	TP-004	Not Given	1.20	1.30	B	Light brown slightly gravelly slightly sandy CLAY with fragments of chalk, plants		27	Sample was quartered, oven dried at 109 °C			
2928164	TP-007	Not Given	1.90	2.00	B	Brown slightly gravelly slightly sandy CLAY		30	Sample was quartered, oven dried at 109 °C			
2928165	TP-008	Not Given	0.70	0.80	B	White CHALK		21	Sample was quartered, oven dried at 107 °C			
2928166	TP-009	Not Given	0.60	0.70	B	Light brown slightly gravelly slightly sandy CLAY with fragments of chalk		18	Sample was quartered, oven dried at 109 °C			
2928167	TP-011	Not Given	1.30	1.40	B	White CHALK		28	Sample was quartered, oven dried at 109 °C			
2928168	TP-012	Not Given	1.40	1.50	B	White CHALK		32	Sample was quartered, oven dried at 109 °C			
2928169	TP-014	Not Given	1.20	1.30	B	White CHALK		29	Sample was quartered, oven dried at 107 °C			
2928170	TP-019	Not Given	2.10	2.20	B	White CHALK		25	Sample was quartered, oven dried at 109 °C			
2928171	TP-020	Not Given	1.00	1.20	B	White CHALK		24	Sample was quartered, oven dried at 109 °C			

Comments:

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Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2928172	TP-023	Not Given	2.10	2.20	B	White CHALK		22	Sample was quartered, oven dried at 107 °C			
2928173	TP-028	Not Given	2.10	2.20	B	White CHALK		23	Sample was quartered, oven dried at 107 °C			
2928174	TP-029	Not Given	1.60	1.70	B	White CHALK		21	Sample was quartered, oven dried at 107 °C			
2928175	TP-031	Not Given	1.20	1.30	B	White CHALK		26	Sample was quartered, oven dried at 106.7 °C			
2928176	TP-032	Not Given	1.80	1.90	B	White CHALK		30	Sample was quartered, oven dried at 106.7 °C			
2928177	TP-034	Not Given	1.20	1.30	B	White slightly clayey CHALK		30	Sample was quartered, oven dried at 106.7 °C			
2928178	TP-035	Not Given	1.10	2.00	B	White CHALK		30	Sample was quartered, oven dried at 106.7 °C			
2928179	TP-036	Not Given	0.90	1.00	B	White CHALK		23	Sample was quartered, oven dried at 106.7 °C			
2928180	TP-039	Not Given	1.20	1.30	B	White CHALK		31	Sample was quartered, oven dried at 106.7 °C			
2928181	TP-040	Not Given	1.50	1.60	B	White CHALK		25	Sample was quartered, oven dried at 106.7 °C			

Comments:

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4041

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Site Address: Baldock

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Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2928182	TP-042	Not Given	1.60	1.70	B	White CHALK		19	Sample was quartered, oven dried at 109 °C			
2928183	TP-043	Not Given	0.60	0.70	B	Brown slightly gravelly sandy CLAY with fragments of chalk, plants		18	Sample was quartered, oven dried at 109 °C			
2928184	TP-043	Not Given	1.20	Not Given	B	Light brown slightly sandy gravelly CLAY with fragments of chalk		23	Sample was quartered, oven dried at 109 °C			
2928185	TP-044	Not Given	0.80	0.90	B	White CHALK		15	Sample was quartered, oven dried at 109 °C			
2928187	TP-046	Not Given	1.70	1.80	B	White very clayey CHALK		31	Sample was quartered, oven dried at 109 °C			
2928188	TP-054	Not Given	0.90	1.00	B	White CHALK		17	Sample was quartered, oven dried at 109 °C			
2928189	TP-60	Not Given	1.70	1.80	B	White CHALK		25	Sample was quartered, oven dried at 109 °C			
2928190	TP-61	Not Given	1.90	2.00	B	White CHALK		25	Sample was quartered, oven dried at 109 °C			
2928191	TP-72	Not Given	0.70	0.80	B	Light brown CLAY with fragments of chalk		20	Sample was quartered, oven dried at 107 °C			
2928192	TP-73A	Not Given	0.40	0.50	B	Light brown CLAY with fragments of chalk		23	Sample was quartered, oven dried at 107 °C			

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Environmental Science

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Sampled By: Not Given

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Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2928193	TP-75	Not Given	0.40	0.50	B	White CHALK		32	Sample was quartered, oven dried at 106 °C			
2928194	TP-75	Not Given	0.40	0.50	B	Brown organic slightly gravelly slightly sandy CLAY with fragments of chalk		31	Sample was quartered, oven dried at 109 °C			
2928195	TP-76	Not Given	2.50	2.60	B	White CHALK		22	Sample was quartered, oven dried at 109 °C			
2928196	TP-78	Not Given	1.90	2.00	B	White CHALK		21	Sample was quartered, oven dried at 109 °C			
2928197	TP-85	Not Given	2.10	2.20	B	White CHALK		17	Sample was quartered, oven dried at 109 °C			
2928198	TP-86	Not Given	1.60	1.70	B	White CHALK		18	Sample was quartered, oven dried at 109 °C			
2928199	TP-87	Not Given	1.40	1.50	B	Light brown slightly clayey CHALK		25	Sample was quartered, oven dried at 109 °C			
2928200	TP-88	Not Given	1.00	1.20	B	White CHALK		25	Sample was quartered, oven dried at 109 °C			
2928201	TP-89	Not Given	1.00	1.10	B	White CHALK		20	Sample was quartered, oven dried at 109 °C			
2928202	TP-90	Not Given	1.70	1.80	B	White CHALK		26	Sample was quartered, oven dried at 106.7 °C			

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF WATER CONTENT

Tested in Accordance with: BS 1377-2: 1990: Clause 3.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2928203	TP-91	Not Given	1.20	1.30	B	White CHALK		22	Sample was quartered, oven dried at 106.7 °C			
2928204	TP-92	Not Given	1.00	Not Given	B	White CHALK		30	Sample was quartered, oven dried at 107 °C			
2928205	TP-94	Not Given	1.20	Not Given	B	White CHALK		30	Sample was quartered, oven dried at 107 °C			
2928206	TP-102	Not Given	1.50	1.60	B	White clayey CHALK with fragments of flintstones		31	Sample was quartered, oven dried at 107 °C			
2928208	TP-110	Not Given	0.40	0.50	B	White mottled grey clayey CHALK with fragments of flintstones		25	Sample was quartered, oven dried at 107 °C			
2928209	TP-111	Not Given	1.00	1.20	B	White CHALK		21	Sample was quartered, oven dried at 107 °C			
2928210	TP-113	Not Given	0.90	1.00	B	Cream colour CHALK with fragments of flintstones		15	Sample was quartered, oven dried at 107 °C			
2928211	TP-114	Not Given	0.50	Not Given	B	White mottled grey CHALK		31	Sample was quartered, oven dried at 107 °C			
2928212	TP-119	Not Given	0.90	1.00	B	White CHALK		26	Sample was quartered, oven dried at 107 °C			
2928213	TP-125	Not Given	0.40	Not Given	B	White CHALK		24	Sample was quartered, oven dried at 107 °C			

Comments:

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Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2928214	TP-126	Not Given	1.50	Not Given	B	White CHALK		30	Sample was quartered, oven dried at 107 °C			
2928215	TP-127	Not Given	0.90	Not Given	B	White mottled grey CHALK		31	Sample was quartered, oven dried at 107 °C			
2928216	TP-128	Not Given	1.30	Not Given	B	White CHALK		32	Sample was quartered, oven dried at 107 °C			
2928217	TP-132	Not Given	0.45	Not Given	B	Brown very sandy very clayey GRAVEL		23	Sample was quartered, oven dried at 107 °C			
2928218	TP-133	Not Given	2.00	2.10	B	White CHALK with fragments of flintstones		15	Sample was quartered, oven dried at 107 °C			
2928220	TP-137	Not Given	1.10	Not Given	B	Cream colour slightly gravelly clayey SAND with fragments of chalk		16	Sample was quartered, oven dried at 107 °C			
2928222	TP-140	Not Given	2.00	2.10	B	White CHALK		29	Sample was quartered, oven dried at 107 °C			
2928223	TP-143	Not Given	0.90	1.00	B	Brown very gravelly very clayey SAND with fragments of chalk, plants		18	Sample was quartered, oven dried at 107 °C			
2928224	TP-143	Not Given	1.50	1.60	B	Light brown slightly gravelly clayey SAND with fragments of chalk		16	Sample was quartered, oven dried at 107 °C			
2928225	TP-145	Not Given	0.60	Not Given	B	Brown very gravelly very sandy CLAY		17	Sample was quartered, oven dried at 107 °C			

Comments:

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Date Received: 09/01/2024
Date Tested: 19/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	WC	Sample preparation / Oven temperature at the time of testing			
		Reference	Depth Top m	Depth Base m	Type							
2928226	TP-146	Not Given	0.60	0.70	B	Yellowish brown slightly gravelly slightly sandy CLAY with fragments of chalk		24	Sample was quartered, oven dried at 107 °C			
2928227	TP-148	Not Given	1.20	Not Given	B	Cream colour CHALK		17	Sample was quartered, oven dried at 107 °C			
2928228	TP-151	Not Given	1.60	1.70	B	White slightly clayey CHALK		19	Sample was quartered, oven dried at 107 °C			
2928229	TP-153	Not Given	1.70	1.80	B	White CHALK		23	Sample was quartered, oven dried at 107 °C			
2928230	TP-154	Not Given	1.10	1.20	B	Light grey clayey CHALK with fragments of flintstones		27	Sample was quartered, oven dried at 107 °C			

Comments:

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**TEST CERTIFICATE****DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
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Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

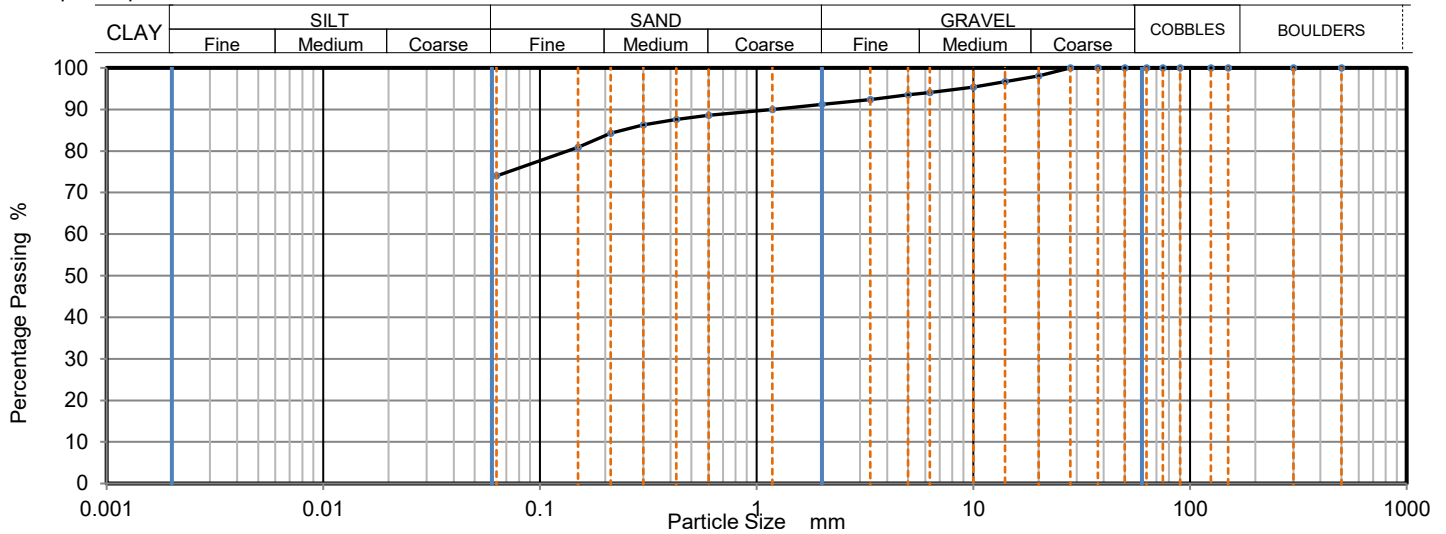
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928163
Hole No.: TP-004
Sample Reference: Not Given
Sample Description: Light brown slightly gravelly slightly sandy CLAY with fragments of chalk, plants
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	98		
14	97		
10	95		
6.3	94		
5	94		
3.35	92		
2	91		
1.18	90		
0.6	89		
0.425	88		
0.3	86		
0.212	84		
0.15	81		
0.063	74		

Sample Proportions	% dry mass
Very coarse	0
Gravel	9
Sand	17
Fines <0.063mm	74

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

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Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

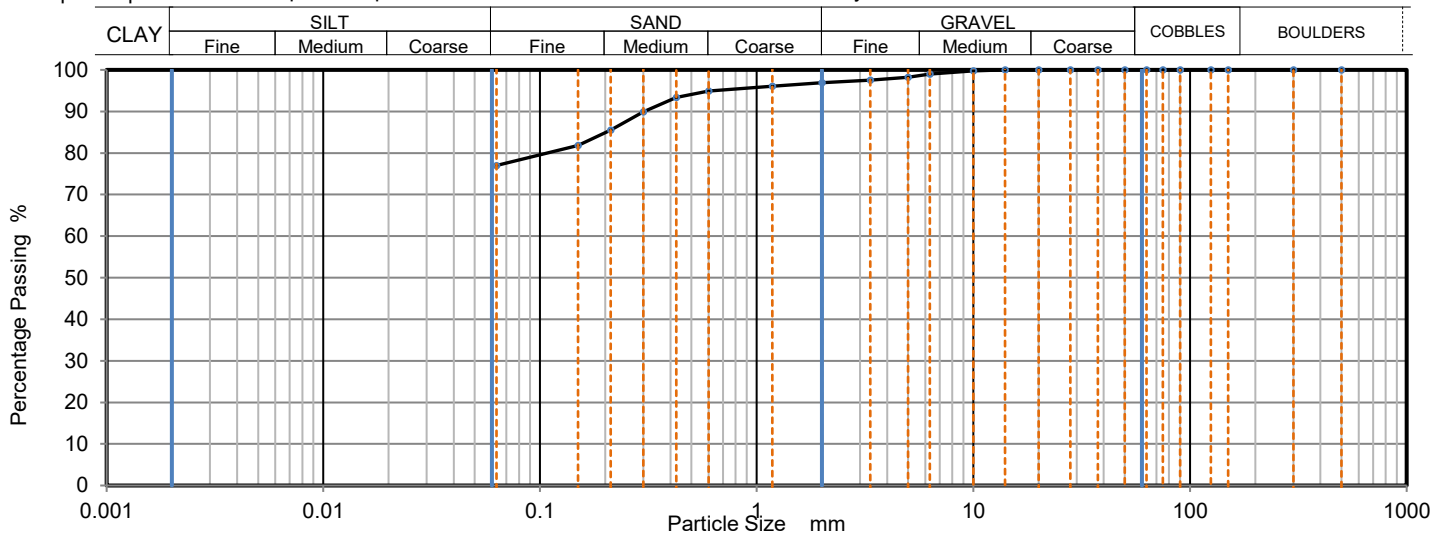
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928164
Hole No.: TP-007
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 1.90
Depth Base [m]: 2.00
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	99		
5	98		
3.35	98		
2	97		
1.18	96		
0.6	95		
0.425	93		
0.3	90		
0.212	86		
0.15	82		
0.063	78		

Sample Proportions	% dry mass
Very coarse	0
Gravel	3
Sand	19
Fines <0.063mm	78

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

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Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

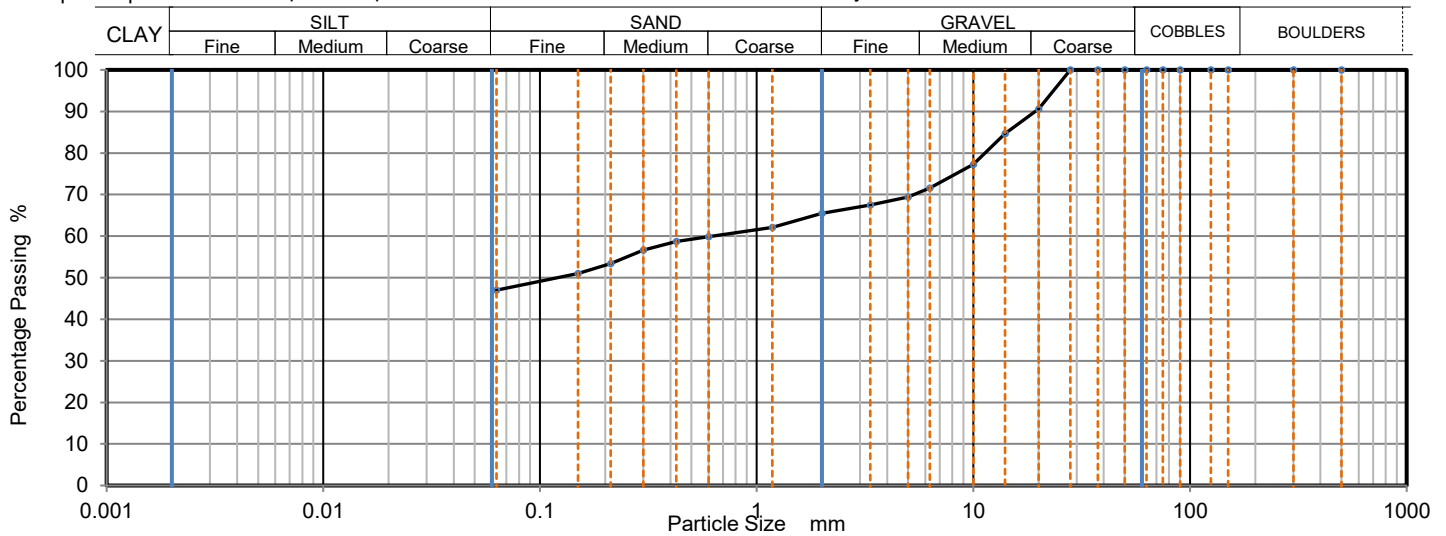
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928166
Hole No.: TP-009
Sample Reference: Not Given
Sample Description: Light brown slightly gravelly slightly sandy CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	91		
14	85		
10	77		
6.3	72		
5	69		
3.35	68		
2	66		
1.18	62		
0.6	60		
0.425	59		
0.3	57		
0.212	53		
0.15	51		
0.063	47		

Sample Proportions	% dry mass
Very coarse	0
Gravel	34
Sand	18
Fines <0.063mm	47

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 9.9
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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**TEST CERTIFICATE****DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

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Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

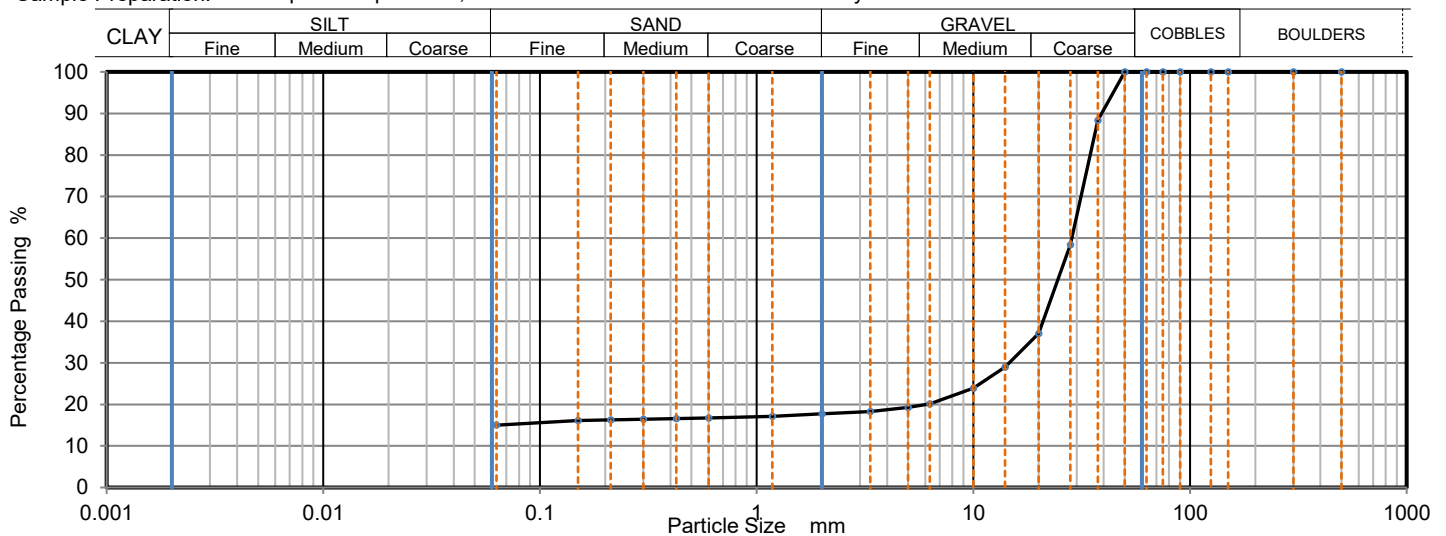
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928168
Hole No.: TP-012
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	88		
28	58		
20	37		
14	29		
10	24		
6.3	20		
5	19		
3.35	18		
2	18		
1.18	17		
0.6	17		
0.425	17		
0.3	16		
0.212	16		
0.15	16		
0.063	15		

Sample Proportions	% dry mass
Very coarse	0
Gravel	82
Sand	2
Fines <0.063mm	15

Grading Analysis	
D100	mm 50
D60	mm 28.4
D30	mm 14.6
D10	mm
Uniformity Coefficient	> 450
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

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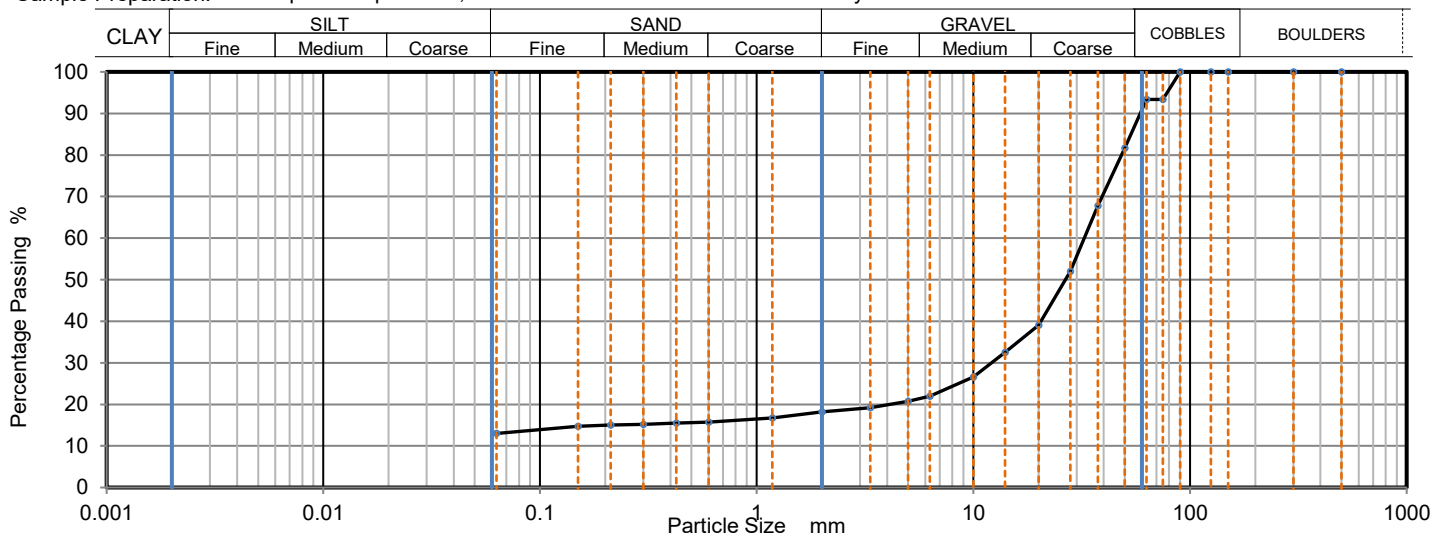
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928174
Hole No.: TP-029
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	93		
63	93		
50	82		
37.5	68		
28	52		
20	39		
14	33		
10	27		
6.3	22		
5	21		
3.35	19		
2	18		
1.18	17		
0.6	16		
0.425	16		
0.3	15		
0.212	15		
0.15	15		
0.063	14		

Sample Proportions	% dry mass
Very coarse	7
Gravel	75
Sand	4
Fines <0.063mm	14

Grading Analysis	
D100	mm 90
D60	mm 32.5
D30	mm 12.1
D10	mm
Uniformity Coefficient	> 520
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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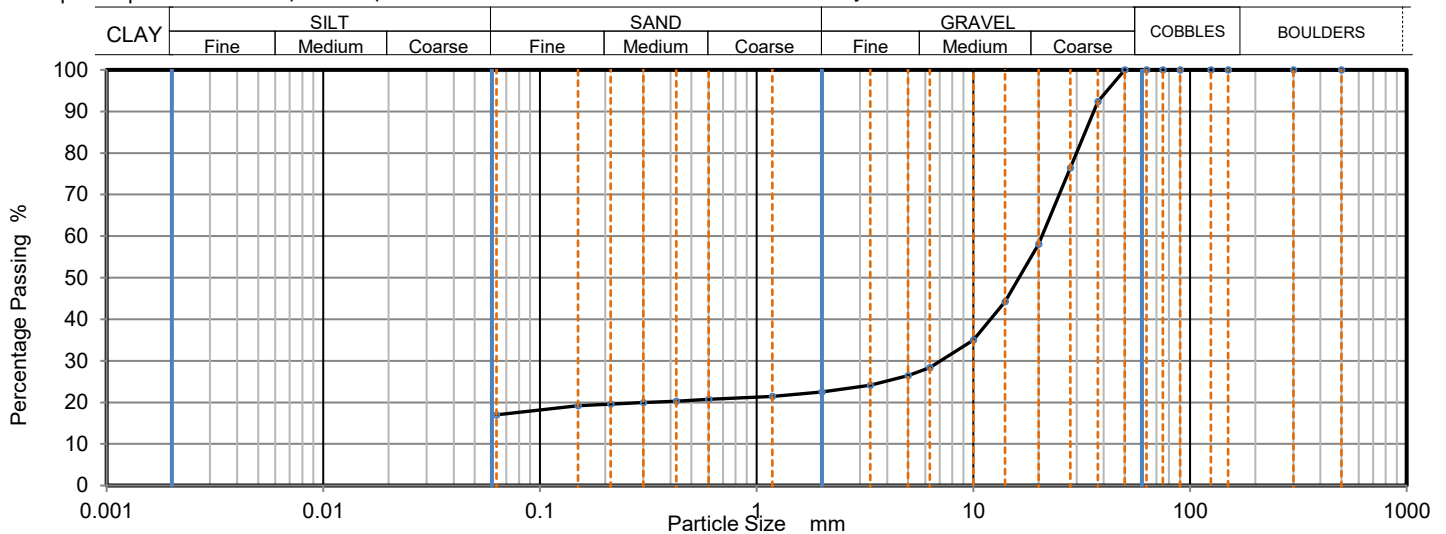
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928175
Hole No.: TP-031
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	92		
28	76		
20	58		
14	44		
10	35		
6.3	28		
5	26		
3.35	24		
2	23		
1.18	21		
0.6	21		
0.425	20		
0.3	20		
0.212	20		
0.15	19		
0.063	17		

Sample Proportions	% dry mass
Very coarse	0
Gravel	77
Sand	5
Fines <0.063mm	17

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 330
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

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Client: The Shadbolt Group
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Contact: Stephen Fisk
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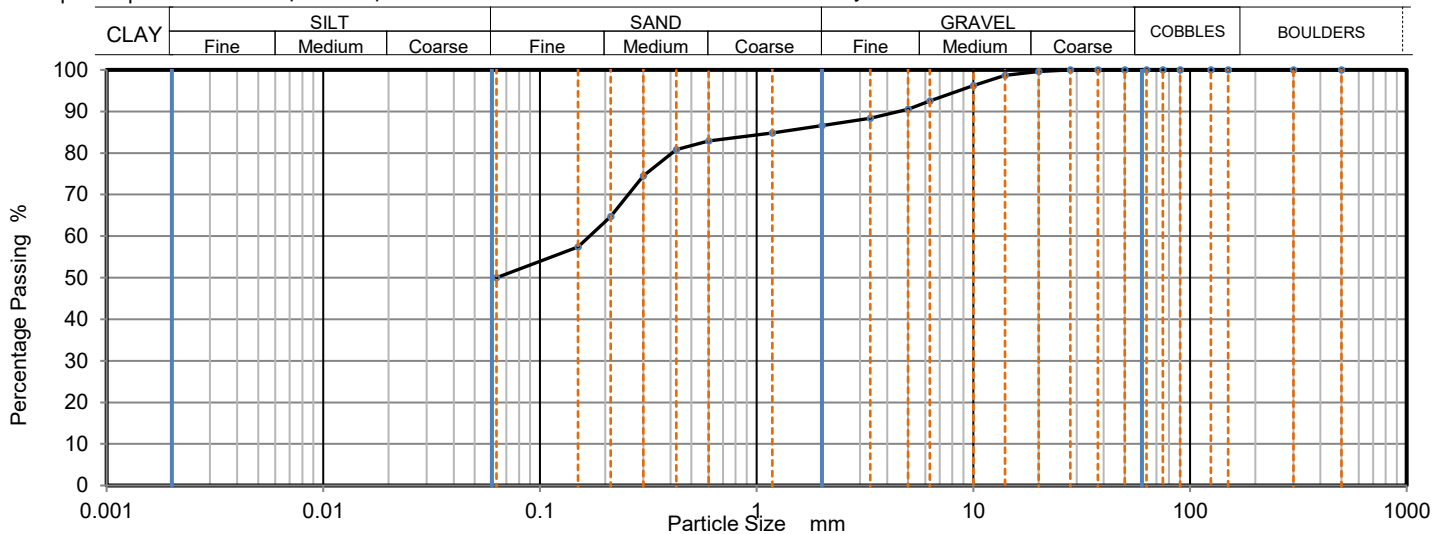
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928183
Hole No.: TP-043
Sample Reference: Not Given
Sample Description: Brown slightly gravelly sandy CLAY with fragments of chalk, plants
Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	96		
6.3	93		
5	91		
3.35	88		
2	87		
1.18	85		
0.6	83		
0.425	81		
0.3	75		
0.212	65		
0.15	57		
0.063	51		

Sample Proportions	% dry mass
Very coarse	0
Gravel	13
Sand	36
Fines <0.063mm	51

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 2.7
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

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Contact: Stephen Fisk
Site Address: Baldock

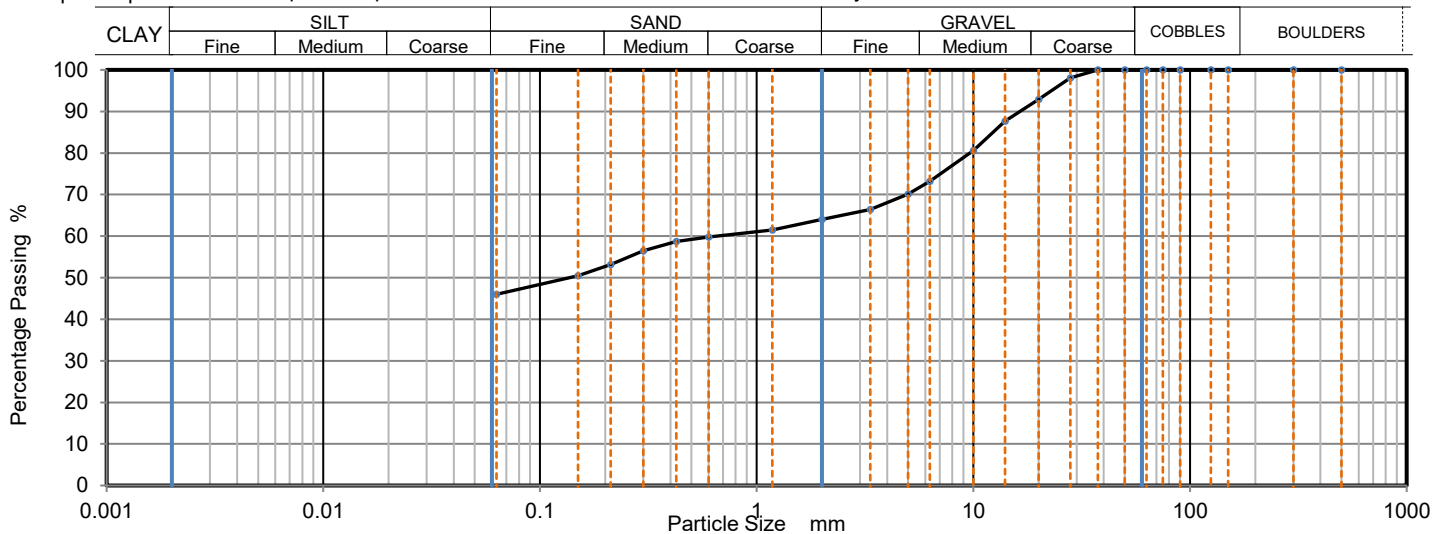
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928184
Hole No.: TP-043
Sample Reference: Not Given
Sample Description: Light brown slightly sandy gravelly CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 1.20
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	98		
20	93		
14	88		
10	81		
6.3	73		
5	70		
3.35	66		
2	64		
1.18	62		
0.6	60		
0.425	59		
0.3	57		
0.212	53		
0.15	51		
0.063	46		

Sample Proportions	% dry mass
Very coarse	0
Gravel	36
Sand	18
Fines <0.063mm	46

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 10
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

**TEST CERTIFICATE****DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

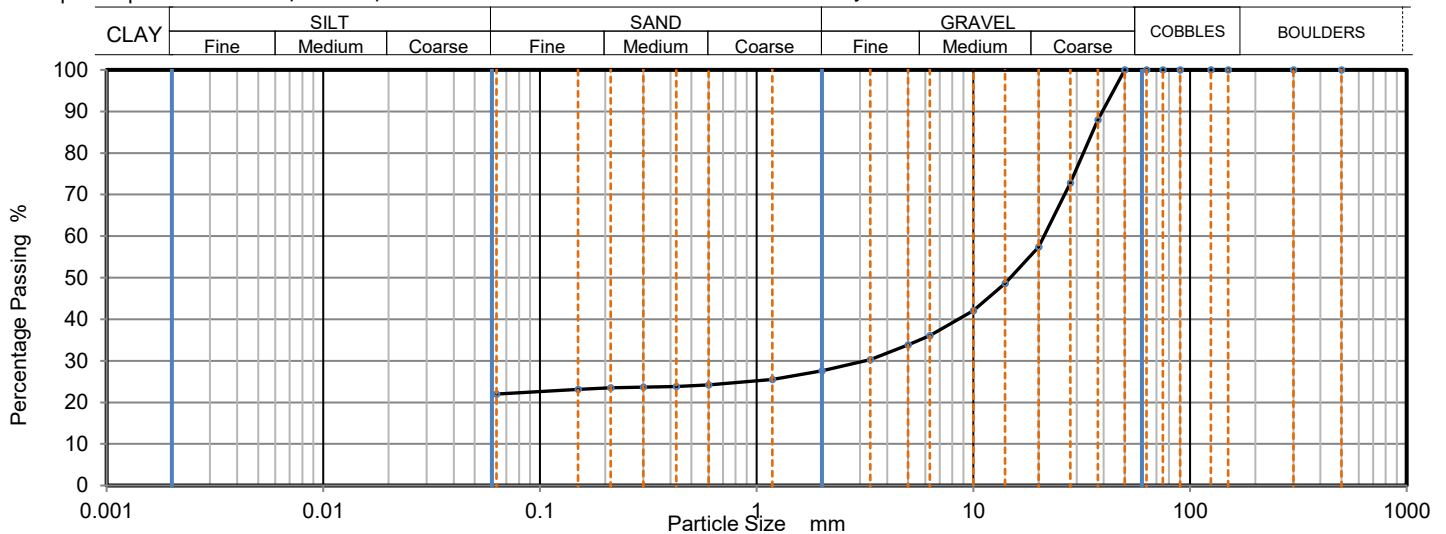
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928187
Hole No.: TP-046
Sample Reference: Not Given
Sample Description: White very clayey CHALK
Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 1.70
Depth Base [m]: 1.80
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	88		
28	73		
20	57		
14	49		
10	42		
6.3	36		
5	34		
3.35	30		
2	28		
1.18	26		
0.6	24		
0.425	24		
0.3	24		
0.212	24		
0.15	23		
0.063	23		

Sample Proportions	% dry mass
Very coarse	0
Gravel	72
Sand	5
Fines <0.063mm	23

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 340
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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**TEST CERTIFICATE****DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

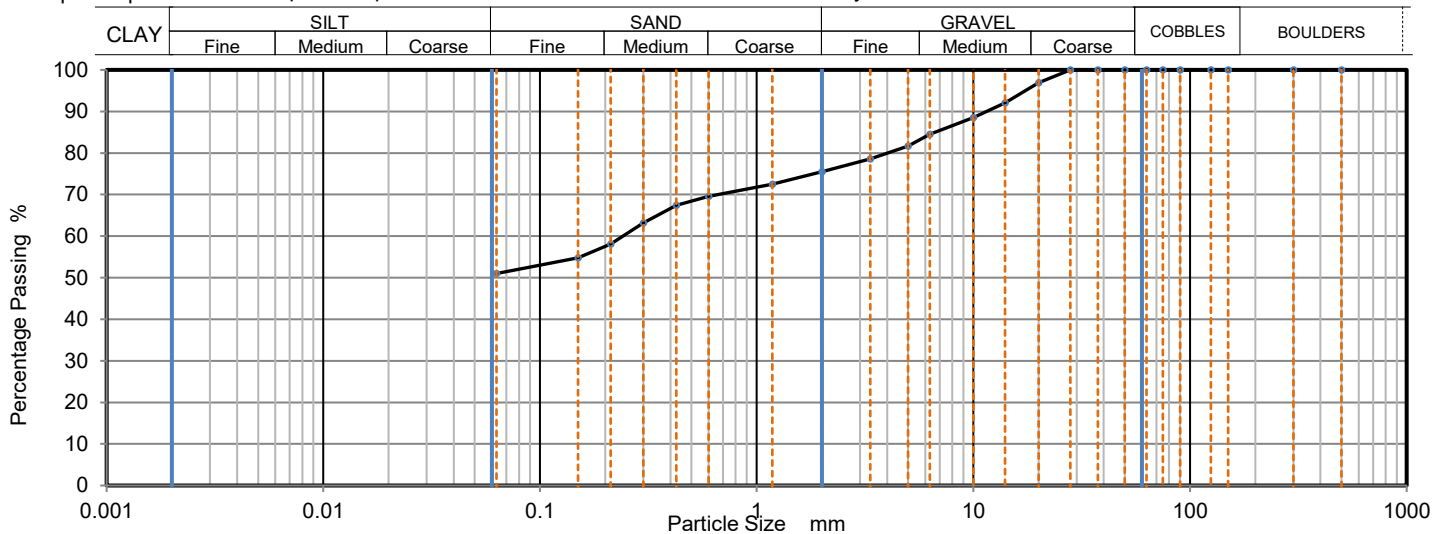
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928194
Hole No.: TP-75
Sample Reference: Not Given
Sample Description: Brown organic slightly gravelly slightly sandy CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	97		
14	92		
10	89		
6.3	85		
5	82		
3.35	79		
2	76		
1.18	73		
0.6	70		
0.425	67		
0.3	63		
0.212	58		
0.15	55		
0.063	51		

Sample Proportions	% dry mass
Very coarse	0
Gravel	24
Sand	24
Fines <0.063mm	51

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 3.8
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

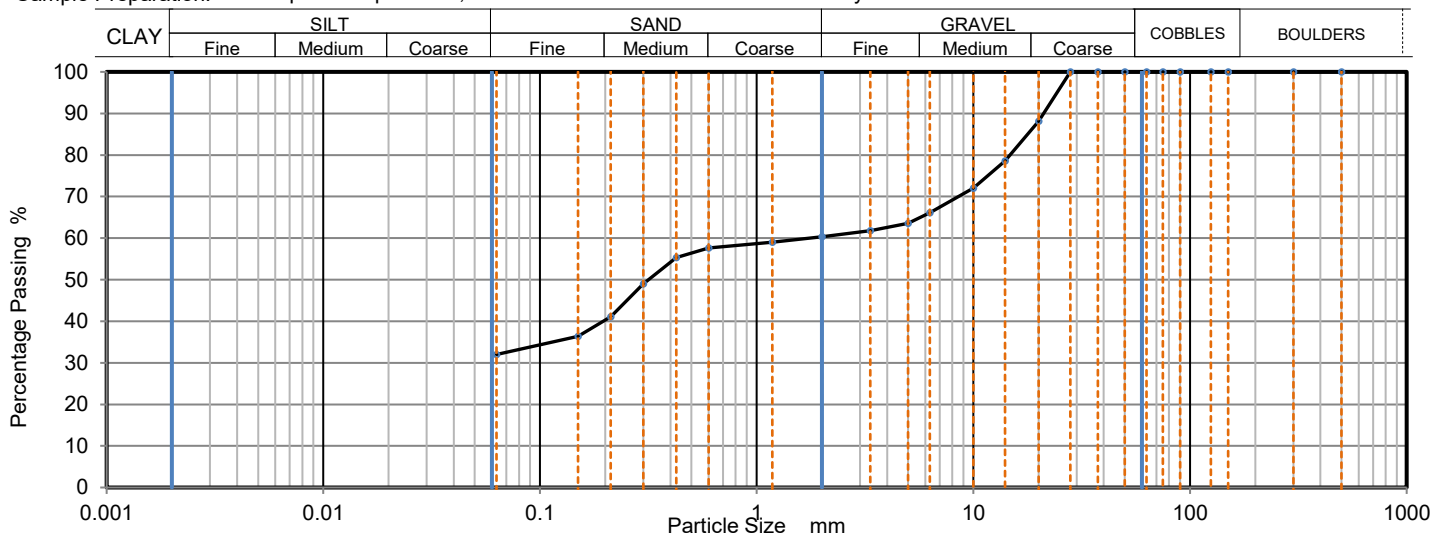
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928217
Hole No.: TP-132
Sample Reference: Not Given
Sample Description: Brown very sandy very clayey GRAVEL
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 0.45
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	88		
14	79		
10	72		
6.3	66		
5	64		
3.35	62		
2	60		
1.18	59		
0.6	58		
0.425	55		
0.3	49		
0.212	41		
0.15	36		
0.063	33		

Sample Proportions	% dry mass
Very coarse	0
Gravel	40
Sand	27
Fines <0.063mm	33

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 28
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Monika Siewior
Reporting Specialist
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i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

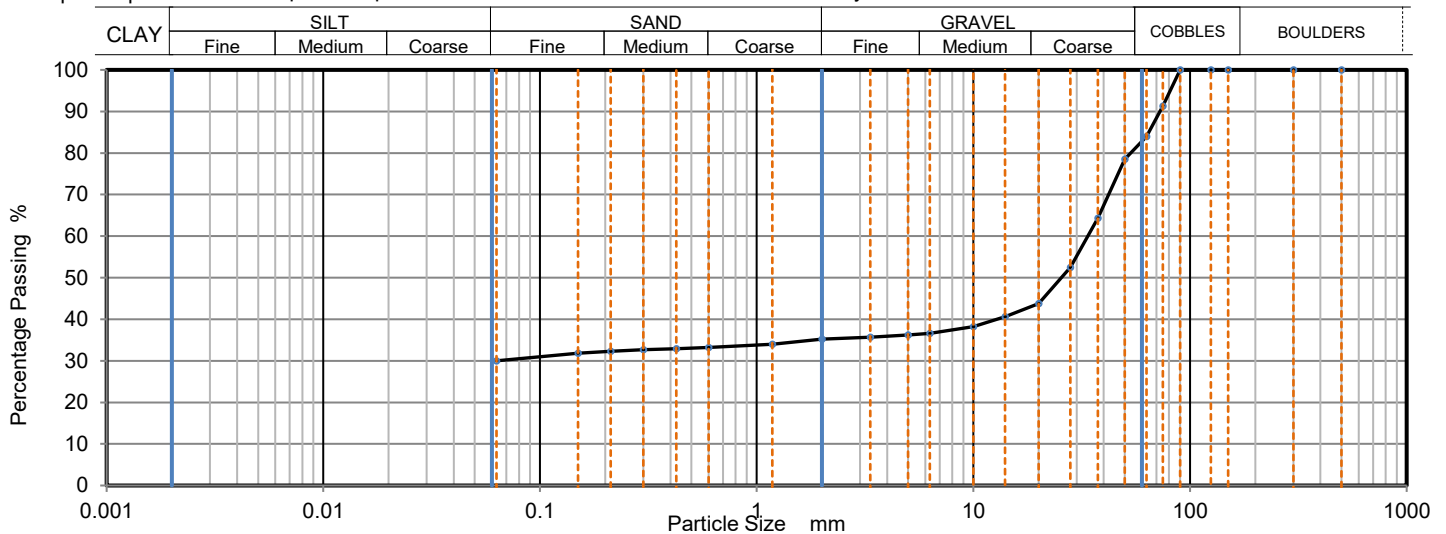
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928218
Hole No.: TP-133
Sample Reference: Not Given
Sample Description: White CHALK with fragments of flintstones
Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 2.00
Depth Base [m]: 2.10
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	91		
63	84		
50	79		
37.5	64		
28	53		
20	44		
14	41		
10	38		
6.3	37		
5	36		
3.35	36		
2	35		
1.18	34		
0.6	33		
0.425	33		
0.3	33		
0.212	32		
0.15	32		
0.063	30		

Sample Proportions	% dry mass
Very coarse	16
Gravel	49
Sand	5
Fines <0.063mm	30

Grading Analysis	
D100	mm 90
D60	mm 33.7
D30	mm
D10	mm
Uniformity Coefficient	> 530
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

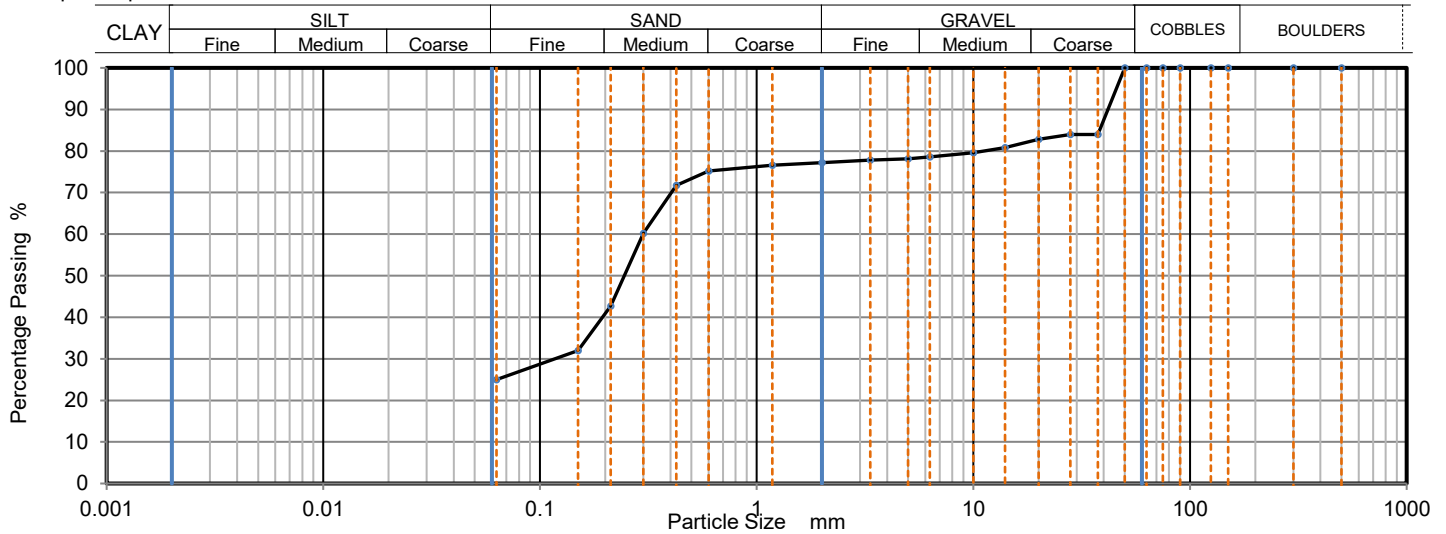
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928223
Hole No.: TP-143
Sample Reference: Not Given
Sample Description: Brown very gravelly very clayey SAND with fragments of chalk, plants
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	84		
28	84		
20	83		
14	81		
10	80		
6.3	79		
5	78		
3.35	78		
2	77		
1.18	77		
0.6	75		
0.425	72		
0.3	60		
0.212	43		
0.15	32		
0.063	26		

Sample Proportions	% dry mass
Very coarse	0
Gravel	23
Sand	52
Fines <0.063mm	26

Grading Analysis	
D100	mm 50
D60	mm 0.299
D30	mm 0.115
D10	mm
Uniformity Coefficient	> 4.7
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

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Reporting Specialist
for and on behalf of i2 Analytical Ltd

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Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

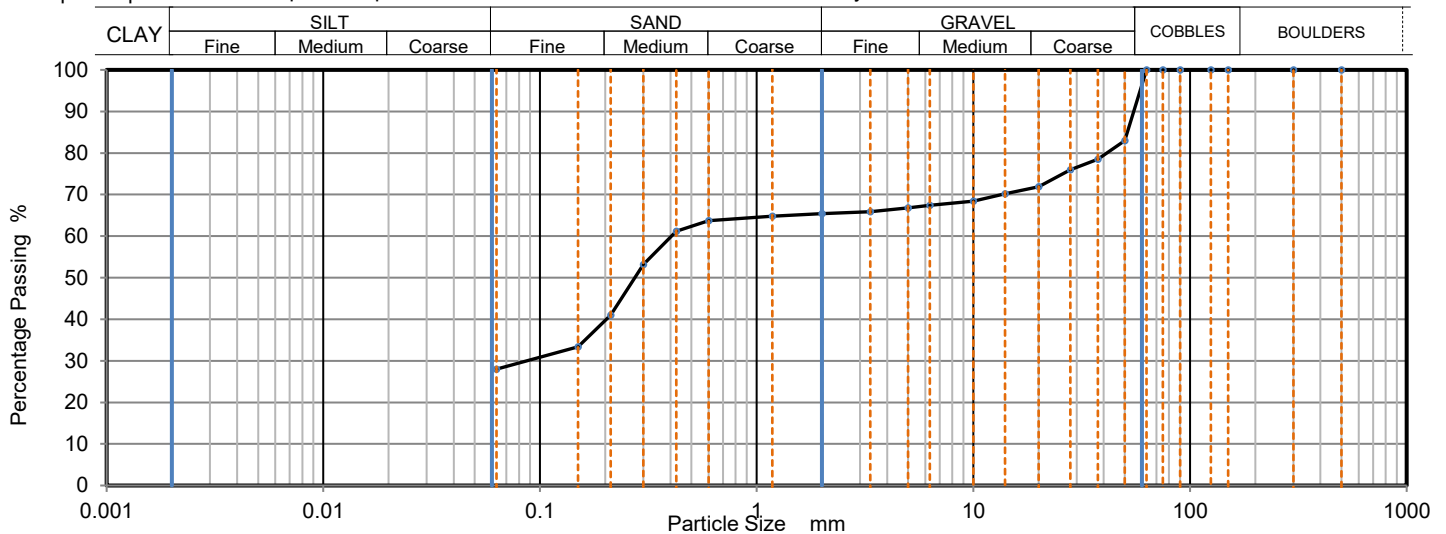
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928225
Hole No.: TP-145
Sample Reference: Not Given
Sample Description: Brown very gravelly very sandy CLAY
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	83		
37.5	79		
28	76		
20	72		
14	70		
10	68		
6.3	67		
5	67		
3.35	66		
2	65		
1.18	65		
0.6	64		
0.425	61		
0.3	53		
0.212	41		
0.15	33		
0.063	28		

Sample Proportions	% dry mass
Very coarse	0
Gravel	35
Sand	37
Fines <0.063mm	28

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	> 6.4
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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**TEST CERTIFICATE****DETERMINATION OF PARTICLE SIZE DISTRIBUTION**

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

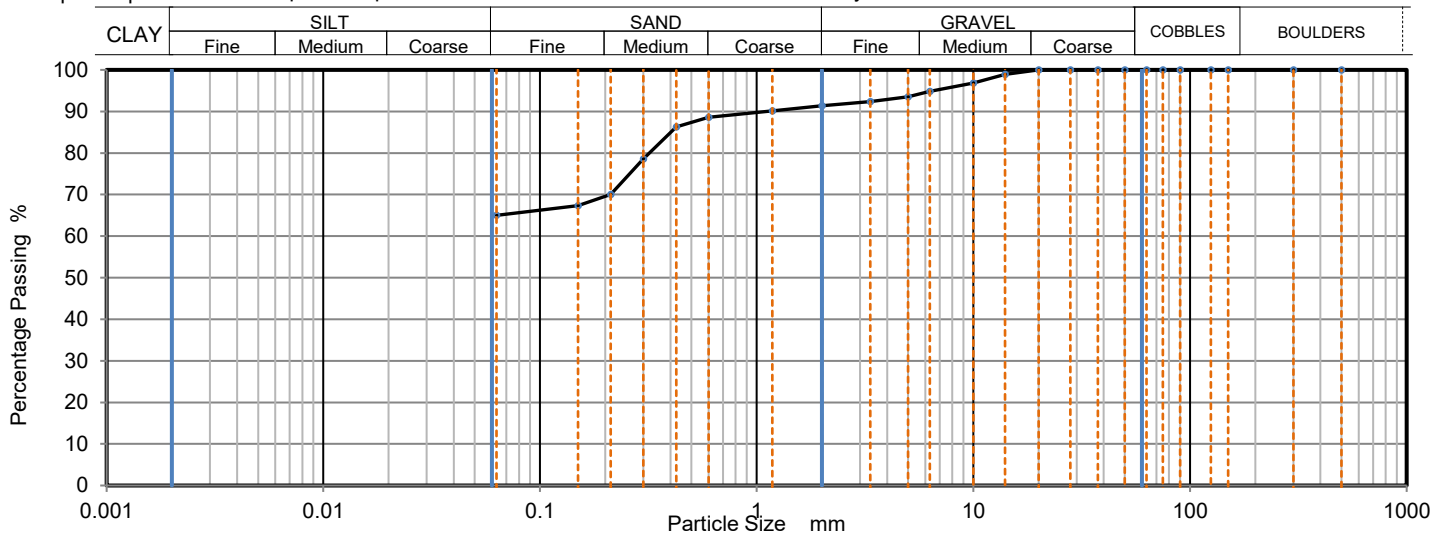
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928226
Hole No.: TP-146
Sample Reference: Not Given
Sample Description: Yellowish brown slightly gravelly slightly sandy CLAY with fragments of chalk
Sample Preparation: Sample was quartered, oven dried at 109 °C and broken down by hand.

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	100		
90	100		
75	100		
63	100		
50	100		
37.5	100		
28	100		
20	100		
14	99		
10	97		
6.3	95		
5	94		
3.35	92		
2	91		
1.18	90		
0.6	89		
0.425	86		
0.3	79		
0.212	70		
0.15	67		
0.063	65		

Sample Proportions	% dry mass
Very coarse	0
Gravel	9
Sand	26
Fines <0.063mm	65

Grading Analysis	
D100	mm
D60	mm
D30	mm
D10	mm
Uniformity Coefficient	N/A
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:**Signed:**

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF PARTICLE SIZE DISTRIBUTION

Tested in Accordance with: BS 1377-2: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

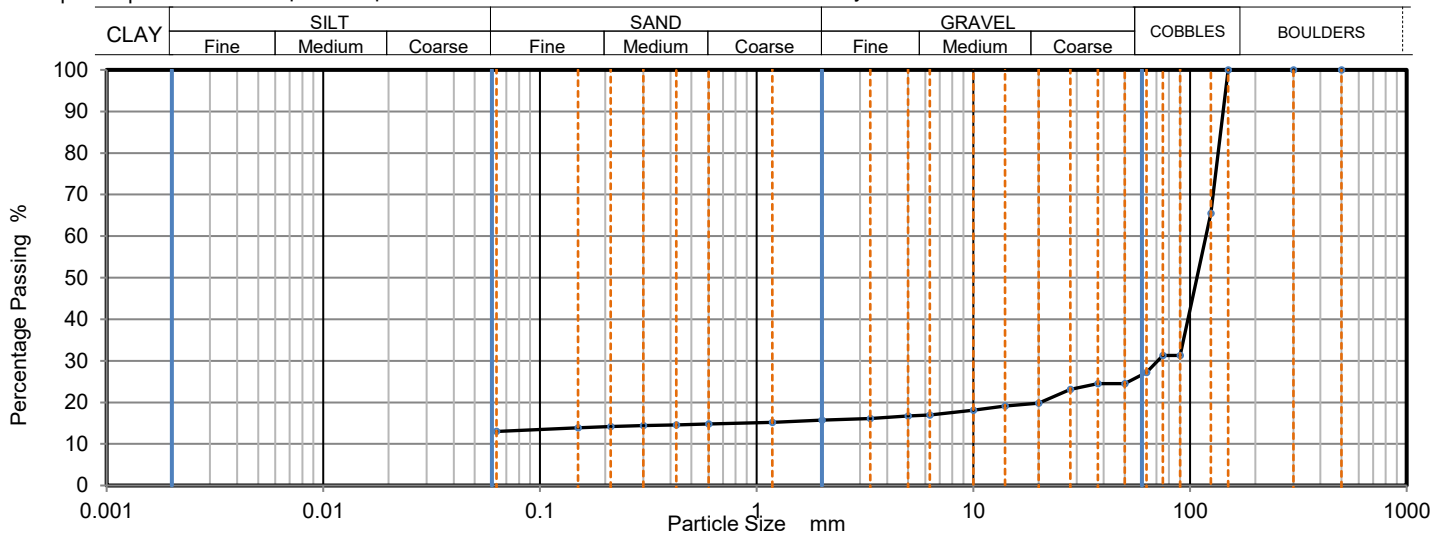
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928230
Hole No.: TP-154
Sample Reference: Not Given
Sample Description: Light grey clayey CHALK with fragments of flintstones
Sample Preparation: Sample was quartered, oven dried at 106 °C and broken down by hand.

Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
500	100		
300	100		
150	100		
125	66		
90	31		
75	31		
63	27		
50	25		
37.5	25		
28	23		
20	20		
14	19		
10	18		
6.3	17		
5	17		
3.35	16		
2	16		
1.18	15		
0.6	15		
0.425	15		
0.3	14		
0.212	14		
0.15	14		
0.063	13		

Sample Proportions	% dry mass
Very coarse	73
Gravel	12
Sand	3
Fines <0.063mm	13

Grading Analysis	
D100	mm 300
D60	mm 119
D30	mm 71
D10	mm
Uniformity Coefficient	> 1900
Curvature Coefficient	

Uniformity and Curvature Coefficient calculated in accordance with BS EN ISO 14688-2:2018

Note: Tested in Accordance with BS1377:Part 2:1990, clause 9.2

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

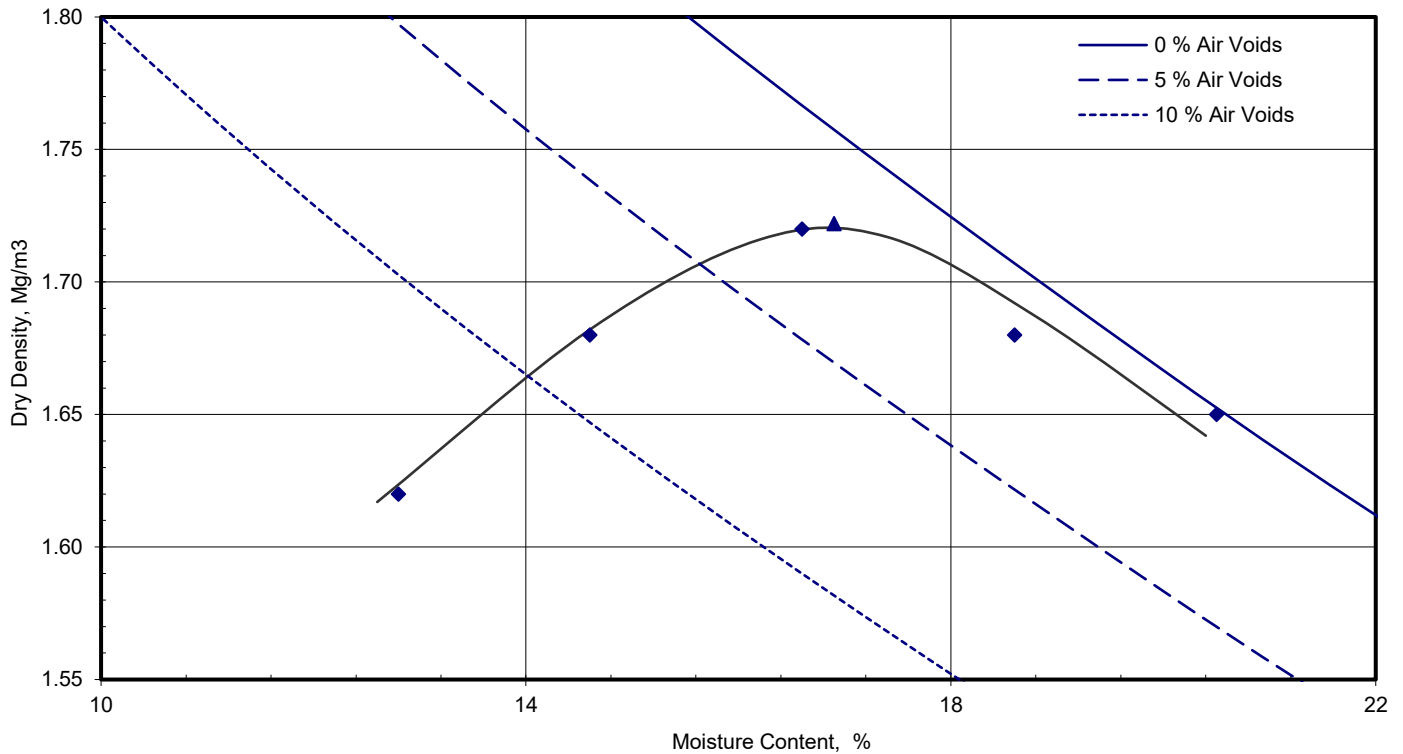
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928196
Hole No.: TP-78
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.90
Depth Base [m]: 2.00
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	13	15	17	19	21
Dry Density	Mg/m³	1.62	1.68	1.72	1.68	1.65

Mould Type	CBR	
Samples Used	Single sample tested	
Dry Mass Retained on 37.5 mm Sieve	%	8
Dry Mass Retained on 20.0 mm Sieve	%	54
Particle Density - Assumed	Mg/m³	2.50
As received Moisture Content	%	21
Maximum Dry Density	Mg/m³	1.72
Optimum Moisture Content	%	17

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test as per client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

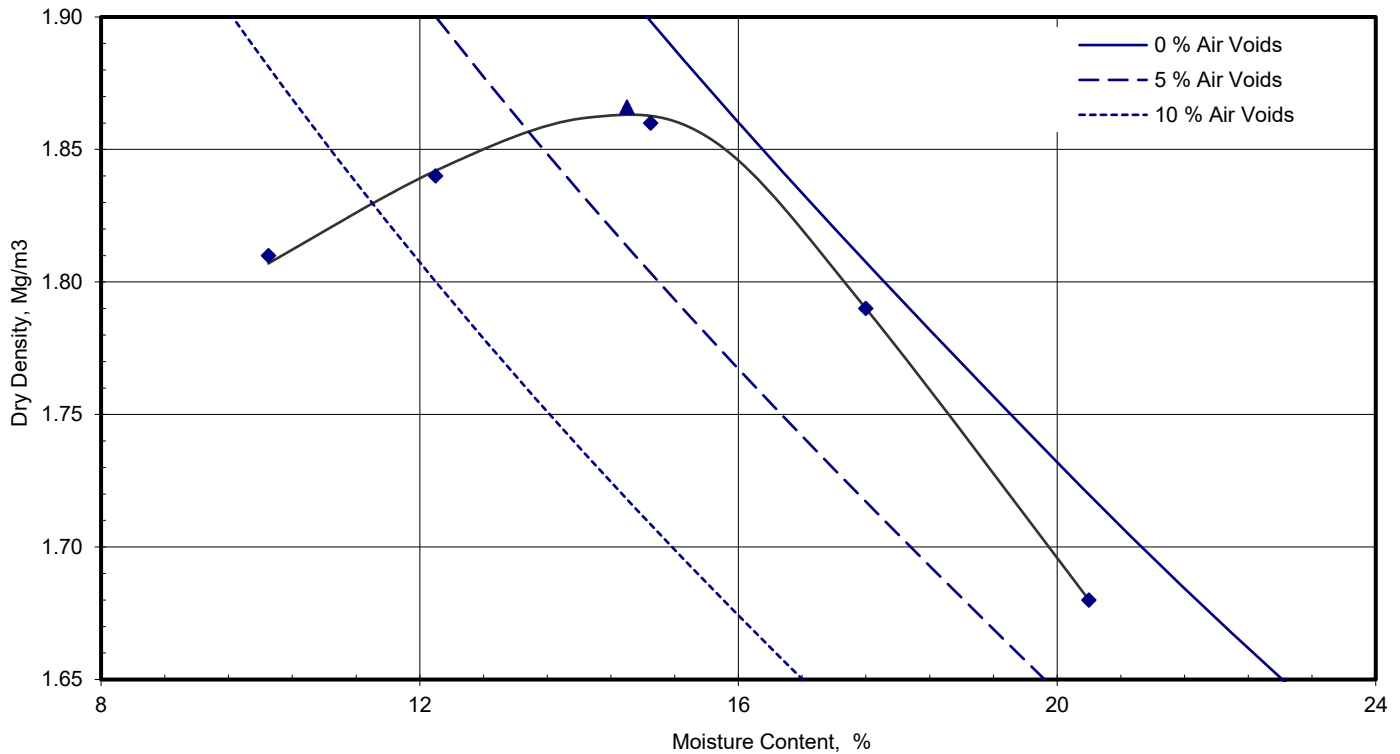
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928164
Hole No.: TP-007
Sample Reference: Not Given
Sample Description: Brown slightly gravelly slightly sandy CLAY
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.90
Depth Base [m]: 2.00
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	10	12	15	18	20
Dry Density	Mg/m³	1.81	1.84	1.86	1.79	1.68

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	4
Dry Mass Retained on 20.0 mm Sieve	%	14
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	30
Maximum Dry Density	Mg/m³	1.87

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

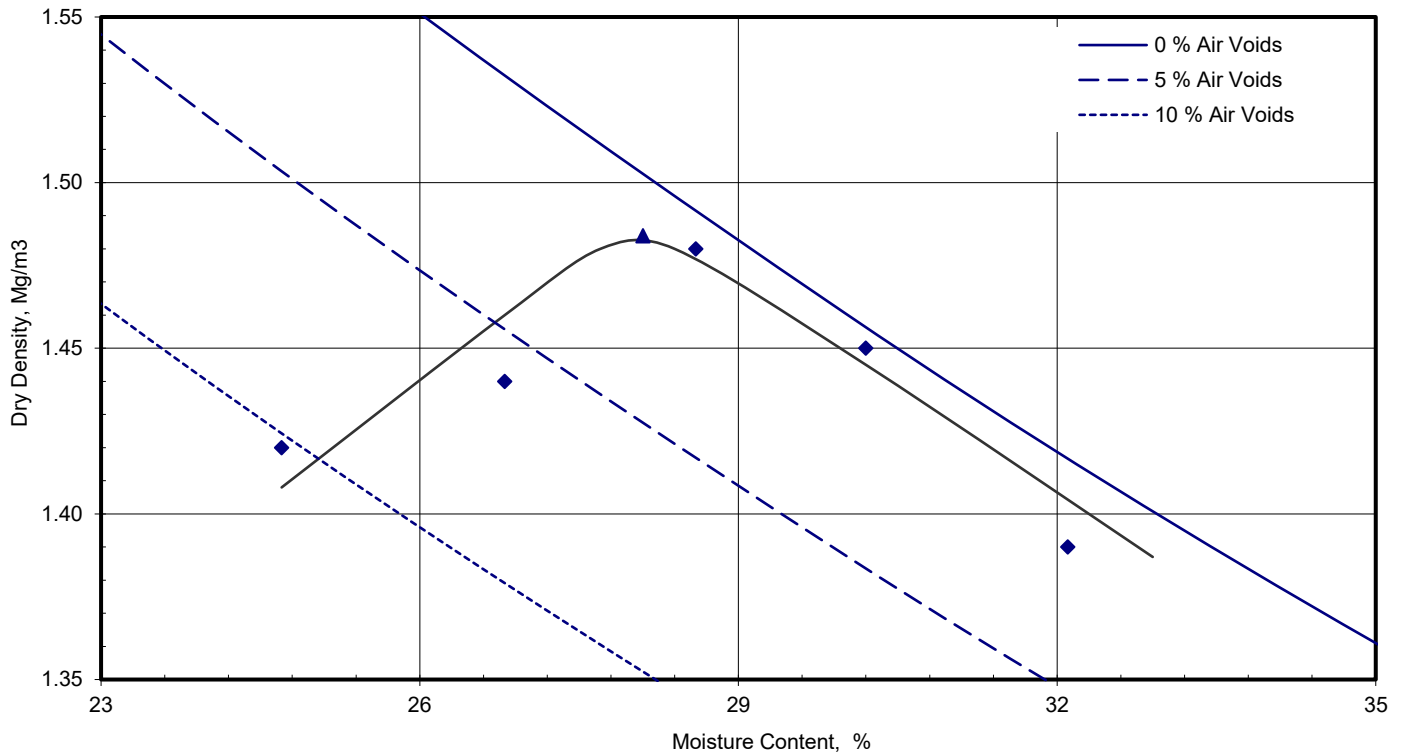
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928167
Hole No.: TP-011
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.30
Depth Base [m]: 1.40
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	25	27	29	30	32
Dry Density	Mg/m³	1.42	1.44	1.48	1.45	1.39

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	13
Dry Mass Retained on 20.0 mm Sieve	%	50
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	27
Maximum Dry Density	Mg/m³	1.48

Optimum Moisture Content	%	28
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

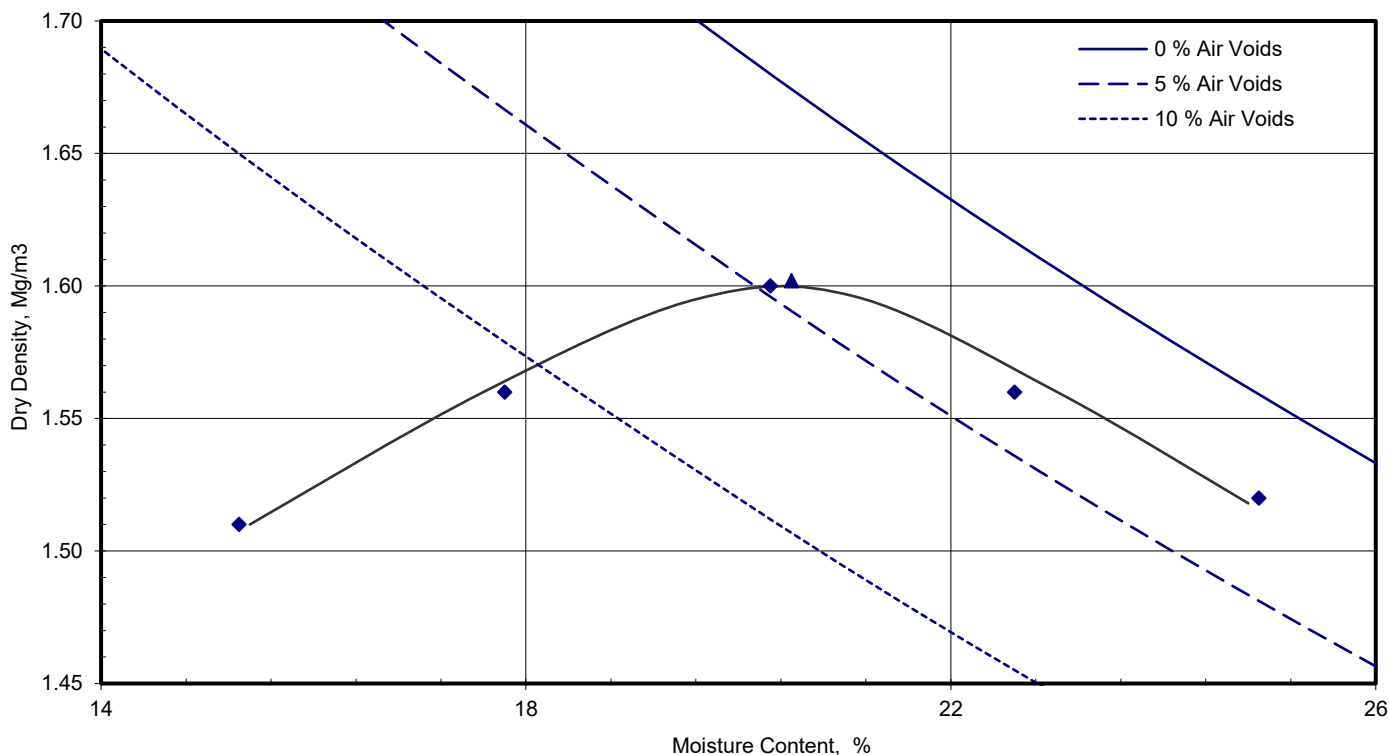
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928169
Hole No.: TP-014
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	15	18	20	23	25
Dry Density	Mg/m³	1.51	1.56	1.60	1.56	1.52

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	2
Dry Mass Retained on 20.0 mm Sieve	%	5
Particle Density - Assumed	Mg/m³	2.55
As received Moisture Content	%	32
Maximum Dry Density	Mg/m³	1.60

Optimum Moisture Content	%	21
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

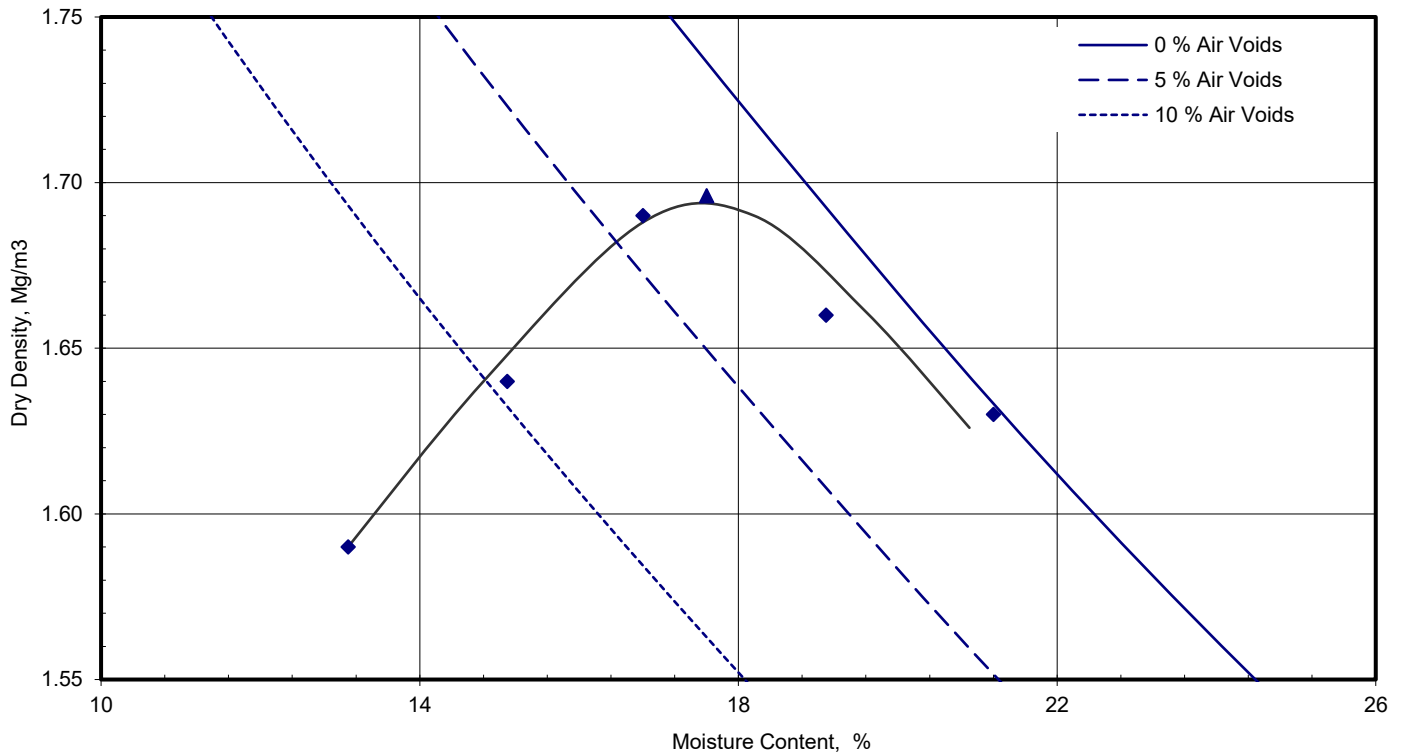
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928170
Hole No.: TP-019
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.10
Depth Base [m]: 2.20
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	13	15	17	19	21
Dry Density	Mg/m³	1.59	1.64	1.69	1.66	1.63

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	18
Dry Mass Retained on 20.0 mm Sieve	%	23
Particle Density - Assumed	Mg/m³	2.50
As received Moisture Content	%	24
Maximum Dry Density	Mg/m³	1.70

Optimum Moisture Content	%	18
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

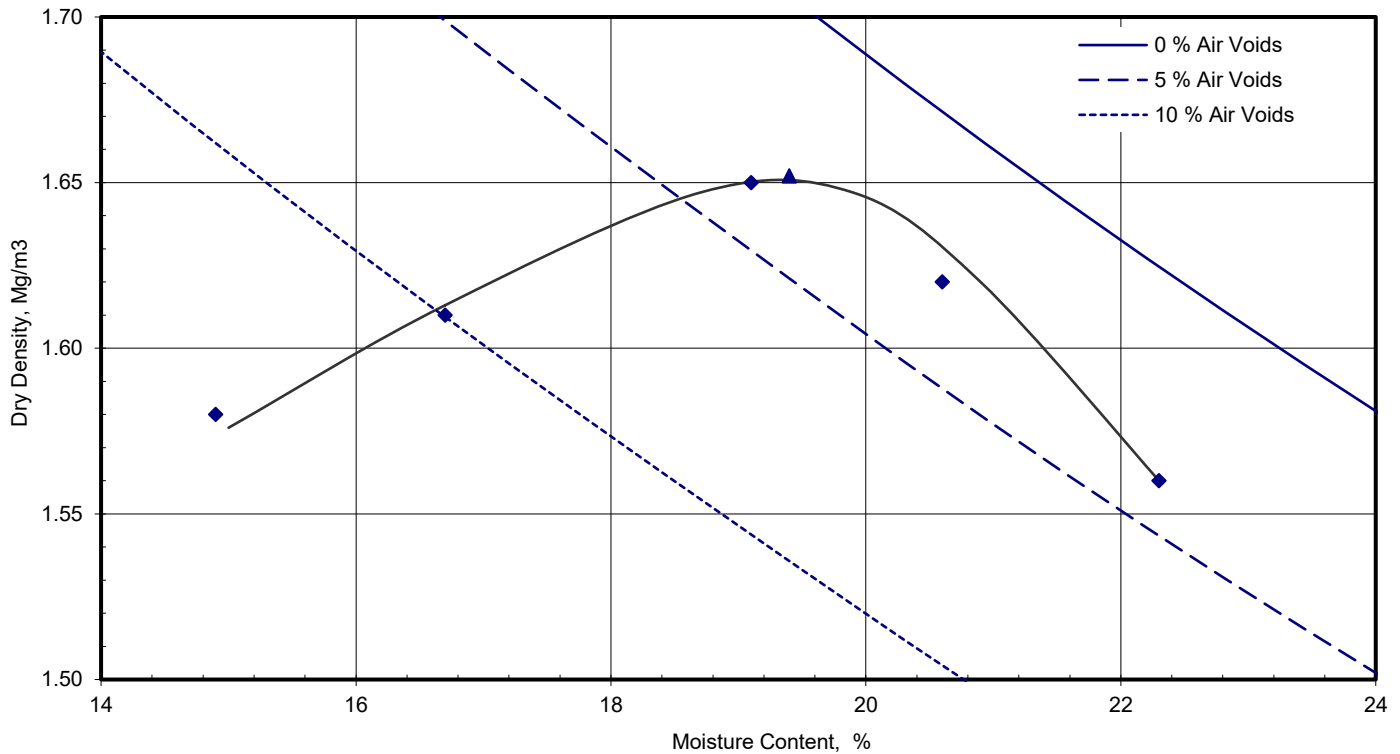
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928172
Hole No.: TP-023
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.10
Depth Base [m]: 2.20
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	15	17	19	21	22
Dry Density	Mg/m³	1.58	1.61	1.65	1.62	1.56

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	6
Particle Density - Assumed	Mg/m³	2.55
As received Moisture Content	%	22
Maximum Dry Density	Mg/m³	1.65

Optimum Moisture Content	%	19
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

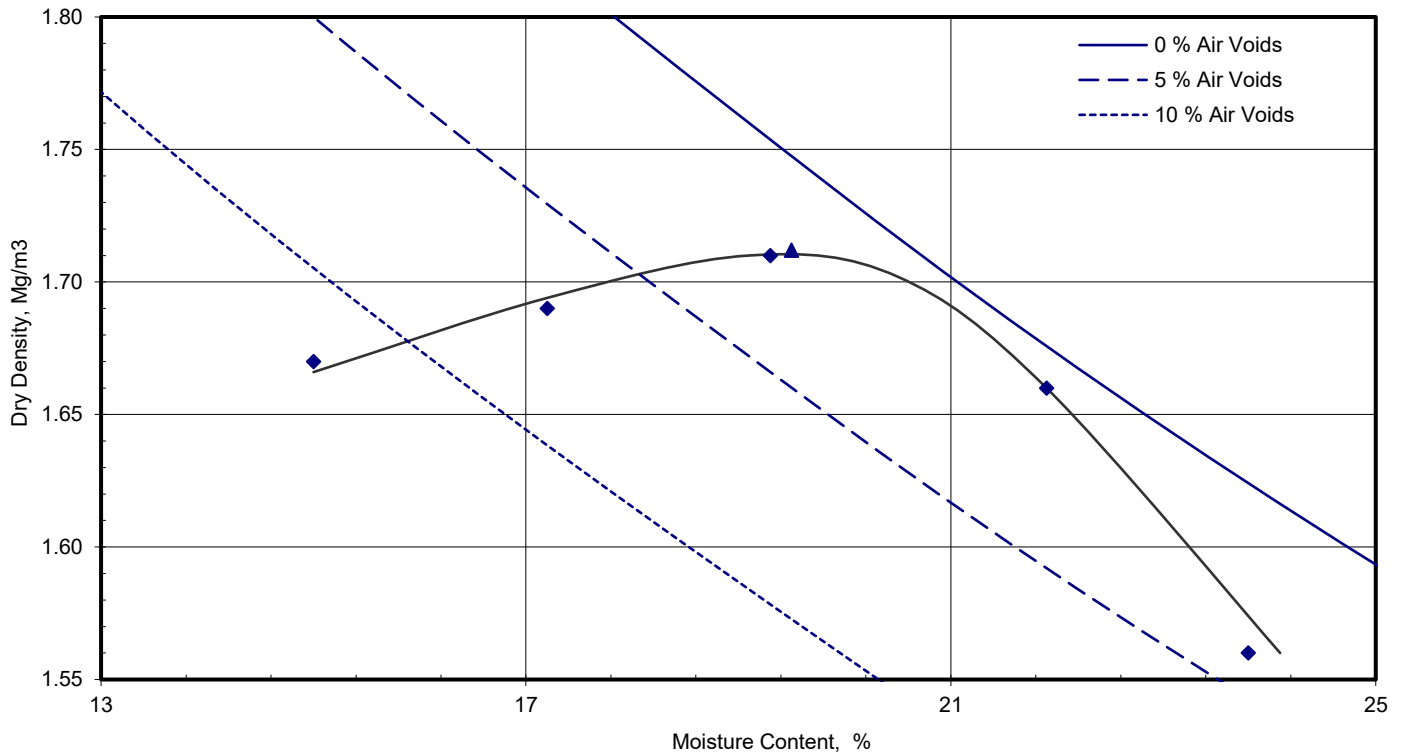
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928173
Hole No.: TP-028
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.10
Depth Base [m]: 2.20
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	15	17	19	22	24
Dry Density	Mg/m³	1.67	1.69	1.71	1.66	1.56

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	7
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	22
Maximum Dry Density	Mg/m³	1.71

Optimum Moisture Content	%	20
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

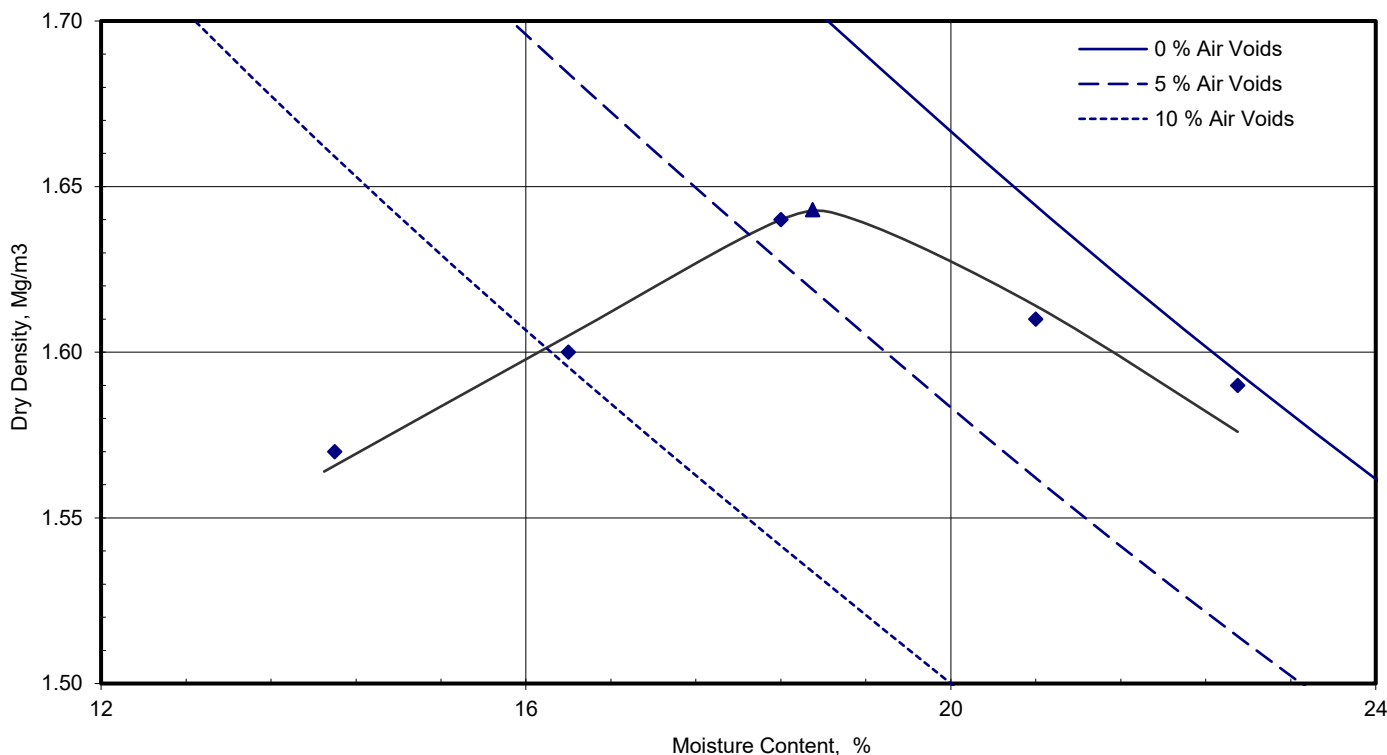
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928177
Hole No.: TP-034
Sample Reference: Not Given
Sample Description: White slightly clayey CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	14	16	18	21	23
Dry Density	Mg/m³	1.57	1.60	1.64	1.61	1.59

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.50
As received Moisture Content	%	30
Maximum Dry Density	Mg/m³	1.64

Optimum Moisture Content	%	19
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

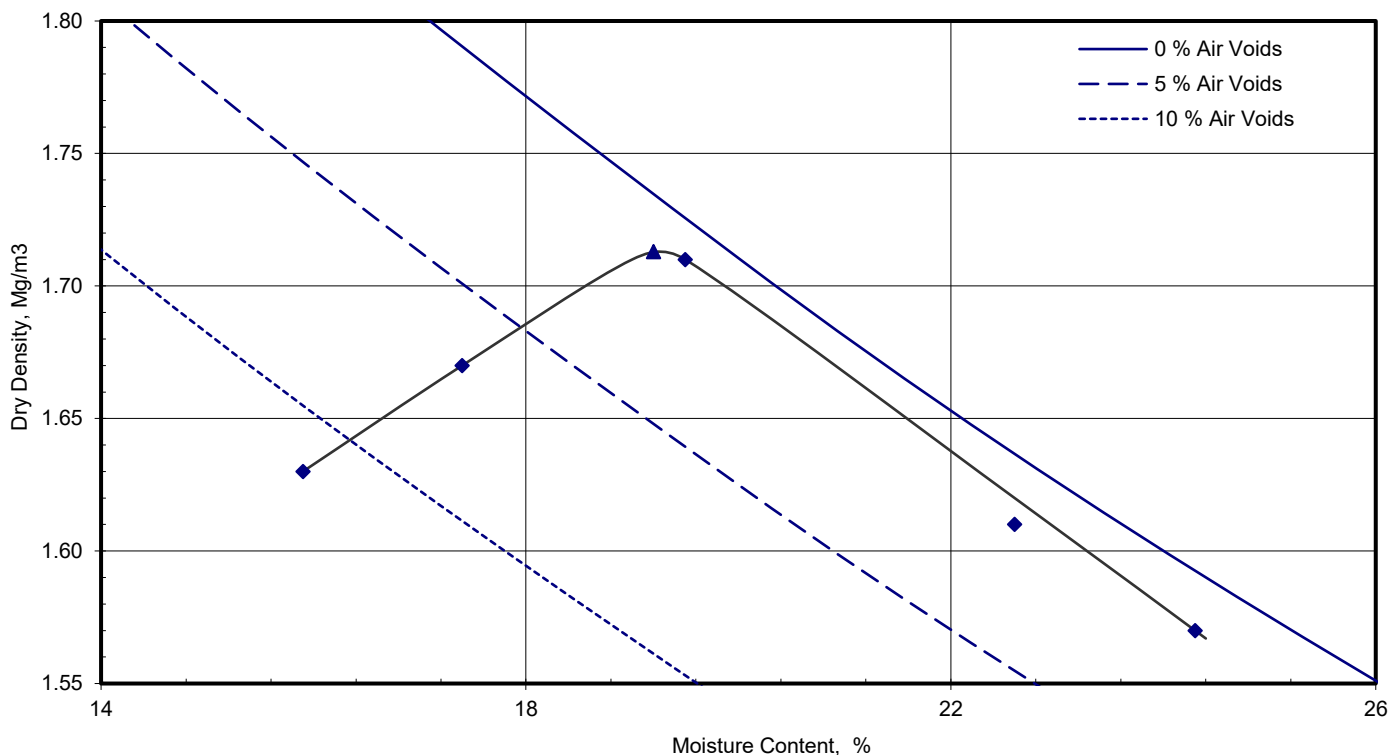
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928179
Hole No.: TP-036
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	16	17	20	23	24
Dry Density	Mg/m³	1.63	1.67	1.71	1.61	1.57

Mould Type	1 Litre
Samples Used	Single sample tested
Dry Mass Retained on 37.5 mm Sieve	0
Dry Mass Retained on 20.0 mm Sieve	24
Particle Density - Assumed	2.60
As received Moisture Content	23
Maximum Dry Density	1.71

Optimum Moisture Content	%	19
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

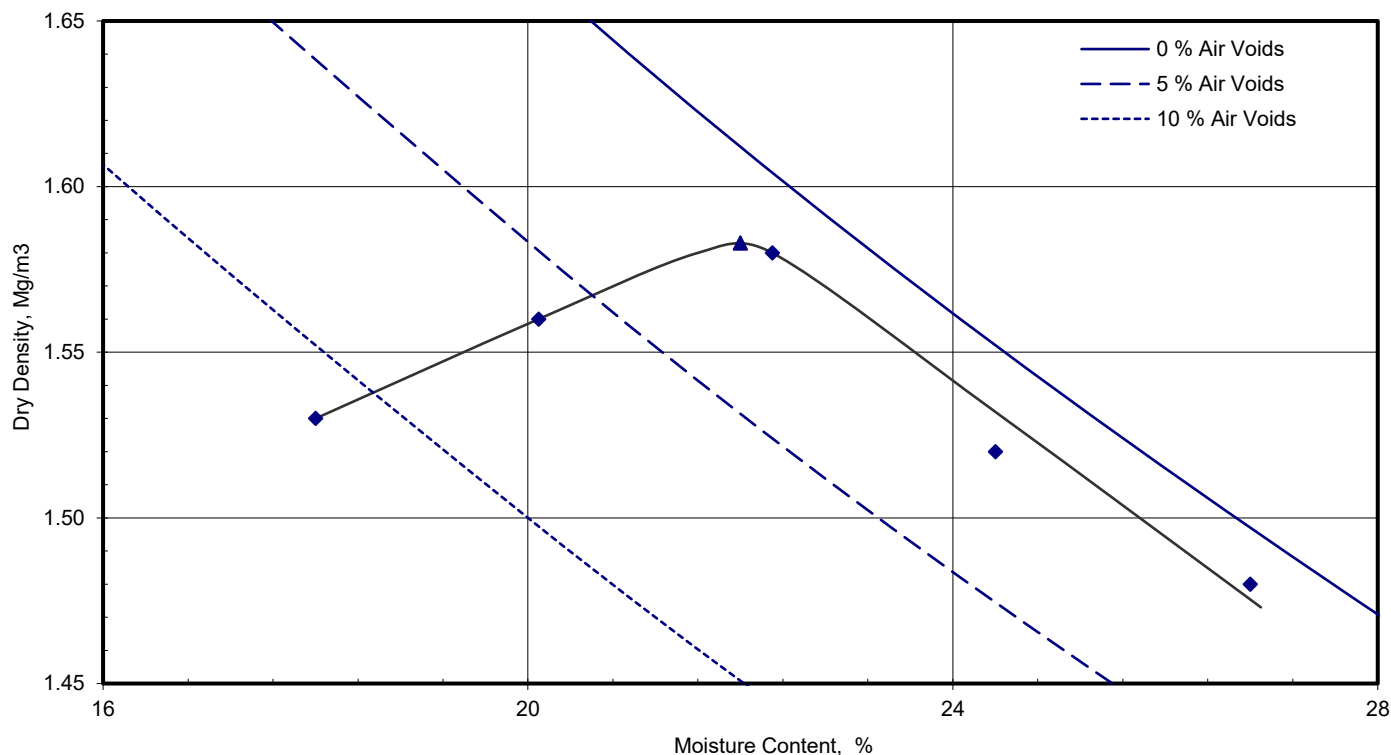
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928180
Hole No.: TP-039
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	18	20	22	24	27
Dry Density	Mg/m³	1.53	1.56	1.58	1.52	1.48

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	5
Dry Mass Retained on 20.0 mm Sieve	%	39
Particle Density - Assumed	Mg/m³	2.50
As received Moisture Content	%	29
Maximum Dry Density	Mg/m³	1.58

Optimum Moisture Content	%	22
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

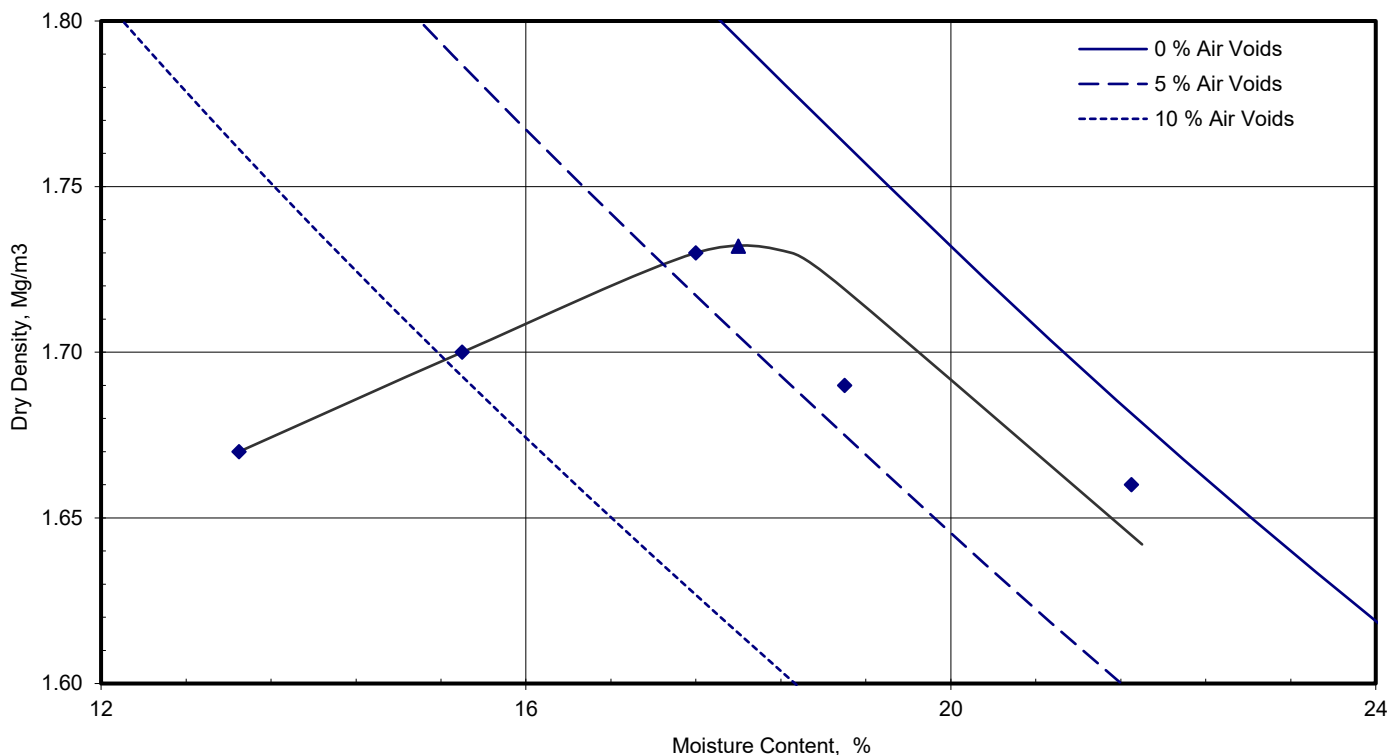
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928181
Hole No.: TP-040
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.50
Depth Base [m]: 1.60
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	13	15	18	19	22
Dry Density	Mg/m³	1.67	1.70	1.73	1.69	1.66

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	22
Maximum Dry Density	Mg/m³	1.73

Optimum Moisture Content	%	18
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

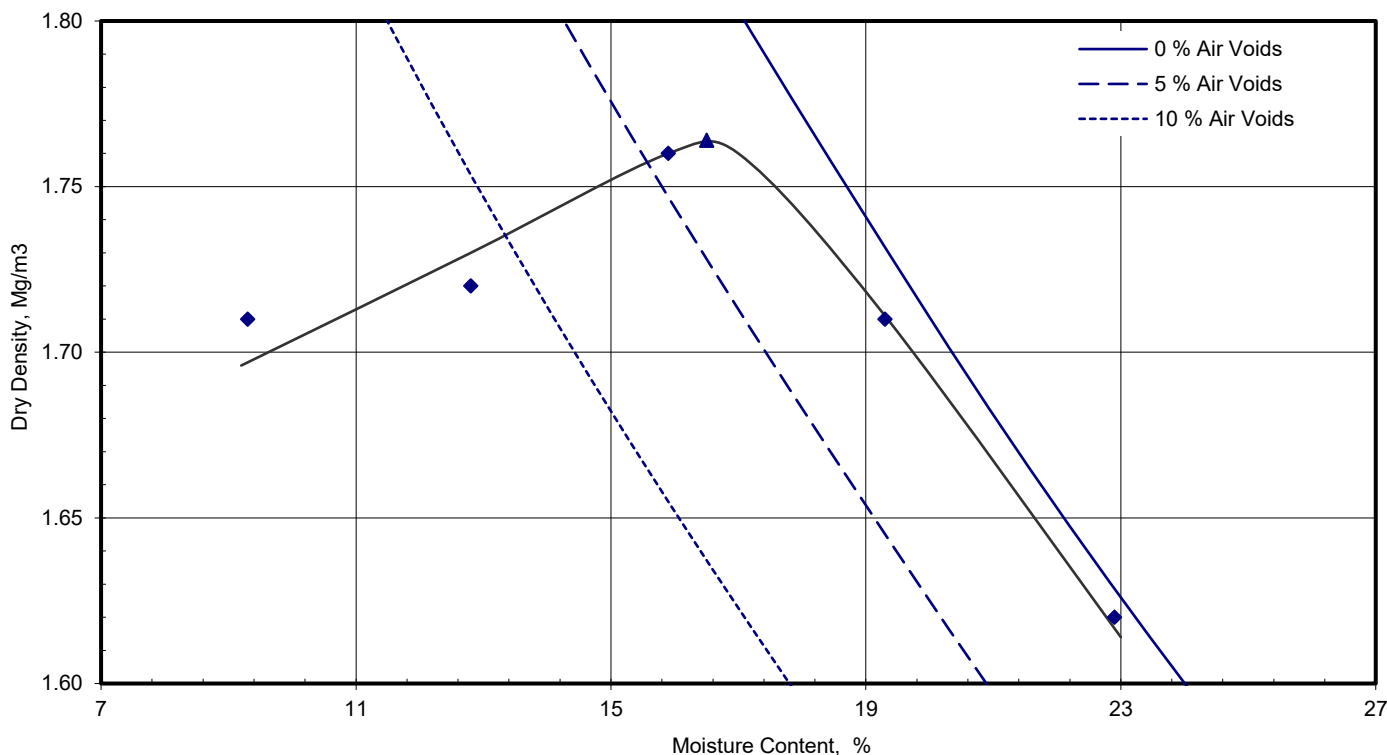
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928182
Hole No.: TP-042
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	9.3	13	16	19	23
Dry Density	Mg/m³	1.71	1.72	1.76	1.71	1.62

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	19
Maximum Dry Density	Mg/m³	1.76

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

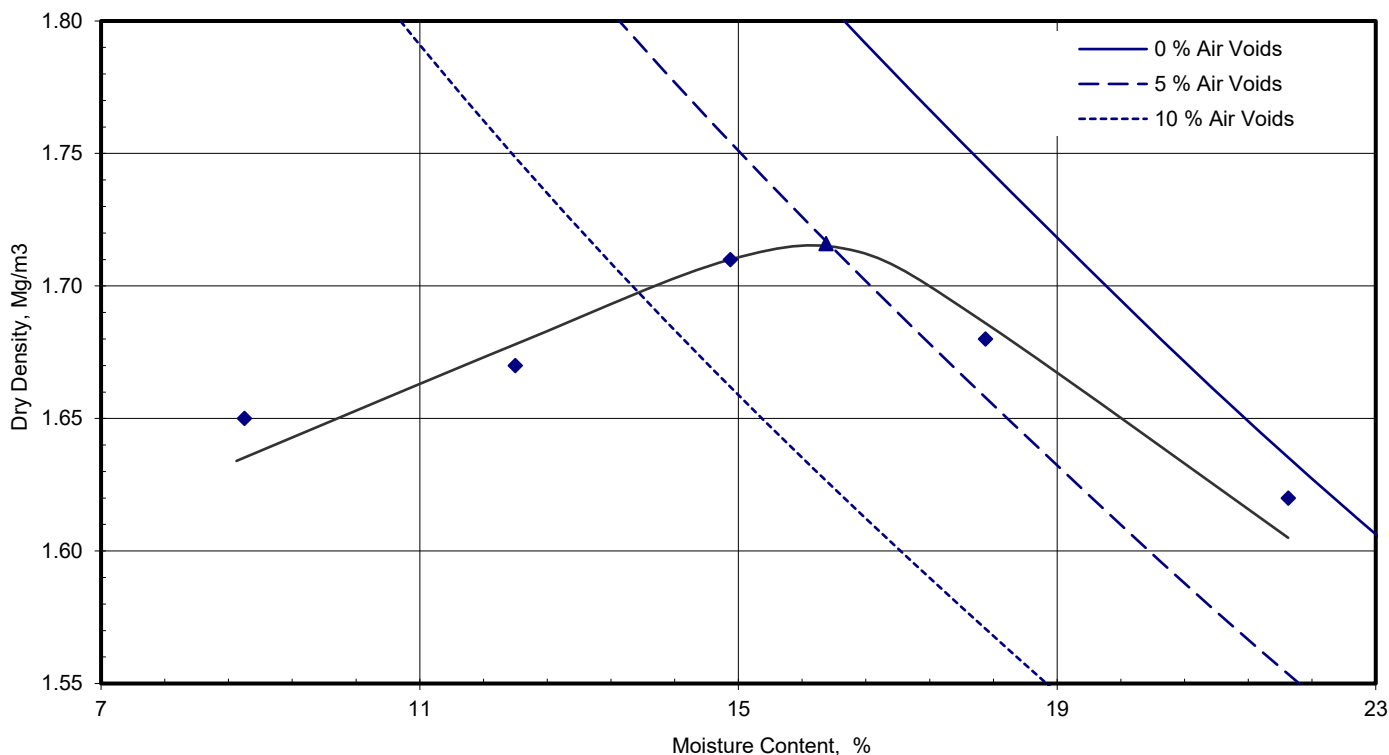
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928189
Hole No.: TP-60
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.70
Depth Base [m]: 1.80
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	8.8	12	15	18	22
Dry Density	Mg/m³	1.65	1.67	1.71	1.68	1.62

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.55
As received Moisture Content	%	25
Maximum Dry Density	Mg/m³	1.72

Optimum Moisture Content	%	16
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

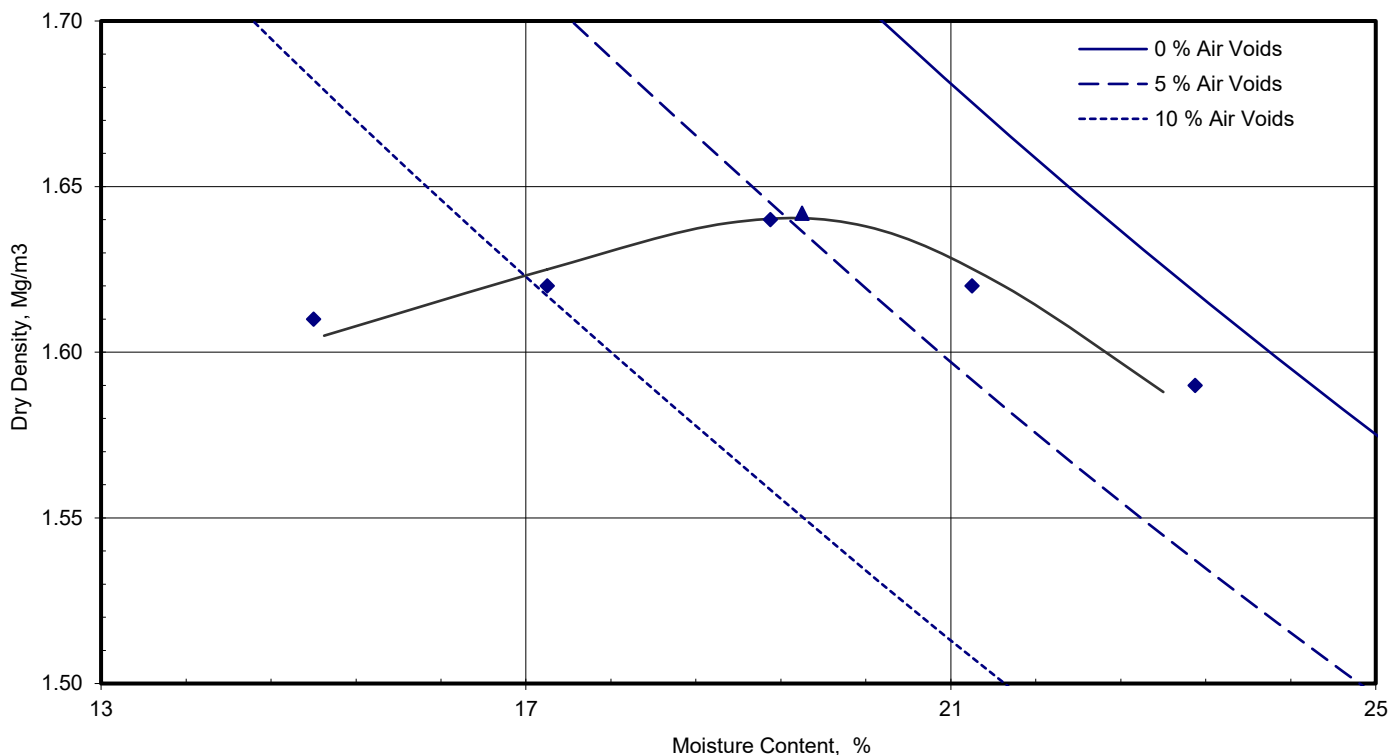
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928190
Hole No.: TP-61
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.90
Depth Base [m]: 2.00
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	15	17	19	21	23
Dry Density	Mg/m³	1.61	1.62	1.64	1.62	1.59

Mould Type	CBR	
Samples Used	Single sample tested	
Dry Mass Retained on 37.5 mm Sieve	%	10
Dry Mass Retained on 20.0 mm Sieve	%	21
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	23
Maximum Dry Density	Mg/m³	1.64

Optimum Moisture Content	%	20
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

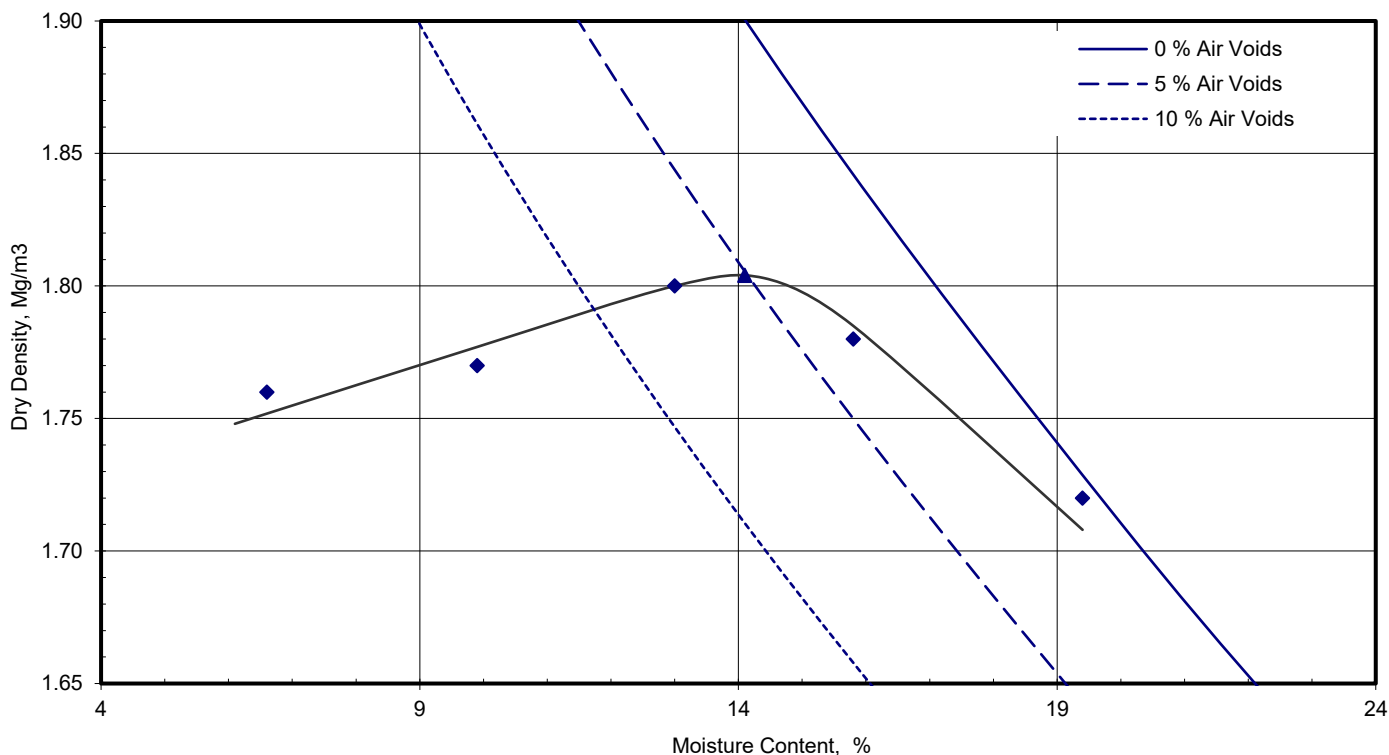
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928193
Hole No.: TP-75
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	6.6	9.9	13	16	19
Dry Density	Mg/m³	1.76	1.77	1.80	1.78	1.72

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	19
Maximum Dry Density	Mg/m³	1.80

Optimum Moisture Content	%	14
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

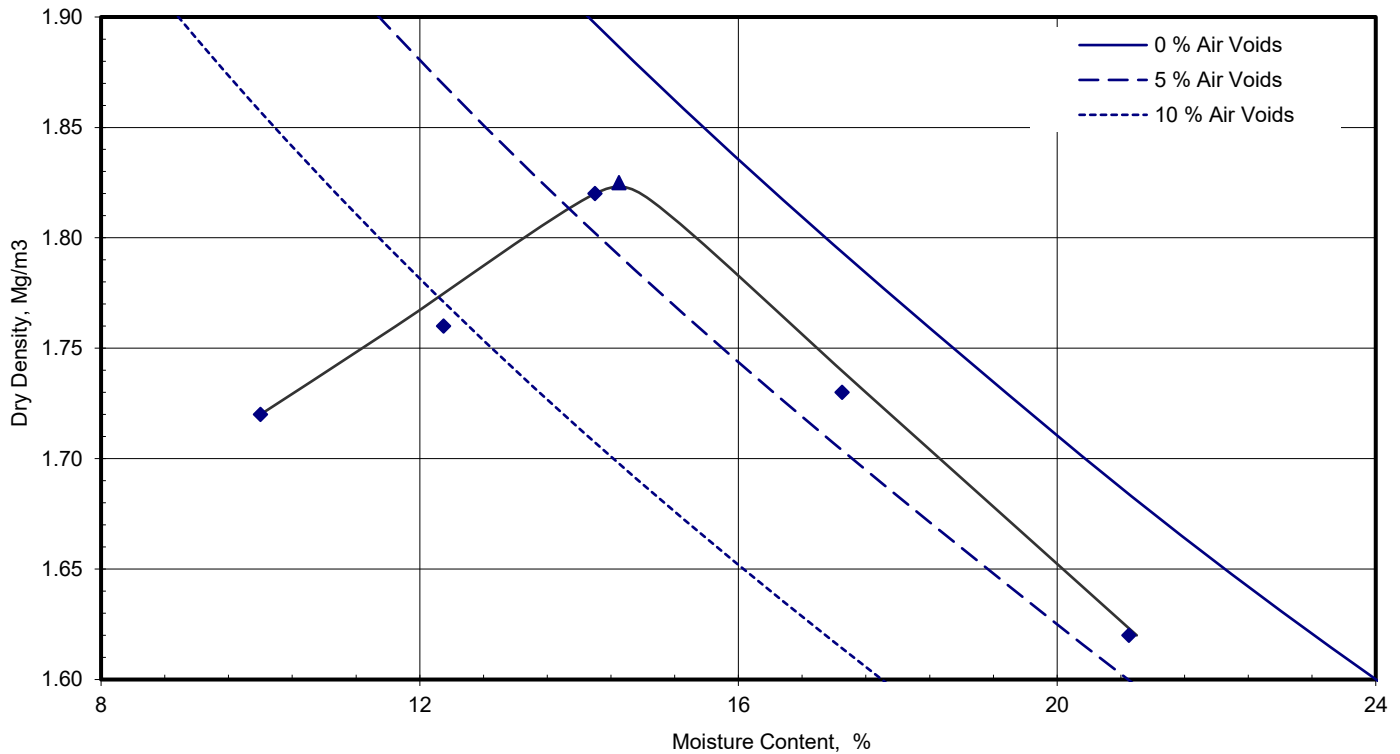
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928194
Hole No.: TP-75
Sample Reference: Not Given
Sample Description: Brown organic slightly gravelly slightly sandy CLAY with fragments of chalk
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	10	12	14	17	21
Dry Density	Mg/m³	1.72	1.76	1.82	1.73	1.62

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	3
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	29
Maximum Dry Density	Mg/m³	1.83

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

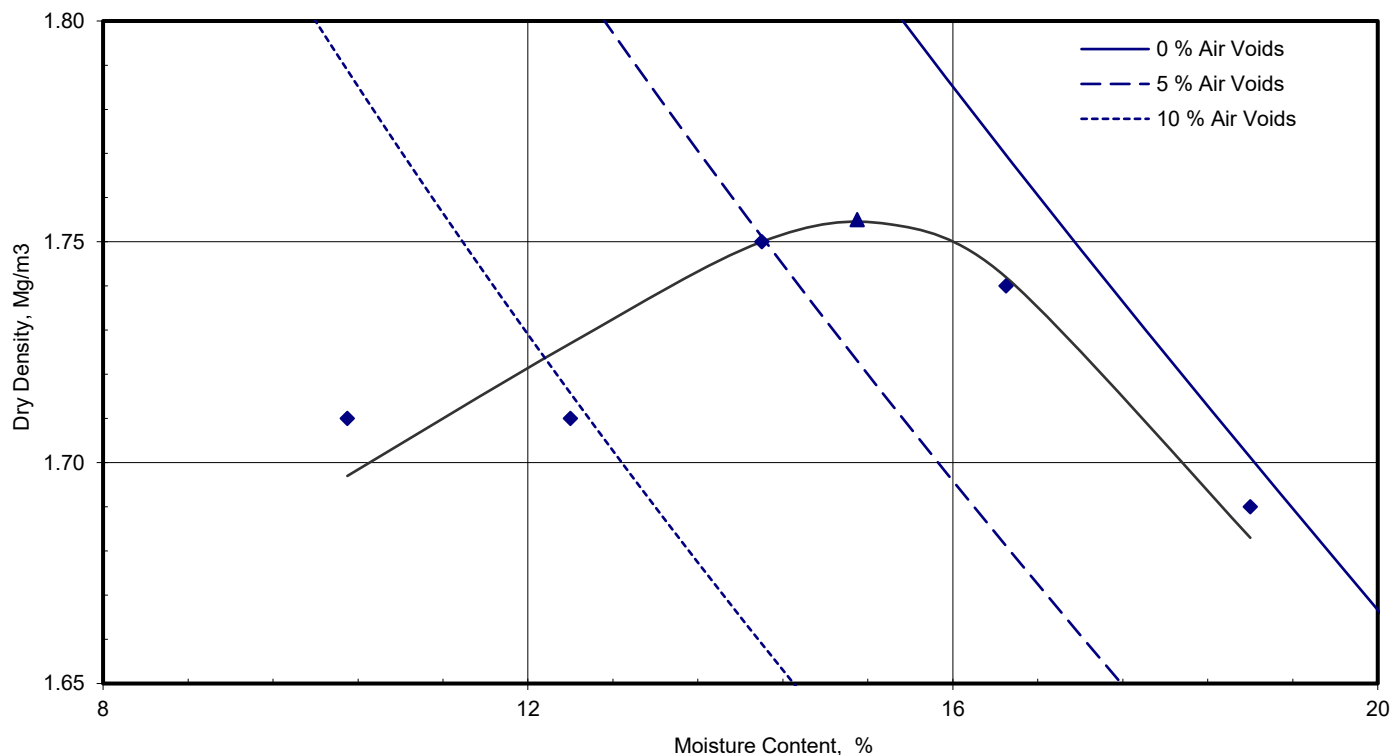
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928195
Hole No.: TP-76
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.50
Depth Base [m]: 2.60
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	10	12	14	17	19
Dry Density	Mg/m³	1.71	1.71	1.75	1.74	1.69

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	11
Dry Mass Retained on 20.0 mm Sieve	%	35
Particle Density - Assumed	Mg/m³	2.50
As received Moisture Content	%	21
Maximum Dry Density	Mg/m³	1.76

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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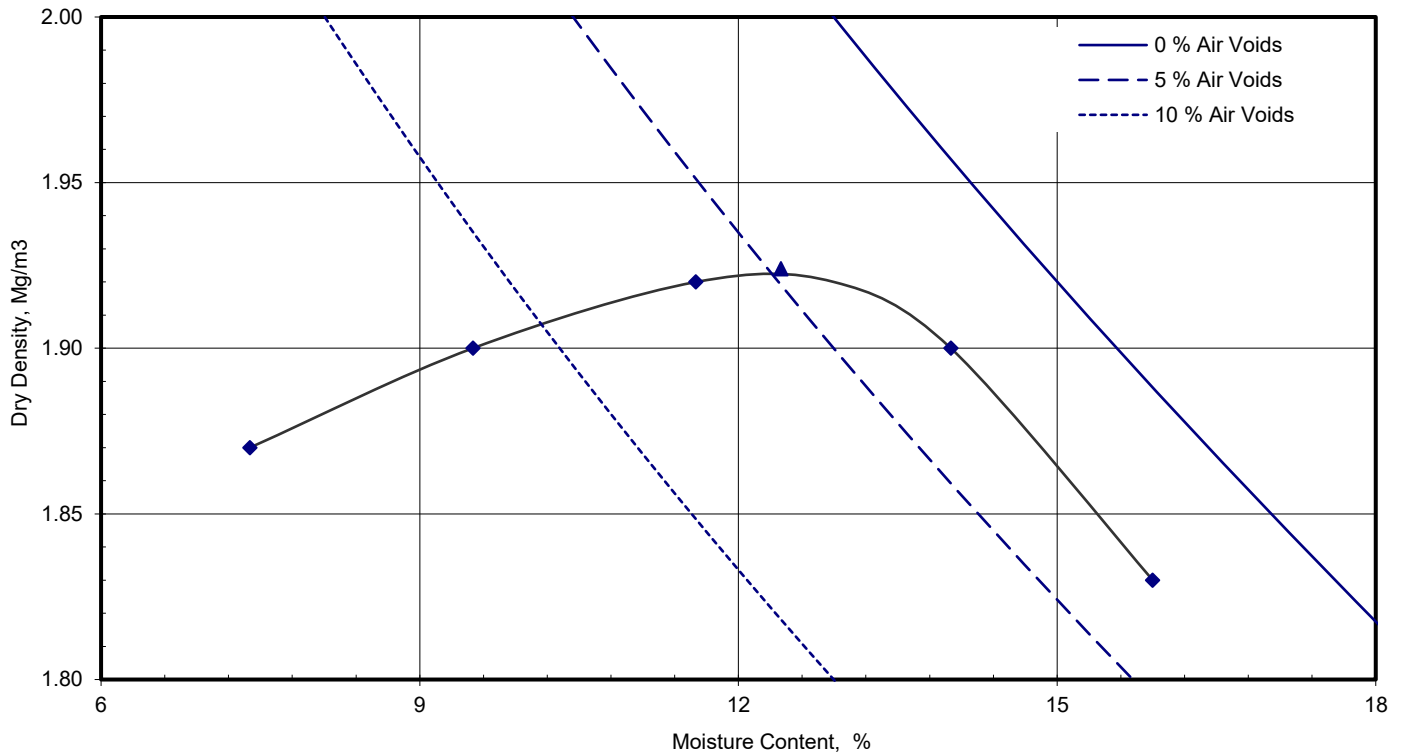
4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928197
Hole No.: TP-85
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 2.10
Depth Base [m]: 2.20
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	7.4	9.5	12	14	16
Dry Density	Mg/m³	1.87	1.90	1.92	1.90	1.83

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	2
Dry Mass Retained on 20.0 mm Sieve	%	5
Particle Density - Assumed	Mg/m³	2.70
As received Moisture Content	%	14
Maximum Dry Density	Mg/m³	1.92

Optimum Moisture Content	%	12
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

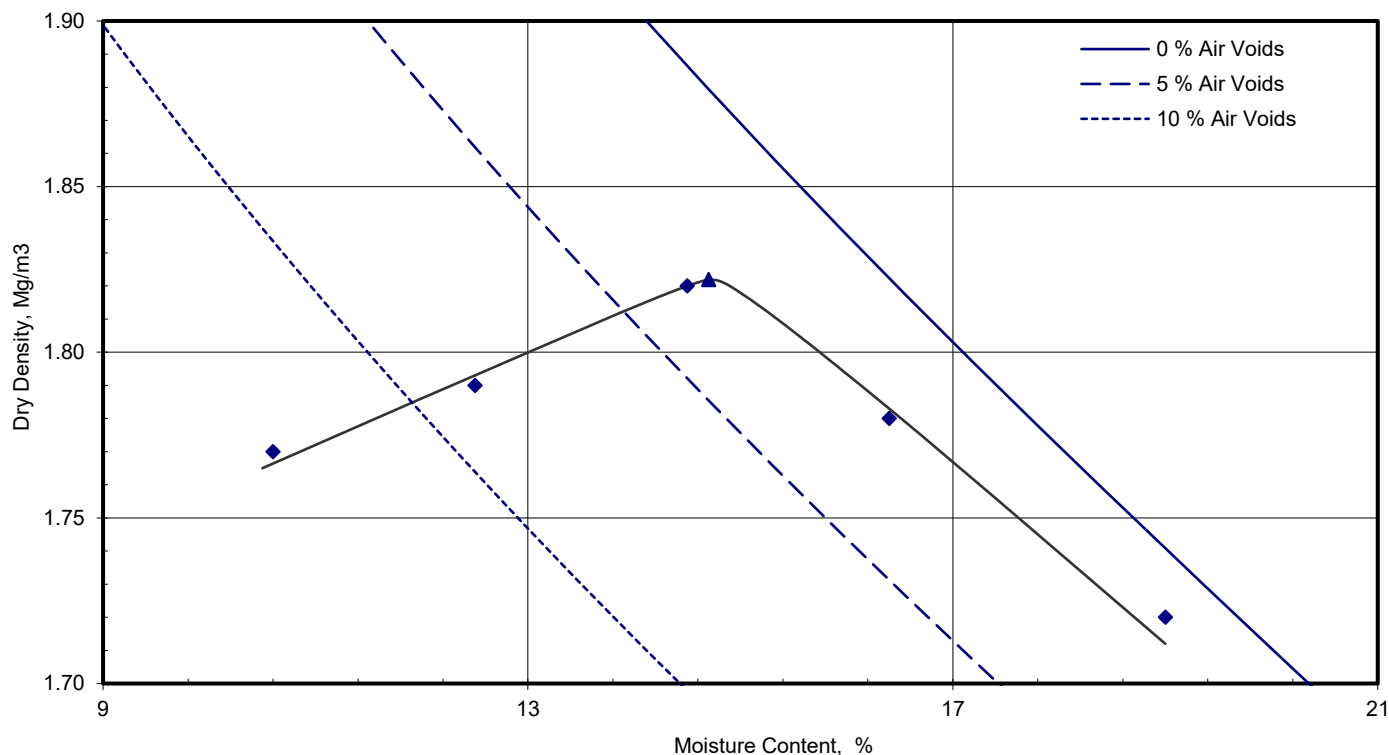
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928198
Hole No.: TP-86
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	11	13	15	16	19
Dry Density	Mg/m³	1.77	1.79	1.82	1.78	1.72

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	5
Dry Mass Retained on 20.0 mm Sieve	%	14
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	16
Maximum Dry Density	Mg/m³	1.82

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

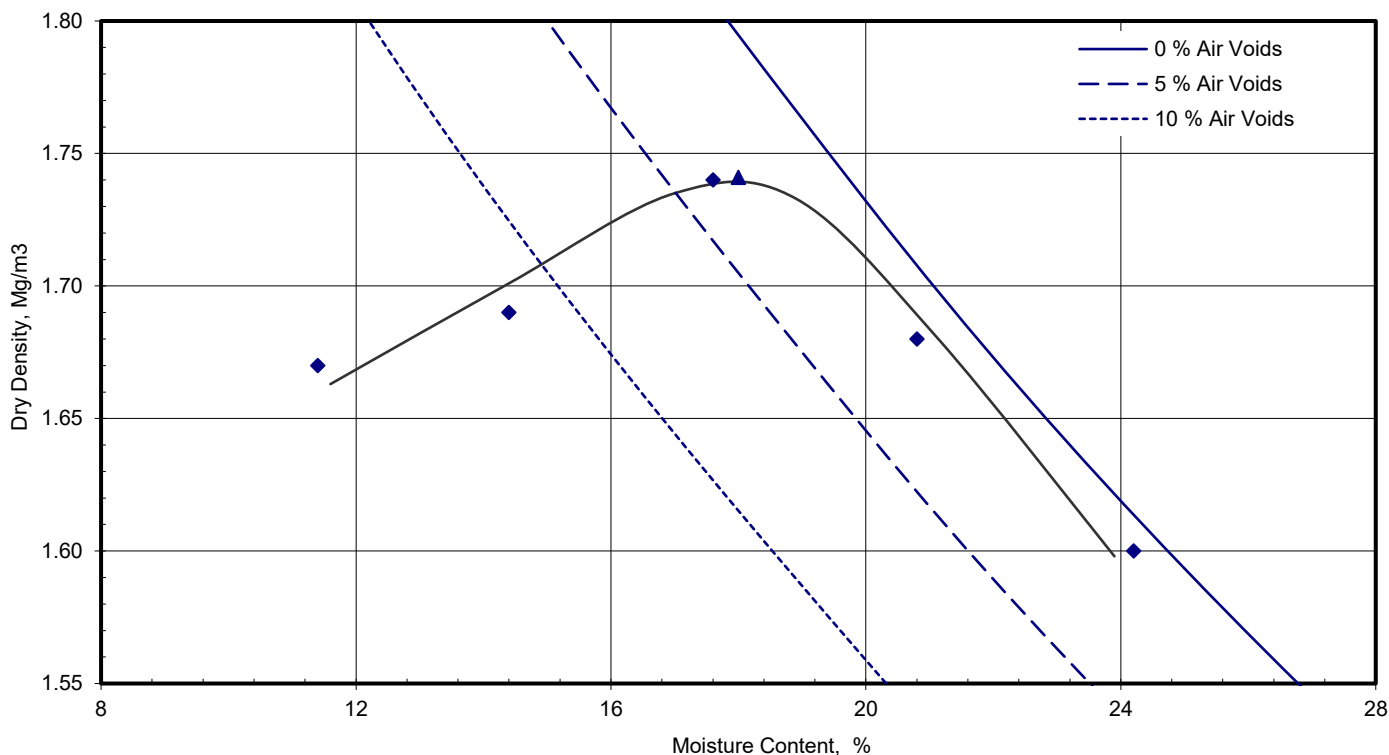
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928199
Hole No.: TP-87
Sample Reference: Not Given
Sample Description: Light brown slightly clayey CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	11	14	18	21	24
Dry Density	Mg/m³	1.67	1.69	1.74	1.68	1.60

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	5
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	24
Maximum Dry Density	Mg/m³	1.74

Optimum Moisture Content	%	18
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

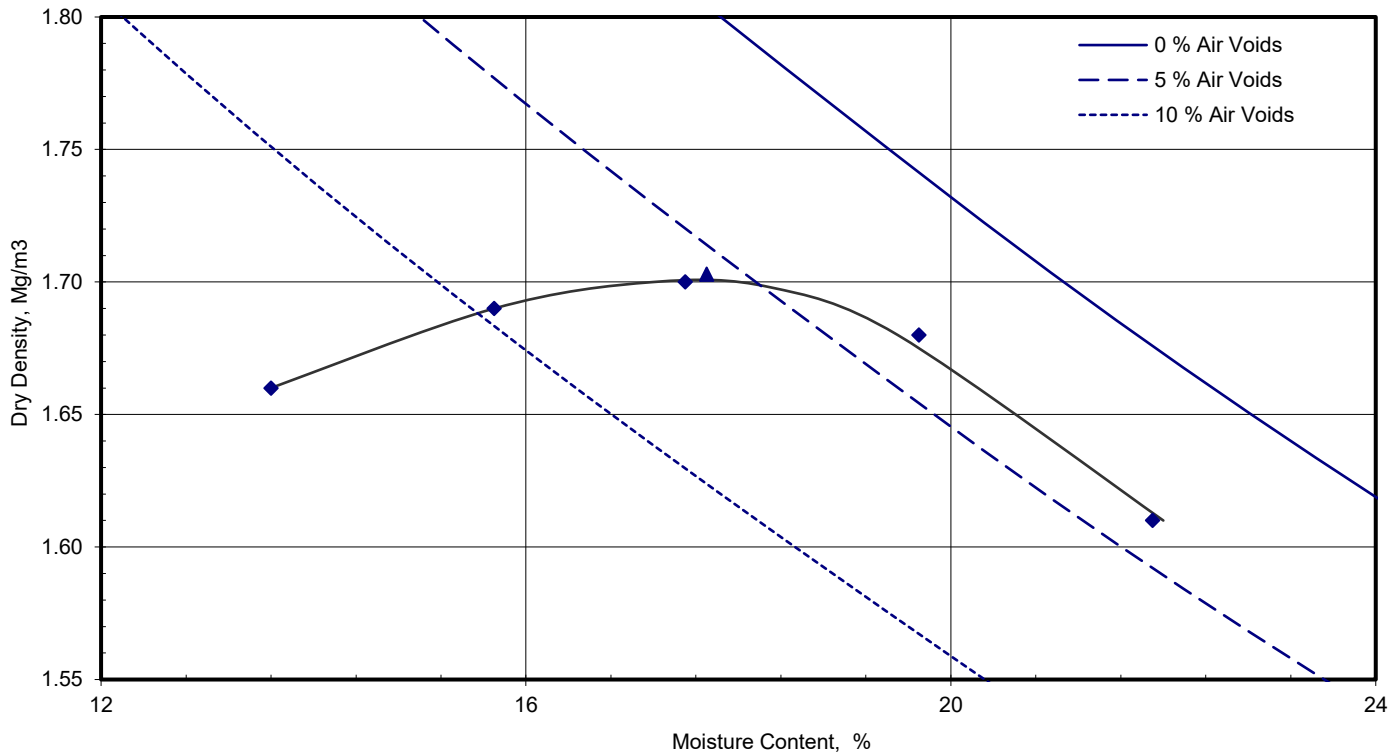
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928200
Hole No.: TP-88
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	14	16	18	20	22
Dry Density	Mg/m³	1.66	1.69	1.70	1.68	1.61

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	9
Dry Mass Retained on 20.0 mm Sieve	%	37
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	41
Maximum Dry Density	Mg/m³	1.70

Optimum Moisture Content	%	18
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

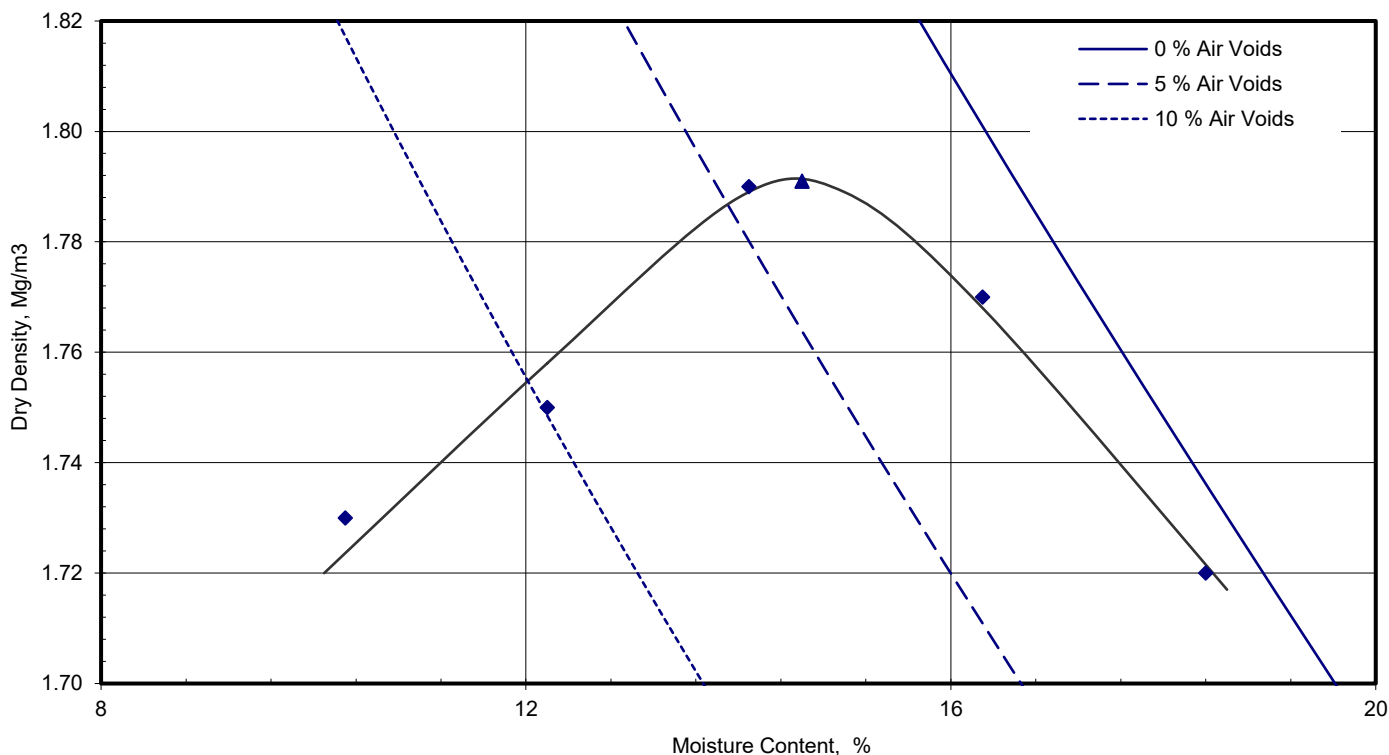
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928201
Hole No.: TP-89
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.00
Depth Base [m]: 1.10
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	10	12	14	16	18
Dry Density	Mg/m³	1.73	1.75	1.79	1.77	1.72

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	30
Dry Mass Retained on 20.0 mm Sieve	%	71
Particle Density - Assumed	Mg/m³	2.55
As received Moisture Content	%	18
Maximum Dry Density	Mg/m³	1.79

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

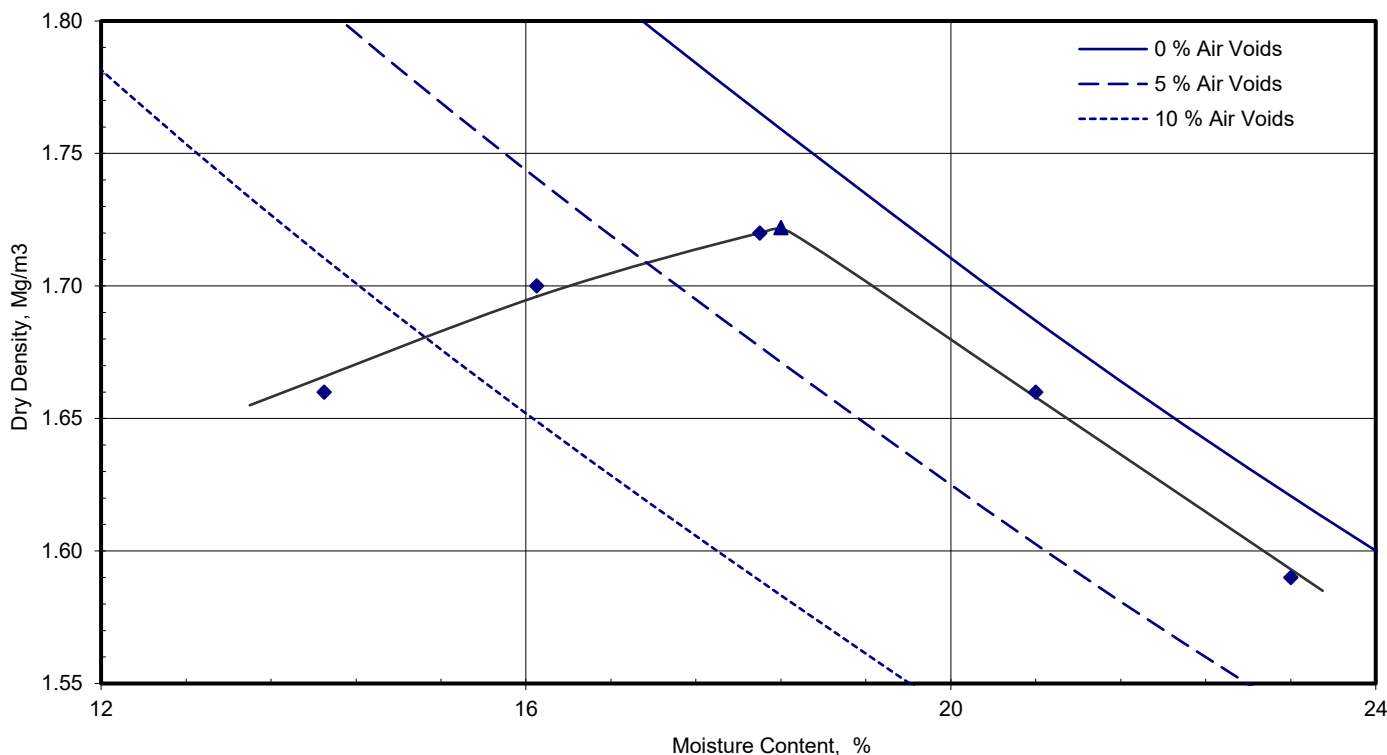
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928202
Hole No.: TP-90
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.70
Depth Base [m]: 1.80
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	14	16	18	21	23
Dry Density	Mg/m³	1.66	1.70	1.72	1.66	1.59

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	23
Maximum Dry Density	Mg/m³	1.72

Optimum Moisture Content	%	18
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

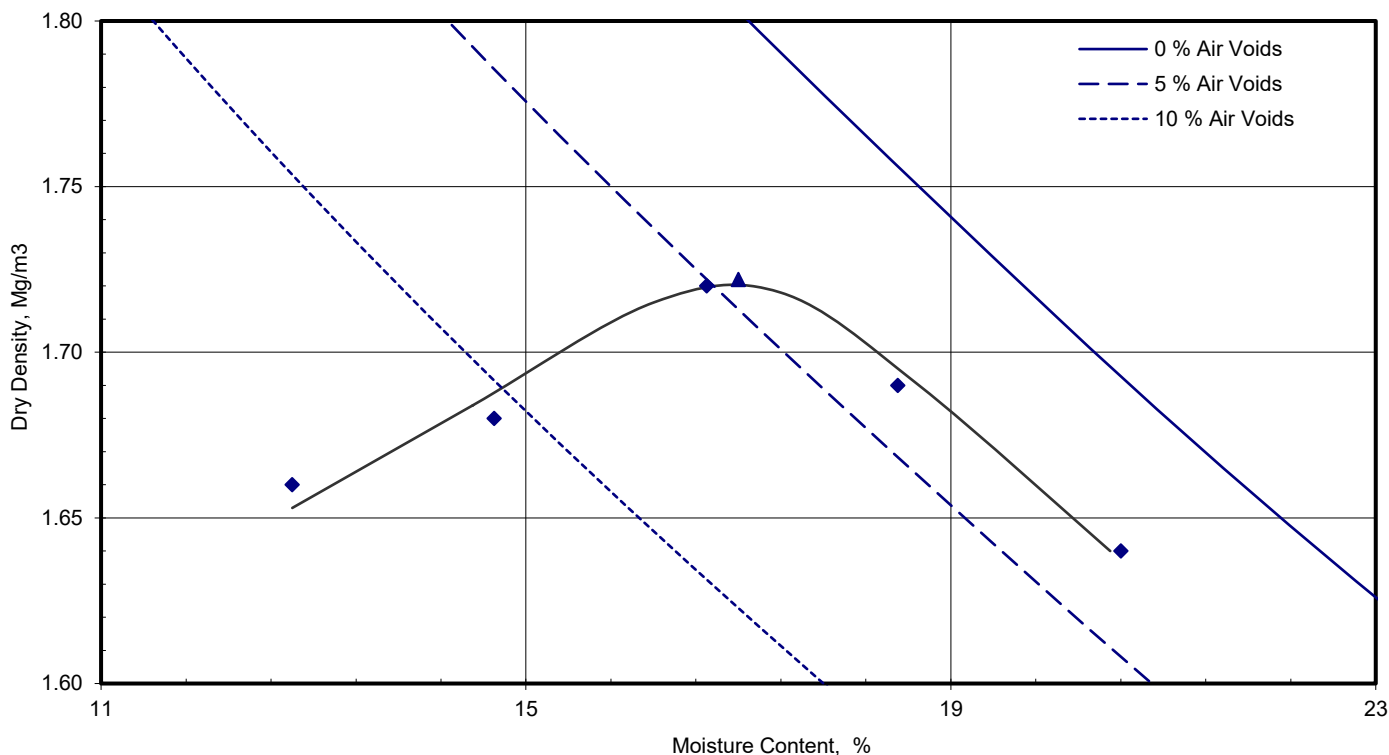
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928203
Hole No.: TP-91
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	13	15	17	19	21
Dry Density	Mg/m³	1.66	1.68	1.72	1.69	1.64

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	6
Dry Mass Retained on 20.0 mm Sieve	%	12
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	21
Maximum Dry Density	Mg/m³	1.72

Optimum Moisture Content	%	17
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

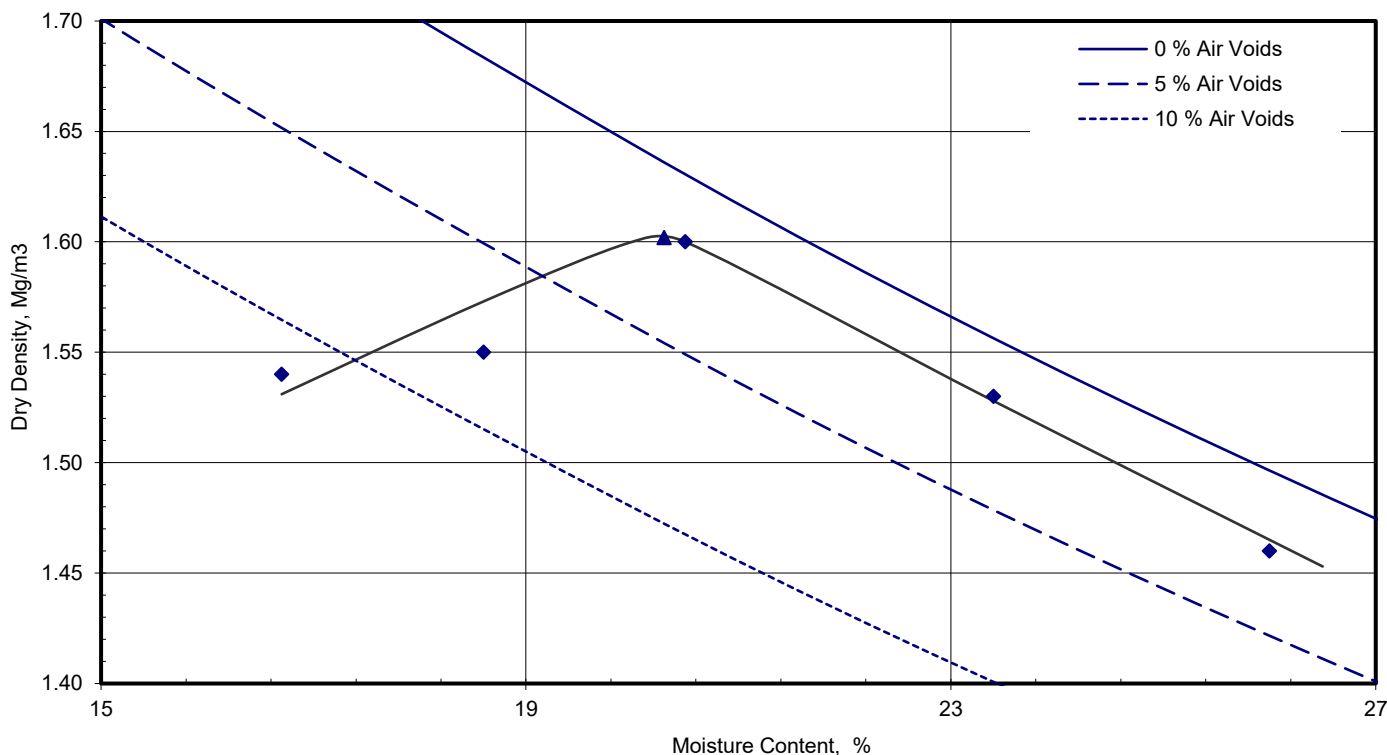
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928205
Hole No.: TP-94
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.20
Depth Base [m]: Not Given
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	17	19	21	23	26
Dry Density	Mg/m³	1.54	1.55	1.60	1.53	1.46

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	5
Dry Mass Retained on 20.0 mm Sieve	%	35
Particle Density - Assumed	Mg/m³	2.45
As received Moisture Content	%	31
Maximum Dry Density	Mg/m³	1.60

Optimum Moisture Content	%	20
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

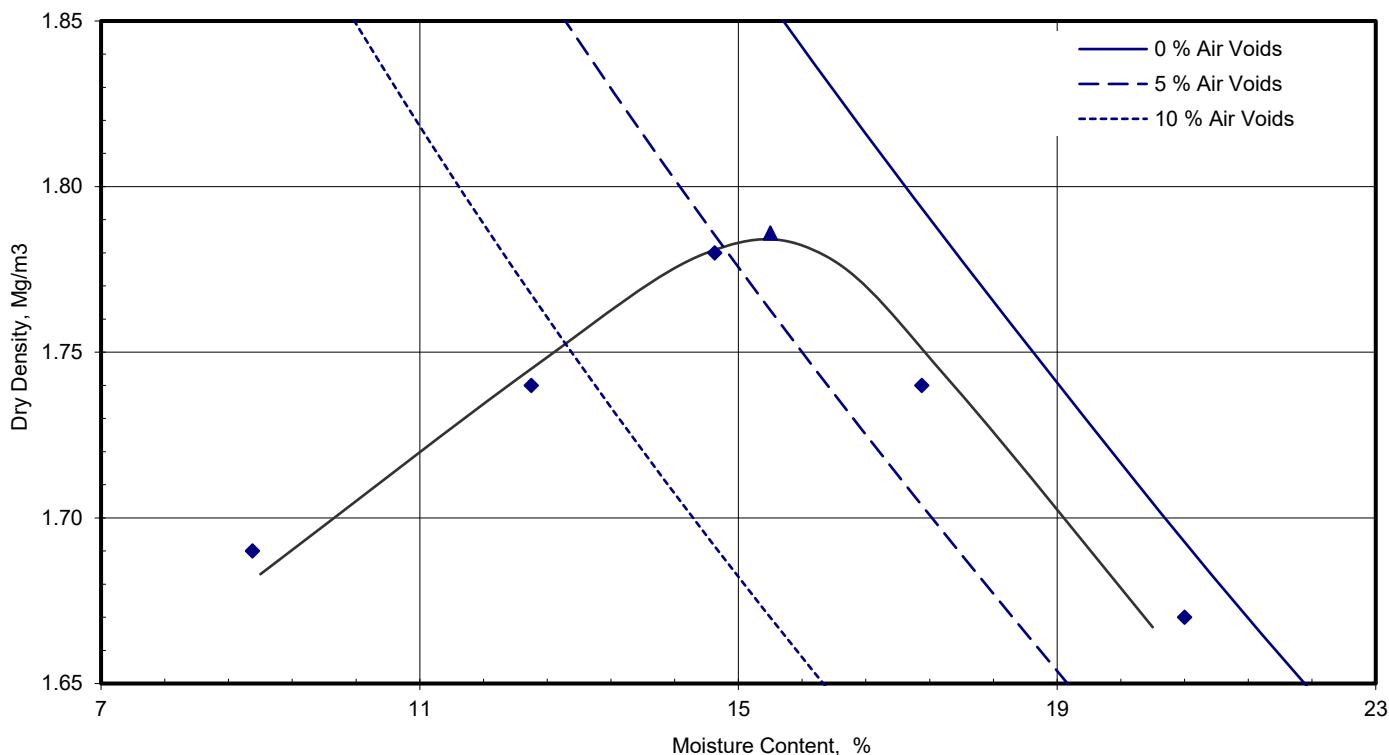
Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928209
Hole No.: TP-111
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	8.9	12	15	17	21
Dry Density	Mg/m³	1.69	1.74	1.78	1.74	1.67

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	20
Dry Mass Retained on 20.0 mm Sieve	%	32
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	21
Maximum Dry Density	Mg/m³	1.79

Optimum Moisture Content	%	15
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

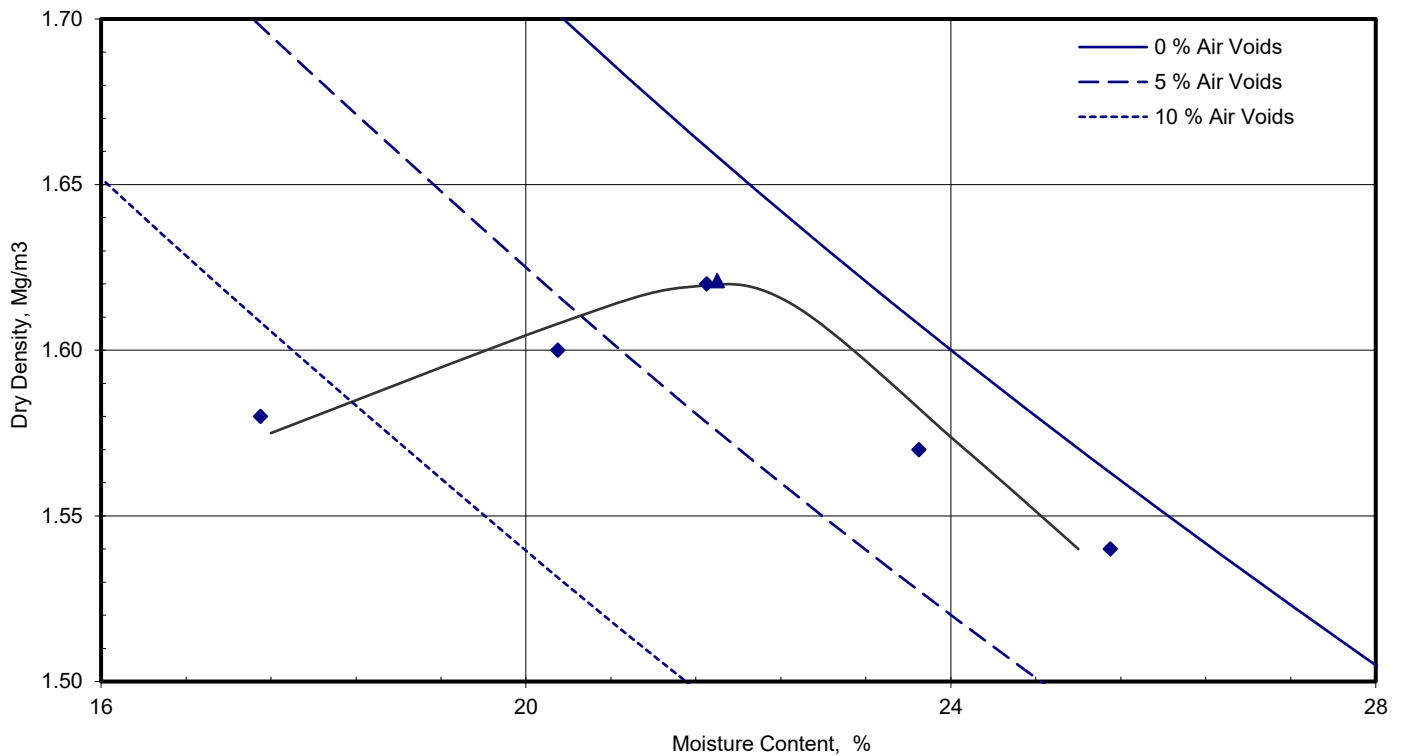
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928214
Hole No.: TP-126
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.50
Depth Base [m]: Not Given
Sample Type: B

Compaction Point No.	1	2	3	4	5	
Moisture Content	%	18	20	22	24	26
Dry Density	Mg/m³	1.58	1.60	1.62	1.57	1.54

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	3
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	30
Maximum Dry Density	Mg/m³	1.62

Optimum Moisture Content	%	22
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

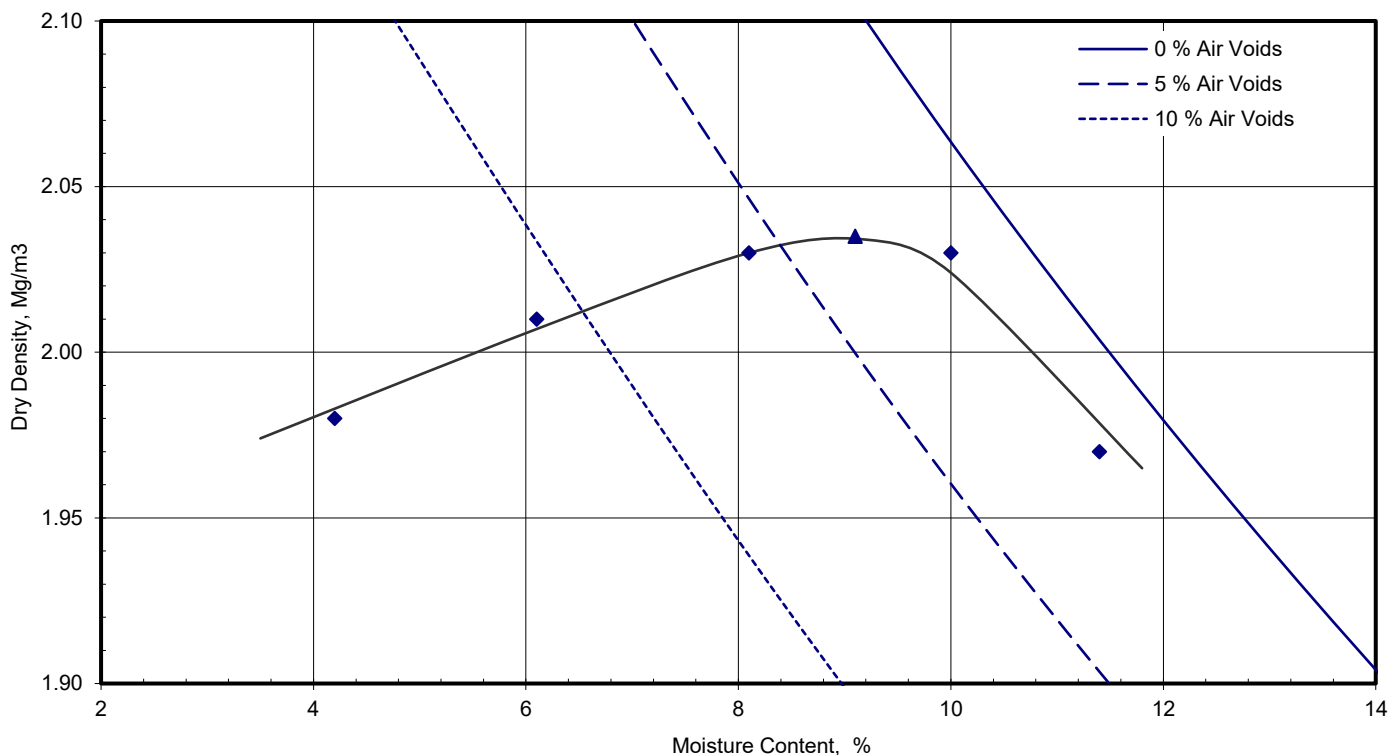
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928227
Hole No.: TP-148
Sample Reference: Not Given
Sample Description: Cream colour CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.20
Depth Base [m]: Not Given
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	4.2	6.1	8.1	10	11
Dry Density	Mg/m³	1.98	2.01	2.03	2.03	1.97

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	2
Dry Mass Retained on 20.0 mm Sieve	%	5
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	14
Maximum Dry Density	Mg/m³	2.04
Optimum Moisture Content	%	9.1

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

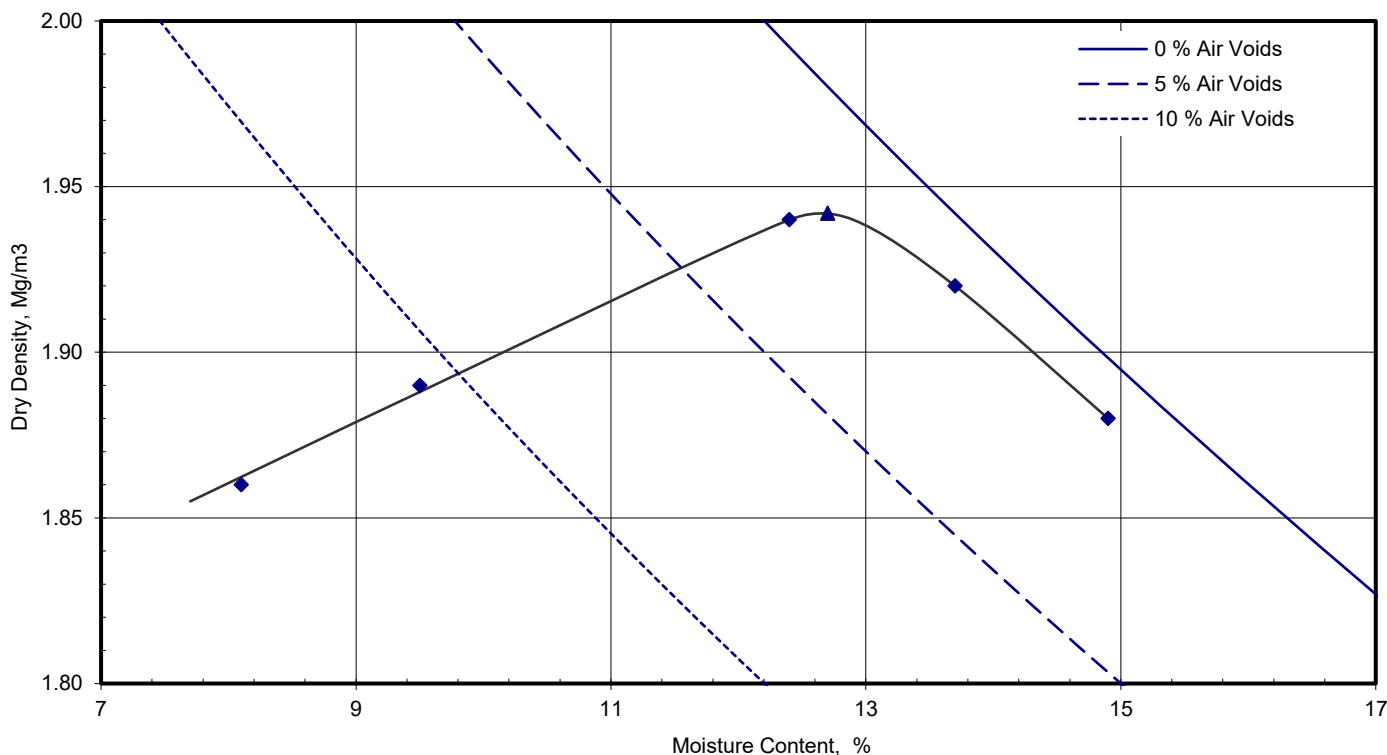
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928228
Hole No.: TP-151
Sample Reference: Not Given
Sample Description: White slightly clayey CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.60
Depth Base [m]: 1.70
Sample Type: B



Compaction Point No.		1	2	3	4	5
Moisture Content	%	8.1	9.5	12	14	15
Dry Density	Mg/m³	1.86	1.89	1.94	1.92	1.88

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	0
Dry Mass Retained on 20.0 mm Sieve	%	0
Particle Density - Assumed	Mg/m³	2.65
As received Moisture Content	%	12
Maximum Dry Density	Mg/m³	1.94

Optimum Moisture Content	%	13
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF DRY DENSITY/MOISTURE
CONTENT RELATIONSHIP METHOD USING
4.5 KG RAMMER**

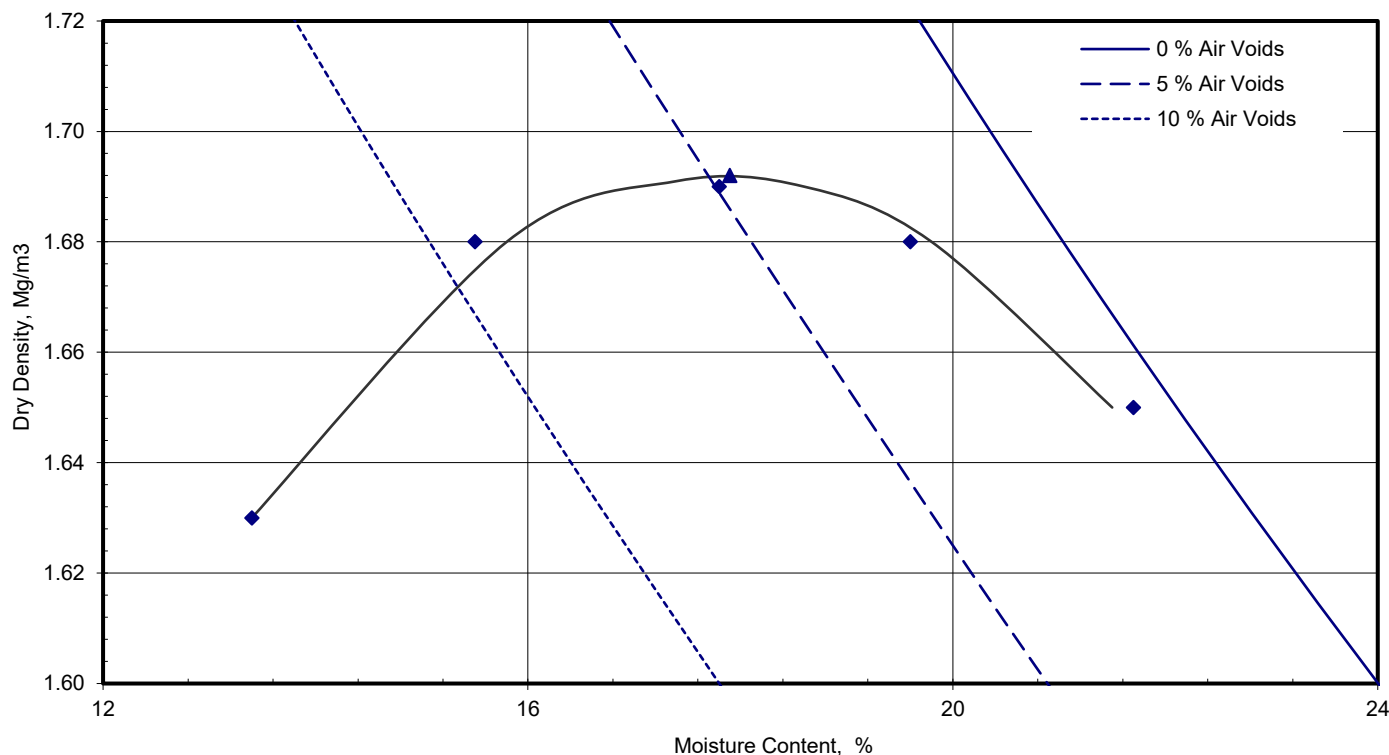
Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 23/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928229
Hole No.: TP-153
Sample Reference: Not Given
Sample Description: White CHALK
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.Depth Top [m]: 1.70
Depth Base [m]: 1.80
Sample Type: B

Compaction Point No.		1	2	3	4	5
Moisture Content	%	13	16	18	20	22
Dry Density	Mg/m³	1.63	1.68	1.69	1.68	1.65

Mould Type		CBR
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	12
Dry Mass Retained on 20.0 mm Sieve	%	36
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	29
Maximum Dry Density	Mg/m³	1.69

Optimum Moisture Content	%	18
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.6 using 4.5kg [heavy] Rammer

Remarks: Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test.
Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF DRY DENSITY/MOISTURE CONTENT RELATIONSHIP METHOD USING 4.5 KG RAMMER

Tested in Accordance with: BS 1377-4: 1990

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

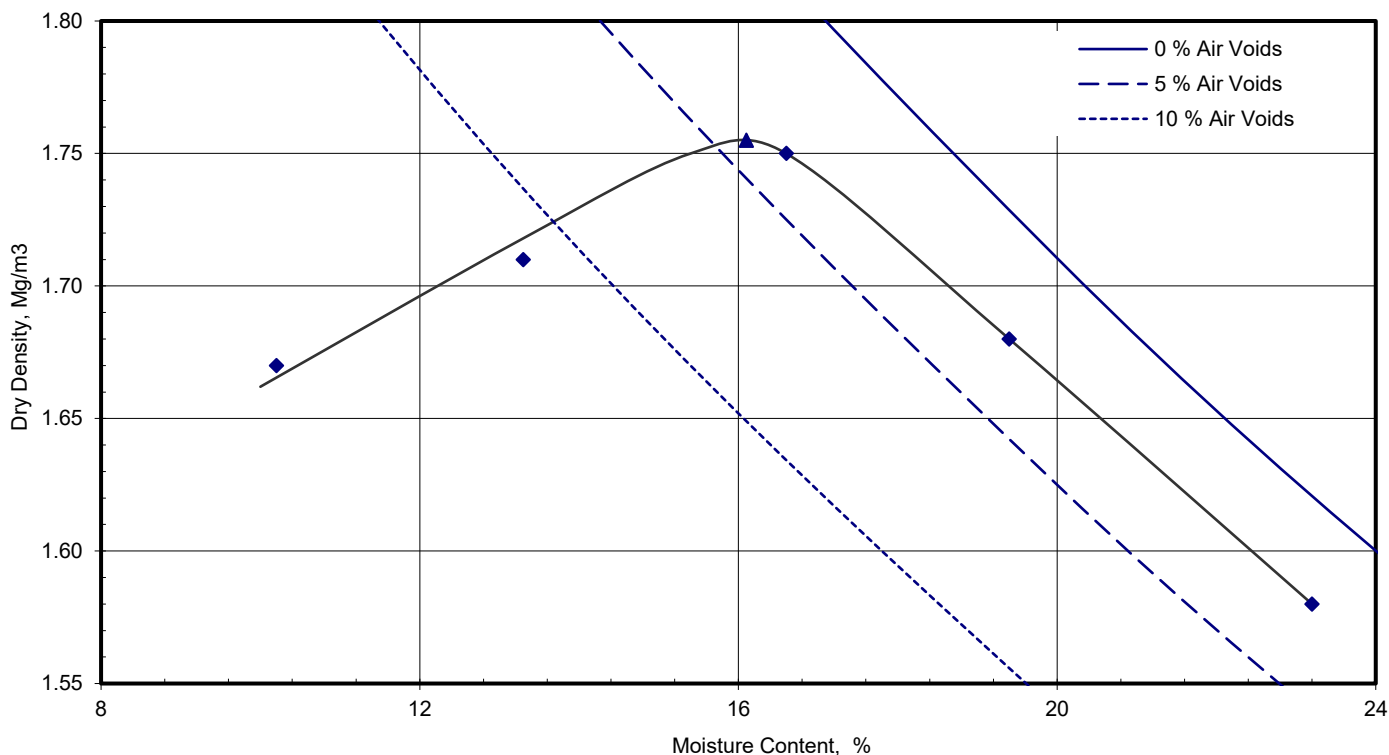
Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928230
Hole No.: TP-154
Sample Reference: Not Given
Sample Description: Light grey clayey CHALK with fragments of flintstones
Sample Preparation: Sample was quartered and broken down by hand. Material used was natural.

Depth Top [m]: 1.10
Depth Base [m]: 1.20
Sample Type: B



Compaction Point No.	1	2	3	4	5	
Moisture Content	%	10	13	17	19	23
Dry Density	Mg/m³	1.67	1.71	1.75	1.68	1.58

Mould Type		1 Litre
Samples Used		Single sample tested
Dry Mass Retained on 37.5 mm Sieve	%	76
Dry Mass Retained on 20.0 mm Sieve	%	80
Particle Density - Assumed	Mg/m³	2.60
As received Moisture Content	%	27
Maximum Dry Density	Mg/m³	1.76

Optimum Moisture Content	%	16
--------------------------	---	----

Note: Tested in Accordance with BS 1377-4: 1990: Clause 3.5 using 4.5kg [heavy] Rammer

Remarks: Insufficient amount of material - compacted in 1 litre mould. Coarse fragments were crushed to obtain sufficient mass of size fraction suitable to carry out the test. Test performed as per Client request

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-4: 1990: Clause 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01 - 05/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Moisture Content %	Saturated Moisture Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
2928167	TP-011	Not Given	1.30	1.40	B	White CHALK		32	26	29	3.1	
2928169	TP-014	Not Given	1.20	1.30	B	White CHALK		42	31	22	2.8	
2928170	TP-019	Not Given	2.10	2.20	B	White CHALK		49	23	25	2.9	
2928172	TP-023	Not Given	2.10	2.20	B	White CHALK		72	21	32	3.2	
2928173	TP-028	Not Given	2.10	2.20	B	White CHALK		99	21	22	2.7	
2928176	TP-032	Not Given	1.80	1.90	B	White CHALK		49	24	24	3.0	
2928177	TP-034	Not Given	1.20	1.30	B	White slightly clayey CHALK	Water ooze out of the mould after 40 blows	67	30	29	3.3	
2928179	TP-036	Not Given	0.90	1.00	B	White CHALK		47	22	30	2.8	
2928180	TP-039	Not Given	1.20	1.30	B	White CHALK		37	30	30	3.0	
2928181	TP-040	Not Given	1.50	1.60	B	White CHALK	Water ooze out of the mould after 40 blows	80	25	20	2.7	

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-4: 1990: Clause 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01 - 02/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Moisture Content %	Saturated Moisture Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
2928182	TP-042	Not Given	1.60	1.70	B	White CHALK		91	21	18	2.8	
2928189	TP-60	Not Given	1.70	1.80	B	White CHALK		43	24	24	3.0	
2928193	TP-75	Not Given	0.40	0.50	B	White CHALK		42	19	22	2.4	
2928195	TP-76	Not Given	2.50	2.60	B	White CHALK		45	20	19	2.7	
2928196	TP-78	Not Given	1.90	2.00	B	White CHALK		36	21	19	2.8	
2928197	TP-85	Not Given	2.10	2.20	B	White CHALK		39	15	11	2.1	
2928198	TP-86	Not Given	1.60	1.70	B	White CHALK		85	17	16	2.3	
2928199	TP-87	Not Given	1.40	1.50	B	Light brown slightly clayey CHALK		37	23	26	2.6	
2928200	TP-88	Not Given	1.00	1.20	B	White CHALK		34	25	26	2.7	
2928201	TP-89	Not Given	1.00	1.10	B	White CHALK		90	18	22	2.8	

Comments:

Signed:

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Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF THE CHALK CRUSHING VALUE (CCV)

Tested in Accordance with: BS 1377-4: 1990: Clause 6

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01 - 02/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Material >10 mm %	Specimen Moisture Content %	Saturated Moisture Content %	Chalk Crushing Value	Preparation
		Reference	Depth Top m	Depth Base m	Type							
2928202	TP-90	Not Given	1.70	1.80	B	White CHALK		61	25	27	3.1	
2928205	TP-94	Not Given	1.20	Not Given	B	White CHALK	Water ooze out of mould at 30 blows	26	29	31	2.2	
2928209	TP-111	Not Given	1.00	1.20	B	White CHALK		51	20	21	2.6	
2928214	TP-126	Not Given	1.50	Not Given	B	White CHALK		45	29	31	2.7	
2928228	TP-151	Not Given	1.60	1.70	B	White slightly clayey CHALK		88	9.9	11	2.3	
2928229	TP-153	Not Given	1.70	1.80	B	White CHALK		23	23	15	2.3	
2928230	TP-154	Not Given	1.10	1.20	B	Light grey clayey CHALK with fragments of flintstones		100	25	22	3.0	

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF BULK DENSITY - IMMERSION IN FLUID METHOD

Tested in Accordance with: BS EN ISO 17892-2: 2014: Clause 5.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041
Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01 - 25/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Bulk density	Dry density	WC	Preparation		
		Reference	Depth Top	Depth Base	Type								
			m	m				Mg/m3	Mg/m3	%			
2928191	TP-72	Not Given	0.70	0.80	B	Light brown CLAY with fragments of chalk		2.12	1.80	18.0			
2928192	TP-73A	Not Given	0.40	0.50	B	Light brown CLAY with fragments of chalk		2.05	1.71	20.1			

Note: WC - Water Content by BS EN ISO 17892-1

Comments:

Signed: Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2928162	TP-F1	Not Given	1.40	1.50	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.10	1.75	20	
2928165	TP-008	Not Given	0.70	0.80	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.08	1.76	18	
2928167	TP-011	Not Given	1.30	1.40	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	29	1.93	1.51	28	
2928169	TP-014	Not Given	1.20	1.30	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.06	1.69	22	
2928170	TP-019	Not Given	2.10	2.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	25	2.01	1.62	24	
2928171	TP-020	Not Given	1.00	1.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	21	2.05	1.71	20	
2928172	TP-023	Not Given	2.10	2.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	32	1.75	1.44	21	
2928173	TP-028	Not Given	2.10	2.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.06	1.70	21	
2928176	TP-032	Not Given	1.80	1.90	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.03	1.64	24	
2928177	TP-034	Not Given	1.20	1.30	B	White slightly clayey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	29	1.92	1.51	28	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 19/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2928178	TP-035	Not Given	1.10	2.00	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	30	1.93	1.49	30	
2928179	TP-036	Not Given	0.90	1.00	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	30	1.82	1.50	22	
2928180	TP-039	Not Given	1.20	1.30	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	30	1.92	1.49	29	
2928181	TP-040	Not Given	1.50	1.60	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.10	1.75	20	
2928182	TP-042	Not Given	1.60	1.70	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	18	2.14	1.82	18	
2928185	TP-044	Not Given	0.80	0.90	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	18	2.09	1.81	16	
2928188	TP-054	Not Given	0.90	1.00	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	17	2.15	1.84	16	
2928189	TP-60	Not Given	1.70	1.80	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.02	1.63	23	
2928190	TP-61	Not Given	1.90	2.00	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.06	1.70	21	
2928193	TP-75	Not Given	0.40	0.50	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.01	1.69	18	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2928195	TP-76	Not Given	2.50	2.60	B	White CHALK		19	2.11	1.78	19	
2928196	TP-78	Not Given	1.90	2.00	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	19	2.10	1.78	18	
2928197	TP-85	Not Given	2.10	2.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	11	2.30	2.07	11	
2928198	TP-86	Not Given	1.60	1.70	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	16	2.17	1.87	16	
2928199	TP-87	Not Given	1.40	1.50	B	Light brown slightly clayey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.97	1.59	24	
2928200	TP-88	Not Given	1.00	1.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.99	1.59	25	
2928201	TP-89	Not Given	1.00	1.10	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.06	1.70	21	
2928202	TP-90	Not Given	1.70	1.80	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	27	1.97	1.57	26	
2928203	TP-91	Not Given	1.20	1.30	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	1.98	1.64	21	
2928204	TP-92	Not Given	1.00	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	29	1.95	1.52	28	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2928205	TP-94	Not Given	1.20	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	31	1.92	1.48	30	
2928206	TP-102	Not Given	1.50	1.60	B	White clayey CHALK with fragments of flintstones	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	29	1.94	1.50	29	
2928208	TP-110	Not Given	0.40	0.50	B	White mottled grey clayey CHALK with fragments of flintstones	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	1.99	1.64	22	
2928209	TP-111	Not Given	1.00	1.20	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	21	2.06	1.72	20	
2928210	TP-113	Not Given	0.90	1.00	B	Cream colour CHALK with fragments of flintstones	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.01	1.69	19	
2928211	TP-114	Not Given	0.50	Not Given	B	White mottled grey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	29	1.94	1.51	28	
2928212	TP-119	Not Given	0.90	1.00	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	33	1.77	1.43	24	
2928213	TP-125	Not Given	0.40	Not Given	B	White CHALK		23	2.03	1.66	22	
2928214	TP-126	Not Given	1.50	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	31	1.92	1.47	31	
2928215	TP-127	Not Given	0.90	Not Given	B	White mottled grey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	31	1.91	1.47	31	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 08/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2928216	TP-128	Not Given	1.30	Not Given	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	29	1.94	1.51	29	
2928222	TP-140	Not Given	2.00	2.10	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	27	1.96	1.56	25	
2928228	TP-151	Not Given	1.60	1.70	B	White slightly clayey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	11	2.31	2.09	11	
2928229	TP-153	Not Given	1.70	1.80	B	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	15	2.21	1.93	14	
2928230	TP-154	Not Given	1.10	1.20	B	Light grey clayey CHALK with fragments of flintstones	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.07	1.70	21	
2928232	RO-01	Not Given	9.77	10.00	C	White mottled light grey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	11	2.30	2.06	11	
2928233	RO-17	Not Given	3.90	4.05	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.99	1.60	25	
2928235	RO-17	Not Given	8.03	8.20	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	25	2.01	1.62	24	
2928236	RO-18	Not Given	3.33	3.50	C	White CHALK		22	2.04	1.70	20	
2928237	RO-18	Not Given	6.00	6.12	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	23	2.04	1.67	22	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 18/01 - 22/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2928238	RO-18	Not Given	6.74	6.90	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	20	2.08	1.74	20	
2928239	RO-25	Not Given	2.88	3.06	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	25	2.01	1.62	24	
2928240	RO-25	Not Given	6.20	6.48	C	White CHALK		30	1.93	1.49	30	
2928241	RO-25	Not Given	9.25	9.46	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.07	1.71	21	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed: Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

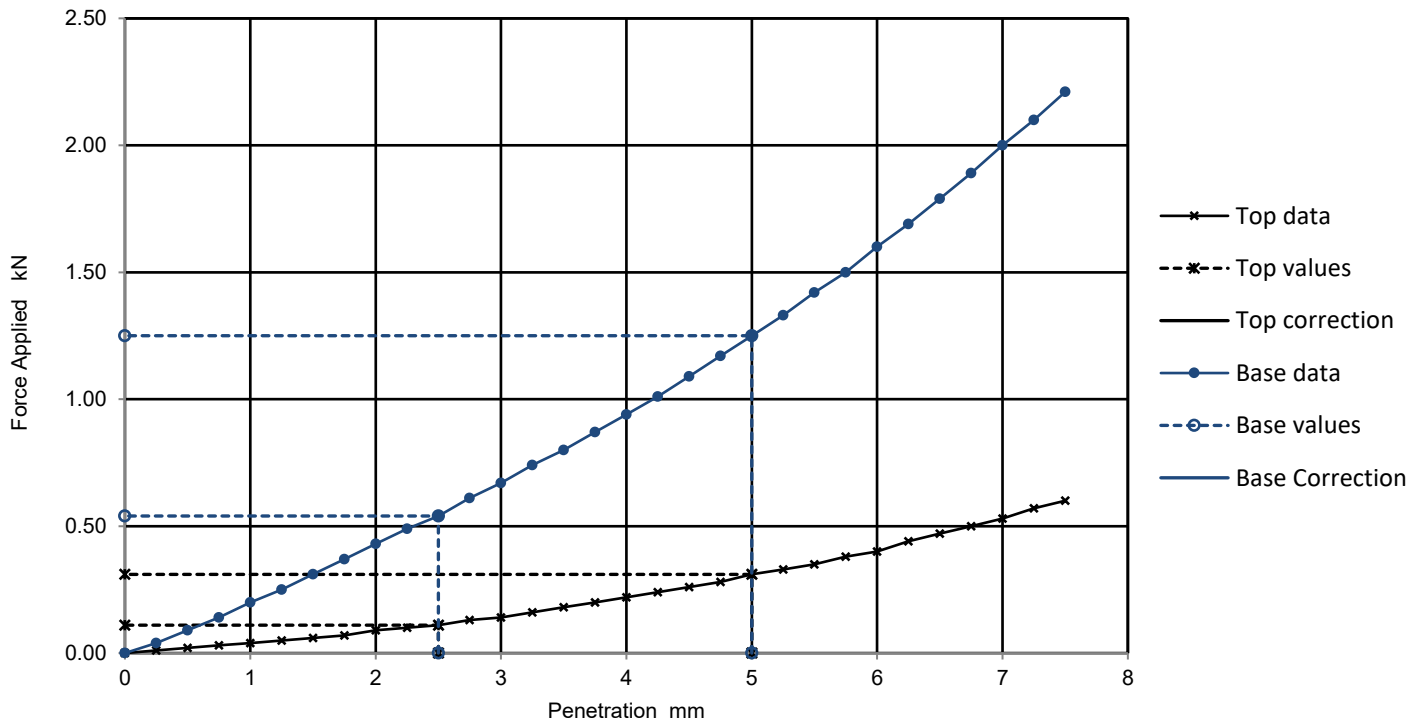
Test Results:

Laboratory Reference: 2928162
Hole No.: TP-F1
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.40
Depth Base [m]: 1.50
Sample Type: B

Specimen Preparation:

Condition	Remoulded			Soaking details		Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days	
				Time to surface		days	
				Amount of swell recorded		mm	
Material retained on 20mm sieve removed	27	%		Dry density after soaking		Mg/m3	
Initial Specimen details	Bulk density	2.17	Mg/m3	Surcharge applied		8	kg
	Dry density	1.90	Mg/m3			4.9	kPa
	Moisture content	14	%				

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.83	1.6	1.6	
No	4.1	6.3	6.3	

Moisture Content %
14
14

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

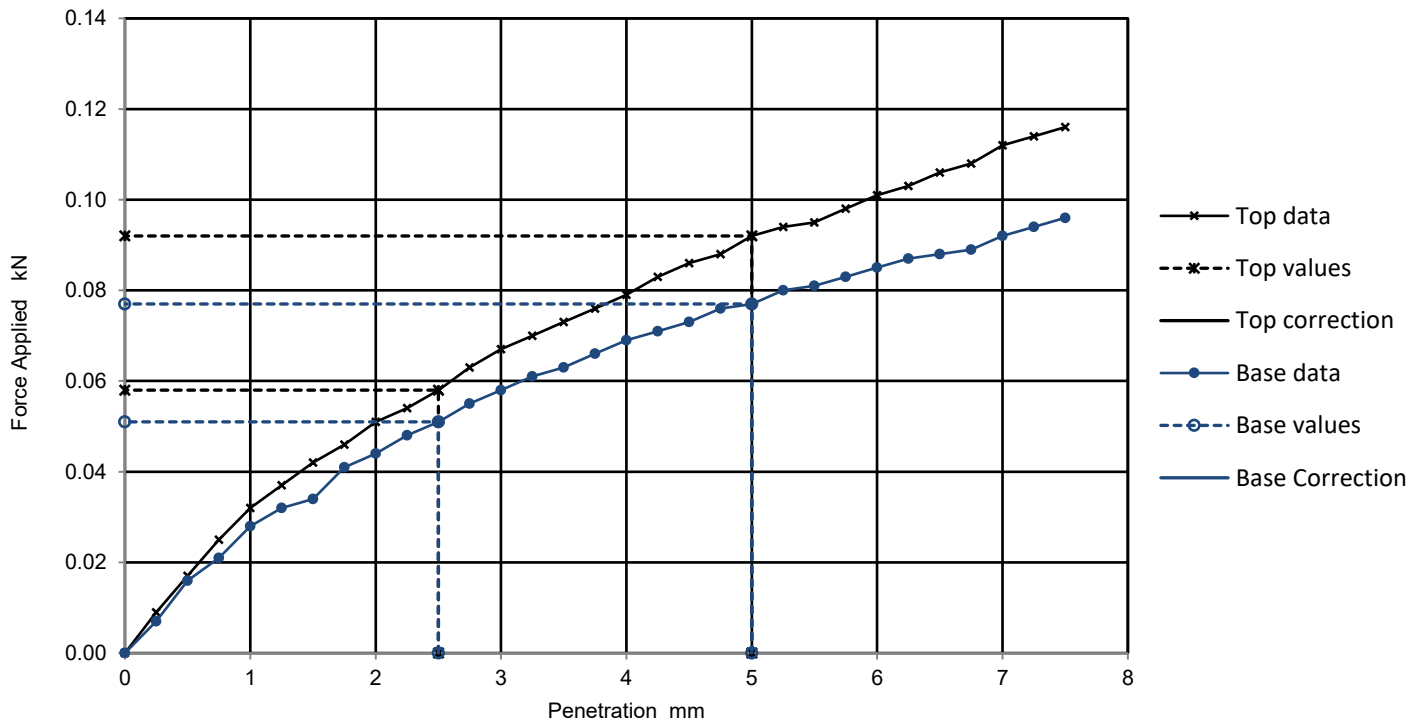
Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928163
Hole No.: TP-004
Sample Reference: Not Given
Sample Description: Light brown slightly gravelly slightly sandy CLAY with fragments of chalk, plantsDepth Top [m]: 1.20
Depth Base [m]: 1.30
Sample Type: B**Specimen Preparation:**

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	2 %		
Initial Specimen details	Bulk density 1.92 Mg/m3	Surcharge applied	8 kg
	Dry density 1.50 Mg/m3		4.9 kPa
	Moisture content 28 %		

Force v Penetration Plots**Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.44	0.46	0.46	0.42
No	0.39	0.39	0.39	

Moisture Content %
28
28

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928165
Hole No.: TP-008
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 0.70
Depth Base [m]: 0.80
Sample Type: B

Specimen Preparation:

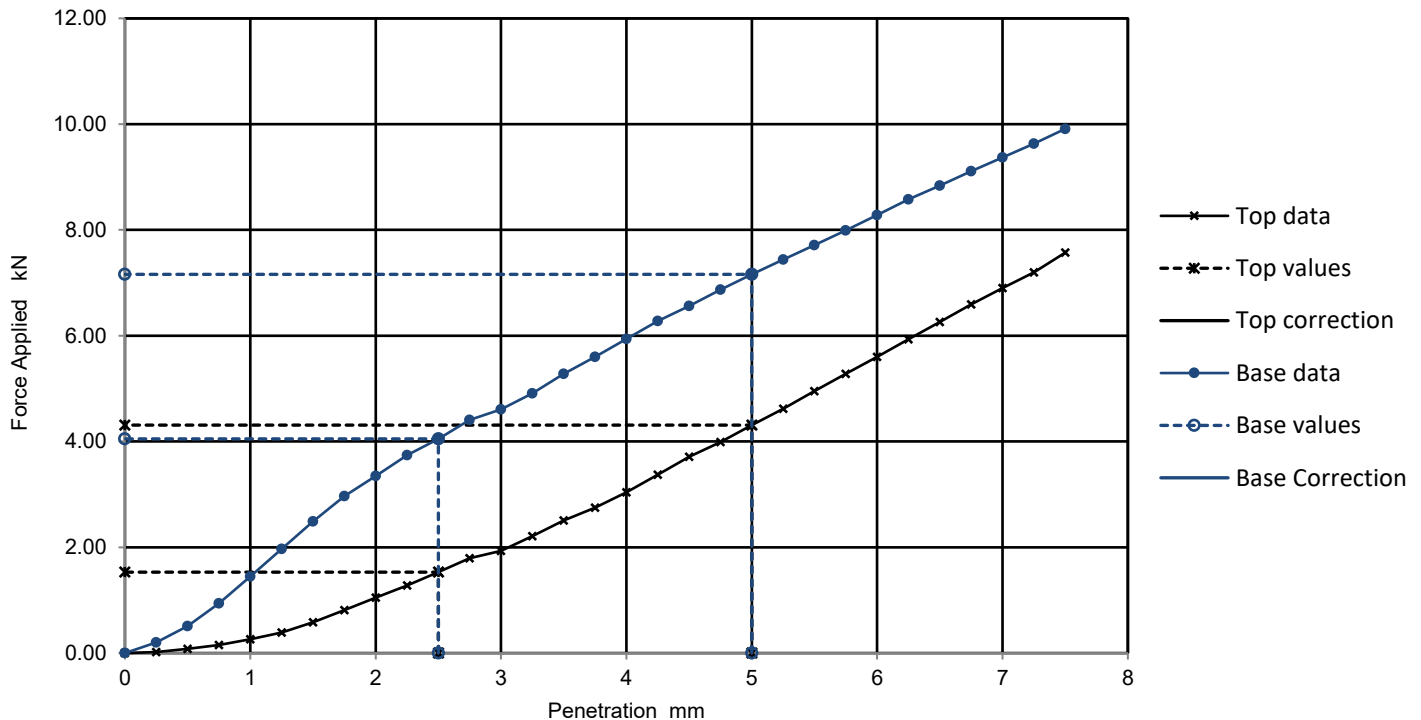
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 47 %

Initial Specimen details Bulk density 2.00 Mg/m³
Dry density 1.65 Mg/m³
Moisture content 22 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	12	22	22	
No	31	36	36	

Moisture Content %
22
21

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Laboratory Reference: 2928166
Hole No.: TP-009
Sample Reference: Not Given
Sample Description: Light brown slightly gravelly slightly sandy CLAY with fragments of chalk

Sample Type: B

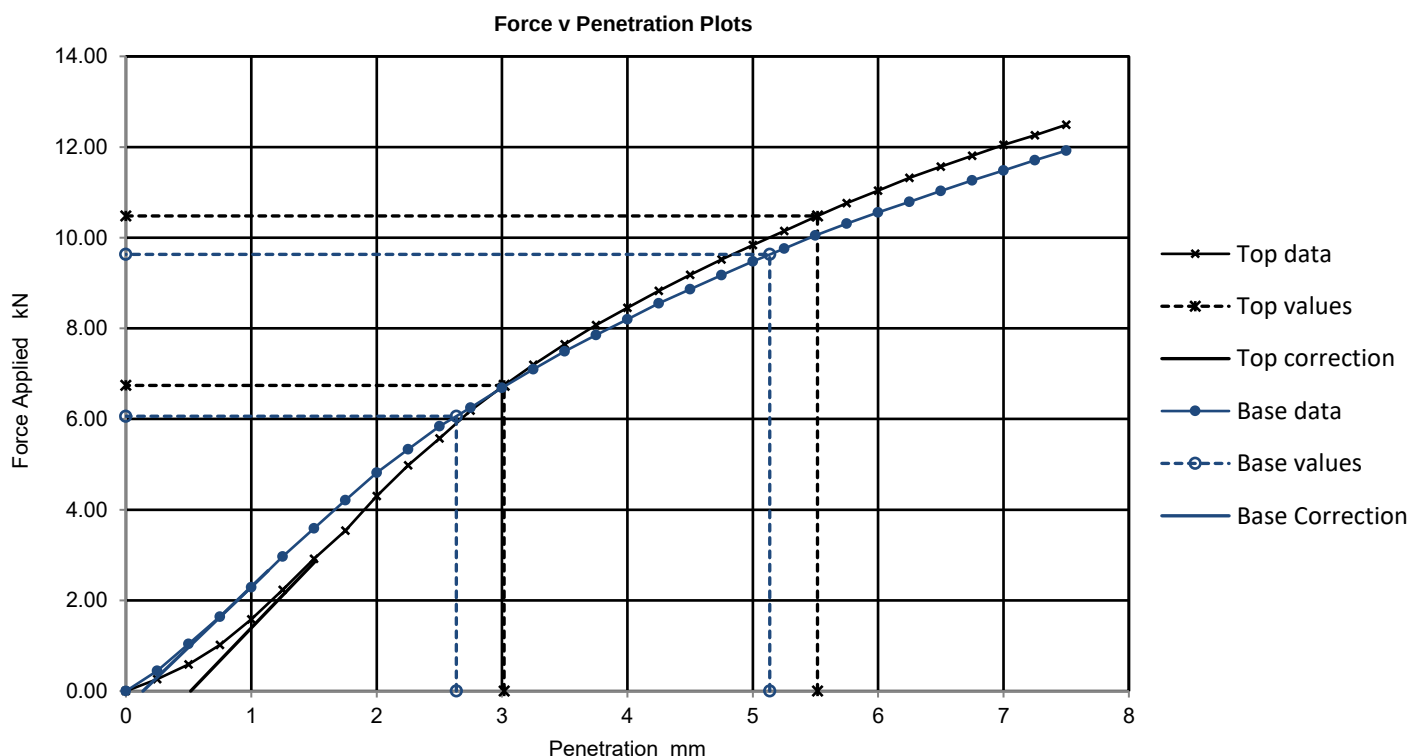
Condition	Remoulded
Details	Recompacted with specified standard effort using 2.5kg rammer

Soaking details	Not soaked
Period of soaking	days
Time to surface	days
Amount of swell recorded	mm
Dry density after soaking	Mg/m ³

Material retained on 20mm sieve removed	9	%
---	---	---

Initial Specimen details	Bulk density	1.97	Mg/m3
	Dry density	1.67	Mg/m3
	Moisture content	18	%

Surcharge applied	8	kg
	4.9	kPa



TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	51	52	52	50
Yes	46	48	48	

Moisture Content	%
18	
18	

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928171
Hole No.: TP-020
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.00
Depth Base [m]: 1.20
Sample Type: B

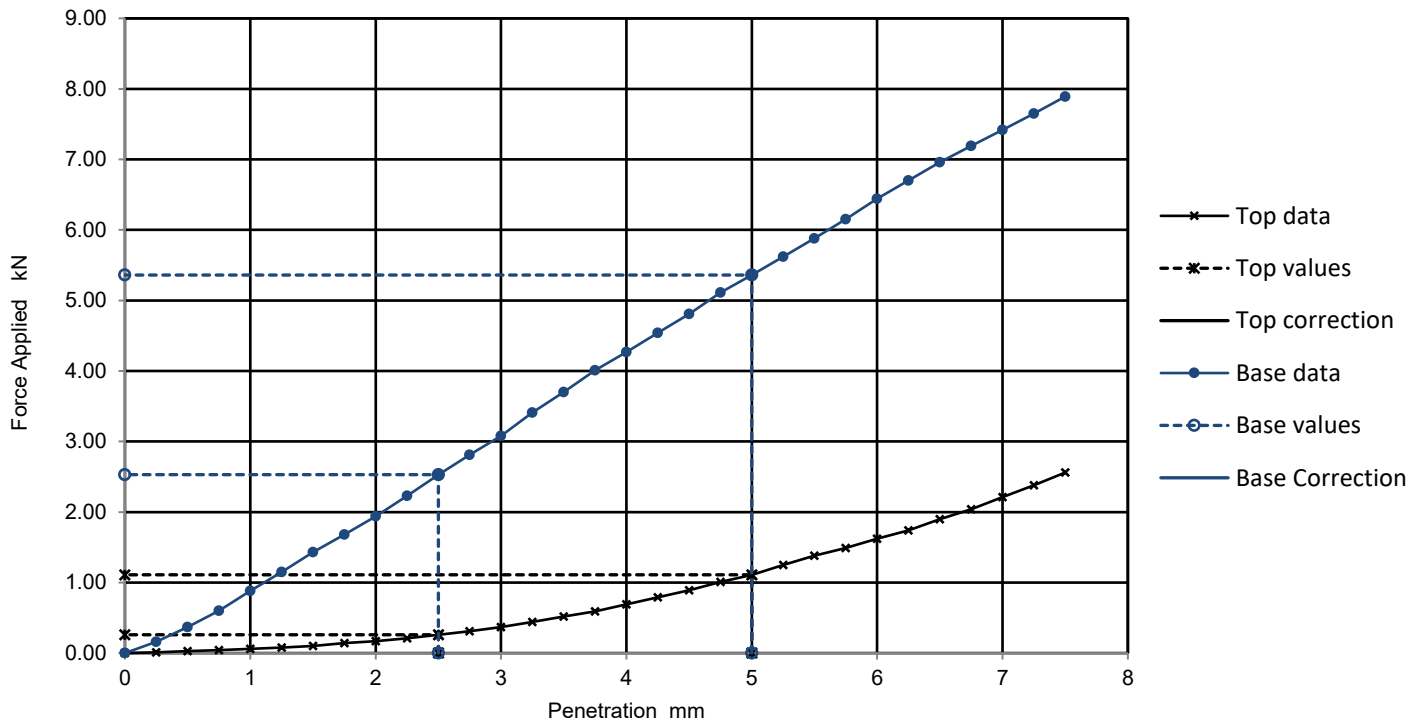
Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 7 %

Initial Specimen details	Bulk density	1.99	Mg/m3	Surcharge applied	8	kg
	Dry density	1.60	Mg/m3		4.9	kPa
	Moisture content	25	%			

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	2	5.6	5.6	
No	19	27	27	

Moisture Content %
23
24

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

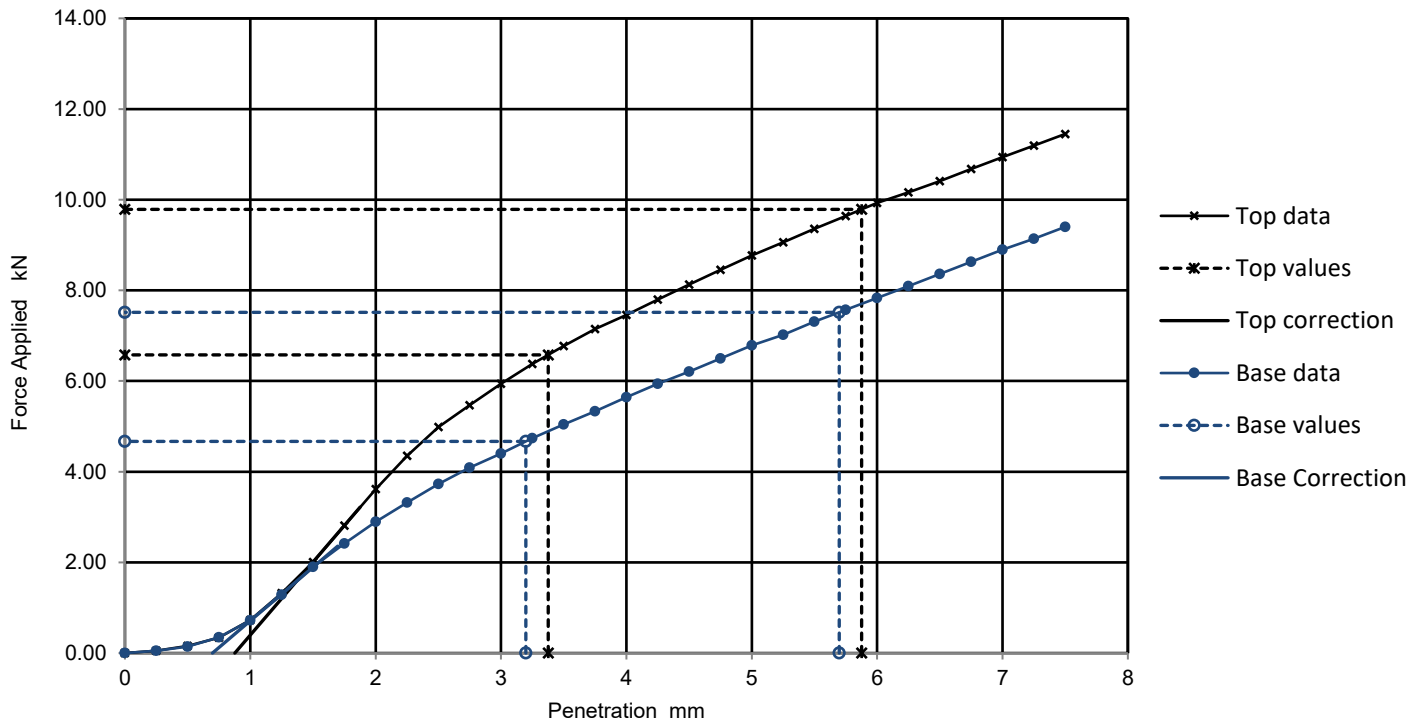
Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given**Test Results:**Laboratory Reference: 2928179
Hole No.: TP-036
Sample Reference: Not Given
Sample Description: White CHALKDepth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B**Specimen Preparation:**Condition: Remoulded
Details: Recompacted with specified standard effort using 2.5kg rammerSoaking details: Not soaked
Period of soaking: days
Time to surface: days
Amount of swell recorded: mm
Dry density after soaking: Mg/m3

Material retained on 20mm sieve removed: 24 %

Initial Specimen details: Bulk density: 1.87 Mg/m3
Dry density: 1.53 Mg/m3
Moisture content: 22 %
Surcharge applied: 8 kg
4.9 kPa**Force v Penetration Plots****Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	50	49	50	
Yes	35	38	38	

Moisture Content %
21
22

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928183
Hole No.: TP-043
Sample Reference: Not Given
Sample Description: Brown slightly gravelly sandy CLAY with fragments of chalk, plants

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B

Specimen Preparation:

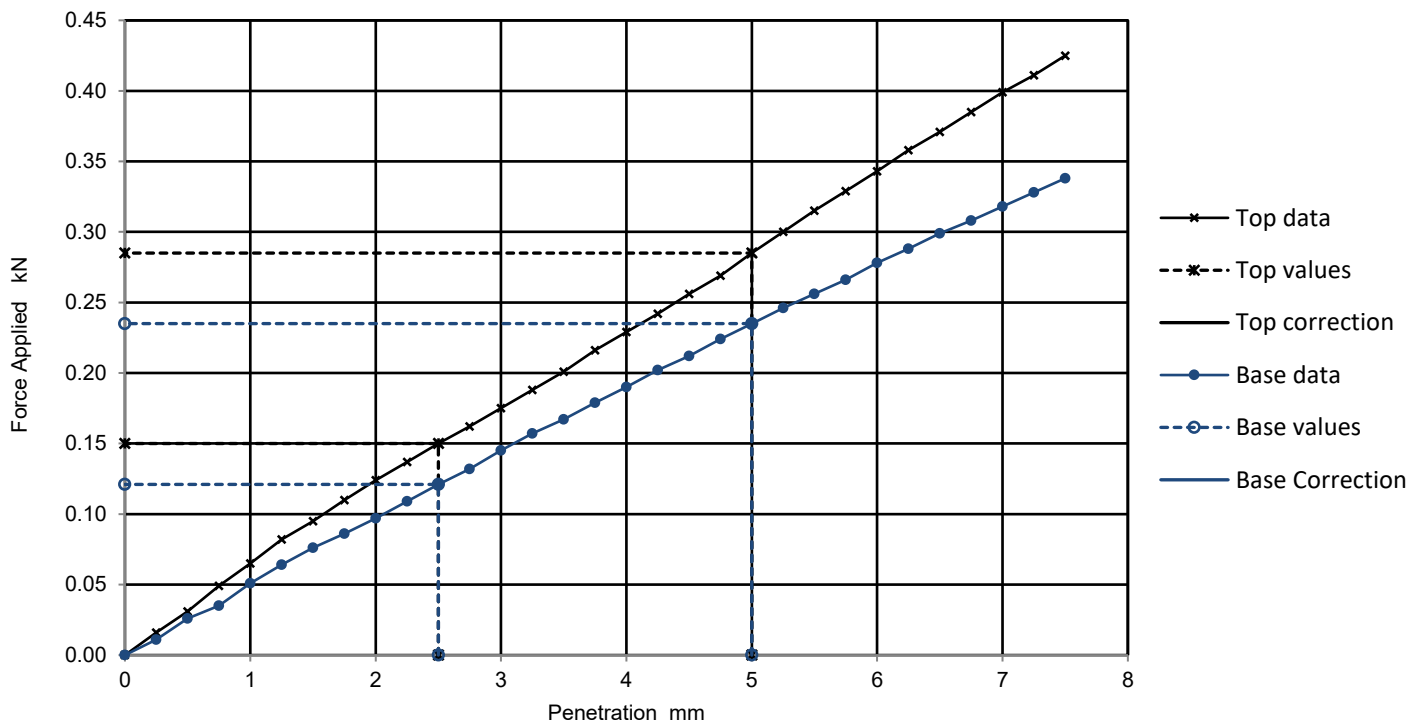
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 0 %

Initial Specimen details Bulk density 2.05 Mg/m³
Dry density 1.74 Mg/m³
Moisture content 18 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	1.1	1.4	1.4	1.3
No	0.92	1.2	1.2	

Moisture Content %
18
18

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928185
Hole No.: TP-044
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 0.80
Depth Base [m]: 0.90
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

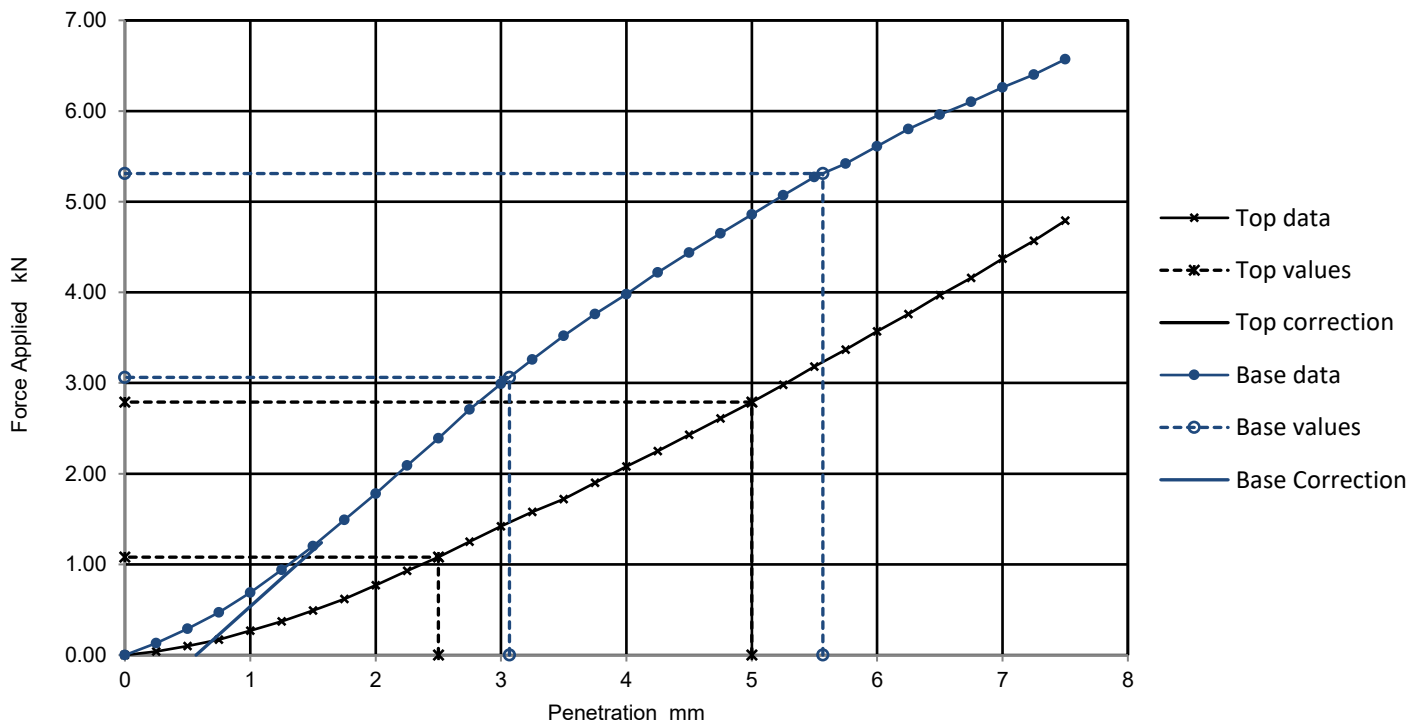
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 28 %

Initial Specimen details Bulk density 2.08 Mg/m³
Dry density 1.79 Mg/m³
Moisture content 16 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	8.2	14	14	
Yes	23	27	27	

Moisture Content %
17
16

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request

Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928188
Hole No.: TP-054
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B

Specimen Preparation:

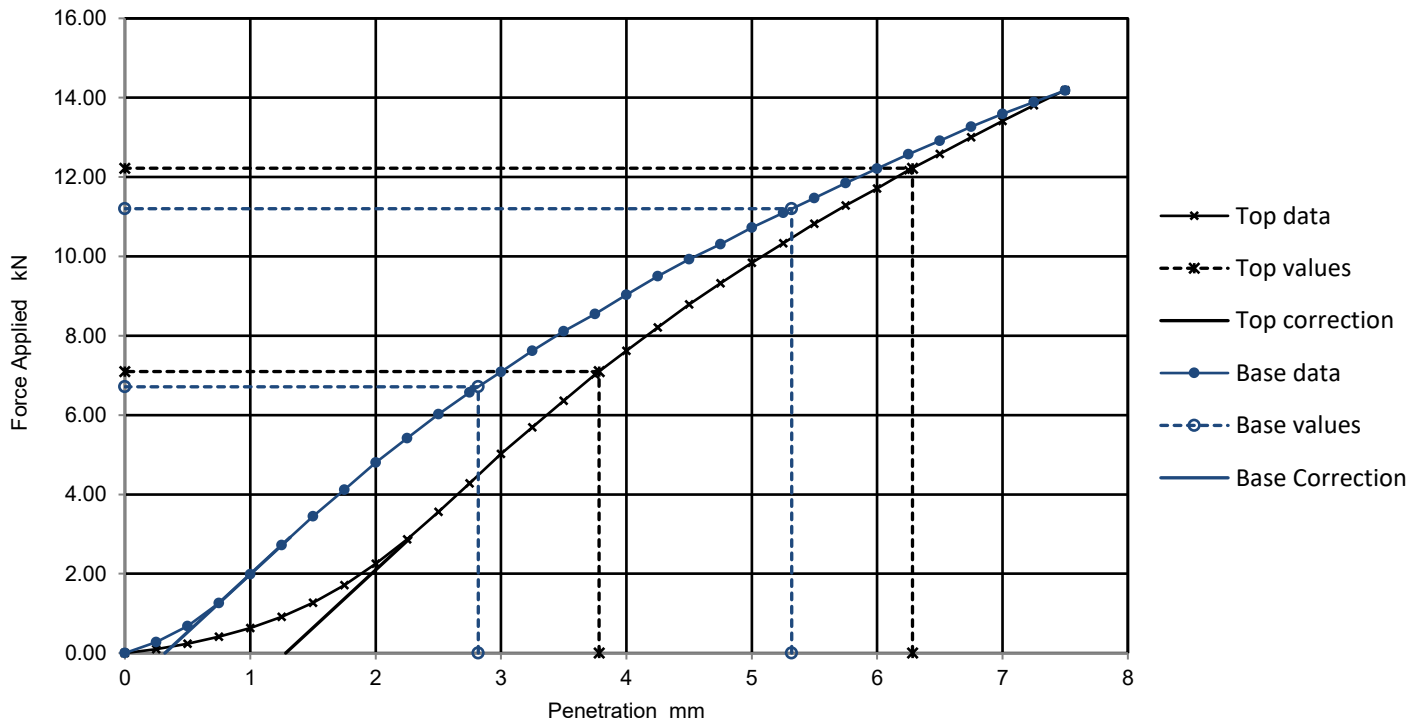
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 23 %

Initial Specimen details Bulk density 2.03 Mg/m3
Dry density 1.73 Mg/m3
Moisture content 18 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	54	61	61	59
Yes	51	56	56	

Moisture Content %
17
17

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request.

Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

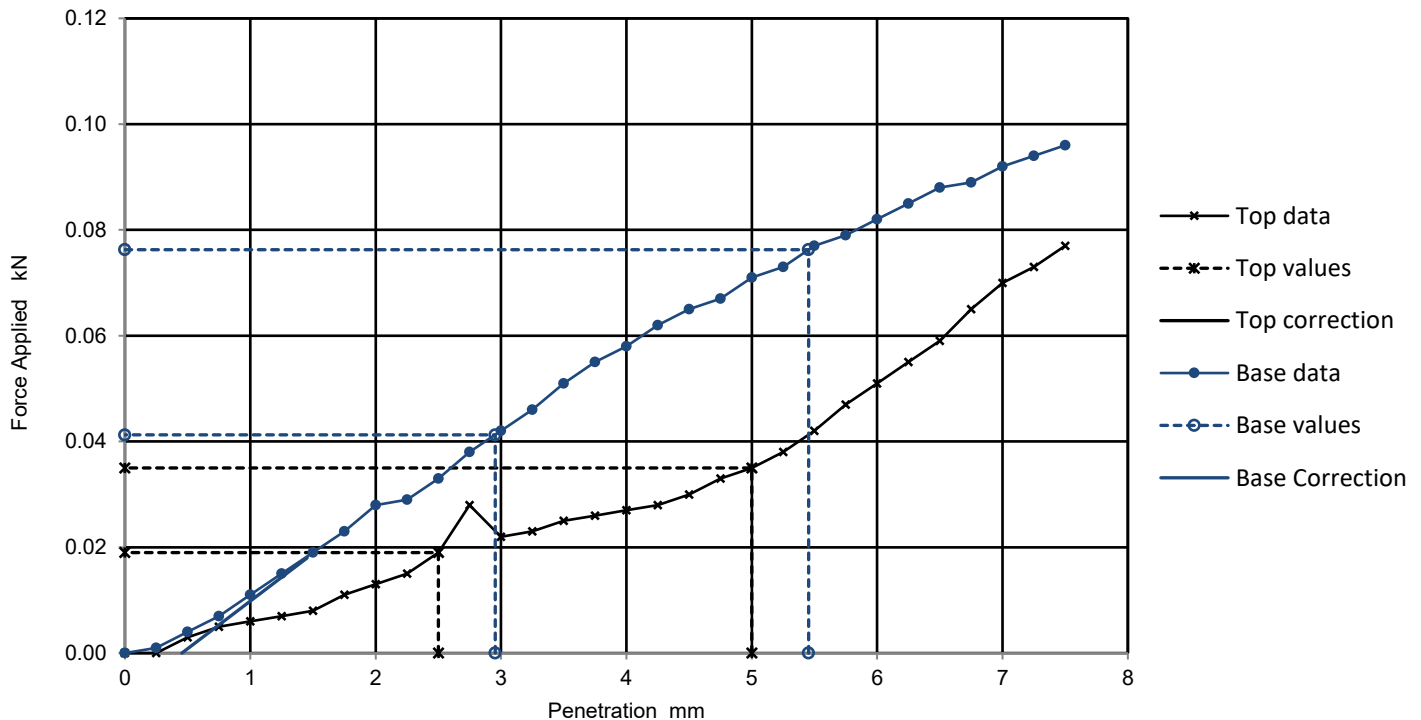
Test Results:

Laboratory Reference: 2928191
Hole No.: TP-72
Sample Reference: Not Given
Sample Description: Light brown CLAY with fragments of chalk

Depth Top [m]: 0.70
Depth Base [m]: 0.80
Sample Type: B

Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	0 %		
Initial Specimen details	Bulk density	2.14	Mg/m3
	Dry density	1.83	Mg/m3
	Moisture content	17	%
		Surcharge applied	8 kg
			4.9 kPa

Force v Penetration Plots**Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.14	0.18	0.18	
Yes	0.31	0.38	0.38	

Moisture Content %
17
16

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928193
Hole No.: TP-75
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

Specimen Preparation:

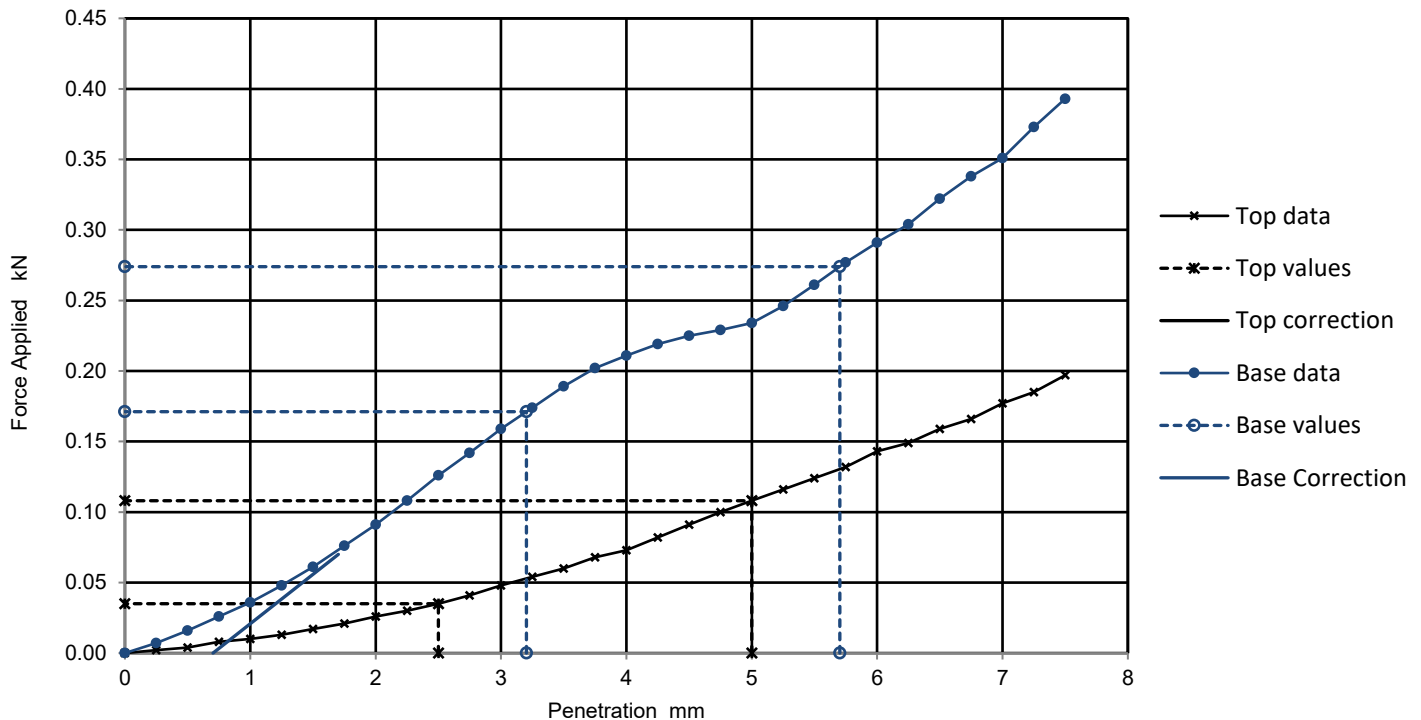
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 0 %

Initial Specimen details Bulk density 2.05 Mg/m3
Dry density 1.70 Mg/m3
Moisture content 21 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.27	0.54	0.54	
Yes	1.3	1.4	1.4	

Moisture Content %
20
21

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928204
Hole No.: TP-92
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 1.00
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

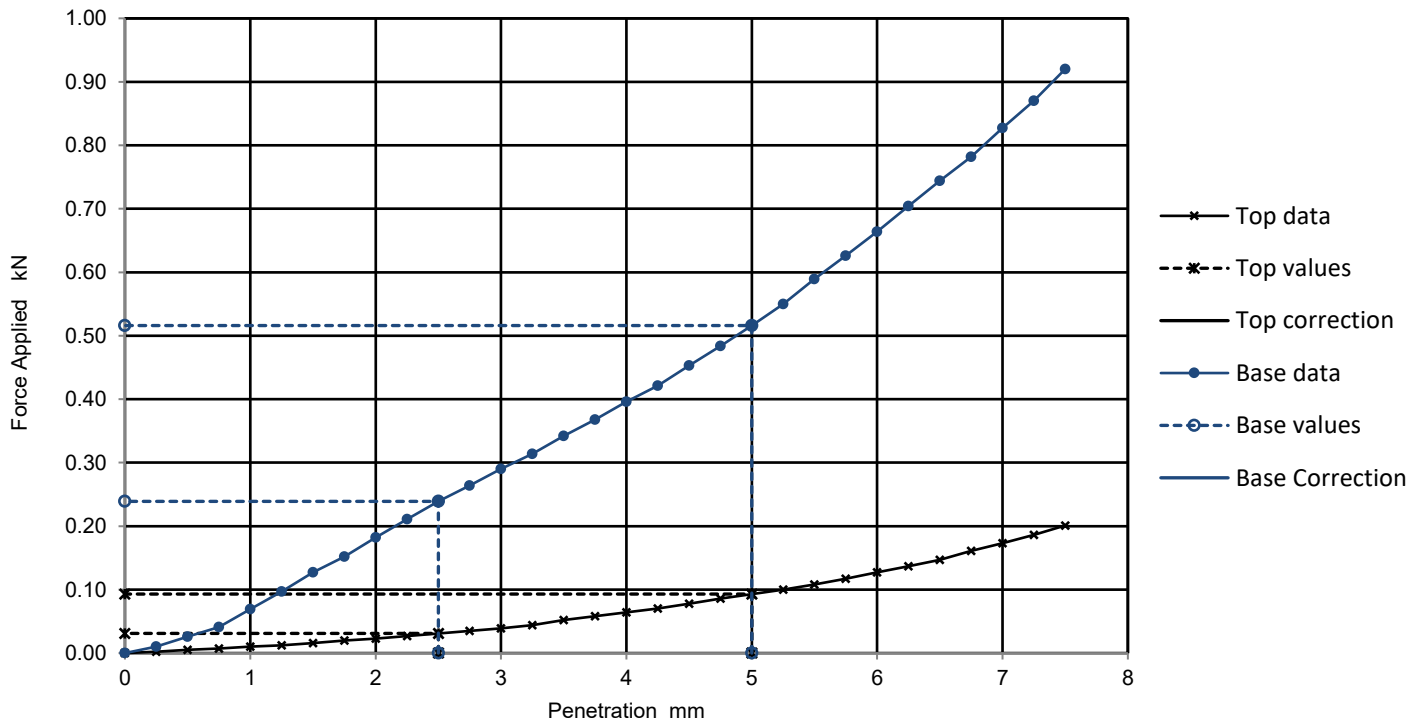
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 22 %

Initial Specimen details Bulk density 1.91 Mg/m3
Dry density 1.46 Mg/m3
Moisture content 31 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.23	0.47	0.47	
No	1.8	2.6	2.6	

Moisture Content %
31
30

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928208
Hole No.: TP-110
Sample Reference: Not Given
Sample Description: White mottled grey clayey CHALK with fragments of flintstones

Depth Top [m]: 0.40
Depth Base [m]: 0.50
Sample Type: B

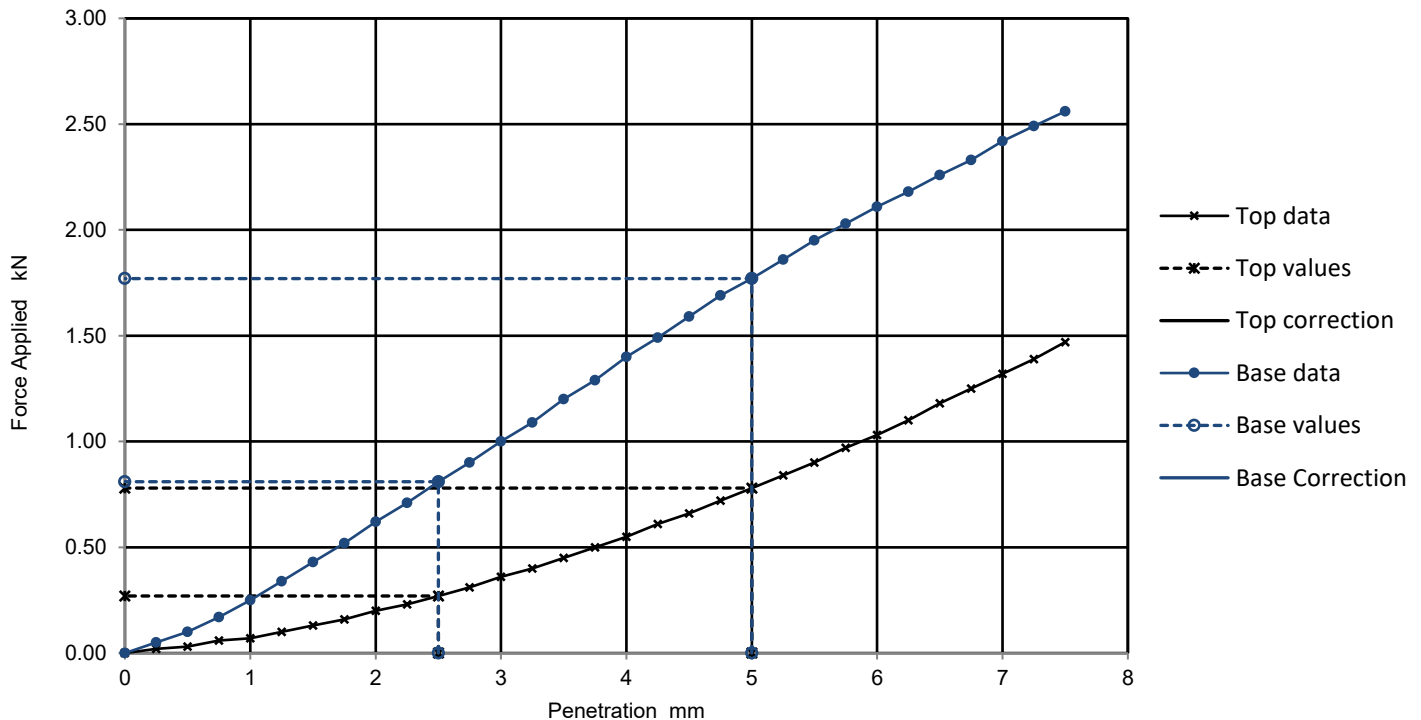
Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 21 %

Initial Specimen details	Bulk density	1.97	Mg/m3	Surcharge applied	8	kg
	Dry density	1.59	Mg/m3		4.9	kPa
	Moisture content	24	%			

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	2	3.9	3.9	
No	6.1	8.9	8.9	

Moisture Content %
24
24

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928210
Hole No.: TP-113
Sample Reference: Not Given
Sample Description: Cream colour CHALK with fragments of flintstones

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B

Specimen Preparation:

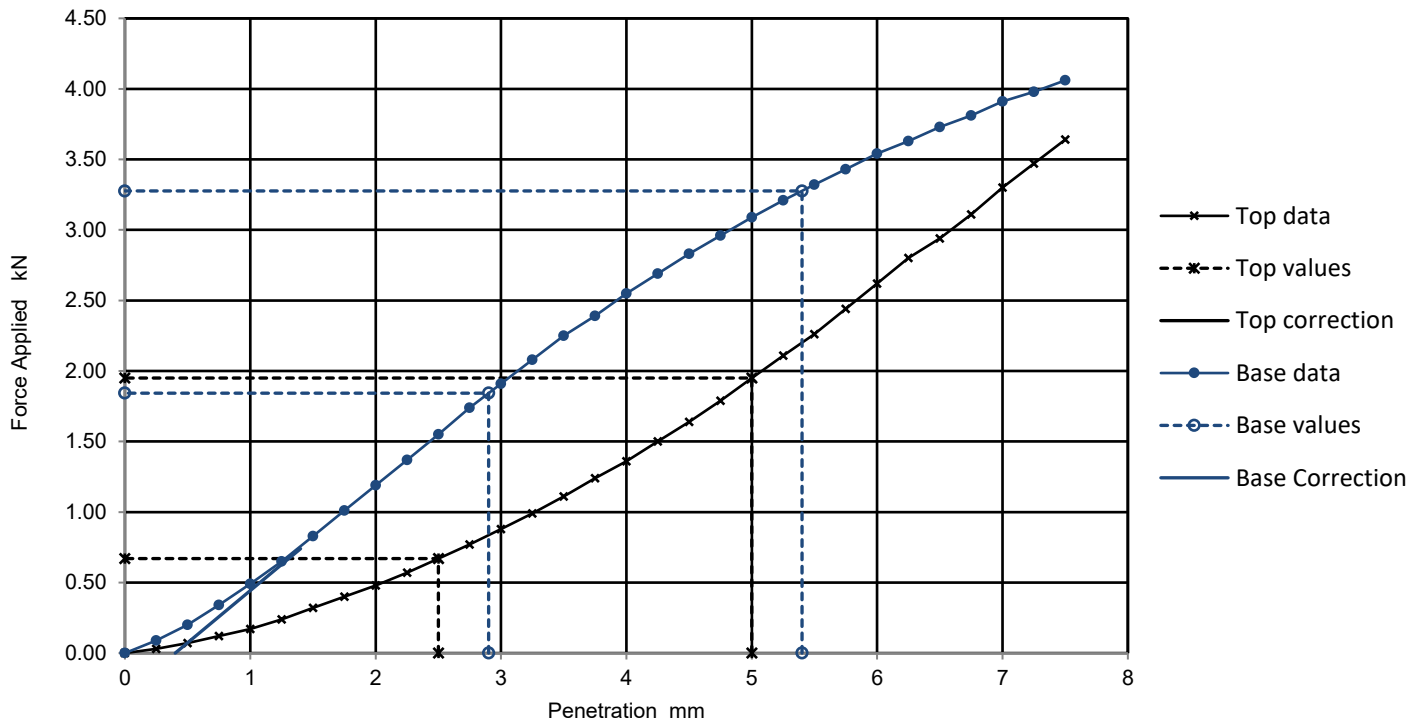
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 11 %

Initial Specimen details Bulk density 2.08 Mg/m³
Dry density 1.80 Mg/m³
Moisture content 16 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	5.1	9.8	9.8	
Yes	14	16	16	

Moisture Content %
14
15

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

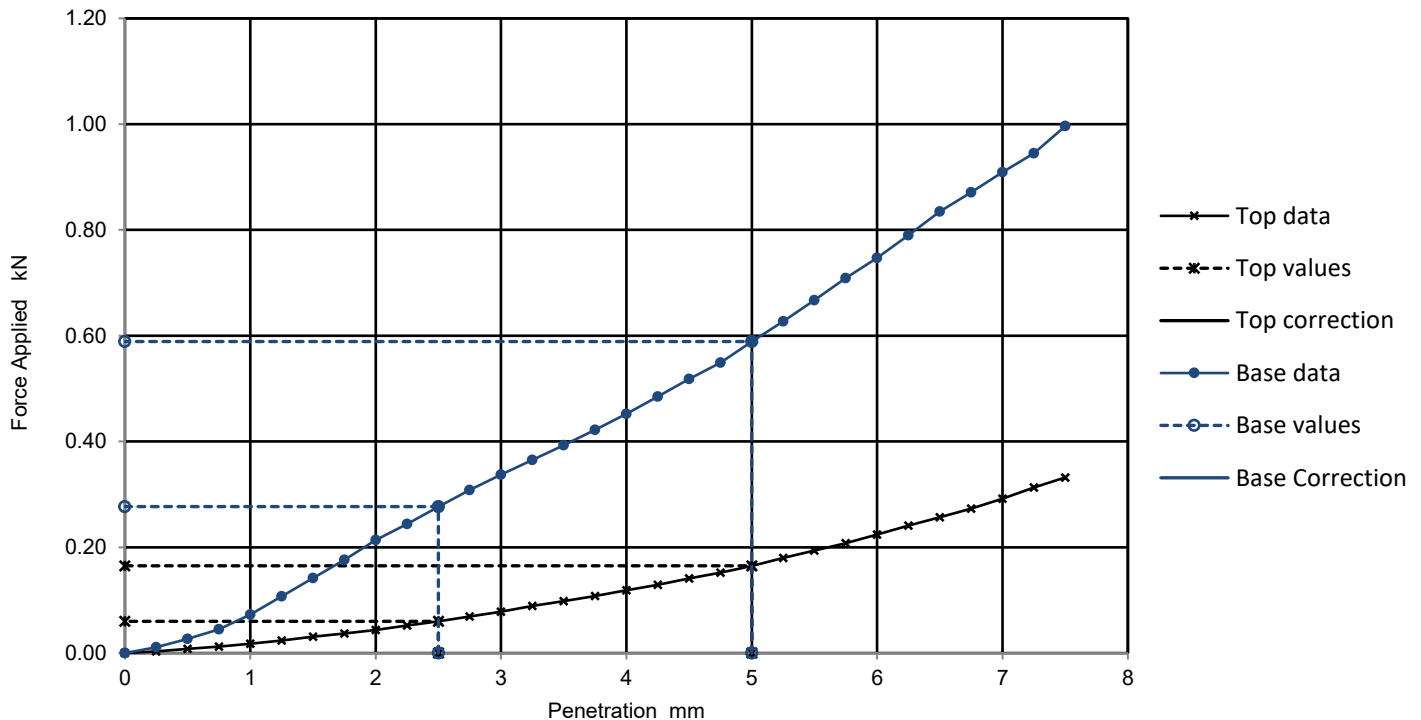
Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928211
Hole No.: TP-114
Sample Reference: Not Given
Sample Description: White mottled grey CHALKDepth Top [m]: 0.50
Depth Base [m]: Not Given
Sample Type: B**Specimen Preparation:**

Condition	Remoulded			Soaking details		Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days	
				Time to surface		days	
				Amount of swell recorded		mm	
				Dry density after soaking		Mg/m3	
Material retained on 20mm sieve removed			25	%			
Initial Specimen details	Bulk density	1.88	Mg/m3	Surcharge applied		8	kg
	Dry density	1.43	Mg/m3			4.9	kPa
	Moisture content	32	%				

Force v Penetration Plots**Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.45	0.83	0.83	
No	2.1	2.9	2.9	

Moisture Content %
30
31

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 25/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928212
Hole No.: TP-119
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B

Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

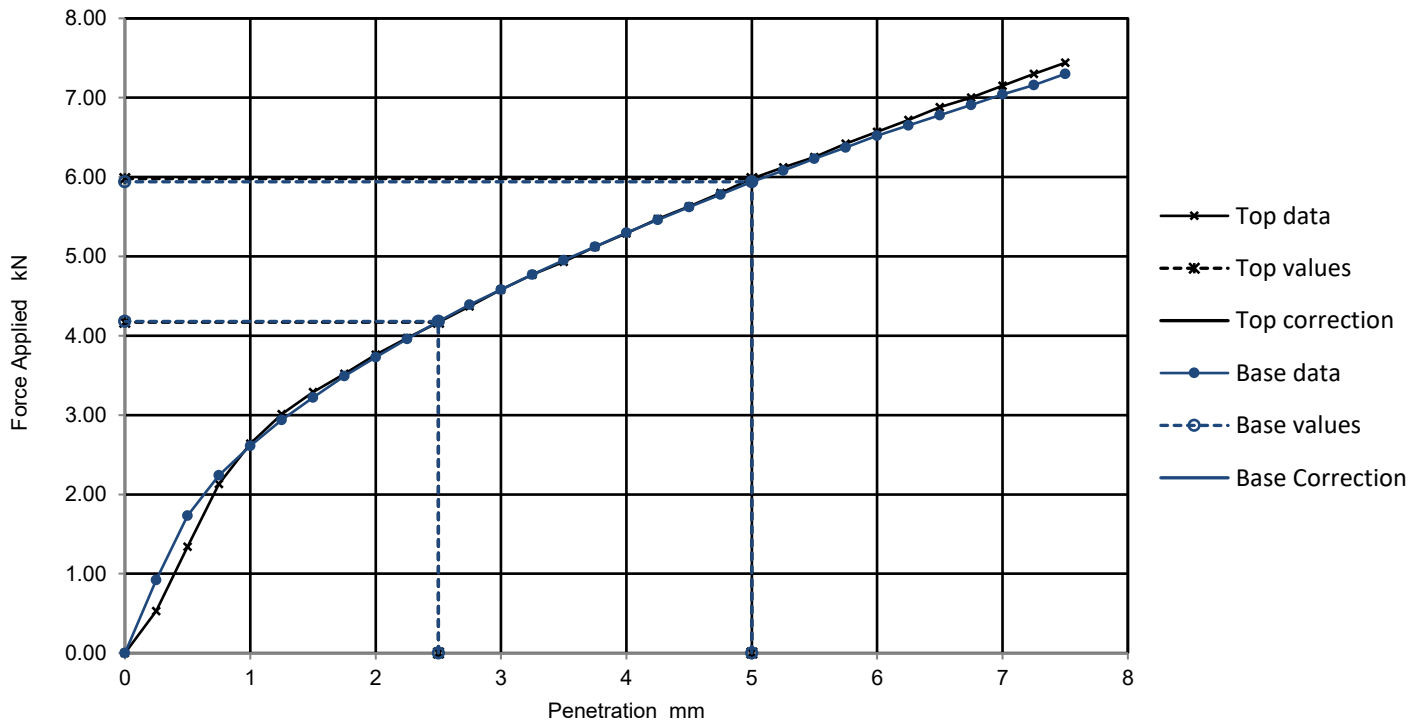
Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 24 %

Initial Specimen details Bulk density 1.68 Mg/m3
Dry density 1.35 Mg/m3
Moisture content 25 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	32	30	32	32
No	32	30	32	

Moisture Content %
25
25

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 24/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928213
Hole No.: TP-125
Sample Reference: Not Given
Sample Description: White CHALK

Depth Top [m]: 0.40
Depth Base [m]: Not Given
Sample Type: B

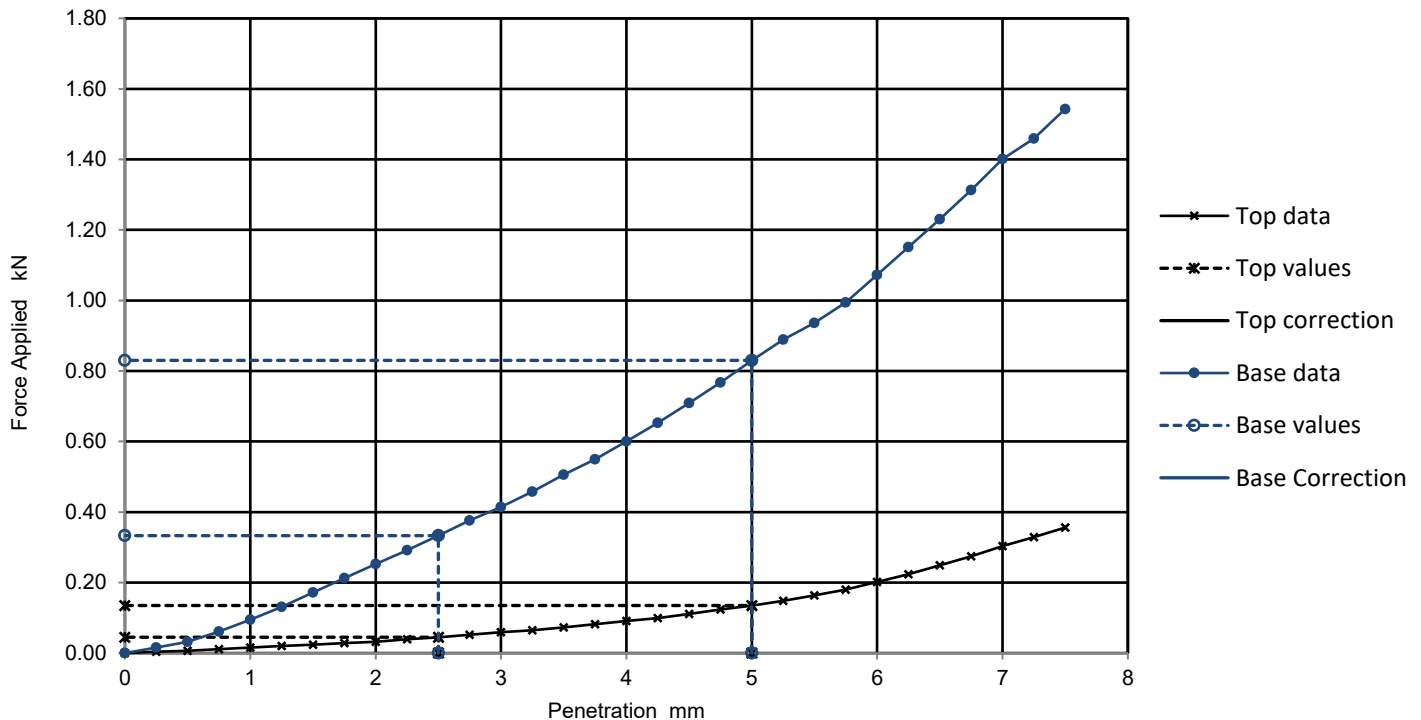
Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m3

Material retained on 20mm sieve removed 31 %

Initial Specimen details Bulk density 2.02 Mg/m3
Dry density 1.64 Mg/m3
Moisture content 24 %
Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.34	0.68	0.68	
No	2.5	4.2	4.2	

Moisture Content %
23
23

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2
Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING
RATIO (CBR)**

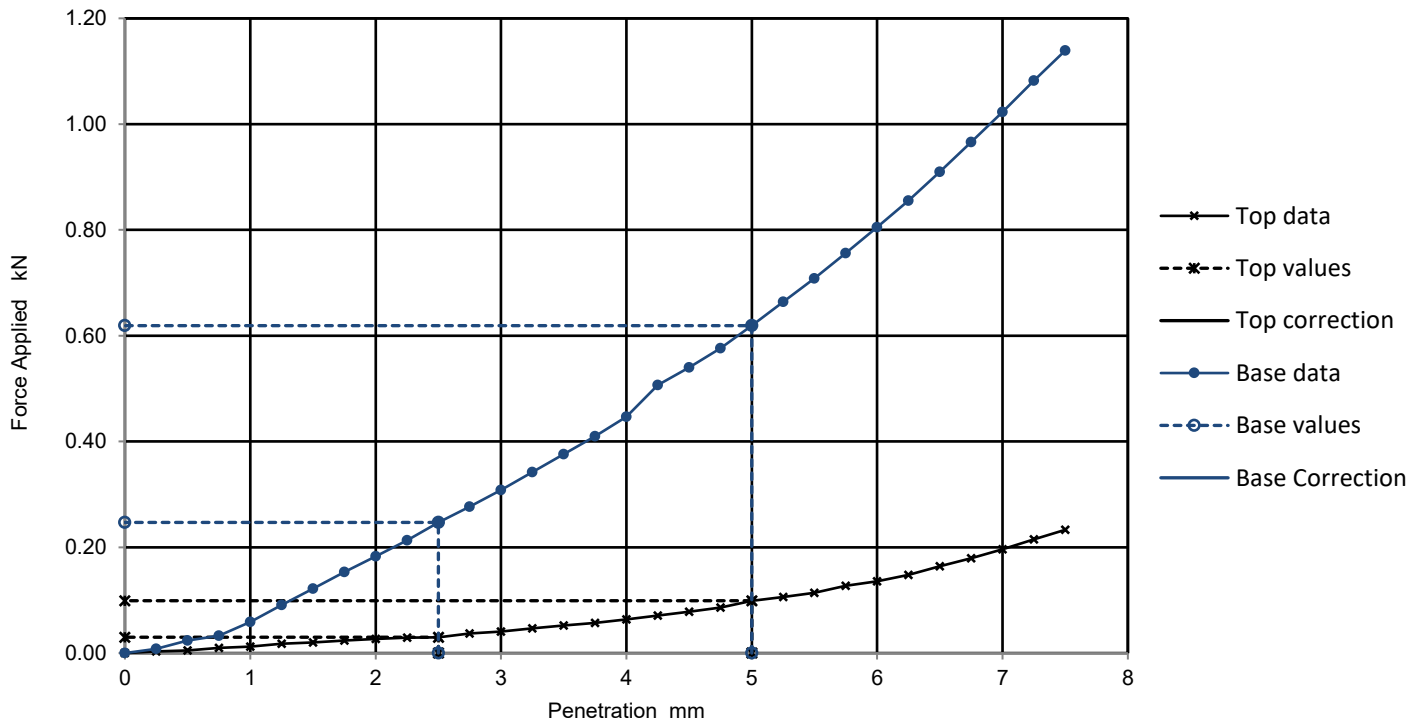
Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EBClient: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DPContact: Stephen Fisk
Site Address: BaldockClient Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:Laboratory Reference: 2928215
Hole No.: TP-127
Sample Reference: Not Given
Sample Description: White mottled grey CHALKDepth Top [m]: 0.90
Depth Base [m]: Not Given
Sample Type: B**Specimen Preparation:**

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	37 %		
Initial Specimen details	Bulk density 1.89 Mg/m3	Surcharge applied	8 kg
	Dry density 1.44 Mg/m3		4.9 kPa
	Moisture content 32 %		

Force v Penetration Plots**Results**TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.23	0.5	0.5	
No	1.9	3.1	3.1	

Moisture Content %
31
31

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request.
Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928217
Hole No.: TP-132
Sample Reference: Not Given
Sample Description: Brown very sandy very clayey GRAVEL

Depth Top [m]: 0.45
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

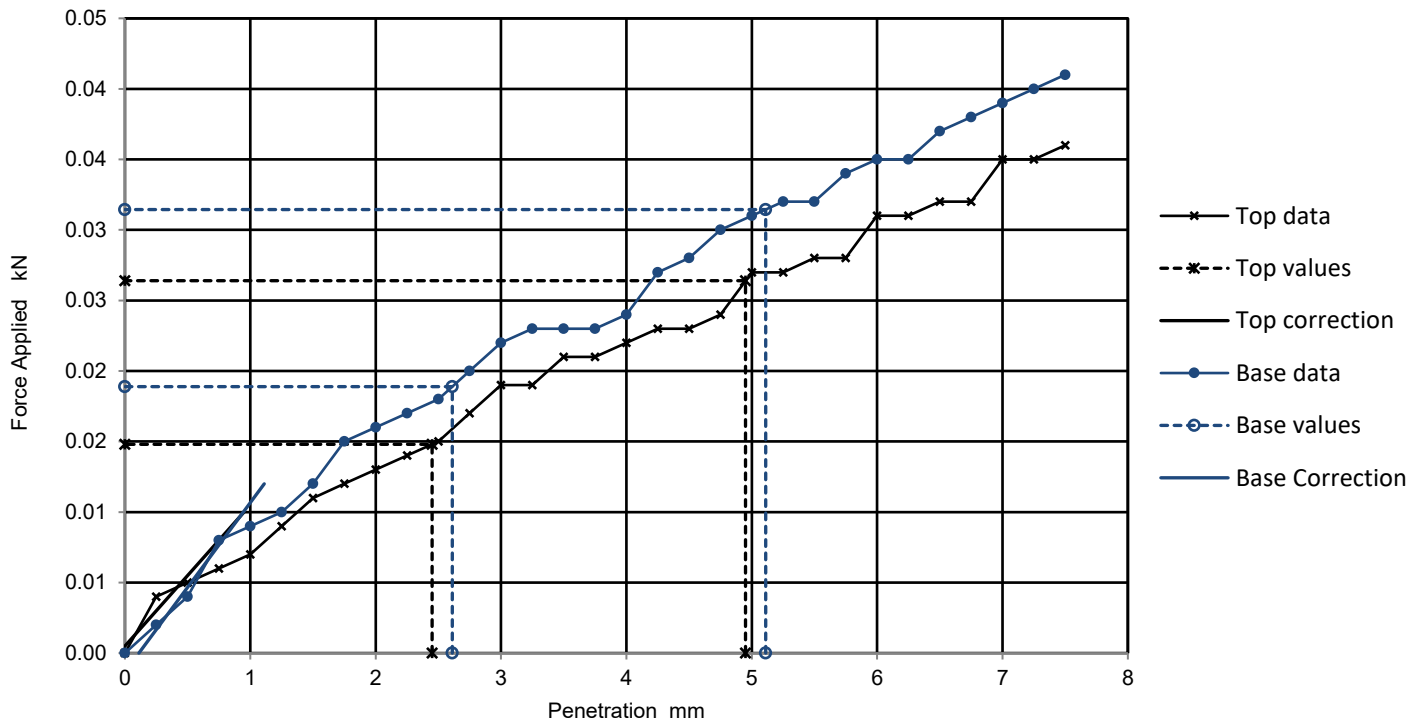
Condition: Remoulded
Details: Recompacted with specified standard effort using 2.5kg rammer

Soaking details: Not soaked
Period of soaking: days
Time to surface: days
Amount of swell recorded: mm
Dry density after soaking: Mg/m³

Material retained on 20mm sieve removed: 12 %

Initial Specimen details: Bulk density: 1.96 Mg/m³
Dry density: 1.57 Mg/m³
Moisture content: 25 %
Surcharge applied: 8 kg
4.9 kPa

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
Yes	0.11	0.13	0.13	0.14
Yes	0.14	0.16	0.16	

Moisture Content %
24
24

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request. Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 26/01/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference: 2928223
Hole No.: TP-143
Sample Reference: Not Given
Sample Description: Brown very gravelly very clayey SAND with fragments of chalk, plants

Depth Top [m]: 0.90
Depth Base [m]: 1.00
Sample Type: B

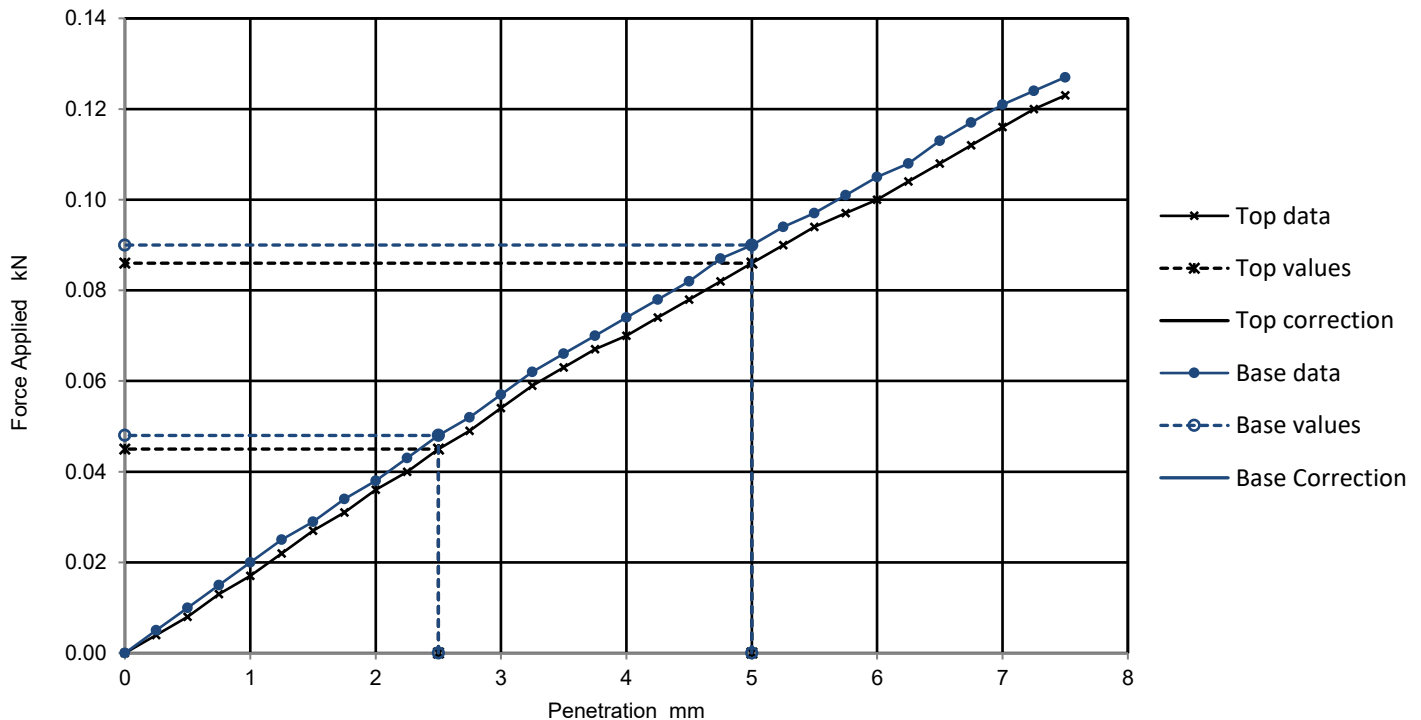
Specimen Preparation:

Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 17 %

Initial Specimen details	Bulk density	2.05	Mg/m ³	Surcharge applied	8	kg
	Dry density	1.73	Mg/m ³		4.9	kPa
	Moisture content	18	%			

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.34	0.43	0.43	0.44
No	0.36	0.45	0.45	

Moisture Content %
18
17

Remarks:

Test/ Specimen
specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE**DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)**

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test Results:

Laboratory Reference: 2928225
Hole No.: TP-145
Sample Reference: Not Given
Sample Description: Brown very gravelly very sandy CLAY

Depth Top [m]: 0.60
Depth Base [m]: Not Given
Sample Type: B

Specimen Preparation:

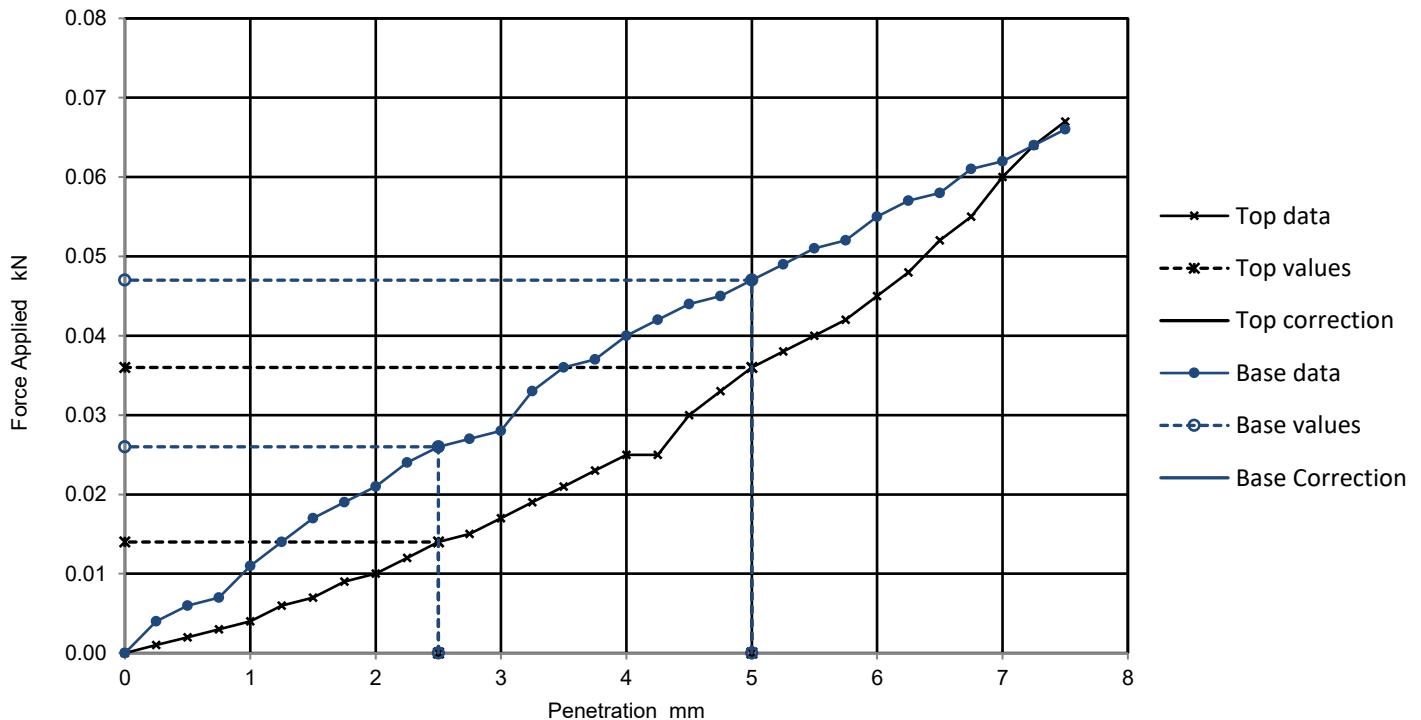
Condition Remoulded
Details Recompacted with specified standard effort using 2.5kg rammer

Soaking details Not soaked
Period of soaking days
Time to surface days
Amount of swell recorded mm
Dry density after soaking Mg/m³

Material retained on 20mm sieve removed 28 %

Initial Specimen details Bulk density 2.02 Mg/m³
Dry density 1.69 Mg/m³
Moisture content 20 %

Surcharge applied 8 kg
4.9 kPa

Force v Penetration Plots**Results**

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	0.11	0.18	0.18	
No	0.2	0.24	0.24	

Moisture Content %
21
22

Remarks: Test carried out with > 25 % retained on 20mm as per clause 7.2.1.2 according to the client's request. Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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4041

TEST CERTIFICATE

DETERMINATION OF THE CALIFORNIA BEARING RATIO (CBR)

Tested in Accordance with: BS 1377-4: 1990: Clause 7

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 29/01/2024
Sampled By: Not Given

Test Results:

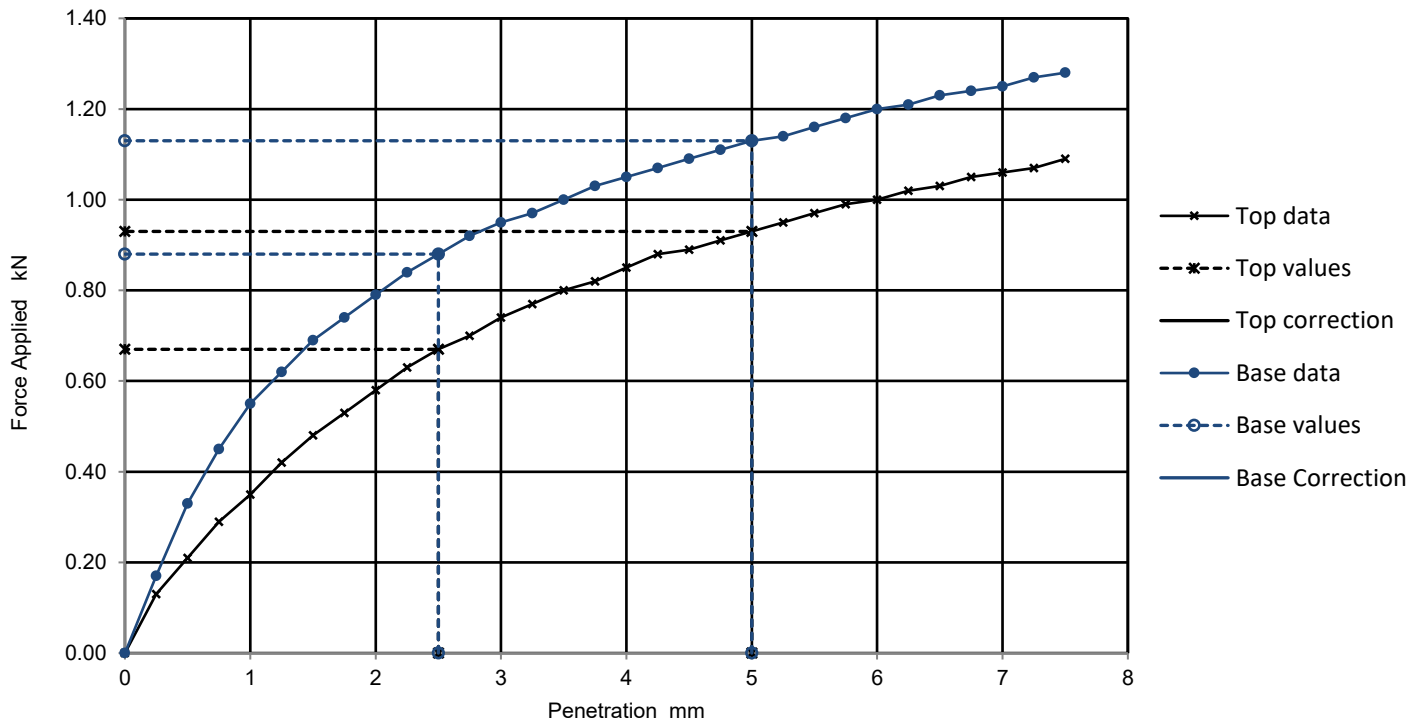
Laboratory Reference: 2928226
Hole No.: TP-146
Sample Reference: Not Given
Sample Description: Yellowish brown slightly gravelly slightly sandy CLAY with fragments of chalk

Depth Top [m]: 0.60
Depth Base [m]: 0.70
Sample Type: B

Specimen Preparation:

Condition	Remoulded	Soaking details	Not soaked
Details	Recompacted with specified standard effort using 2.5kg rammer	Period of soaking	days
		Time to surface	days
		Amount of swell recorded	mm
		Dry density after soaking	Mg/m3
Material retained on 20mm sieve removed	0 %		
Initial Specimen details	Bulk density 1.97 Mg/m3	Surcharge applied	8 kg
	Dry density 1.54 Mg/m3		4.9 kPa
	Moisture content 28 %		

Force v Penetration Plots



Results

TOP
BASE

Curve correction applied	CBR Values, %			
	2.5mm	5mm	Highest	Average
No	5.1	4.7	5.1	
No	6.7	5.7	6.7	

Moisture Content %
26
25

Remarks:

Test/ Specimen specific remarks:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 06/02 - 08/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2928232	RO-01	Not Given	9.77	10.00	C	White mottled light grey CHALK	WC = 12.7%	1	D	L	YES	58.0	101.6	101.0	96.0	3.0	98.8	0.30	0.41
2928233	RO-17	Not Given	3.90	4.05	C	White CHALK	WC = 24.8%	1	A	U	YES	-	101.0	74.0	67.0	1.8	92.8	0.20	0.27
2928235	RO-17	Not Given	8.03	8.20	C	White CHALK	WC = 23.2%	1	D	U	YES	58.2	101.6	101.0	98.0	2.3	99.8	0.23	0.31
2928236	RO-18	Not Given	3.33	3.50	C	White CHALK	WC = 21.8%	1	A	U	YES	-	101.7	56.0	42.0	1.9	73.7	0.34	0.41
2928237	RO-18	Not Given	6.00	6.12	C	White CHALK	WC = 21.1%	1	A	U	YES	-	101.1	71.0	68.0	3.2	93.6	0.37	0.48
2928238	RO-18	Not Given	6.74	6.90	C	White CHALK	WC = 19.5%	1	D	U	YES	64.4	100.2	100.0	89.0	1.8	94.4	0.20	0.27
2928239	RO-25	Not Given	2.88	3.06	C	White CHALK	WC = 22.4%	1	A	U	YES	-	100.8	86.0	80.0	1.8	101.3	0.17	0.23
2928240	RO-25	Not Given	6.20	6.48	C	White CHALK	WC = 21.5%	1	D	U	YES	79.3	100.6	100.0	91.0	1.6	95.7	0.17	0.23
2928241	RO-25	Not Given	9.25	9.46	C	White CHALK	WC = 24.3%	1	D	U	YES	77.2	101.4	101.0	95.0	1.0	98.1	0.10	0.14
2928167	TP-011	Not Given	1.30	1.40	B	White CHALK	WC = 18.9%	1	I	U	YES	36.1	51.5	28.0	21.0	0.7	37.1	0.51	0.44

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041
Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock

Client Reference: 2899
Job Number: 24-78227-1
Date Sampled: Not Given
Date Received: 09/01/2024
Date Tested: 07/02/2024
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P	Equivalent diameter, De	Point Load Strength Index	
		Reference	Depth Top	Depth Base	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne	W	Dps	Dps'			Is	Is(50)
			m	m															
2928176	TP-032	Not Given	1.80	1.90	B	White CHALK	WC = 20.8%	1	I	U	YES	61.1	85.4	41.0	32.0	1.2	59.0	0.35	0.37

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed: Monika Siewior
Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2936118	RO-R1-02	Not Given	2.96	3.02	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.98	1.58	25	
2936119	RO-R1-02	Not Given	3.52	3.56	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.96	1.59	23	
2936120	RO-R1-02	Not Given	7.58	7.75	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	25	1.96	1.60	23	
2936121	RO-R1-02	Not Given	11.80	11.99	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	1.99	1.63	23	
2936122	RO-R2/R3-01	Not Given	10.50	10.62	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	17	2.22	1.86	19	
2936123	RO-R2/R3-02	Not Given	4.20	4.28	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.99	1.59	25	
2936124	RO-R2/R3-02	Not Given	7.09	7.17	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	27	1.97	1.56	26	
2936125	RO-R2/R3-02	Not Given	12.58	12.64	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	11	2.29	2.06	11	
2936126	RO-R2/R3-03	Not Given	8.09	8.19	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	19	2.10	1.78	18	
2936127	RO-R2/R3-03	Not Given	11.21	11.33	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.02	1.65	22	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2936128	RO-R2/R3-04	Not Given	13.88	14.11	C	Cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	12	2.26	2.04	11	
2936129	RO-R4-03	Not Given	4.70	4.78	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	17	2.10	1.85	14	
2936130	RO-R4-03	Not Given	11.00	11.21	C	Light grey CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	24	2.02	1.63	24	
2936131	RO-R4-04	Not Given	3.00	3.11	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	21	2.06	1.73	20	
2936132	RO-R4-04	Not Given	6.50	6.62	C	Cream colour CHALK		12	2.28	2.05	11	
2936133	RO-R4-04	Not Given	8.00	8.16	C	White mottled cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	12	2.26	2.05	11	
2936134	RO-R4-04	Not Given	13.16	13.49	C	White CHALK		25	2.00	1.61	25	
2936135	RO-R4-04	Not Given	15.22	15.43	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.06	1.70	21	
2936136	RO-R5-01	Not Given	7.03	7.20	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	11	2.32	2.10	10	
2936137	RO-R5-01	Not Given	15.16	15.42	C	Cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	23	2.02	1.68	20	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION MOISTURE CONTENT OF CHALK

Tested in Accordance with: BS 1377-2: 1990: Clause 3.3

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 30/01/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SMC	Bulk density	Dry density	MC	Preparation
		Reference	Depth Top	Depth Base	Type							
			m	m				%	Mg/m3	Mg/m3	%	
2936138	RO-R5-02	Not Given	6.82	6.88	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	13	2.26	2.02	12	
2936139	RO-R5-02	Not Given	13.78	13.98	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	27	1.99	1.57	27	
2936140	RO-R5-03	Not Given	7.33	7.62	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.04	1.69	21	
2936141	RO-R5-03	Not Given	13.11	13.32	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.98	1.60	24	
2936142	RO-R5-03	Not Given	14.24	14.51	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	26	1.97	1.59	23	
2936143	RO-R5-04	Not Given	4.30	4.50	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	22	2.04	1.69	21	
2936144	RO-R5-04	Not Given	10.43	10.67	C	Cream colour CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	13	2.24	2.02	11	
2936145	RO-R5-04	Not Given	12.83	12.92	C	White CHALK	Supplied lump of chalk fails to comply with volume requirements as per BS1377:2 Clause 3.3.5.1	28	1.97	1.55	27	

Note: SMC - Saturation Moisture Content; MC - Moisture Content

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936118	RO-R1-02	Not Given	2.96	3.02	C	White CHALK	WC = 22.6%	1	I	U	YES	48.0	63.8	46.0	38.0	2.0	55.6	0.65	0.68
2936119	RO-R1-02	Not Given	3.52	3.56	C	White CHALK	WC = 22.3%	1	I	U	YES	50.2	55.5	45.0	41.0	0.8	53.8	0.28	0.29
2936120	RO-R1-02	Not Given	7.58	7.75	C	White CHALK	WC = 21.1%	1	A	U	YES	-	101.7	47.0	39.0	1.9	71.0	0.38	0.44
2936120_1	RO-R1-02	Not Given	7.58	7.75	C	White CHALK	WC = 20.2%	1	I	U	YES	37.4	51.3	36.0	28.0	0.9	42.8	0.49	0.46
2936121_1	RO-R1-02	Not Given	11.80	11.99	C	White CHALK	WC = 21.6%	1	I	U	YES	35.9	49.8	33.0	25.0	0.8	39.8	0.47	0.43
2936121	RO-R1-02	Not Given	11.80	11.99	C	White CHALK	WC = 21.2%	1	I	U	YES	44.3	68.2	43.0	31.0	1.1	51.9	0.39	0.40
2936122	RO-R2/R3-01	Not Given	10.50	10.62	C	White CHALK	WC = 18.5%	1	A	U	YES	-	100.7	49.0	37.0	1.5	68.9	0.32	0.37
2936123	RO-R2/R3-02	Not Given	4.20	4.28	C	White CHALK	WC = 25.6%	1	I	U	YES	51.0	87.6	66.0	62.0	0.8	83.2	0.12	0.15
2936124	RO-R2/R3-02	Not Given	7.09	7.17	C	White CHALK	WC = 26.7%	1	A	U	YES	-	101.5	49.0	38.0	1.4	70.1	0.28	0.33
2936125	RO-R2/R3-02	Not Given	12.58	12.64	C	White CHALK	WC = 10.6%	1	I	U	YES	52.3	71.1	33.0	26.0	1.0	48.5	0.40	0.40

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936126	RO-R2/R3-03	Not Given	8.09	8.19	C	White CHALK	WC = 17.9%	1	I	U	YES	50.7	74.1	45.0	39.0	2.1	60.7	0.56	0.61
2936130_1	RO-R2/R3-03	Not Given	11.00	11.21	C	Light grey CHALK	WC = 22.6%	1	A	U	YES	-	99.8	72.0	66.0	1.5	91.6	0.18	0.23
2936127	RO-R2/R3-03	Not Given	11.21	11.33	C	White CHALK	WC = 21.9%	1	A	U	YES	-	100.8	65.0	46.0	3.3	76.8	0.56	0.68
2936128	RO-R2/R3-04	Not Given	13.88	14.11	C	Cream colour CHALK	WC = 9.2%	1	A	U	YES	-	99.3	59.0	45.0	5.9	75.4	1.03	1.24
2936128_1	RO-R2/R3-04	Not Given	13.88	14.11	C	Cream colour CHALK	WC = 8.4%	1	A	U	YES	-	99.3	76.0	72.0	2.6	95.4	0.28	0.37
2936129	RO-R4-03	Not Given	4.70	4.78	C	White CHALK	WC = 13.2%	1	I	U	YES	50.0	79.4	65.0	49.0	2.4	70.4	0.48	0.57
2936130	RO-R4-03	Not Given	11.00	11.21	C	Light grey CHALK	WC = 22.7%	1	A	U	YES	-	100.3	68.0	58.0	1.8	86.1	0.24	0.30
2936131	RO-R4-04	Not Given	3.00	3.11	C	White CHALK	WC = 18.5%	1	I	U	YES	50.7	78.2	37.0	32.0	1.6	56.4	0.49	0.51
2936132	RO-R4-04	Not Given	6.50	6.62	C	Cream colour CHALK	WC = 12.2%	1	A	U	YES	-	98.7	63.0	46.0	3.6	76.0	0.61	0.74
2936133	RO-R4-04	Not Given	8.00	8.16	C	White mottled cream colour CHALK	WC = 10.1%	1	A	P	YES	-	99.0	51.0	43.0	1.7	73.6	0.30	0.36

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936133_1	RO-R4-04	Not Given	8.00	8.16	C	White mottled cream colour CHALK	WC = 9.5%	1	I	U	YES	38.6	50.2	39.0	31.0	1.3	44.5	0.66	0.62
2936134_1	RO-R4-04	Not Given	13.16	13.49	C	White CHALK	WC = 23.1%	1	D	U	YES	74.6	99.7	99.0	93.0	1.8	96.3	0.19	0.26
2936134	RO-R4-04	Not Given	13.16	13.49	C	White CHALK	WC = 25.2%	1	A	U	YES	-	100.2	48.0	34.0	1.4	65.9	0.31	0.35
2936135	RO-R4-04	Not Given	15.22	15.43	C	White CHALK	WC = 19.9%	1	I	U	YES	55.8	85.1	73.0	68.0	0.7	85.8	0.10	0.12
2936136	RO-R5-01	Not Given	7.03	7.20	C	White CHALK	WC = 10.9%	1	I	U	YES	50.3	54.3	35.0	28.0	1.4	44.0	0.72	0.68
2936137	RO-R5-01	Not Given	15.16	15.42	C	Cream colour CHALK	WC = 20.3%	1	A	U	YES	-	102.0	41.0	35.0	0.7	67.4	0.14	0.16
2936137_1	RO-R5-01	Not Given	15.16	15.42	C	Cream colour CHALK	WC = 20.4%	1	A	U	YES	-	101.5	87.0	78.0	1.2	100.4	0.12	0.16
2936138	RO-R5-02	Not Given	6.82	6.88	C	White CHALK	WC = 11.1%	1	I	U	YES	47.8	65.1	46.0	39.0	0.9	56.9	0.28	0.29
2936139	RO-R5-02	Not Given	13.78	13.98	C	White CHALK	WC = 27.5%	1	I	U	YES	54.6	92.3	62.0	53.0	0.6	78.9	0.10	0.12
2936140	RO-R5-03	Not Given	7.33	7.62	C	White CHALK	WC = 15.5%	1	A	U	YES	-	99.4	68.0	59.0	1.5	86.4	0.19	0.25

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock Bridges (Schedule 2)

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 24-79644-1
Date Sampled: Not Given
Date Received: 22/01/2024
Date Tested: 09/02/2024
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks # (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
2936140_1	RO-R5-03	Not Given	7.33	7.62	C	White CHALK	WC = 15.1%	1	A	U	YES	-	99.7	76.0	70.0	1.3	94.2	0.15	0.19
2936141_1	RO-R5-03	Not Given	13.11	13.32	C	White CHALK	WC = 24.9%	1	D	U	YES	56.9	99.3	99.0	92.0	0.9	95.6	0.10	0.13
2936141	RO-R5-03	Not Given	13.11	13.32	C	White CHALK	WC = 25.4%	1	A	U	YES	-	99.7	66.0	49.0	1.4	78.9	0.22	0.27
2936142	RO-R5-03	Not Given	14.24	14.51	C	White CHALK	WC = 22.2%	1	I	U	YES	51.3	89.7	63.0	51.0	1.2	76.3	0.21	0.25
2936142_1	RO-R5-03	Not Given	14.24	14.51	C	White CHALK	WC = 21.8%	1	D	U	YES	53.6	101.5	101.0	95.0	1.0	98.2	0.10	0.14
2936143_1	RO-R5-04	Not Given	4.30	4.50	C	White CHALK	WC = 19.8%	1	I	U	YES	34.9	52.8	42.0	35.0	1.2	48.5	0.51	0.50
2936143	RO-R5-04	Not Given	4.30	4.50	C	White CHALK	WC = 20.9%	1	A	U	YES	-	100.3	53.0	42.0	1.7	73.2	0.32	0.38
2936144	RO-R5-04	Not Given	10.43	10.67	C	Cream colour CHALK	WC = 11.2%	1	A	U	YES	-	100.4	41.0	32.0	1.4	64.0	0.33	0.37
2936144_1	RO-R5-04	Not Given	10.43	10.67	C	Cream colour CHALK	WC = 10.5%	1	D	U	YES	56.6	100.2	100.0	95.0	2.1	97.6	0.22	0.30
2936145	RO-R5-04	Not Given	12.83	12.92	C	White CHALK	WC = 27.5%	1	I	U	YES	49.9	88.7	74.0	42.0	1.1	68.9	0.23	0.27

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 14/03/2023 - 14/03/2024

Comments:

Signed:

Katarzyna Koziel
Senior Reporting Specialist
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION WATER CONTENT OF CHALK

Tested in Accordance with: BS EN ISO 17892-2:2014, clause 5.2 and BS 1377: Part 2:2022, clause 4.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 26/02 - 27/02/2025
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top m	Depth Base m	Type							
448531	RC-32	Not Given	6.10	Not Given	B	White CHALK		28.9	1.52	1.52	0.2	
448532	RC-33	Not Given	4.73	Not Given	D	White CHALK		27.3	1.58	1.55	1.6	
448533	RC-33	Not Given	9.20	Not Given	B	White CHALK		27.4	1.90	1.55	22.2	
448497	RO-01	Not Given	3.94	4.12	C	White CHALK		27.4	1.97	1.55	26.8	
448498	RO-04	D1	Not Given	Not Given	B	White CHALK		18.9	2.08	1.79	16.5	
448499	RO-06	D1	Not Given	Not Given	B	White CHALK		18.4	2.08	1.80	15.1	
448500	RO-06	D2	Not Given	Not Given	B	White CHALK		18.9	2.06	1.79	15.3	
448501	RO-06	D3	Not Given	Not Given	D	White CHALK		22.4	2.00	1.68	19.1	
448502	RO-08	D1	Not Given	Not Given	D	White CHALK		26.4	1.88	1.58	19.0	
448503	RO-08	D2	Not Given	Not Given	D	White CHALK		27.6	1.90	1.55	22.7	

Note: SWC - Saturation Water Content; WC - Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022 clause 4.1

Comments:

Signed:

Katarzyna Koziel
Geotechnical Reporting Team Leader
for and on behalf of i2 Analytical Ltd

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SUMMARY REPORT

METHOD FOR SATURATION WATER CONTENT OF CHALK

Tested in Accordance with: BS EN ISO 17892-2:2014, clause 5.2 and BS 1377: Part 2:2022, clause 4.2

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 14/02 - 25/02/2025
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top m	Depth Base m	Type							
448504	RO-08	D3	Not Given	Not Given	D	White CHALK		21.4	2.00	1.71	17.2	
448505	RO-08	D4	Not Given	Not Given	D	White CHALK		23.4	1.95	1.65	17.6	
448506	RO-09	D1	Not Given	Not Given	B	White CHALK		24.0	2.00	1.64	22.0	
448507	RO-10	D1	Not Given	Not Given	D	White CHALK		23.8	2.02	1.64	22.7	
448508	RO-10	D2	Not Given	Not Given	D	White CHALK		25.4	1.98	1.60	23.5	
448509	RO-11	D1	Not Given	Not Given	D	White CHALK		18.9	2.08	1.79	16.1	
448510	RO-11	D2	Not Given	Not Given	B	White CHALK		21.8	2.01	1.70	18.5	
448511	RO-11	D3	Not Given	Not Given	D	White CHALK		14.3	2.20	1.95	13.0	
448512	RO-13	D1	Not Given	Not Given	B	White CHALK		25.9	1.92	1.59	21.1	
448513	RO-13	D2	Not Given	Not Given	D	White CHALK		27.5	1.94	1.55	25.4	

Note: SWC - Saturation Water Content; WC - Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022 clause 4.1

Comments:

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i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

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NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 21/02 - 26/02/2025
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top m	Depth Base m	Type							
448514	RO-14	D1	Not Given	Not Given	B	White CHALK		22.0	2.00	1.69	18.0	
448515	RO-14	D2D	Not Given	Not Given	B	White CHALK		24.4	1.97	1.63	21.2	
448516	RO-14	D3	Not Given	Not Given	B	White CHALK		15.8	2.14	1.89	13.3	
448517	RO-14	D4	Not Given	Not Given	D	White CHALK		11.0	2.21	2.08	6.1	
448518	RO-16	D1	Not Given	Not Given	B	White CHALK		10.8	2.28	2.09	9.1	
448519	RO-16	D2	Not Given	Not Given	B	White CHALK		18.2	2.09	1.81	15.1	
448520	RO-20	D1	Not Given	Not Given	B	White CHALK		22.5	1.98	1.68	18.2	
448521	RO-20	D2	Not Given	Not Given	B	White CHALK		19.5	2.04	1.77	15.6	
448522	RO-20	D3	Not Given	Not Given	D	White CHALK		22.0	2.01	1.69	18.5	
448523	RO-20	D4	Not Given	Not Given	B	White CHALK		19.9	2.03	1.76	15.6	

Note: SWC - Saturation Water Content; WC - Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022 clause 4.1

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Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 26/02 - 27/02/2025
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top m	Depth Base m	Type							
448524	RO-21	Not Given	9.18	9.50	C	White CHALK		38.7	1.73	1.32	30.6	
448525	RO-23	Not Given	Not Given	Not Given	B	White CHALK		27.5	1.73	1.55	11.4	
448526	RO-24	D2	Not Given	Not Given	B	White CHALK		20.6	2.00	1.74	15.1	
448527	RO-26	D2	Not Given	Not Given	B	White CHALK		21.3	2.06	1.71	20.1	
448528	RO-26	D3	Not Given	Not Given	B	White CHALK		12.2	2.26	2.03	11.1	
448529	RO-28	D1	Not Given	Not Given	D	White CHALK		19.8	2.06	1.76	16.8	
448530	RO-28	D2	Not Given	Not Given	B	White CHALK		17.0	2.22	1.85	20.2	
448534	RO-35	D1	Not Given	Not Given	B	White CHALK		28.5	1.61	1.53	5.4	
448535	RO-35	D2	Not Given	Not Given	B	White CHALK		29.7	1.87	1.50	24.5	
448536	RO-35	D3	Not Given	Not Given	B	White CHALK		38.4	1.60	1.33	20.8	

Note: SWC - Saturation Water Content; WC - Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022 clause 4.1

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Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 14/02 - 25/02/2025
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	SWC	Bulk density	Dry density	WC	Preparation
		Reference	Depth Top m	Depth Base m	Type							
448537	RO-R1-02	D1	Not Given	Not Given	D	White CHALK		27.2	1.88	1.56	20.7	
448538	RO-R2/R3-01	D1	Not Given	Not Given	B	White CHALK		18.9	2.08	1.79	16.1	
448539	RO-R2/R3-01	D2	Not Given	Not Given	B	White CHALK		19.8	2.02	1.76	14.9	
448540	RO-R4-03	D1	Not Given	Not Given	B	White CHALK		17.9	2.10	1.82	15.4	
448541	RO-R4-03	D2	Not Given	Not Given	B	White CHALK		22.3	2.01	1.68	19.5	
448542	RO-R4-03	D3	Not Given	Not Given	C	White CHALK		16.9	2.14	1.85	15.2	
448543	RO-R4-03	D4	Not Given	Not Given	B	White CHALK		24.8	1.99	1.62	22.8	
448544	RO-R4-04	D1	Not Given	Not Given	B	White CHALK		29.2	1.91	1.51	26.7	
448545	RO-R4-04	D2	Not Given	Not Given	C	White CHALK		26.0	1.97	1.59	24.4	
448546	RO-R5-02	D1	Not Given	Not Given	B	White CHALK		28.7	1.83	1.52	20.4	

Note: SWC - Saturation Water Content; WC - Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022 clause 4.1

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METHOD FOR SATURATION WATER CONTENT OF CHALK

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Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group

Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899

Job Number: 25-006189-1

Date Sampled: Not Given

Date Received: 10/02/2025

Date Tested: 27/02/2025

Sampled By: Not Given

[illegible]

Note: SWC - Saturation Water Content; WC - Water Content by BS EN ISO 17892-1:2014+A1:2022, BS 1377-2: 2022 clause 4.1

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 26/02 - 27/02/2025
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
448531	RC-32	Not Given	6.10	Not Given	B	White CHALK	WC = 0.2%	1	D	U	YES	54.4	101.0	101.0	98.0	1.9	99.5	0.19	0.26
448532	RC-33	Not Given	4.73	Not Given	D	White CHALK	WC = 1.7%	1	I	U	YES	33.8	58.2	58.0	54.0	0.4	63.3	0.10	0.11
448533	RC-33	Not Given	9.20	Not Given	B	White CHALK	WC = 22.5%	1	A	U	YES	-	94.3	76.0	71.0	0.4	92.3	0.05	0.06
448497	RO-01	Not Given	3.94	4.12	C	White CHALK	WC = 19.5%	1	D	U	YES	66.4	99.8	100.0	96.0	0.8	97.9	0.08	0.11
448499	RO-06	D1	Not Given	Not Given	B	White CHALK	WC = 15.9%	1	D	U	YES	58.8	100.7	100.0	92.0	1.7	96.2	0.18	0.25
448500	RO-06	D2	Not Given	Not Given	B	White CHALK	WC = 15.1%	1	A	U	YES	-	100.6	84.0	78.0	2.4	100.0	0.24	0.33
448501	RO-06	D3	Not Given	Not Given	D	White CHALK	WC = 17.9%	1	I	U	YES	56.6	100.7	73.0	66.0	1.7	92.0	0.19	0.26
448503	RO-08	D2	Not Given	Not Given	D	White CHALK	WC = 21.9%	1	A	U	YES	-	101.6	57.0	48.0	1.3	78.8	0.20	0.25
448506	RO-09	D1	Not Given	Not Given	B	White CHALK	WC = 23.7%	1	I	U	YES	64.2	85.6	82.0	72.0	1.4	88.6	0.18	0.23
448510	RO-11	D2	Not Given	Not Given	B	White CHALK	WC = 17.2%	1	D	U	YES	53.3	100.5	99.0	94.0	2.1	97.2	0.22	0.29

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed:

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Geotechnical Reporting Team Leader
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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 26/02 - 27/02/2025
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
448514	RO-14	D1	Not Given	Not Given	B	White CHALK	WC = 19.1%	1	I	U	YES	55.8	90.1	81.0	74.0	2.5	92.1	0.29	0.38
448516	RO-14	D3	Not Given	Not Given	B	White CHALK	WC = 14.7%	1	A	U	YES	-	90.0	60.0	50.0	1.6	75.7	0.27	0.33
448517	RO-14	D4	Not Given	Not Given	D	White CHALK	WC = 6.3%	1	A	U	YES	-	88.4	59.0	52.0	5.8	76.5	0.98	1.19
448518	RO-16	D1	Not Given	Not Given	B	White CHALK	WC = 7.5%	1	I	U	YES	92.6	101.1	58.0	55.0	2.2	84.1	0.31	0.39
448520	RO-20	D1	Not Given	Not Given	B	White CHALK	WC = 19.0%	1	D	U	YES	86.0	85.5	85.0	77.0	2.3	81.2	0.34	0.42
448523	RO-20	D4	Not Given	Not Given	B	White CHALK	WC = 14.5%	1	D	U	YES	69.5	87.8	87.0	83.0	2.0	85.4	0.27	0.35
448524	RO-21	Not Given	9.18	9.50	C	White CHALK	WC = 29.3%	1	D	U	YES	108.4	100.3	100.0	95.0	0.8	97.6	0.08	0.11
448525	RO-23	Not Given	4.00	Not Given	B	White CHALK	WC = 12.4%	1	D	U	YES	53.5	100.0	99.0	92.0	2.8	95.9	0.30	0.40
448526	RO-24	D2	Not Given	Not Given	B	White CHALK	WC = 13.5%	1	D	U	YES	55.2	99.7	99.0	95.0	1.5	97.3	0.16	0.21
448529	RO-28	D1	Not Given	Not Given	D	White CHALK	WC = 16.2%	1	A	U	YES	-	101.4	40.0	33.0	1.5	65.3	0.35	0.40

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

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SUMMARY REPORT

DETERMINATION OF POINT LOAD STRENGTH

Tested in Accordance with: ISRM: 2007, pages 125-132

i2 Analytical Ltd
Unit 8 Harrowden Road
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Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 26/02 - 27/02/2025
Sampled By: Not Given

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks (including water content if measured)	Specimen Reference	Test Type see ISRM		Failure Valid (Y/N)	Dimensions				Force P kN	Equivalent diameter, De mm	Point Load Strength Index	
		Reference	Depth Top m	Depth Base m	Type				Type (D, A, I, B)	Direction (L, P or U)		Lne mm	W mm	Dps mm	Dps' mm			Is MPa	Is(50) MPa
448534	RO-35	D1	Not Given	Not Given	B	White CHALK	WC = 4.1%	1	D	U	YES	61.5	100.9	100.0	95.0	0.4	97.9	0.04	0.05
448536	RO-35	D3	Not Given	Not Given	B	White CHALK	WC = 20.9%	1	D	U	YES	81.8	100.8	99.0	95.0	0.4	97.8	0.04	0.06
448537	RO-R1-02	D1	Not Given	Not Given	D	White CHALK	WC = 20.2%	1	A	U	YES	-	102.9	51.0	42.0	2.2	74.2	0.40	0.48
448539	RO-R2/R3-01	D2	Not Given	Not Given	B	White CHALK	WC = 16.2%	1	A	U	YES	-	100.3	92.0	80.0	3.3	101.1	0.32	0.44
448540	RO-R4-03	D1	Not Given	Not Given	B	White CHALK	WC = 14.7%	1	D	U	YES	53.7	99.3	99.0	95.0	1.2	97.1	0.13	0.17
448541	RO-R4-03	D2	Not Given	Not Given	B	White CHALK	WC = 18.8%	1	D	U	YES	56.9	100.0	99.0	94.0	0.4	96.9	0.04	0.06
448543	RO-R4-03	D4	Not Given	Not Given	B	White CHALK	WC = 23.9%	1	A	U	YES	-	99.6	75.0	53.0	2.9	82.0	0.43	0.54
448544	RO-R4-04	D1	Not Given	Not Given	B	White CHALK	WC = 26.8%	1	D	U	YES	94.0	98.6	97.0	92.0	1.9	95.2	0.21	0.28
448545	RO-R4-04	D2	Not Given	Not Given	C	White CHALK	WC = 24.3%	1	I	U	YES	105.4	97.8	67.0	65.0	1.4	90.0	0.17	0.23
448546	RO-R5-02	D1	Not Given	Not Given	B	White CHALK	WC = 21.0%	1	A	U	YES	-	101.2	60.0	52.0	2.4	81.8	0.35	0.44

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random;
Dimensions: Dps - Distance between platens (platen separation), Dps' - at failure (see ISRM note 6), Lne - Length from platens to nearest free end W - Width of shortest dimension perpendicular to load, P;
Detailed legend for test and dimensions, based on ISRM, is shown above; Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed:

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DETERMINATION OF POINT LOAD STRENGTH

i2 Analytical Ltd
Unit 8 Harrowden Road
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Northampton NN4 7EB



Environmental Science

Client: The Shadbolt Group

Client Address: 18 Bewick Road, Gateshead,
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Contact: Stephen Fisk
Site Address: Baldock - Supplementary

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Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 27/02/2025
Sampled By: Not Given

[illegible]

Note: # non accredited; Test Type: D - Diametral, A - Axial, I - Irregular Lump, B - Block; Direction: L - parallel to planes of weakness, P - perpendicular to planes of weakness, U - unknown or random; Dimensions: Dps - Distance between platens (platen separation), Dps_f - at failure (see ISRM note 6), Lne - Length from platens to nearest free end and W - Width of shortest dimension perpendicular to load, P₁ - Detailed legend for test and dimensions, based on ISRM, is shown above. Size factor, F = (De/50)0.45 for all tests

Equipment No.: i2 4341 Calibration Date: 15/03/2024 - 15/03/2025

Comments:

Signed:

Katarzyna Koziel
Geotechnical Reporting Team Leader
for and on behalf of i2 Analytical Ltd

Opinions and interpretations expressed herein are outside of the scope of the UKAS Accreditation. This report may not be reproduced other than in full without the prior written approval of the issuing laboratory. The results included within the report relate only to the sample(s) submitted for testing.



SUMMARY REPORT

DETERMINATION OF UNIAXIAL COMPRESSIVE STRENGTH OF ROCK MATERIALS

Tested in Accordance with: ISRM, 2007, p153, part 1

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB



Environmental Science

4041

Client: The Shadbolt Group
Client Address: 18 Bewick Road, Gateshead,
NE8 4DP

Contact: Stephen Fisk
Site Address: Baldock - Supplementary

Testing carried out at i2 Analytical Limited, ul. Pionierow, 41-711 Ruda Slaska, Poland

Client Reference: 2899
Job Number: 25-006189-1
Date Sampled: Not Given
Date Received: 10/02/2025
Date Tested: 26/02/2025
Sampled By: Not Given

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Specimen Dimensions (2)				Bulk density (2)	Water Content (1)	Uniaxial Compression (3)			
		Reference	Depth Top	Depth Base	Type			Diameter	Length	H/D	Orientation of sample			Condition	Stress Rate	Mode of failure	UCS
			m	m													
448521	RO-20	D2	Not Given	Not Given	B	White CHALK	Sample is below recommended length to diameter ratio.	89.8	77.9	0.9	Vertical	2.06	17.0	as received	0.0158	AC	9.06
448535	RO-35	D2	Not Given	Not Given	B	White CHALK	Sample is below recommended length to diameter ratio. *	100.8	103.2	1.0	Vertical	1.86	26.1	as received	0.0125	AC	1.79
448542	RO-R4-03	D3	Not Given	Not Given	C	White CHALK	Sample is below recommended length to diameter ratio.	100.7	124.0	1.2	Vertical	2.21	12.7	as received	0.0126	S + AC	5.57

Note: 1 - ISRM p87 test 1, water content at 105 ± 3 °C, specimen as tested for UCS, 2 - ISRM p86 clause (vii), Caliper method used for determination of bulk volume and derivation of bulk density, 3 - ISRM p153 part 1, determination of Uniaxial Compressive Strength (UCS) of Rock Materials, above notes apply unless annotated otherwise in the remarks. Compaction machine: VJ Tech AUTOCON - VJT 51-3011; Mode of failure legend: S - Single shear, MS - multiple shear, AC - Axial cleavage, F - Fragmented

Comments: * - Duration of test, fell below time specified in ISRM method, 2007, p153, part1.

Signed:

Katarzyna Koziel
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APPENDIX F

GROUND GAS AND GROUNDWATER MONITORING RESULTS

GAS RISK ASSESSMENT TABLE (CIRIA C665)

GAS PROTECTION MEASURES ASSESSMENT TABLES (BS8485:2015)

The Shadbolt Group

18 Bewick Road, Gateshead, Tyne & Wear, NE8 4DP Tel: 0191 478 3330 Email: admin@shadboltgroup.net

GROUNDWATER / GAS MONITORING RECORD SHEET



SHADBOLT
ENVIRONMENTAL

Site:	Baldock											Job No:		2899			
Client:	Urban & Civic											Date:		17/11/2023			
												Weather:		Clear/Windy			
Monitored by:	HB											Instruments Used:		GFM 436 + Dipmeter			
												Pressure Trend:		Rising			
Borehole		Borehole surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks	
			Peak	Steady	Peak	Steady	Peak	Steady	Steady	Steady	Peak (Steady)	Pressure	Depth	Depth	Depth		
			(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	PPM	PPM	(l/hr)	(mbar)	(m bgl)	(m aOD)	(m bgl)		
Ambient						20.4	20.4					1008					
WS-01			0.0	0.0	1.2	1.2	18.9	18.7	0.0	0.0	0.0	1008	DRY		1.62		
WS-02			0.0	0.0	1.5	1.5	19.1	18.1	0.0	0.0	0.0	1009	DRY		1.43		
WS-03			0.0	0.0	0.0	0.0	20.2	20.2	0.0	0.0	0.0	1008	DRY		3.77		
WS-04			0.0	0.0	0.6	0.6	19.0	18.7	0.0	0.0	0.0	1009	DRY		1.66		
WS-05			0.0	0.0	0.6	0.6	19.5	19.4	0.0	0.0	0.0	1008	DRY		2.00		
WS-06			0.0	0.0	1.0	1.0	19.6	19.2	0.0	0.0	0.0	1008	DRY		1.33		
WS-07			0.0	0.0	0.8	0.8	19.1	18.7	0.0	0.0	0.0	1008	DRY		1.68		
WS-09			0.0	0.0	0.6	0.6	19.3	18.5	0.0	0.0	0.0	1009	DRY		1.66		
WS-10			0.0	0.0	1.0	1.0	20.0	19.0	0.0	0.0	0.0	1009	DRY		1.44		
WS-11			0.0	0.0	0.4	0.2	19.8	19.8	0.0	0.0	0.0	1008	DRY		1.45		
WS-12			0.0	0.0	0.4	0.3	19.8	19.8	0.0	0.0	0.0	1009	DRY		1.68		
WS-13			0.0	0.0	0.8	0.8	19.2	18.9	0.0	0.0	0.0	1008	DRY		1.36		
WS-16			0.0	0.0	0.9	0.9	16.4	15.5	0.0	0.0	0.0	1009	DRY		1.69		
WS-17			0.0	0.0	0.8	0.8	19.1	19.1	0.0	0.0	0.0	1008	DRY		1.83		
WS-18			0.0	0.0	0.7	0.7	20.5	19.8	0.0	0.0	0.0	1009	DRY		1.87		
WS-20			0.0	0.0	0.1	0.1	20.1	20.1	0.0	0.0	0.0	1008	DRY		1.84		
WS-21			0.0	0.0	1.1	1.1	19.4	18.8	0.0	0.0	0.0	1008	DRY		1.72		
WS-22			0.0	0.0	0.2	0.2	20.0	19.8	0.0	0.0	0.0	1009	DRY		1.69		
WS-23			0.0	0.0	1.1	1.1	18.8	18.2	0.0	0.0	0.0	1008	DRY		1.93		
WS-24			0.0	0.0	0.8	0.8	19.5	18.8	0.0	0.0	0.0	1008	DRY		1.98		
WS-25			0.0	0.0	0.7	0.6	19.4	19.4	0.0	0.0	0.0	1008	DRY		1.80		
WS-32			0.0	0.0	0.8	0.8	18.6	18.1	0.0	0.0	0.0	1008	DRY		1.44		
WS-33			0.0	0.0	0.5	0.5	19.2	19.2	0.0	0.0	0.0	1008	DRY		1.97		
WS-35			0.0	0.0	0.3	0.3	19.8	19.8	0.0	0.0	0.0	1009	DRY		1.69		
WS-41			0.0	0.0	0.2	0.2	20.1	20.1	0.0	0.0	0.0	1009	DRY		1.90		
WS-49			0.0	0.0	0.7	0.7	20.2	19.4	0.0	0.0	0.0	1008	DRY		3.88		
RO-R1-01			0.0	0.0	0.5	0.5	20.1	20.1	0.0	0.0	0.0	1009	DRY		16.00		
RO-R1-02			0.0	0.0	0.5	0.4	19.4	19.4	0.0	0.0	0.0	1008	DRY		15.73		
RO-R5-R1			0.0	0.0	0.1	0.1	20.3	20.3	0.0	0.0	0.0	1008	Water observed - unable to measure		15.66		
RO-R5-R2			0.0	0.0	0.3	0.3	20.1	20.1	0.0	0.0	0.0	1008	Water observed - unable to measure		16.11		

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
- 2 The steady reading is the level which remained constant after approximately 1 minute.

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SHADBOLT
ENVIRONMENTAL

Notes:
1 The peak reading is the maximum recorded level during a monitoring event.
2 The steady reading is the level which remained constant after approximately 1 minute.

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Site:	Baldock											Job No:		2899		
												Date:		09/01/2024		
Client:	Urban & Civic											Weather:		Raining/Windy		
												Instruments Used:		GFM 436 + Dipmeter		
Monitored by:	HB											Pressure Trend:		Decrease		
												Atmospheric		Water	Water	Base
Borehole		Borehole surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Pressure	Depth	Depth	Depth	
			Peak	Steady	Peak	Steady	Peak	Steady	Steady	Steady	Peak (Steady)	(mbar)	(m bgl)	(m aOD)	(m bgl)	
Ambient			(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	(% vol)	PPM	PPM	(l/hr)					
WS-01			0.0	0.0	1.0	1.0	18.7	18.3	0.0	0.0	0.0	1019	DRY		1.60	
WS-02			0.0	0.0	1.5	1.5	17.7	17.5	0.0	0.0	0.0	1020	DRY		1.43	
WS-03			0.0	0.0	0.3	0.3	20.6	20.0	0.0	0.0	0.0	1021	DRY		3.78	
WS-04			0.0	0.0	0.8	0.7	18.8	18.8	0.0	0.0	0.0	1020	DRY		1.74	
WS-05			0.0	0.0	0.9	0.9	18.7	18.7	0.0	0.0	0.0	1021	DRY		1.94	
WS-06			0.0	0.0	1.0	1.0	19.1	18.6	0.0	0.0	0.0	1020	DRY		1.31	
WS-07			0.0	0.0	0.6	0.5	19.6	19.3	0.0	0.0	0.0	1021	DRY		1.68	
WS-09			0.0	0.0	0.9	0.9	18.4	18.4	0.0	0.0	0.0	1021	DRY		1.50	
WS-10			0.0	0.0	0.8	0.8	18.9	18.9	0.0	0.0	0.0	1020	DRY		1.40	
WS-11			0.0	0.0	0.4	0.3	19.9	19.9	0.0	0.0	0.0	1019	0.68		1.48	
WS-12			0.0	0.0	0.9	0.8	19.4	19.2	0.0	0.0	0.0	1021	DRY		1.76	
WS-13			0.0	0.0	0.7	0.7	19.7	19.3	0.0	0.0	0.0	1021	DRY		1.36	
WS-16			0.0	0.0	0.7	0.7	17.7	16.9	0.0	0.0	0.0	1021	DRY		1.76	
WS-17			0.0	0.0	0.1	0.0	20.0	20.0	0.0	0.0	0.0	1021	DRY		1.85	
WS-18			0.0	0.0	0.0	0.0	20.4	20.4	0.0	0.0	0.0	1021	DRY		1.84	
WS-19			0.0	0.0	0.0	0.0	20.2	20.2	0.0	0.0	0.0	1019	DRY		1.76	
WS-20			0.0	0.0	0.0	0.0	20.1	20.1	0.0	0.0	0.0	1019	DRY		1.82	
WS-21			0.0	0.0	0.5	0.5	19.5	19.5	0.0	0.0	0.0	1021	DRY		1.69	
WS-22			0.0	0.0	1.0	1.0	17.8	17.4	0.0	0.0	0.0	1021	DRY		1.69	
WS-24			0.0	0.0	0.6	0.6	19.7	19.7	0.0	0.0	0.0	1019	DRY		1.98	
WS-25			0.0	0.0	0.2	0.2	20.3	20.3	0.0	0.0	0.0	1021	DRY		1.85	
WS-32			0.0	0.0	0.0	0.0	19.7	19.7	0.0	0.0	0.0	1020	DRY		1.44	
WS-33			0.0	0.0	0.3	0.3	20.2	20.2	0.0	0.0	0.0	1019	DRY		2.00	
WS-35			0.0	0.0	0.9	0.9	20.1	20.1	0.0	0.0	0.0	1020	DRY		1.70	
WS-40			0.0	0.0	1.2	1.2	18.5	18.5	0.0	0.0	0.0	1022	DRY		2.93	
WS-41			0.0	0.0	0.7	0.3	19.3	19.3	0.0	0.0	0.0	1021	DRY		1.86	
WS-49			0.0	0.0	0.7	0.7	19.2	19.2	0.0	0.0	0.0	1019	DRY		3.94	
WS-51			0.0	0.0	0.9	0.9	19.1	19.1	0.0	0.0	0.0	1022	DRY		1.47	
RO-R1-01			0.0	0.0	1.											

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SHADBOLT
ENVIRONMENTAL

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
- 2 The steady reading is the level which remained constant after approximately 1 minute.

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SHADBOLT

ENVIRONMENTAL

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
- 2 The steady reading is the level which remained constant after approximately 1 minute.

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Site:	Baldock											Job No:		2899		
												Date:		20/02/2024		
Client:	Urban & Civic											Weather:		Partly Cloudy		
												Instruments Used:		GFM 436 + Dipmeter		
Monitored by:	HB											Pressure Trend:				
Borehole		Borehole surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)	
Ambient						0.0	20.8					1012				
WS-01			0.0	0.0	1.0	0.9	18.2	17.9	0.0	0.0	0.0	1011	DRY		1.60	
WS-02			0.0	0.0	1.2	1.2	18.3	18.3	0.0	0.0	0.0	1011	DRY		1.37	
WS-03			0.0	0.0	0.4	0.4	20.3	20.0	0.0	0.0	0.0	1012	DRY		3.76	
WS-04			0.0	0.0	1.1	1.1	17.5	17.5	0.0	0.0	0.0	1011	DRY		1.60	
WS-05			0.0	0.0	0.9	0.9	19.0	19.0	0.0	0.0	0.0	1011	DRY		1.90	
WS-06			0.0	0.0	0.9	0.9	17.8	17.7	0.0	0.0	0.0	1011	DRY		1.34	
WS-07			0.0	0.0	0.8	0.8	18.9	18.9	0.0	0.0	0.0	1011	DRY		1.60	
WS-09			0.0	0.0	0.9	0.9	18.3	17.6	0.0	0.0	0.0	1011	DRY		1.61	
WS-10			0.0	0.0	0.8	0.8	17.4	17.4	0.0	0.0	0.0	1011	DRY		1.41	
WS-11			0.0	0.0	0.0	0.0	20.5	20.5	0.0	0.0	0.0	1011	0.47		1.37	
WS-12			0.0	0.0	0.1	0.1	20.3	20.3	0.0	0.0	0.0	1009	DRY		1.65	
WS-13			0.0	0.0	0.5	0.5	19.7	19.6	0.0	0.0	0.0	1012	DRY		1.35	
WS-16			0.0	0.0	0.1	0.1	19.9	19.9	0.0	0.0	0.0	1011	DRY		1.54	
WS-17			0.0	0.0	0.7	0.7	19.4	19.1	0.0	0.0	0.0	1012	DRY		1.77	
WS-18			0.0	0.0	0.7	0.7	18.7	18.7	0.0	0.0	0.0	1011	DRY		1.83	
WS-19			0.0	0.0	0.5	0.5	20.4	19.6	0.0	0.0	0.0	1011	DRY		1.60	
WS-20			0.0	0.0	0.7	0.7	19.4	19.4	0.0	0.0	0.0	1011	DRY		1.76	
WS-21			0.0	0.0	0.3	0.3	20.3	19.7	0.0	0.0	0.0	1010	DRY		1.72	
WS-22			0.0	0.0	0.1	0.1	20.5	20.5	0.0	0.0	0.0	1012	DRY		1.54	
WS-23			0.0	0.0	0.5	0.5	20.0	19.6	0.0	0.0	0.0	994	DRY		1.86	
WS-24			0.0	0.0	0.0	0.0	20.6	20.6	0.0	0.0	0.0	1011	DRY		1.87	
WS-25			0.0	0.0	0.2	0.2	20.3	20.3	0.0	0.0	0.0	1010	DRY		1.80	
WS-32			0.0	0.0	1.3	1.3	18.4	17.9	0.0	0.0	0.0	1011	DRY		1.38	
WS-33			0.0	0.0	0.8	0.8	19.4	18.9	0.0	0.0	0.0	1011	DRY		1.90	
WS-35			0.0	0.0	0.7	0.7	19.7	19.7	0.0	0.0	0.0	1011	DRY		1.54	
WS-40			0.0	0.0	1.2	1.2	18.8	18.6	0.0	0.0	0.0	1012	DRY		2.93	
WS-41			0.0	0.0	0.8	0.8	19.2	19.2	0.0	0.0	0.0	1012	DRY		1.86	
WS-49			0.0	0.0												

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GROUNDWATER / GAS MONITORING RECORD SHEET



SHADBOLT
ENVIRONMENTAL

Site:	Baldock											Job No:		2899		
Client:	Urban & Civic											Date:		05/03/2024		
												Weather:		Partly Cloudy		
Monitored by:	HB											Instruments Used:		GFM 436 + Dipmeter		
												Pressure Trend:		Increasing		
Borehole		Borehole surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)	
Ambient						0.0	20.4					1001				
WS-26			0.0	0.0	0.0	0.0	20.4	20.4	0.0	0.0	0.0	1002	DRY		1.48	
WS-34			0.0	0.0	0.7	0.7	19.7	19.5	0.0	0.0	0.0	1002	DRY		3.94	
WS-36			0.0	0.0	1.4	1.4	17.8	17.5	0.0	0.0	0.0	1001	DRY		1.66	
WS-40			0.0	0.0	1.8	1.8	17.7	17.7	0.0	0.0	0.0	1002	DRY		2.91	
WS-51			0.0	0.0	2.0	2.0	17.8	17.4	0.0	0.0	0.0	1002	DRY		1.41	
RO-R1-01			0.0	0.0	0.9	0.9	19.2	19.2	0.0	0.0	0.0	1001	8.85		15.83	
RO-R1-02			0.0	0.0	0.7	0.7	19.2	19.0	0.0	0.0	0.0	1000	10.00		15.76	
RO-R2/R3-01			0.0	0.0	1.7	1.7	17.7	17.7	0.0	0.0	0.0	1002	4.95		15.80	
RO-R2/R3-02			0.0	0.0	0.8	0.8	19.0	19.0	0.0	0.0	0.0	1001	5.06		15.98	
RO-R5-R1			0.0	0.0	1.4	1.4	15.8	15.4	0.0	0.0	0.0	1002	5.65		15.35	
RO-R5-R2			0.0	0.0	1.4	1.4	16.9	16.9	0.0	0.0	0.0	1002	4.95		15.85	

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
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GROUNDWATER / GAS MONITORING RECORD SHEET



SHADBOLT

ENVIRONMENTAL

Site:	Baldock											Job No:		2899			
Client:	Urban & Civic											Date:		21/05/2024			
												Weather:		Raining			
Monitored by:	HB											Instruments Used:		GFM 436 + Dipmeter			
												Pressure Trend:		Falling			
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks	
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)		
Ambient						20.3	20.3					1000					
WS-14			0.0	0.0	1.0	1.0	19.2	19.2	0.0	0.0	0.0	999	DRY		3.82		
WS-15			0.0	0.0	1.0	1.0	19.3	19.3	0.0	0.0	0.0	999	DRY		1.82		
WS-27			0.0	0.0	1.5	1.5	19.1	18.4	0.0	0.0	0.0	1001	DRY		1.33		
WS-28			0.0	0.0	0.8	0.8	19.9	19.8	0.0	0.0	0.0	1001	DRY		3.82		
WS-29			0.0	0.0	0.7	0.7	19.6	19.6	0.0	0.0	0.0	1001	DRY		1.47		
WS-37			0.0	0.0	1.1	1.0	19.3	19.3	0.0	0.0	0.0	1001		2.05	3.84		
WS-38			0.0	0.0	1.3	1.3	17.5	16.5	0.0	0.0	0.0	1000	DRY		1.80		
WS-48			0.0	0.0	1.4	1.4	19.2	18.9	0.0	0.0	0.0	1001	DRY		3.85		
WS-55			0.0	0.0	1.2	1.2	18.9	18.5	0.0	0.0	0.0	1001	DRY		3.74		

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
- 2 The steady reading is the level which remained constant after approximately 1 minute.

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18 Bewick Road, Gateshead, Tyne & Wear, NE8 4DP Tel: 0191 478 3330 Email: admin@shadboltgroup.net

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SHADBOLT

ENVIRONMENTAL

Site:	Baldock											Job No:		2899			
Client:	Urban & Civic											Date:		05/06/2024			
												Weather:		Raining			
Monitored by:	HB											Instruments Used:		GFM 436 + Dipmeter			
												Pressure Trend:		Rising			
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks	
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)		
Ambient						20.7	20.7					1001					
WS-14			0.0	0.0	1.1	1.1	19.5	19.5	0.0	0.0	0.0	1000	DRY		3.83		
WS-15			0.0	0.0	1.6	1.6	18.9	18.9	0.0	0.0	0.0	1001	DRY		1.86		
WS-27			0.0	0.0	1.6	1.6	19.3	19.2	0.0	0.0	0.0	1001	DRY		1.32		
WS-28			0.0	0.0	1.0	1.0	19.6	19.5	0.0	0.0	0.0	1001	DRY		3.84		
WS-29			0.0	0.0	0.3	0.3	20.4	20.4	0.0	0.0	0.0	1001	DRY		1.43		
WS-37			0.0	0.0	1.5	1.2	19.5	19.5	0.0	0.0	0.0	1001	2.11		3.81		
WS-38			0.0	0.0	2.9	2.9	15.8	15.3	0.0	0.0	0.0	1001	DRY		1.85		
WS-48			0.0	0.0	1.8	1.8	18.7	18.5	0.0	0.0	0.0	1001	DRY		3.83		
WS-55			0.0	0.0	1.8	1.8	18.6	18.3	0.0	0.0	0.0	1002	DRY		3.74		

Notes:

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SHADBOLT

ENVIRONMENTAL

Site:	Baldock											Job No:		2899		
Client:	Urban & Civic											Date:		19/05/2024		
												Weather:		Raining		
Monitored by:	HB											Instruments Used:		GFM 436 + Dipmeter		
												Pressure Trend:		Decreasing		
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)	
Ambient							20.7	20.7				1011				
WS-14			0.0	0.0	1.2	1.1	19.7	19.6	0.0	0.0	0.0	1009	DRY		3.82	
WS-15			0.0	0.0	1.5	1.5	19.3	19.3	0.0	0.0	0.0	1009	DRY		1.86	
WS-27			0.0	0.0	1.6	1.6	19.5	19.4	0.0	0.0	0.0	1011	DRY		1.36	
WS-28			0.0	0.0	0.9	0.9	20.0	19.8	0.0	0.0	0.0	1011	DRY		3.85	
WS-29			0.0	0.0	0.6	0.6	20.3	20.3	0.0	0.0	0.0	1010	DRY		1.43	
WS-37			0.0	0.0	1.6	1.6	19.5	19.4	0.0	0.0	0.0	1011	2.27		3.86	
WS-38			0.0	0.0	2.8	2.8	18.3	18.0	0.0	0.0	0.0	1011	DRY		1.86	
WS-48			0.0	0.0	1.3	1.3	19.8	19.8	0.0	0.0	0.0	1011	DRY		3.84	
WS-55			0.0	0.0	1.5	1.5	19.5	19.5	0.0	0.0	0.0	1009	DRY		3.75	

Notes:

1 The peak reading is the maximum recorded level during a monitoring event.

2 The steady reading is the level which remained constant after approximately 1 minute.

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18 Bewick Road, Gateshead, Tyne & Wear, NE8 4DP Tel: 0191 478 3330 Email: admin@shadboltgroup.net

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ENVIRONMENTAL

Site:	Baldock											Job No:		2899			
Client:	Urban & Civic											Date:		19/07/2024			
												Weather:		Dry			
Monitored by:	HB											Instruments Used:		GFM 436 + Dipmeter			
												Pressure Trend:		Decreasing			
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks	
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)		
Ambient						20.5	20.5					1000					
WS-14			0.0	0.0	1.3	1.2	19.7	19.6	0.0	0.0	0.0	999	DRY		3.83		
WS-15			0.0	0.0	1.7	1.7	19.6	19.2	0.0	0.0	0.0	998	DRY		1.86		
WS-27			0.0	0.0	1.7	1.6	19.5	19.4	0.0	0.0	0.0	999	DRY		1.36		
WS-28			0.0	0.0	1.0	1.0	19.1	18.9	0.0	0.0	0.0	999	DRY		3.85		
WS-29			0.0	0.0	0.6	0.6	20.2	20.2	0.0	0.0	0.0	998	DRY		1.43		
WS-37			0.0	0.0	2.4	2.4	18.9	18.7	0.0	0.0	0.0	999	2.35		3.84		
WS-38			0.0	0.0	1.9	1.9	19.1	18.9	0.0	0.0	0.0	999	DRY		1.86		
WS-48			0.0	0.0	1.6	1.6	19.5	19.4	0.0	0.0	0.0	998	DRY		3.84		
WS-55			0.0	0.0	1.5	1.5	19.7	19.7	0.0	0.0	0.0	998	DRY		3.75		

Notes:

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ENVIRONMENTAL

Site:	Baldock											Job No:		2899		
Client:	Urban & Civic											Date:		23/07/2024		
												Weather:		Wet		
Monitored by:	HB/JD											Instruments Used:		GFM 436 + Dipmeter		
												Pressure Trend:		Decreasing		
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)	
Ambient						20.9	20.9					1011				
WS-14			0.0	0.0	1.5	1.5	19.7	19.7	0.0	0.0	0.0	1010	DRY		3.83	
WS-15			0.0	0.0	2.0	2.0	19.3	19.2	0.0	0.0	0.0	1010	DRY		1.86	
WS-27			0.0	0.0	1.5	1.5	20.0	19.9	0.0	0.0	0.0	1011	DRY		1.36	
WS-28			0.0	0.0	1.3	1.3	19.5	19.5	0.0	0.0	0.0	1010	DRY		3.85	
WS-29			0.0	0.0	0.6	0.6	20.6	20.6	0.0	0.0	0.0	1008	DRY		1.43	
WS-37			0.0	0.0	2.7	2.7	19.4	18.0	0.0	0.0	0.0	1011	1.20		3.84	
WS-38			0.0	0.0	1.8	1.8	19.8	19.7	0.0	0.0	0.0	1009	DRY		1.86	
WS-48			0.0	0.0	1.8	1.8	19.4	19.3	0.0	0.0	0.0	1012	DRY		3.89	
WS-55			0.0	0.0	1.5	1.5	19.6	19.6	0.0	0.0	0.0	1011	DRY		3.78	

Notes:

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2 The steady reading is the level which remained constant after approximately 1 minute.

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ENVIRONMENTAL

Site:	Baldock											Job No:		2899		
Client:	Urban & Civic											Date:		15/08/2024		
Monitored by:	HB/JD											Weather:		Warm and dry		
												Instruments Used:		GFM 436 + Dipmeter		
												Pressure Trend:		Rising		
Borehole		surface level (as surveyed)	CH4		CO2		O2		CO	H2S	Flow Rate	Atmospheric	Water	Water	Base	Remarks
			Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Peak (% vol)	Steady (% vol)	Steady PPM	Steady PPM	Peak (Steady) (l/hr)	Pressure (mbar)	Depth (m bgl)	Depth (m aOD)	Depth (m bgl)	
Ambient						20.6	20.6					998				
WS-14			0.0	0.0	1.4	1.4	19.8	19.8	0.0	0.0	0.0	1000	DRY		3.84	
WS-15			0.0	0.0	1.9	1.9	18.9	18.9	0.0	0.0	0.0	999	DRY		1.86	
WS-27			0.0	0.0	2.1	2.0	19.1	19.1	0.0	0.0	0.0	999	DRY		1.38	
WS-28			0.0	0.0	1.6	1.5	19.7	19.7	0.0	0.0	0.0	999	DRY		3.85	
WS-29			0.0	0.0	0.7	0.7	19.9	19.9	0.0	0.0	0.0	999	DRY		1.41	
WS-37			0.0	0.0	2.5	2.5	18.8	18.8	0.0	0.0	0.0	999	1.98		3.83	
WS-38			0.0	0.0	2.2	2.0	19.1	19.1	0.0	0.0	0.0	998	DRY		1.85	
WS-48			0.0	0.0	1.9	1.9	19.6	19.6	0.0	0.0	0.0	998	DRY		3.89	
WS-55			0.0	0.0	1.3	1.3	19.4	19.4	0.0	0.0	0.0	998	DRY		3.76	

Notes:

- 1 The peak reading is the maximum recorded level during a monitoring event.
- 2 The steady reading is the level which remained constant after approximately 1 minute.

CIRIA C665

Characteristic Situation

	Characteristic Situation (CIRIA 149)	Comparable Classification In DETER <i>et al</i> (1999)	Risk Classification	Gas Screening Value (GSV) (CH ₄ or CO ₂) (l/hr) ¹	Additional Factors	Typical source of generation
	1	A	Very Low Risk	<0.07	Typically methane 1 % and/or carbon dioxide 5 %. Otherwise consider increase to Situation 2.	Natural soils with low organic content. “Typical” made ground
	2	B	Low. Risk	<0.7	Borehole air flow rate not to exceed 70 l/hr. Otherwise consider increase to characteristic Situation 3	Natural soil, high peat/ organic content “Typical” made ground
	3	C	Moderate Risk	<3.5		Old landfill, inert waste, mineworkings flooded
	4	D	Moderate to high risk	<15	Quantitative risk assessment required to evaluate scope of protective measures	Mineworkings – susceptible to flooding, completed landfill (WMP 26B criteria)
	5	E	High risk	<70		Mineworkings Unflooded inactive with shallow workings near surface
	6	F	Very high risk	>70		Recent landfill site

Notes:

Gas screening value: (Litres of gas/hour) is calculated by multiplying the maximum gas concentration (%) by the maximum measured borehole flow rate (l.hr) – See Glossary.

Site Characterisation should be based on gas monitoring of concentrations and borehole flow rates for the minimum period defined in Table 5.5, CIRIA 659.

Source of gas and generation potential/performance should be identified.

Soil gas investigation should be in accordance with guidance provided in Chapters 4 to 6.

If there is no detectable flow, use the limit of detection of the instrument.

The boundaries between the Partners in Technology classifications do not fit exactly with the boundaries for the CIRIA classification.

Gas Risk Assessment – Characteristic Situations with Typical Maximum concentrations and Gas Screening Values (Reproduced from Table 8.5, CIRIA Report C659 – Assessing risk posed by hazardous ground gases to buildings)

BS8485:2015

Code of Practice for the Design of Gas Protective Measures for Methane and Carbon Dioxide for New Buildings

Table 3

BRITISH STANDARD

BS 8485:2015

Table 3 Building types

	Type A	Type B	Type C	Type D
Ownership	Private	Private or commercial/public, possible multiple	Commercial/public	Commercial/industrial
Control (change of use, structural alterations, ventilation)	None	Some but not all	Full	Full
Room sizes	Small	Small/medium	Small to large	Large industrial/retail park style

- **Type A building:** private ownership with no building management controls on alterations to the internal structure, the use of rooms, the ventilation of rooms or the structural fabric of the building. Some small rooms present. Probably conventional building construction (rather than civil engineering). Examples include private housing and some retail premises.
- **Type B building:** private or commercial property with central building management control of any alterations to the building or its uses but limited or no central building management control of the maintenance of the building, including the gas protection measures. Multiple occupancy. Small to medium size rooms with passive ventilation of rooms and other internal spaces throughout ground floor and basement areas. May be conventional building or civil engineering construction. Examples include managed apartments, multiple occupancy offices, some retail premises and parts of some public buildings (such as schools, hospitals, leisure centres) and parts of hotels.
- **Type C building:** commercial building with central building management control of any alterations to the building or its uses and central building management control of the maintenance of the building, including the gas protection measures. Single occupancy of ground floor and basement areas. Small to large size rooms with active ventilation or good passive ventilation of all rooms and other internal spaces throughout ground floor and basement areas. Probably civil engineering construction. Examples include offices, some retail premises, and parts of some public buildings (such as schools, hospitals, leisure centres and parts of hotels).
- **Type D building:** industrial style building having large volume internal space(s) that are well ventilated. Corporate ownership with building management controls on alterations to the ground floor and basement areas of the building and on maintenance of ground gas protective measures. Probably civil engineering construction. Examples are retail park sales buildings, factory shop floor areas, warehouses. (Small rooms within these style buildings should be separately categorized as Type B or Type C).

NOTE 2 Type A buildings are those where the risk of failure of the gas protection measures is likely to be most significant to the safety of the occupants and Type D buildings are those where this same risk is likely to be least significant.

From the design CS and the type of building (A, B, C or D) the minimum level of gas protection (score) in the range 0 to 7.5 should be determined in accordance with Table 4.

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Code of Practice for the Design of Gas Protective Measures for Methane and Carbon Dioxide for New Buildings

Table 4

BS 8485:2015

BRITISH STANDARD

Table 4 Gas protection score by CS and type of building

CS	Minimum gas protection score (points)			
	High risk	Medium risk		Low risk
	Type A building	Type B building	Type C building	Type D building
1	0	0	0	0
2	3.5	3.5	2.5	1.5
3	4.5	4	3	2.5
4	6.5 ^{A)}	5.5 ^{A)}	4.5	3.5
5	— ^{B)}	6.5 ^{A)}	5.5	4.5
6	— ^{B)}	— ^{B)}	7.5	6.5

^{A)} Residential buildings should not be built on CS4 or higher sites unless the type of construction or site circumstances allow additional levels of protection to be incorporated, e.g. high-performance ventilation or pathway intervention measures, and an associated sustainable system of management of maintenance of the gas control system, e.g. in institutional and/or fully serviced contractual situations.

^{B)} The gas hazard is too high for this empirical method to be used to define the gas protection measures.

NOTE 3 The NHBC has published guidance [8] for use on residential developments, which utilizes an alternative classification ("traffic light") system. This guidance typically applies to Type A buildings utilizing beam and block floor constructions with clear void ventilation. The design choice variables are limited to decisions relating to the membrane specification and verification recommendations (see Table 7). Designers utilizing this system would therefore need to refer to the NHBC [8] to assess compliance for specific recommendations.

When the minimum gas protection score has been determined for the building as a whole, or for each part of the building, then a combination of two or more of the following three types of protection measures should be used to achieve that score:

- the structural barrier of the floor slab, or of the basement slab and walls if a basement is present;
- ventilation measures; and
- gas resistant membrane.

NOTE 4 The method of selecting the combination of these types of protection measures for a particular building is given in 7.2.

Once the types of protection measures have been decided, the detailed design and specification of the measures should be undertaken (see 7.3).

NOTE 5 In some cases, the designer might be of the opinion at this stage that the extent of the protection measures is potentially more than is needed, because of limitations in the scope of the site investigation [these limitations having led to a more conservative GSV and CS than is likely from the conceptual site model (see 6.3.7.2 and 6.3.7.3)]. In this case, further site investigation could be carried out to check the GSV. Only if there is sufficient time to carry out additional site investigation and gas monitoring would this step be useful.

The detailed design and specification of the protection measures should be recorded in a design report (see 8.3).

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Code of Practice for the Design of Gas Protective Measures for Methane and Carbon Dioxide for New Buildings

Table 5

Table 5 Gas protection scores for the structural barrier	
Floor and substructure design (see Annex A)	Score ^{A)}
Precast suspended segmental subfloor (i.e. beam and block)	0
Cast in situ ground-bearing floor slab (with only nominal mesh reinforcement)	0.5
Cast in situ monolithic reinforced ground bearing raft or reinforced cast in situ suspended floor slab with minimal penetrations	1 or 1.5 ^{B)}
Basement floor and walls conforming to BS 8102:2009, Grade 2 waterproofing ^{C)}	2
Basement floor and walls conforming to BS 8102:2009, Grade 3 waterproofing ^{C)}	2.5
^{A)} The scores are conditional on breaches of floor slabs, etc., being effectively sealed. ^{B)} To achieve a score of 1.5 the raft or suspended slab should be well reinforced to control cracking and have minimal penetrations cast in (see A.2.2.2). ^{C)} The score is conditional on the waterproofing not being based on the use of a geosynthetic clay liner waterproofing product (see C.3, Note 4).	

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Code of Practice for the Design of Gas Protective Measures for Methane and Carbon Dioxide for New Buildings

Table 6

BRITISH STANDARD		BS 8485:2015
Table 6 Gas protection scores for ventilation protection measures		
Protection element/system	Score	Comments
(a) Pressure relief pathway (usually formed of low fines gravel or with a thin geocomposite blanket or strips terminating in a gravel trench external to the building)	0.5	Whenever possible a pressure relief pathway (as a minimum) should be installed in all gas protection measures systems. If the layer has a low permeability and/or is not terminated in a venting trench (or similar), then the score is zero.
(b) Passive sub floor dispersal layer: Very good performance: Good performance: Media used to provide the dispersal layer are: • Clear void • Polystyrene void former blanket • Geocomposite void former blanket • No-fines gravel layer with gas drains • No-fines gravel layer	2.5 1.5	Performance criteria for methane and carbon dioxide are shown in Figure B.6 and Figure B.7, respectively. The ventilation effectiveness of different media depends on a number of different factors including the transmissivity of the medium, the width of the building, the side ventilation spacing and type and the thickness of the layer. The selected score should be assigned taking into account the recommendations in Annex B. Passive ventilation should be designed to meet at least "good performance", see Annex B.
(c) Active dispersal layer, usually comprising fans with active abstraction (suction) from a subfloor dilution layer, with roof level vents. The dilution layer may comprise a clear void or be formed of geocomposite or polystyrene void formers	1.5 to 2.5	This system relies on continued serviceability of the pumps, therefore alarm and response systems should be in place. There should be robust management systems in place to ensure the continued maintenance of the system, including pumps and vents. Active ventilation should always be designed to meet at least "good performance", as described in Annex B.
(d) Active positive pressurization by the creation of a blanket of external fresh air beneath the building floor slab by pumps supplying air to points across the central footprint of the building into a permeable layer, usually formed of a thin geocomposite blanket	1.5 to 2.5	This system relies on continued operation of the pumps, therefore alarm and response systems should be in place. The score assigned should be based on the efficient "coverage" of the building footprint and the redundancy of the system. Active ventilation should always be designed to meet at least "good performance".
(e) Ventilated car park (floor slab of occupied part of the building under consideration is underlain by a basement or undercroft car park)	4	Assumes that the car park is vented to deal with car exhaust fumes, designed to <i>Buildings Regulations 2000, Approved Document F</i> [9].

BS8485:2015

Code of Practice for the Design of Gas Protective Measures for Methane and Carbon Dioxide for New Buildings

Table 7

BRITISH STANDARD		BS 8485:2015
Table 7 Gas protection score for the gas resistant membrane		
Protection element/system	Score	Comments
Gas resistant membrane meeting all of the following criteria: - sufficiently impervious to the gases with a methane gas transmission rate $<40.0 \text{ ml/day/m}^2/\text{atm}$ (average) for sheet and joints (tested in accordance with BS ISO 15105-1 manometric method); - sufficiently durable to remain serviceable for the anticipated life of the building and duration of gas emissions; - sufficiently strong to withstand in-service stresses (e.g. settlement if placed below a floor slab); - sufficiently strong to withstand the installation process and following trades until covered (e.g. penetration from steel fibres in fibre reinforced concrete, penetration of reinforcement ties, tearing due to working above it, dropping tools, etc); - capable, after installation, of providing a complete barrier to the entry of the relevant gas; and - verified in accordance with CIRIA C735 [N1]	2	The performance of membranes is heavily dependent on the quality and design of the installation, resistance to damage after installation and integrity of joints. For example, a minimum 0.4 mm thickness (equivalent to 370 g/m^2 for polyethelene) reinforced membrane (virgin polymer) meets the performance criteria in Table 7 (see C.3). If a membrane is installed that does not meet all the criteria in column 1 then the score is zero.



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