

Project
Northstowe Phase 2
Client
Homes and Communities Agency

Job No
UA008426-01
Easting (OS mE)
540944.75

Ground Level (mAOD)
9.28
Northing (OS mN)
266294.75

Start Date
24/01/2017
End Date
24/01/2017

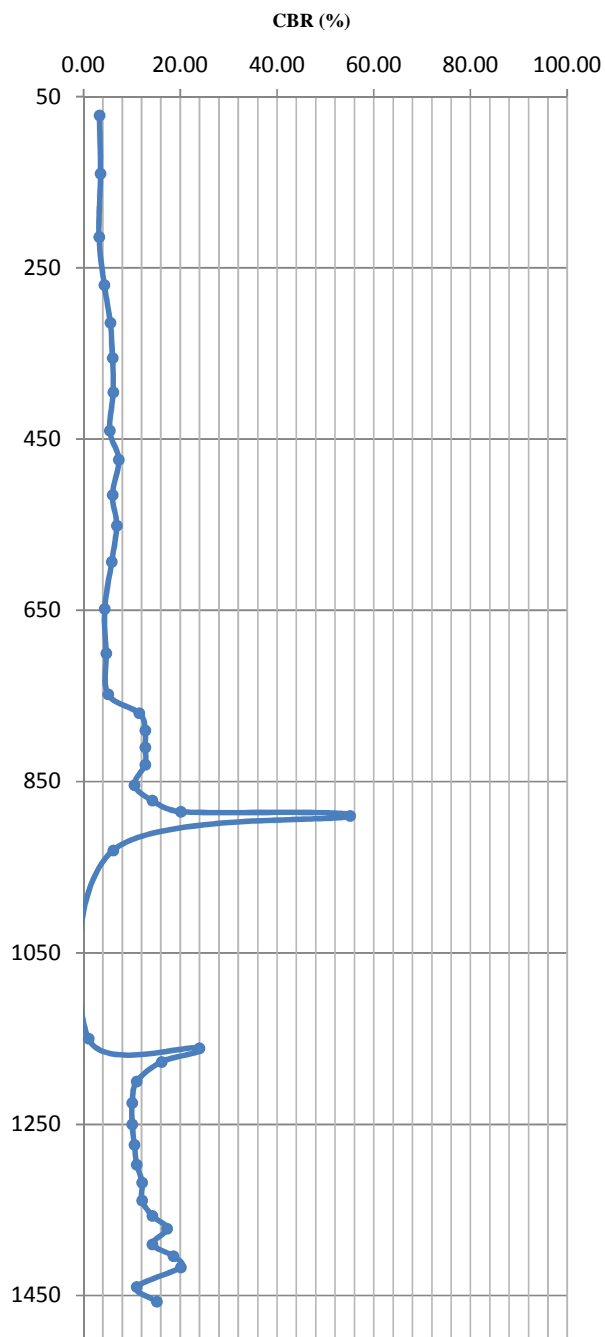
Scale
1:25
Sheet 2 of 2



TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1204	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 11.72		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E541007.82, N265699.15	Initial Scale Reading (mm) 70	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	142	72.00	72	1.86	3.29
2	210	68.00	140	1.83	3.49
3	284	74.00	214	1.87	3.19
4	340	56.00	270	1.75	4.29
5	384	44.00	314	1.64	5.53
6	425	41.00	355	1.61	5.96
7	465	40.00	395	1.60	6.12
8	510	45.00	440	1.65	5.40
9	544	34.00	474	1.53	7.26
10	585	41.00	515	1.61	5.96
11	621	36.00	551	1.56	6.84
12	663	42.00	593	1.62	5.81
13	718	55.00	648	1.74	4.37
14	770	52.00	700	1.72	4.64
15	818	48.00	748	1.68	5.05
16	840	22.00	770	1.34	11.51
17	860	20.00	790	1.30	12.73
18	880	20.00	810	1.30	12.73
19	900	20.00	830	1.30	12.73
20	924	24.00	854	1.38	10.50
21	942	18.00	872	1.26	14.23
22	955	13.00	885	1.11	20.07
23	960	5.00	890	0.70	55.10
24	1000	40.00	930	1.60	6.12
25	1220	220.00	1150	2.34	1.01
26	1231	11.00	1161	1.04	23.95
27	1247	16.00	1177	1.20	16.12
28	1270	23.00	1200	1.36	10.98
29	1295	25.00	1225	1.40	10.05
30	1320	25.00	1250	1.40	10.05
31	1344	24.00	1274	1.38	10.50
32	1367	23.00	1297	1.36	10.98
33	1388	21.00	1318	1.32	12.09
34	1409	21.00	1339	1.32	12.09
35	1427	18.00	1357	1.26	14.23
36	1442	15.00	1372	1.18	17.25
37	1460	18.00	1390	1.26	14.23
38	1474	14.00	1404	1.15	18.56
39	1487	13.00	1417	1.11	20.07
40	1510	23.00	1440	1.36	10.98
41	1527	17.00	1457	1.23	15.12



Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006).	Operator GSTL
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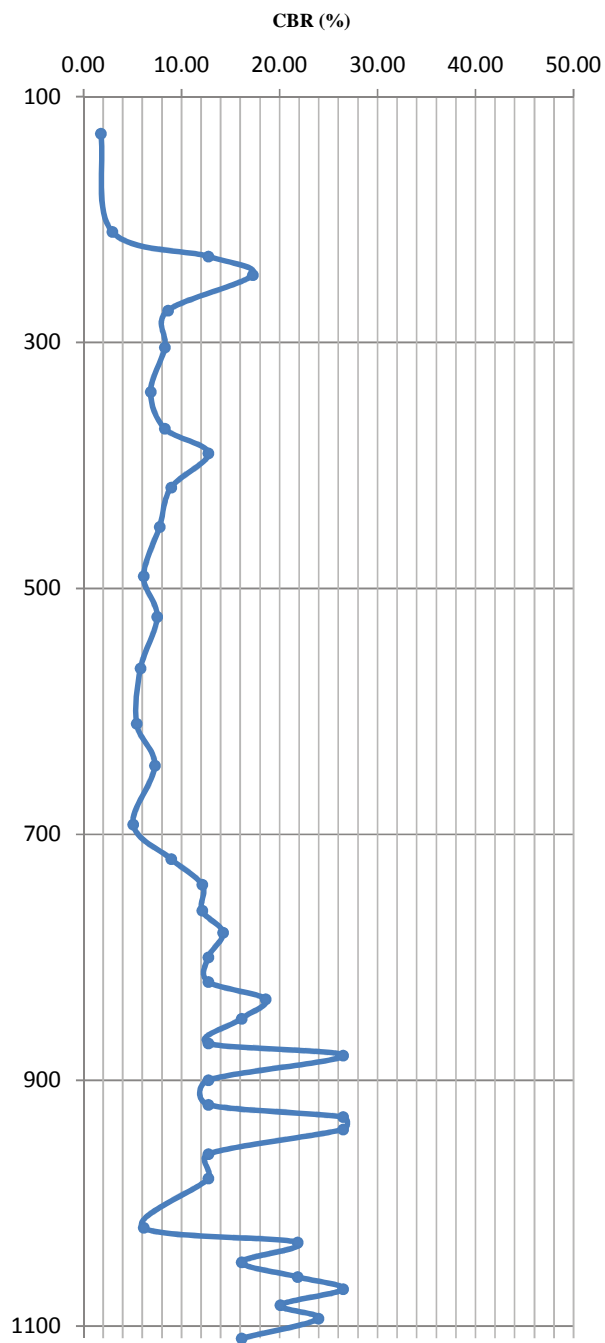
TRL PENETROMETER TESTING

Project Northstowe Phase 2						Position ID DCP1204			
Job No. UA008426-01			Date 02/02/2017		Ground Level (m) 11.72				
Contractor Arcadis Consulting (UK) Ltd			Co-ordinates E541007.82, N265699.15		Initial Scale Reading (mm) 70				
						Sheet 2 of 2			
42	1548	21.00	1478	1.32	12.09				
43	1590	42.00	1520	1.62	5.81				
44	1602	12.00	1532	1.08	21.84				
45	1614	12.00	1544	1.08	21.84				
46	1626	12.00	1556	1.08	21.84				
47	1642	16.00	1572	1.20	16.12				
48	1665	23.00	1595	1.36	10.98				
49	1694	29.00	1624	1.46	8.59				
50	1730	36.00	1660	1.56	6.84				
51	1770	40.00	1700	1.60	6.12				
52	1812	42.00	1742	1.62	5.81				
53	1853	41.00	1783	1.61	5.96				
54	1892	39.00	1822	1.59	6.28				
55	1920	28.00	1850	1.45	8.92				
56	1962	42.00	1892	1.62	5.81				
57	1970	8.00	1900	0.90	33.53				
58	2000	30.00	1930	1.48	8.29				
Remarks						Operator GSTL			
Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006).									

TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1205	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m)		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540941.59, N265525.84	Initial Scale Reading (mm) 10	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	140	130.00	130	2.11	1.76
2	220	80.00	210	1.90	2.94
3	240	20.00	230	1.30	12.73
4	255	15.00	245	1.18	17.25
5	284	29.00	274	1.46	8.59
6	314	30.00	304	1.48	8.29
7	350	36.00	340	1.56	6.84
8	380	30.00	370	1.48	8.29
9	400	20.00	390	1.30	12.73
10	428	28.00	418	1.45	8.92
11	460	32.00	450	1.51	7.75
12	500	40.00	490	1.60	6.12
13	533	33.00	523	1.52	7.50
14	575	42.00	565	1.62	5.81
15	620	45.00	610	1.65	5.40
16	654	34.00	644	1.53	7.26
17	702	48.00	692	1.68	5.05
18	730	28.00	720	1.45	8.92
19	751	21.00	741	1.32	12.09
20	772	21.00	762	1.32	12.09
21	790	18.00	780	1.26	14.23
22	810	20.00	800	1.30	12.73
23	830	20.00	820	1.30	12.73
24	844	14.00	834	1.15	18.56
25	860	16.00	850	1.20	16.12
26	880	20.00	870	1.30	12.73
27	890	10.00	880	1.00	26.49
28	910	20.00	900	1.30	12.73
29	930	20.00	920	1.30	12.73
30	940	10.00	930	1.00	26.49
31	950	10.00	940	1.00	26.49
32	970	20.00	960	1.30	12.73
33	990	20.00	980	1.30	12.73
34	1030	40.00	1020	1.60	6.12
35	1042	12.00	1032	1.08	21.84
36	1058	16.00	1048	1.20	16.12
37	1070	12.00	1060	1.08	21.84
38	1080	10.00	1070	1.00	26.49
39	1093	13.00	1083	1.11	20.07
40	1104	11.00	1094	1.04	23.95
41	1120	16.00	1110	1.20	16.12

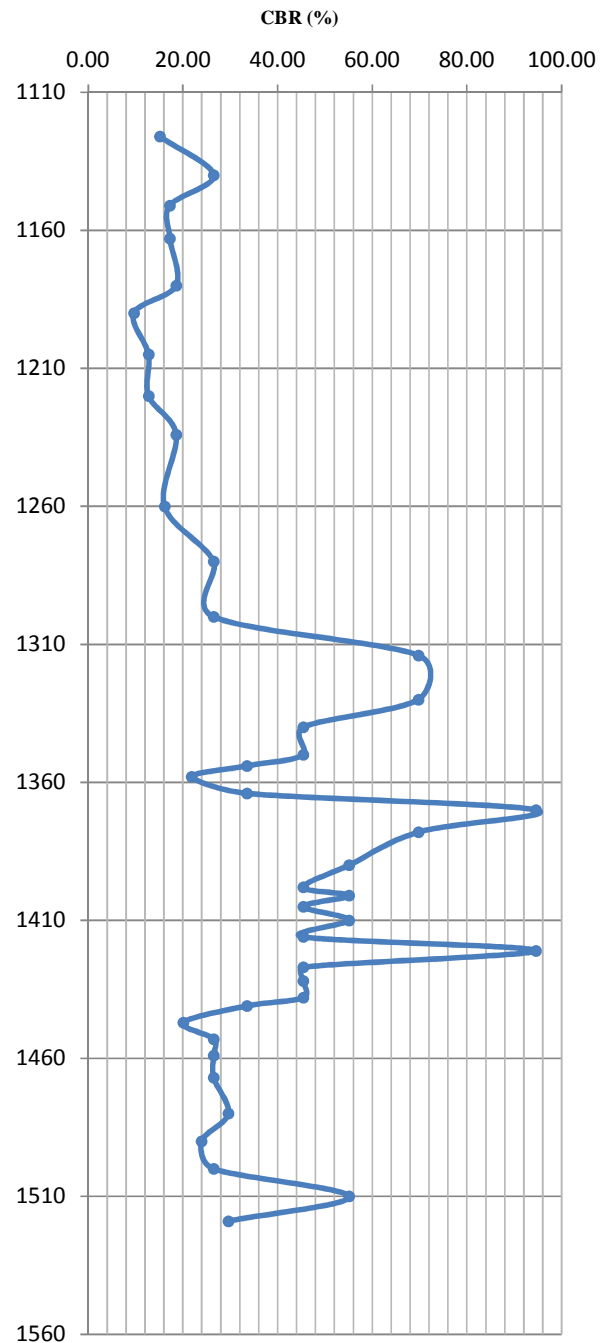


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2				Position ID DCP1205	
Job No. UA008426-01		Date 02/02/2017		Ground Level (m)	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540941.59, N265525.84		Initial Scale Reading (mm) 10	
Sheet 2 of 3					

42	1136	16.00	1126	1.20	16.12
43	1150	14.00	1140	1.15	18.56
44	1161	11.00	1151	1.04	23.95
45	1173	12.00	1163	1.08	21.84
46	1190	17.00	1180	1.23	15.12
47	1200	10.00	1190	1.00	26.49
48	1215	15.00	1205	1.18	17.25
49	1230	15.00	1220	1.18	17.25
50	1244	14.00	1234	1.15	18.56
51	1270	26.00	1260	1.41	9.65
52	1290	20.00	1280	1.30	12.73
53	1310	20.00	1300	1.30	12.73
54	1324	14.00	1314	1.15	18.56
55	1340	16.00	1330	1.20	16.12
56	1350	10.00	1340	1.00	26.49
57	1360	10.00	1350	1.00	26.49
58	1364	4.00	1354	0.60	69.76
59	1368	4.00	1358	0.60	69.76
60	1374	6.00	1364	0.78	45.45
61	1380	6.00	1370	0.78	45.45
62	1388	8.00	1378	0.90	33.53
63	1400	12.00	1390	1.08	21.84
64	1408	8.00	1398	0.90	33.53
65	1411	3.00	1401	0.48	94.55
66	1415	4.00	1405	0.60	69.76
67	1420	5.00	1410	0.70	55.10
68	1426	6.00	1416	0.78	45.45
69	1431	5.00	1421	0.70	55.10
70	1437	6.00	1427	0.78	45.45
71	1442	5.00	1432	0.70	55.10
72	1448	6.00	1438	0.78	45.45
73	1451	3.00	1441	0.48	94.55
74	1457	6.00	1447	0.78	45.45
75	1463	6.00	1453	0.78	45.45
76	1469	6.00	1459	0.78	45.45
77	1477	8.00	1467	0.90	33.53
78	1490	13.00	1480	1.11	20.07
79	1500	10.00	1490	1.00	26.49
80	1510	10.00	1500	1.00	26.49
81	1520	10.00	1510	1.00	26.49
82	1529	9.00	1519	0.95	29.61
83	1540	11.00	1530	1.04	23.95
84	1550	10.00	1540	1.00	26.49
85	1555	5.00	1545	0.70	55.10
86	1564	9.00	1554	0.95	29.61

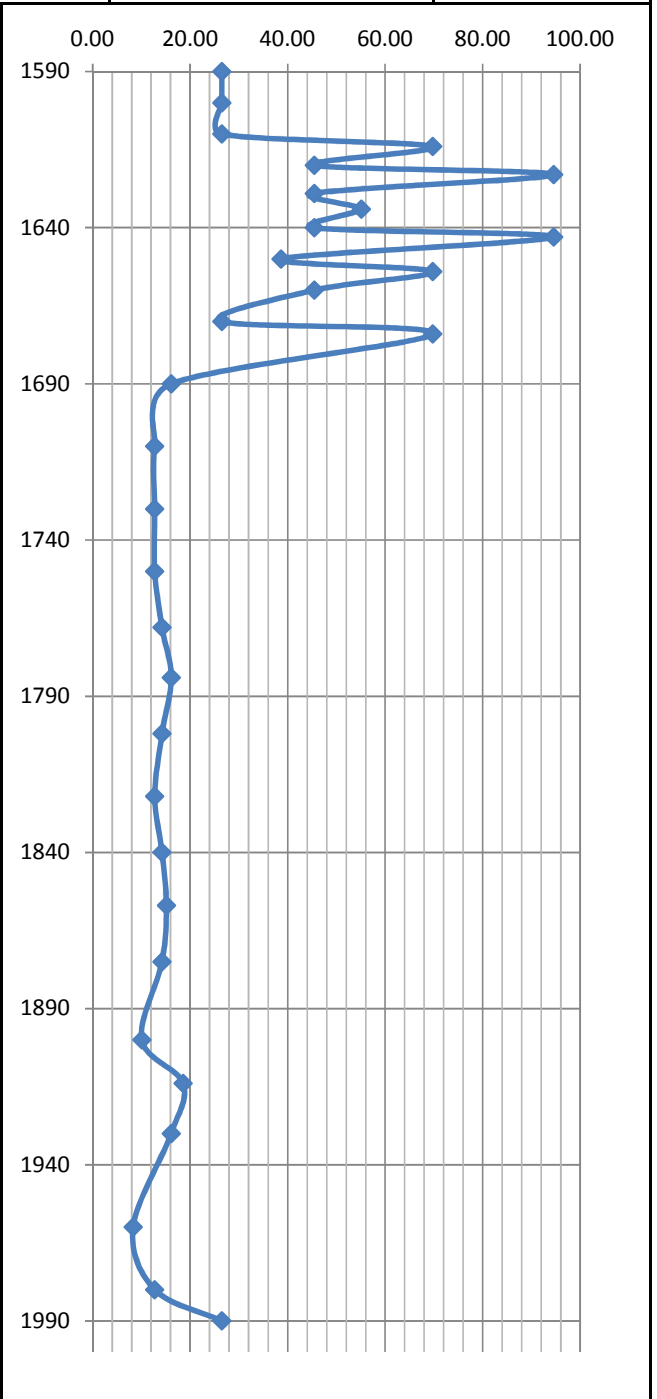


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006).	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2				Position ID DCP1205	
Job No. UA008426-01		Date 02/02/2017		Ground Level (m)	
Contractor Arcadis Consulting (UK) Ltd			Co-ordinates E540941.59, N265525.84		Initial Scale Reading (mm) 10
Sheet 3 of 3					

87	1573	9.00	1563	0.95	29.61
88	1580	7.00	1570	0.85	38.61
89	1590	10.00	1580	1.00	26.49
90	1600	10.00	1590	1.00	26.49
91	1610	10.00	1600	1.00	26.49
92	1620	10.00	1610	1.00	26.49
93	1624	4.00	1614	0.60	69.76
94	1630	6.00	1620	0.78	45.45
95	1633	3.00	1623	0.48	94.55
96	1639	6.00	1629	0.78	45.45
97	1644	5.00	1634	0.70	55.10
98	1650	6.00	1640	0.78	45.45
99	1653	3.00	1643	0.48	94.55
100	1660	7.00	1650	0.85	38.61
101	1664	4.00	1654	0.60	69.76
102	1670	6.00	1660	0.78	45.45
103	1680	10.00	1670	1.00	26.49
104	1684	4.00	1674	0.60	69.76
105	1700	16.00	1690	1.20	16.12
106	1720	20.00	1710	1.30	12.73
107	1740	20.00	1730	1.30	12.73
108	1760	20.00	1750	1.30	12.73
109	1778	18.00	1768	1.26	14.23
110	1794	16.00	1784	1.20	16.12
111	1812	18.00	1802	1.26	14.23
112	1832	20.00	1822	1.30	12.73
113	1850	18.00	1840	1.26	14.23
114	1867	17.00	1857	1.23	15.12
115	1885	18.00	1875	1.26	14.23
116	1910	25.00	1900	1.40	10.05
117	1924	14.00	1914	1.15	18.56
118	1940	16.00	1930	1.20	16.12
119	1970	30.00	1960	1.48	8.29
120	1990	20.00	1980	1.30	12.73
121	2000	10.00	1990	1.00	26.49

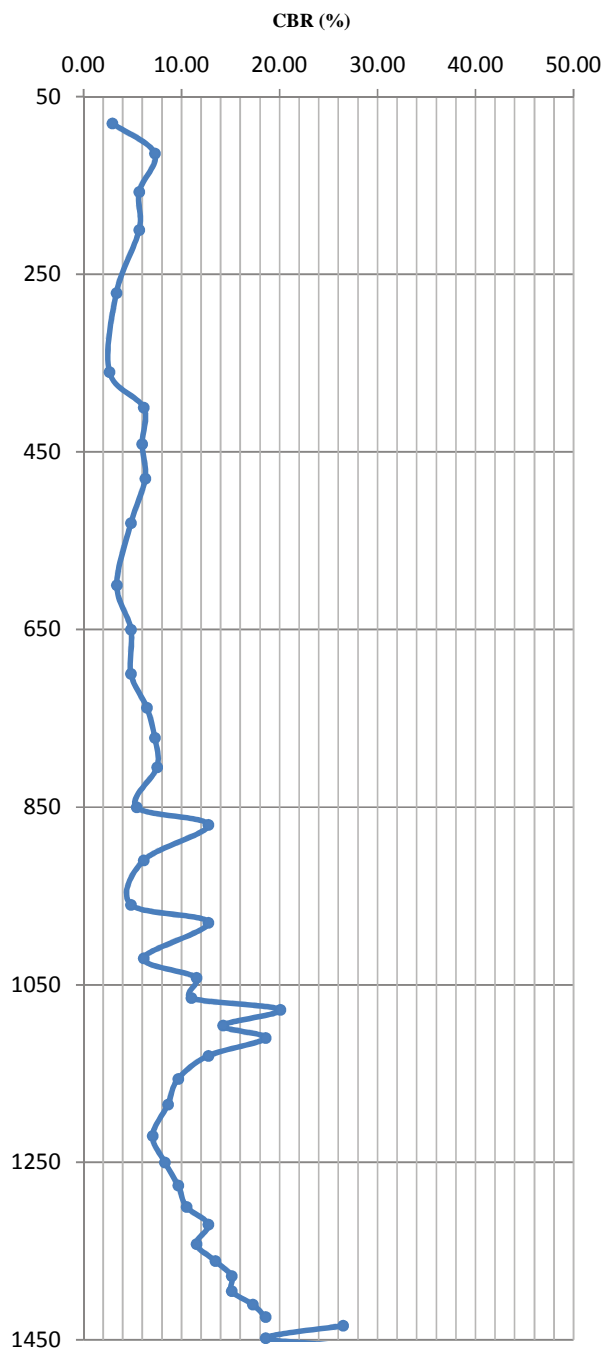


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006).	Operator GSTL

TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1207	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 10.45		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540601.60, N265117.16	Initial Scale Reading (mm) 10	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	90	80.00	80	1.90	2.94
2	124	34.00	114	1.53	7.26
3	167	43.00	157	1.63	5.67
4	210	43.00	200	1.63	5.67
5	281	71.00	271	1.85	3.34
6	370	89.00	360	1.95	2.63
7	410	40.00	400	1.60	6.12
8	451	41.00	441	1.61	5.96
9	490	39.00	480	1.59	6.28
10	540	50.00	530	1.70	4.83
11	610	70.00	600	1.85	3.39
12	660	50.00	650	1.70	4.83
13	710	50.00	700	1.70	4.83
14	748	38.00	738	1.58	6.46
15	782	34.00	772	1.53	7.26
16	815	33.00	805	1.52	7.50
17	860	45.00	850	1.65	5.40
18	880	20.00	870	1.30	12.73
19	920	40.00	910	1.60	6.12
20	970	50.00	960	1.70	4.83
21	990	20.00	980	1.30	12.73
22	1030	40.00	1020	1.60	6.12
23	1052	22.00	1042	1.34	11.51
24	1075	23.00	1065	1.36	10.98
25	1088	13.00	1078	1.11	20.07
26	1106	18.00	1096	1.26	14.23
27	1120	14.00	1110	1.15	18.56
28	1140	20.00	1130	1.30	12.73
29	1166	26.00	1156	1.41	9.65
30	1195	29.00	1185	1.46	8.59
31	1230	35.00	1220	1.54	7.05
32	1260	30.00	1250	1.48	8.29
33	1286	26.00	1276	1.41	9.65
34	1310	24.00	1300	1.38	10.50
35	1330	20.00	1320	1.30	12.73
36	1352	22.00	1342	1.34	11.51
37	1371	19.00	1361	1.28	13.44
38	1388	17.00	1378	1.23	15.12
39	1405	17.00	1395	1.23	15.12
40	1420	15.00	1410	1.18	17.25
41	1434	14.00	1424	1.15	18.56



Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006).	Operator GSTL
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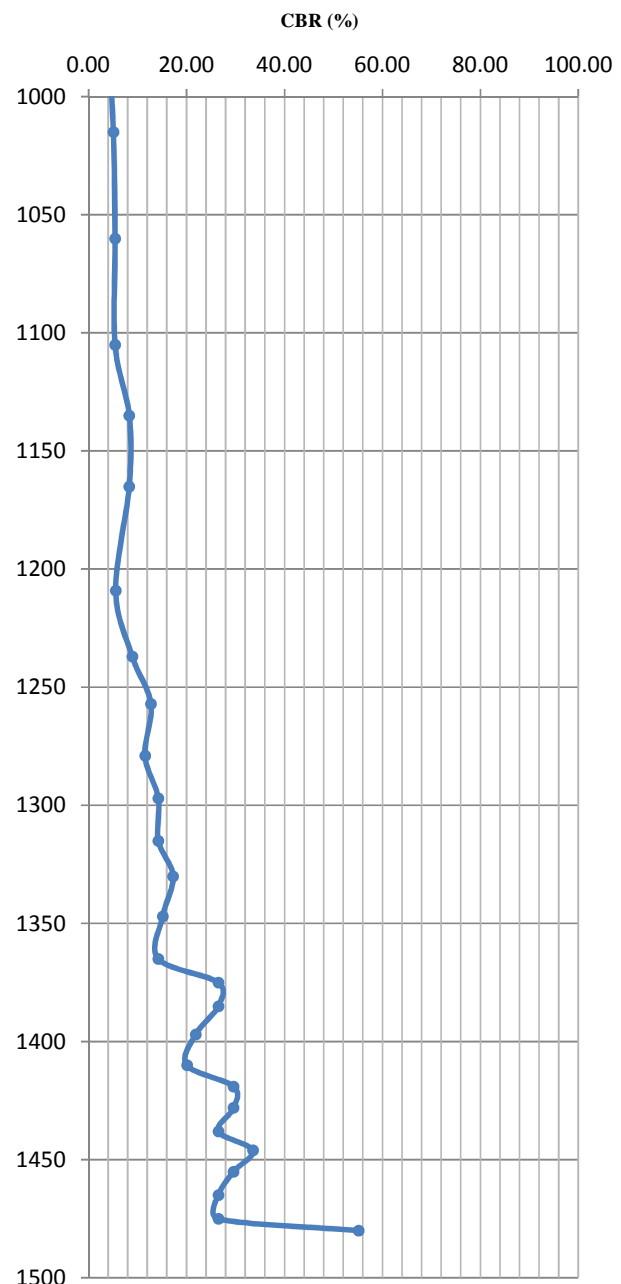
TRL PENETROMETER TESTING

Project Northstowe Phase 2					Position ID DCP1207	
Job No. UA008426-01			Date 02/02/2017		Ground Level (m) 10.45	
Contractor Arcadis Consulting (UK) Ltd			Co-ordinates E540601.60, N265117.16		Initial Scale Reading (mm) 0	
					Sheet 2 of 2	
42	1444	10.00	1434	1.00	26.49	<p style="text-align: center;">CBR (%)</p>
43	1458	14.00	1448	1.15	18.56	
44	1468	10.00	1458	1.00	26.49	
45	1480	12.00	1470	1.08	21.84	
46	1492	12.00	1482	1.08	21.84	
47	1504	12.00	1494	1.08	21.84	
48	1514	10.00	1504	1.00	26.49	
49	1526	12.00	1516	1.08	21.84	
50	1540	14.00	1530	1.15	18.56	
51	1550	10.00	1540	1.00	26.49	
52	1562	12.00	1552	1.08	21.84	
53	1572	10.00	1562	1.00	26.49	
54	1583	11.00	1573	1.04	23.95	
55	1590	7.00	1580	0.85	38.61	
56	1604	14.00	1594	1.15	18.56	
57	1614	10.00	1604	1.00	26.49	
58	1625	11.00	1615	1.04	23.95	
59	1640	15.00	1630	1.18	17.25	
60	1650	10.00	1640	1.00	26.49	
61	1660	10.00	1650	1.00	26.49	
62	1670	10.00	1660	1.00	26.49	
63	1680	10.00	1670	1.00	26.49	
64	1692	12.00	1682	1.08	21.84	
65	1706	14.00	1696	1.15	18.56	
66	1720	14.00	1710	1.15	18.56	
67	1730	10.00	1720	1.00	26.49	
68	1746	16.00	1736	1.20	16.12	
69	1755	9.00	1745	0.95	29.61	
70	1774	19.00	1764	1.28	13.44	
71	1790	16.00	1780	1.20	16.12	
72	1807	17.00	1797	1.23	15.12	
73	1820	13.00	1810	1.11	20.07	
74	1835	15.00	1825	1.18	17.25	
75	1850	15.00	1840	1.18	17.25	
76	1870	20.00	1860	1.30	12.73	
77	1890	20.00	1880	1.30	12.73	
78	1910	20.00	1900	1.30	12.73	
79	1930	20.00	1920	1.30	12.73	
80	1950	20.00	1940	1.30	12.73	
81	1980	30.00	1970	1.48	8.29	
82	1990	10.00	1980	1.00	26.49	
83	2000	10.00	1990	1.00	26.49	
Remarks					Operator	
Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006).					GSTL	

TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1208	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 11.97		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540381.21, N265071.05	Initial Scale Reading (mm) 175	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	295	120.00	120	2.08	1.92
2	402	107.00	227	2.03	2.16
3	475	73.00	300	1.86	3.24
4	540	65.00	365	1.81	3.66
5	597	57.00	422	1.76	4.21
6	650	53.00	475	1.72	4.54
7	710	60.00	535	1.78	3.99
8	762	52.00	587	1.72	4.64
9	820	58.00	645	1.76	4.13
10	860	40.00	685	1.60	6.12
11	920	60.00	745	1.78	3.99
12	980	60.00	805	1.78	3.99
13	1080	100.00	905	2.00	2.32
14	1142	62.00	967	1.79	3.85
15	1190	48.00	1015	1.68	5.05
16	1235	45.00	1060	1.65	5.40
17	1280	45.00	1105	1.65	5.40
18	1310	30.00	1135	1.48	8.29
19	1340	30.00	1165	1.48	8.29
20	1384	44.00	1209	1.64	5.53
21	1412	28.00	1237	1.45	8.92
22	1432	20.00	1257	1.30	12.73
23	1454	22.00	1279	1.34	11.51
24	1472	18.00	1297	1.26	14.23
25	1490	18.00	1315	1.26	14.23
26	1505	15.00	1330	1.18	17.25
27	1522	17.00	1347	1.23	15.12
28	1540	18.00	1365	1.26	14.23
29	1550	10.00	1375	1.00	26.49
30	1560	10.00	1385	1.00	26.49
31	1572	12.00	1397	1.08	21.84
32	1585	13.00	1410	1.11	20.07
33	1594	9.00	1419	0.95	29.61
34	1603	9.00	1428	0.95	29.61
35	1613	10.00	1438	1.00	26.49
36	1621	8.00	1446	0.90	33.53
37	1630	9.00	1455	0.95	29.61
38	1640	10.00	1465	1.00	26.49
39	1650	10.00	1475	1.00	26.49
40	1655	5.00	1480	0.70	55.10



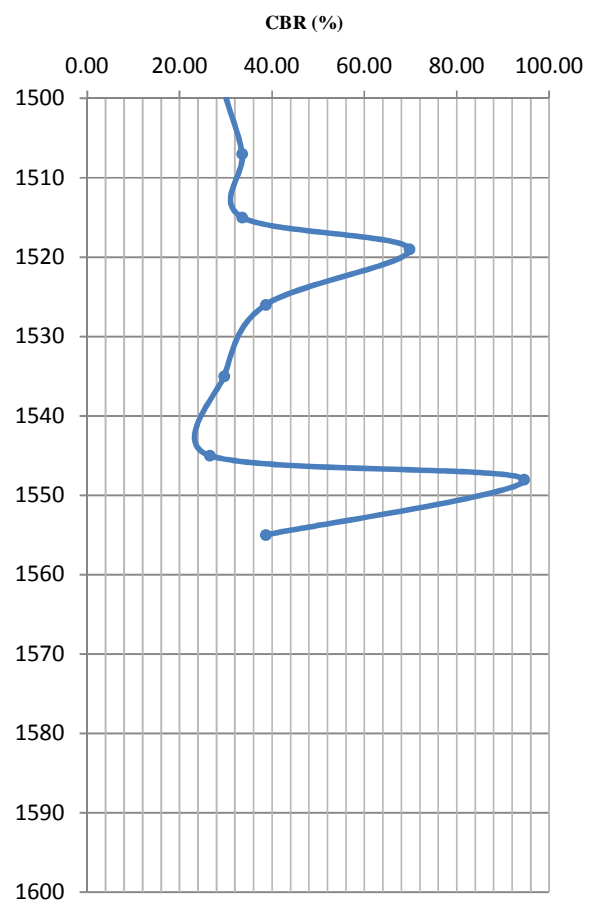
Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1208	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 11.97		
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E540381.21, N265071.05	Initial Scale Reading (mm) 175	Sheet 2 of 2	

41	1665	10.00	1490	1.00	26.49
42	1674	9.00	1499	0.95	29.61
43	1682	8.00	1507	0.90	33.53
44	1690	8.00	1515	0.90	33.53
45	1694	4.00	1519	0.60	69.76
46	1701	7.00	1526	0.85	38.61
47	1710	9.00	1535	0.95	29.61
48	1720	10.00	1545	1.00	26.49
49	1723	3.00	1548	0.48	94.55
50	1730	7.00	1555	0.85	38.61

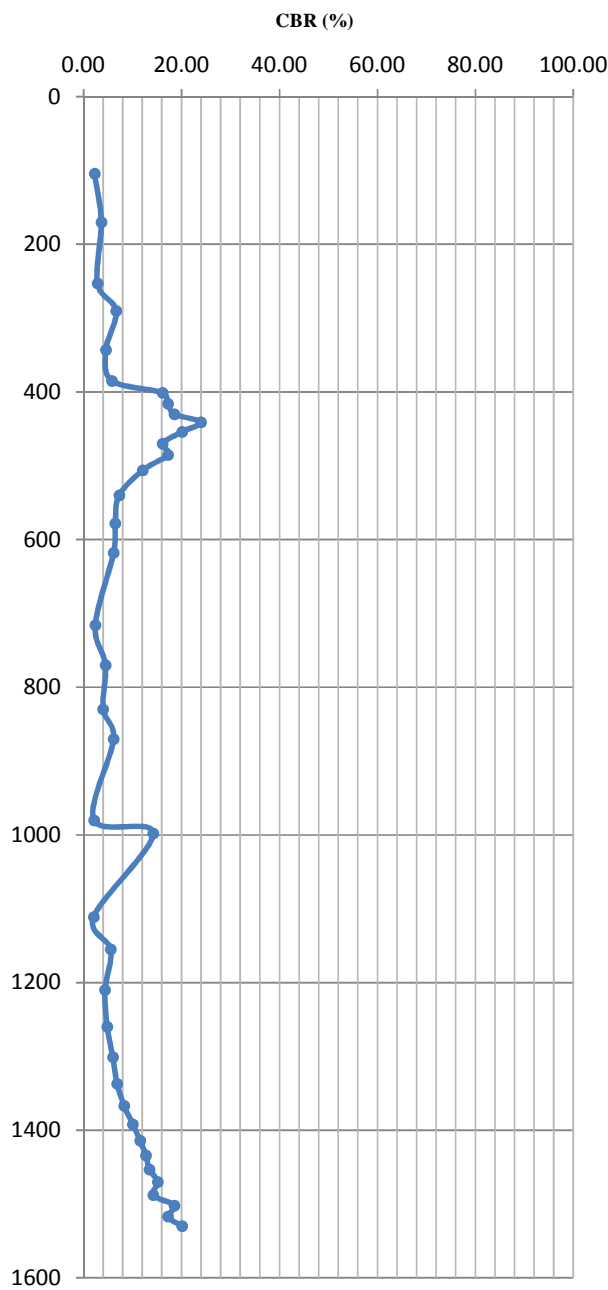


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1209	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 11.39		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540432.26, N264925.70	Initial Scale Reading (mm) 120	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	224	104.00	104	2.02	2.23
2	290	66.00	170	1.82	3.60
3	373	83.00	253	1.92	2.83
4	410	37.00	290	1.57	6.64
5	463	53.00	343	1.72	4.54
6	505	42.00	385	1.62	5.81
7	521	16.00	401	1.20	16.12
8	536	15.00	416	1.18	17.25
9	550	14.00	430	1.15	18.56
10	561	11.00	441	1.04	23.95
11	574	13.00	454	1.11	20.07
12	590	16.00	470	1.20	16.12
13	605	15.00	485	1.18	17.25
14	626	21.00	506	1.32	12.09
15	660	34.00	540	1.53	7.26
16	698	38.00	578	1.58	6.46
17	738	40.00	618	1.60	6.12
18	836	98.00	716	1.99	2.37
19	890	54.00	770	1.73	4.46
20	950	60.00	830	1.78	3.99
21	990	40.00	870	1.60	6.12
22	1100	110.00	980	2.04	2.10
23	1118	18.00	998	1.26	14.23
24	1231	113.00	1111	2.05	2.04
25	1275	44.00	1155	1.64	5.53
26	1330	55.00	1210	1.74	4.37
27	1380	50.00	1260	1.70	4.83
28	1421	41.00	1301	1.61	5.96
29	1457	36.00	1337	1.56	6.84
30	1487	30.00	1367	1.48	8.29
31	1512	25.00	1392	1.40	10.05
32	1534	22.00	1414	1.34	11.51
33	1554	20.00	1434	1.30	12.73
34	1573	19.00	1453	1.28	13.44
35	1590	17.00	1470	1.23	15.12
36	1608	18.00	1488	1.26	14.23
37	1622	14.00	1502	1.15	18.56
38	1637	15.00	1517	1.18	17.25
39	1650	13.00	1530	1.11	20.07



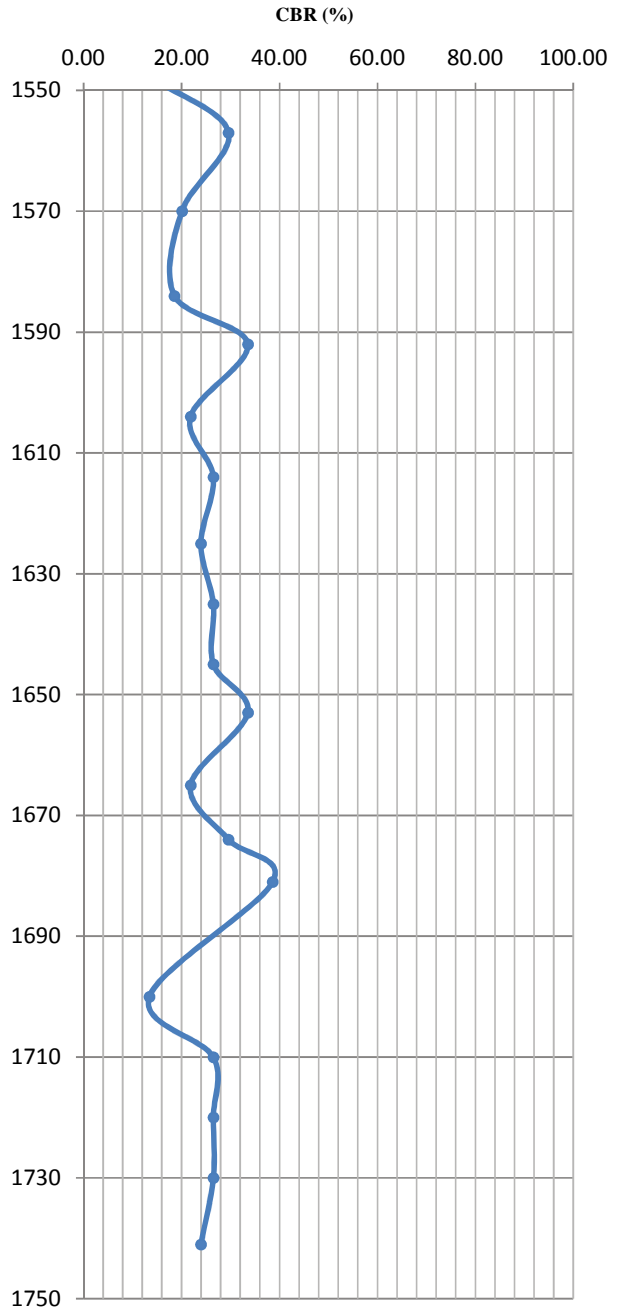
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1209
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 11.39	
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E540432.26, N264925.70	Initial Scale Reading (mm) 120	Sheet 2 of 2

40	1668	18.00	1548	1.26	14.23
41	1677	9.00	1557	0.95	29.61
42	1690	13.00	1570	1.11	20.07
43	1704	14.00	1584	1.15	18.56
44	1712	8.00	1592	0.90	33.53
45	1724	12.00	1604	1.08	21.84
46	1734	10.00	1614	1.00	26.49
47	1745	11.00	1625	1.04	23.95
48	1755	10.00	1635	1.00	26.49
49	1765	10.00	1645	1.00	26.49
50	1773	8.00	1653	0.90	33.53
51	1785	12.00	1665	1.08	21.84
52	1794	9.00	1674	0.95	29.61
53	1801	7.00	1681	0.85	38.61
54	1820	19.00	1700	1.28	13.44
55	1830	10.00	1710	1.00	26.49
56	1840	10.00	1720	1.00	26.49
57	1850	10.00	1730	1.00	26.49
58	1861	11.00	1741	1.04	23.95

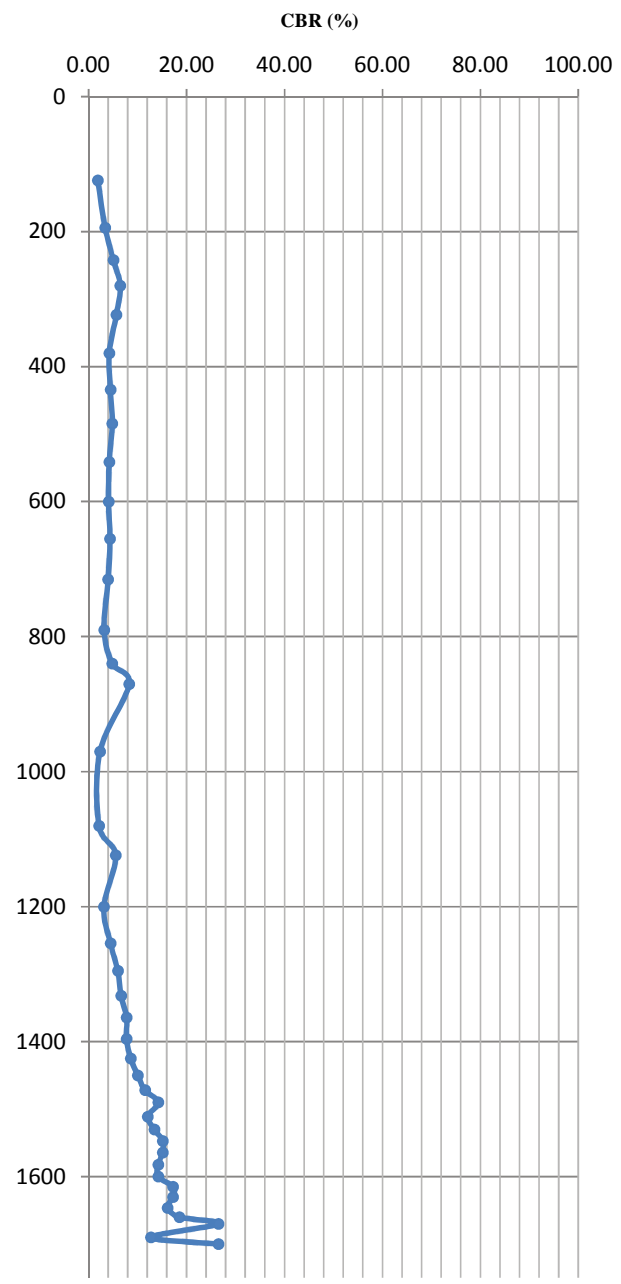


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1210	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 12.42		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540322.08, N264848.38	Initial Scale Reading (mm) 120	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	244	124.00	124	2.09	1.85
2	314	70.00	194	1.85	3.39
3	362	48.00	242	1.68	5.05
4	400	38.00	280	1.58	6.46
5	443	43.00	323	1.63	5.67
6	500	57.00	380	1.76	4.21
7	554	54.00	434	1.73	4.46
8	604	50.00	484	1.70	4.83
9	661	57.00	541	1.76	4.21
10	720	59.00	600	1.77	4.06
11	775	55.00	655	1.74	4.37
12	835	60.00	715	1.78	3.99
13	910	75.00	790	1.88	3.15
14	960	50.00	840	1.70	4.83
15	990	30.00	870	1.48	8.29
16	1090	100.00	970	2.00	2.32
17	1200	110.00	1080	2.04	2.10
18	1244	44.00	1124	1.64	5.53
19	1320	76.00	1200	1.88	3.10
20	1374	54.00	1254	1.73	4.46
21	1415	41.00	1295	1.61	5.96
22	1452	37.00	1332	1.57	6.64
23	1484	32.00	1364	1.51	7.75
24	1516	32.00	1396	1.51	7.75
25	1545	29.00	1425	1.46	8.59
26	1570	25.00	1450	1.40	10.05
27	1592	22.00	1472	1.34	11.51
28	1610	18.00	1490	1.26	14.23
29	1631	21.00	1511	1.32	12.09
30	1650	19.00	1530	1.28	13.44
31	1667	17.00	1547	1.23	15.12
32	1684	17.00	1564	1.23	15.12
33	1702	18.00	1582	1.26	14.23
34	1720	18.00	1600	1.26	14.23
35	1735	15.00	1615	1.18	17.25
36	1750	15.00	1630	1.18	17.25
37	1766	16.00	1646	1.20	16.12
38	1780	14.00	1660	1.15	18.56
39	1790	10.00	1670	1.00	26.49
40	1810	20.00	1690	1.30	12.73
41	1820	10.00	1700	1.00	26.49



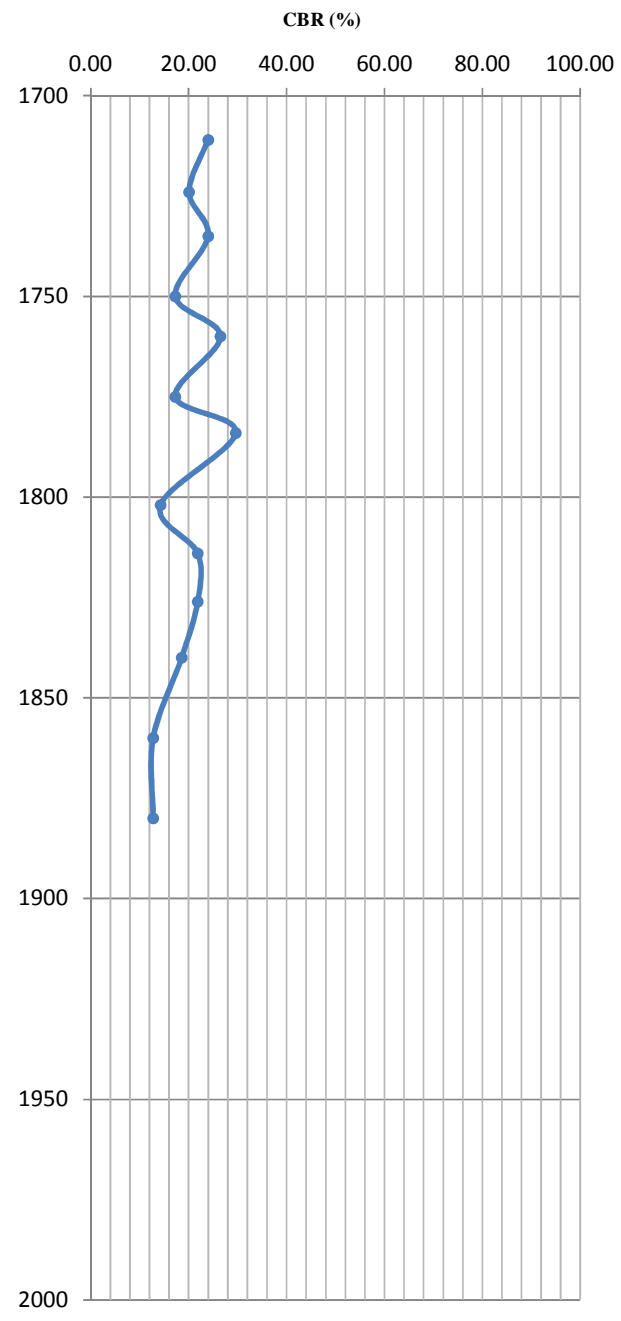
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 12.42	DCP1210
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E540322.08, N264848.38	Initial Scale Reading (mm) 120	

42	1831	11.00	1711	1.04	23.95
43	1844	13.00	1724	1.11	20.07
44	1855	11.00	1735	1.04	23.95
45	1870	15.00	1750	1.18	17.25
46	1880	10.00	1760	1.00	26.49
47	1895	15.00	1775	1.18	17.25
48	1904	9.00	1784	0.95	29.61
49	1922	18.00	1802	1.26	14.23
50	1934	12.00	1814	1.08	21.84
51	1946	12.00	1826	1.08	21.84
52	1960	14.00	1840	1.15	18.56
53	1980	20.00	1860	1.30	12.73
54	2000	20.00	1880	1.30	12.73

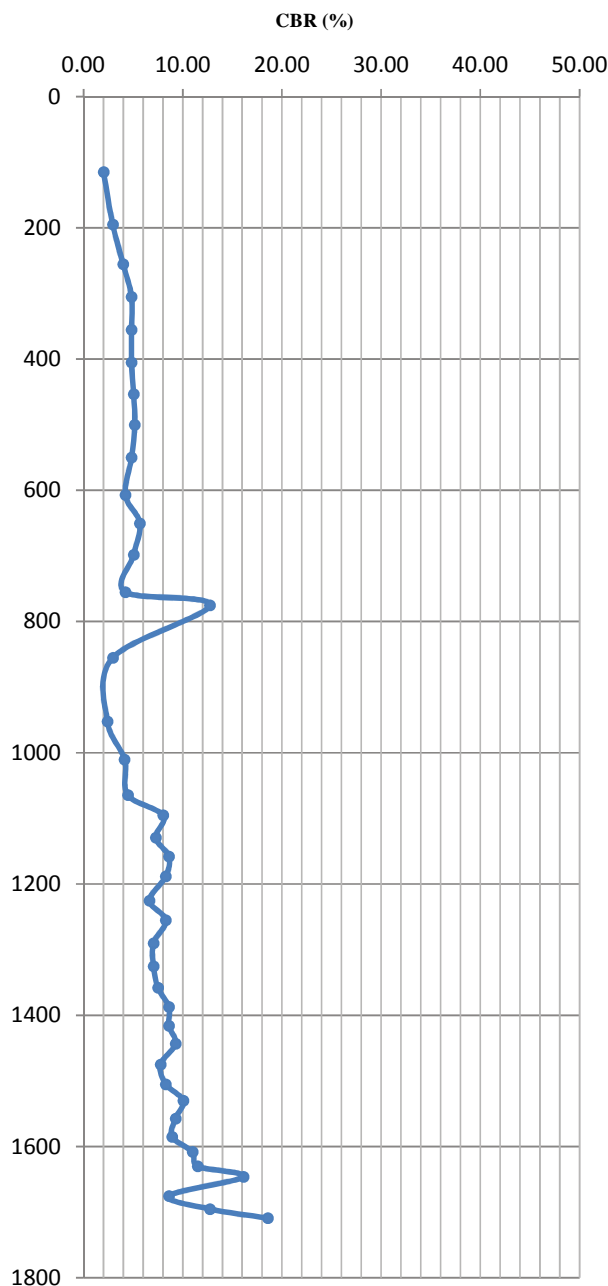


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $Log_{10}(CBR) = 2.48 - 1.057 \times Log_{10}(mm/blow)$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1211	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 13.55		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540182.67, N264797.63	Initial Scale Reading (mm) 125	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	240	115.00	115	2.06	2.00
2	320	80.00	195	1.90	2.94
3	380	60.00	255	1.78	3.99
4	430	50.00	305	1.70	4.83
5	480	50.00	355	1.70	4.83
6	530	50.00	405	1.70	4.83
7	578	48.00	453	1.68	5.05
8	625	47.00	500	1.67	5.16
9	675	50.00	550	1.70	4.83
10	732	57.00	607	1.76	4.21
11	775	43.00	650	1.63	5.67
12	823	48.00	698	1.68	5.05
13	880	57.00	755	1.76	4.21
14	900	20.00	775	1.30	12.73
15	980	80.00	855	1.90	2.94
16	1077	97.00	952	1.99	2.40
17	1135	58.00	1010	1.76	4.13
18	1189	54.00	1064	1.73	4.46
19	1220	31.00	1095	1.49	8.01
20	1254	34.00	1129	1.53	7.26
21	1283	29.00	1158	1.46	8.59
22	1313	30.00	1188	1.48	8.29
23	1350	37.00	1225	1.57	6.64
24	1380	30.00	1255	1.48	8.29
25	1415	35.00	1290	1.54	7.05
26	1450	35.00	1325	1.54	7.05
27	1483	33.00	1358	1.52	7.50
28	1512	29.00	1387	1.46	8.59
29	1541	29.00	1416	1.46	8.59
30	1568	27.00	1443	1.43	9.27
31	1600	32.00	1475	1.51	7.75
32	1630	30.00	1505	1.48	8.29
33	1655	25.00	1530	1.40	10.05
34	1682	27.00	1557	1.43	9.27
35	1710	28.00	1585	1.45	8.92
36	1733	23.00	1608	1.36	10.98
37	1755	22.00	1630	1.34	11.51
38	1771	16.00	1646	1.20	16.12
39	1800	29.00	1675	1.46	8.59
40	1820	20.00	1695	1.30	12.73
41	1834	14.00	1709	1.15	18.56



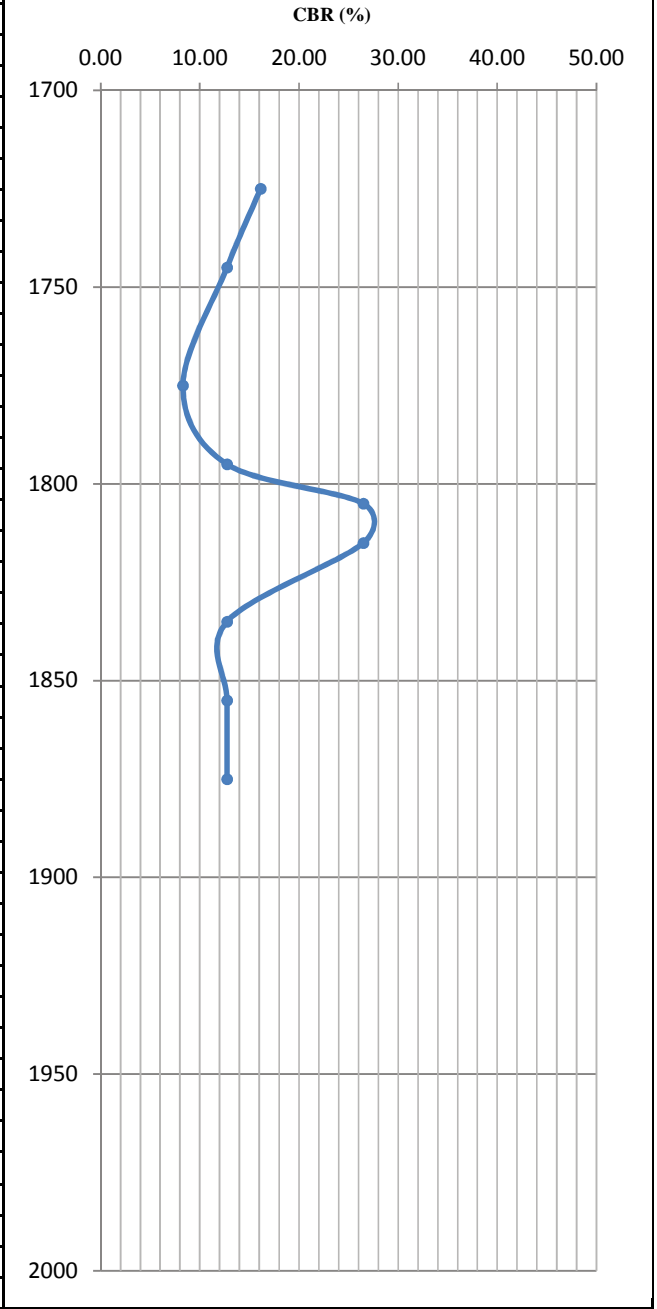
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID		
Job No. UA008426-01		Date 02/02/2017		Ground Level (m) 13.55	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540182.67, N264797.63		Initial Scale Reading (mm) 125	
					Sheet 2 of 2

42	1850	16.00	1725	1.20	16.12
43	1870	20.00	1745	1.30	12.73
44	1900	30.00	1775	1.48	8.29
45	1920	20.00	1795	1.30	12.73
46	1930	10.00	1805	1.00	26.49
47	1940	10.00	1815	1.00	26.49
48	1960	20.00	1835	1.30	12.73
49	1980	20.00	1855	1.30	12.73
50	2000	20.00	1875	1.30	12.73

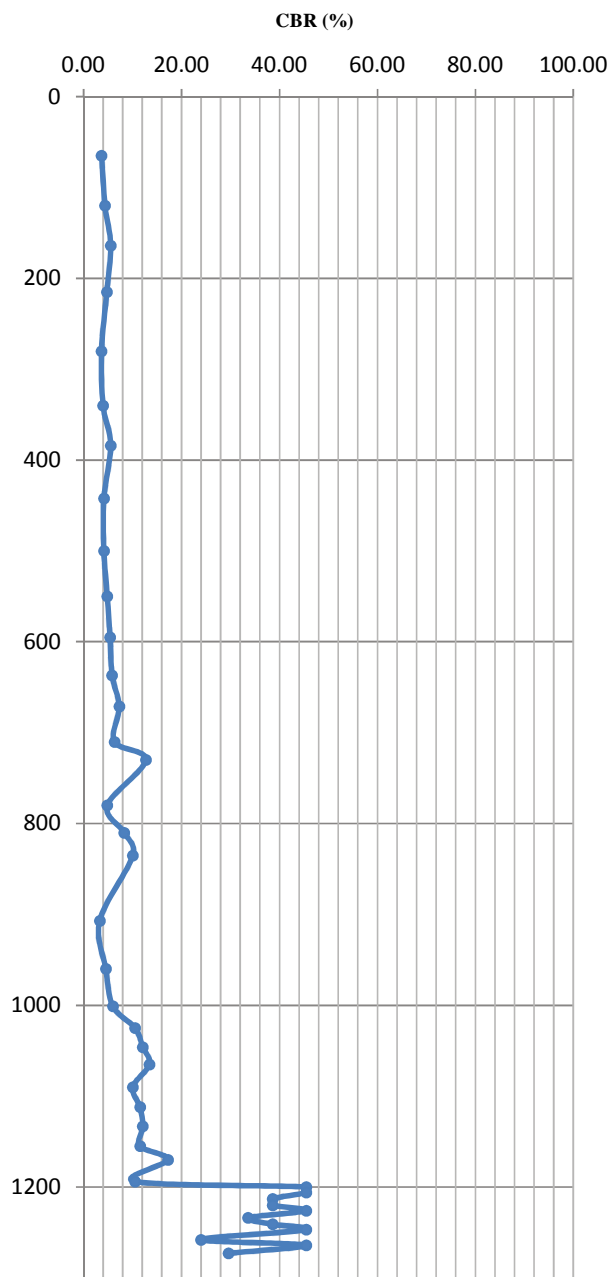


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator <p style="text-align: center;">GSTL</p>
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1212	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 13.77		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540131.24, N264745.19	Initial Scale Reading (mm) 170	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	235	65.00	65	1.81	3.66
2	290	55.00	120	1.74	4.37
3	334	44.00	164	1.64	5.53
4	385	51.00	215	1.71	4.73
5	450	65.00	280	1.81	3.66
6	510	60.00	340	1.78	3.99
7	554	44.00	384	1.64	5.53
8	612	58.00	442	1.76	4.13
9	670	58.00	500	1.76	4.13
10	720	50.00	550	1.70	4.83
11	765	45.00	595	1.65	5.40
12	807	42.00	637	1.62	5.81
13	841	34.00	671	1.53	7.26
14	880	39.00	710	1.59	6.28
15	900	20.00	730	1.30	12.73
16	950	50.00	780	1.70	4.83
17	980	30.00	810	1.48	8.29
18	1005	25.00	835	1.40	10.05
19	1077	72.00	907	1.86	3.29
20	1130	53.00	960	1.72	4.54
21	1171	41.00	1001	1.61	5.96
22	1195	24.00	1025	1.38	10.50
23	1216	21.00	1046	1.32	12.09
24	1235	19.00	1065	1.28	13.44
25	1260	25.00	1090	1.40	10.05
26	1282	22.00	1112	1.34	11.51
27	1303	21.00	1133	1.32	12.09
28	1325	22.00	1155	1.34	11.51
29	1340	15.00	1170	1.18	17.25
30	1364	24.00	1194	1.38	10.50
31	1370	6.00	1200	0.78	45.45
32	1376	6.00	1206	0.78	45.45
33	1383	7.00	1213	0.85	38.61
34	1390	7.00	1220	0.85	38.61
35	1396	6.00	1226	0.78	45.45
36	1404	8.00	1234	0.90	33.53
37	1411	7.00	1241	0.85	38.61
38	1417	6.00	1247	0.78	45.45
39	1428	11.00	1258	1.04	23.95
40	1434	6.00	1264	0.78	45.45
41	1443	9.00	1273	0.95	29.61



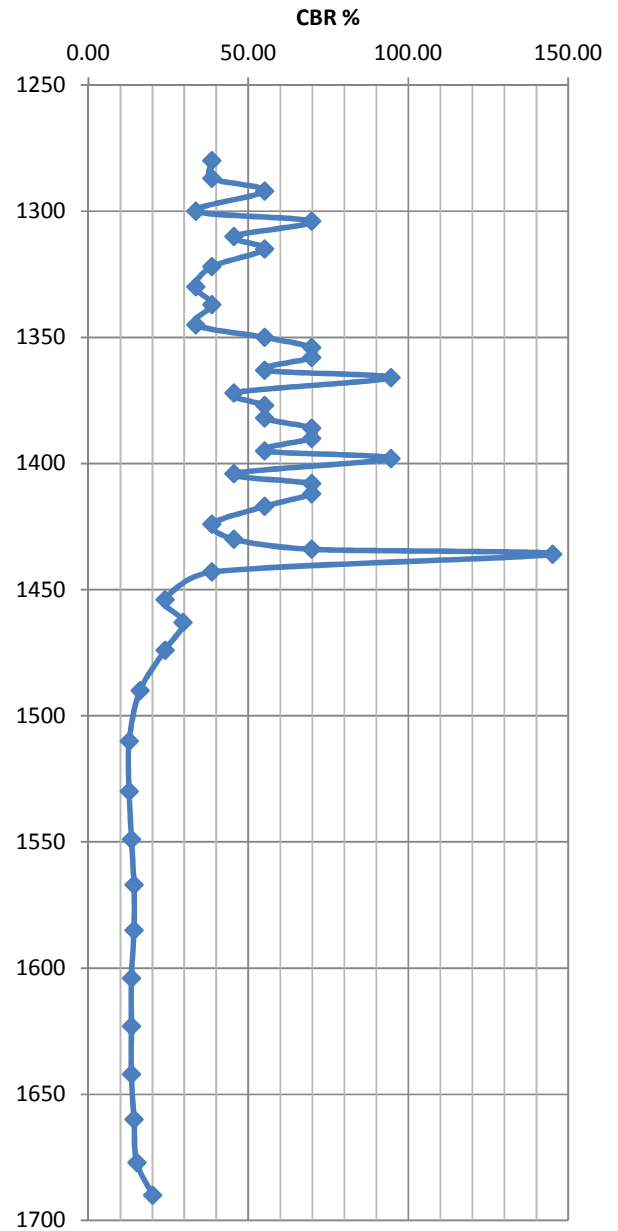
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1212		
Job No. UA008426-01		Date 02/02/2017		Ground Level (m) 13.77	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540131.24, N264745.19		Initial Scale Reading (mm) 170	
Sheet 2 of 3					

42	1450	7.00	1280	0.85	38.61
43	1457	7.00	1287	0.85	38.61
44	1462	5.00	1292	0.70	55.10
45	1470	8.00	1300	0.90	33.53
46	1474	4.00	1304	0.60	69.76
47	1480	6.00	1310	0.78	45.45
48	1485	5.00	1315	0.70	55.10
49	1492	7.00	1322	0.85	38.61
50	1500	8.00	1330	0.90	33.53
51	1507	7.00	1337	0.85	38.61
52	1515	8.00	1345	0.90	33.53
53	1520	5.00	1350	0.70	55.10
54	1524	4.00	1354	0.60	69.76
55	1528	4.00	1358	0.60	69.76
56	1533	5.00	1363	0.70	55.10
57	1536	3.00	1366	0.48	94.55
58	1542	6.00	1372	0.78	45.45
59	1547	5.00	1377	0.70	55.10
60	1552	5.00	1382	0.70	55.10
61	1556	4.00	1386	0.60	69.76
62	1560	4.00	1390	0.60	69.76
63	1565	5.00	1395	0.70	55.10
64	1568	3.00	1398	0.48	94.55
65	1574	6.00	1404	0.78	45.45
66	1578	4.00	1408	0.60	69.76
67	1582	4.00	1412	0.60	69.76
68	1587	5.00	1417	0.70	55.10
69	1594	7.00	1424	0.85	38.61
70	1600	6.00	1430	0.78	45.45
71	1604	4.00	1434	0.60	69.76
72	1606	2.00	1436	0.30	145.15
73	1613	7.00	1443	0.85	38.61
74	1624	11.00	1454	1.04	23.95
75	1633	9.00	1463	0.95	29.61
76	1644	11.00	1474	1.04	23.95
77	1660	16.00	1490	1.20	16.12
78	1680	20.00	1510	1.30	12.73
79	1700	20.00	1530	1.30	12.73
80	1719	19.00	1549	1.28	13.44
81	1737	18.00	1567	1.26	14.23
82	1755	18.00	1585	1.26	14.23
83	1774	19.00	1604	1.28	13.44
84	1793	19.00	1623	1.28	13.44
85	1812	19.00	1642	1.28	13.44
86	1830	18.00	1660	1.26	14.23
87	1847	17.00	1677	1.23	15.12
88	1860	13.00	1690	1.11	20.07



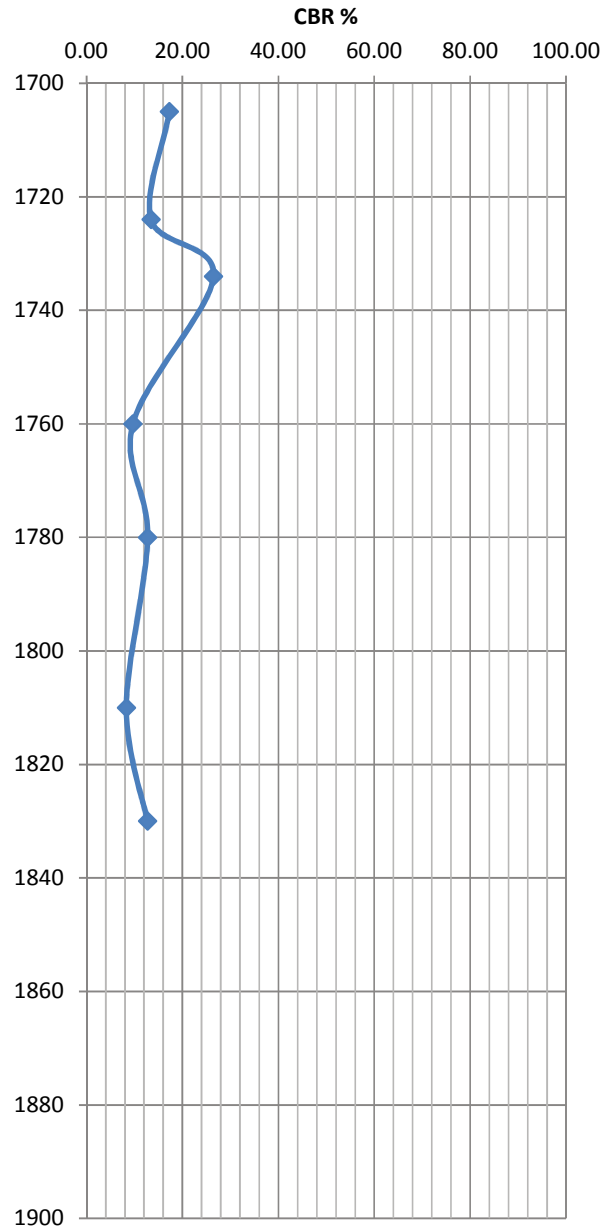
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1212		
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 13.77			
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540131.24, N264745.19	Initial Scale Reading (mm) 170		Sheet 3 of 3

89	1875	15.00	1705	1.18	17.25
90	1894	19.00	1724	1.28	13.44
91	1904	10.00	1734	1.00	26.49
92	1930	26.00	1760	1.41	9.65
93	1950	20.00	1780	1.30	12.73
94	1980	30.00	1810	1.48	8.29
95	2000	20.00	1830	1.30	12.73

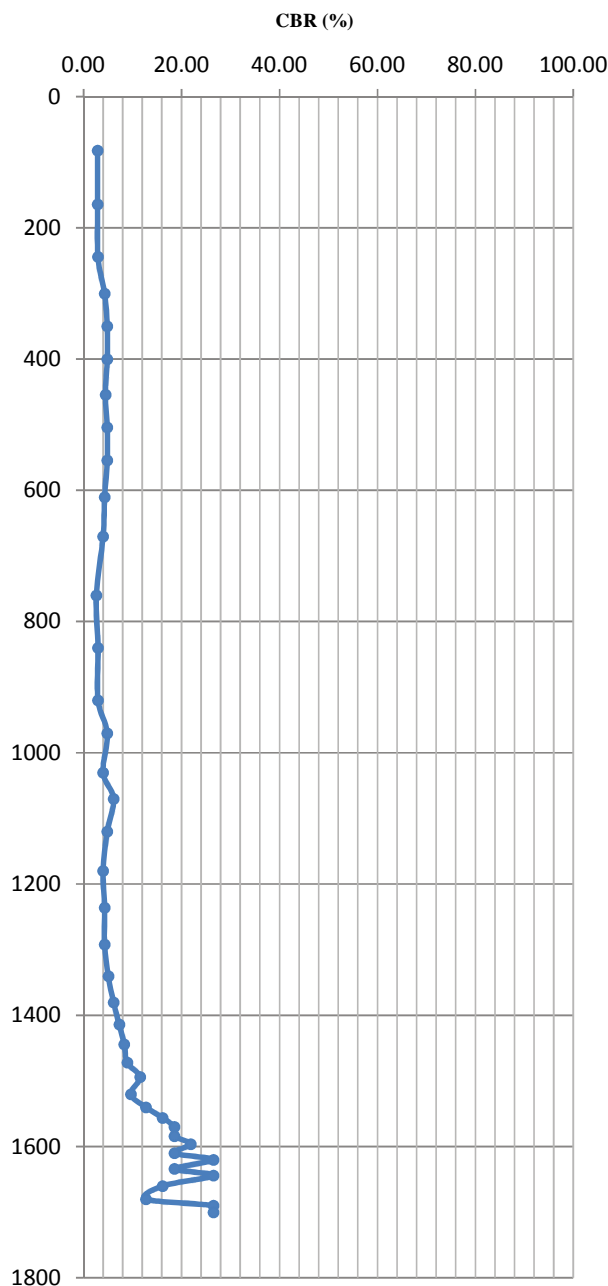


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1213	
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 13.99		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540053.37, N264713.46	Initial Scale Reading (mm) 0	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	102	82.00	82	1.91	2.86
2	184	82.00	164	1.91	2.86
3	264	80.00	244	1.90	2.94
4	320	56.00	300	1.75	4.29
5	370	50.00	350	1.70	4.83
6	420	50.00	400	1.70	4.83
7	474	54.00	454	1.73	4.46
8	524	50.00	504	1.70	4.83
9	574	50.00	554	1.70	4.83
10	630	56.00	610	1.75	4.29
11	690	60.00	670	1.78	3.99
12	780	90.00	760	1.95	2.60
13	860	80.00	840	1.90	2.94
14	940	80.00	920	1.90	2.94
15	990	50.00	970	1.70	4.83
16	1050	60.00	1030	1.78	3.99
17	1090	40.00	1070	1.60	6.12
18	1140	50.00	1120	1.70	4.83
19	1200	60.00	1180	1.78	3.99
20	1256	56.00	1236	1.75	4.29
21	1312	56.00	1292	1.75	4.29
22	1360	48.00	1340	1.68	5.05
23	1400	40.00	1380	1.60	6.12
24	1434	34.00	1414	1.53	7.26
25	1464	30.00	1444	1.48	8.29
26	1492	28.00	1472	1.45	8.92
27	1514	22.00	1494	1.34	11.51
28	1540	26.00	1520	1.41	9.65
29	1560	20.00	1540	1.30	12.73
30	1576	16.00	1556	1.20	16.12
31	1590	14.00	1570	1.15	18.56
32	1604	14.00	1584	1.15	18.56
33	1616	12.00	1596	1.08	21.84
34	1630	14.00	1610	1.15	18.56
35	1640	10.00	1620	1.00	26.49
36	1654	14.00	1634	1.15	18.56
37	1664	10.00	1644	1.00	26.49
38	1680	16.00	1660	1.20	16.12
39	1700	20.00	1680	1.30	12.73
40	1710	10.00	1690	1.00	26.49
41	1720	10.00	1700	1.00	26.49



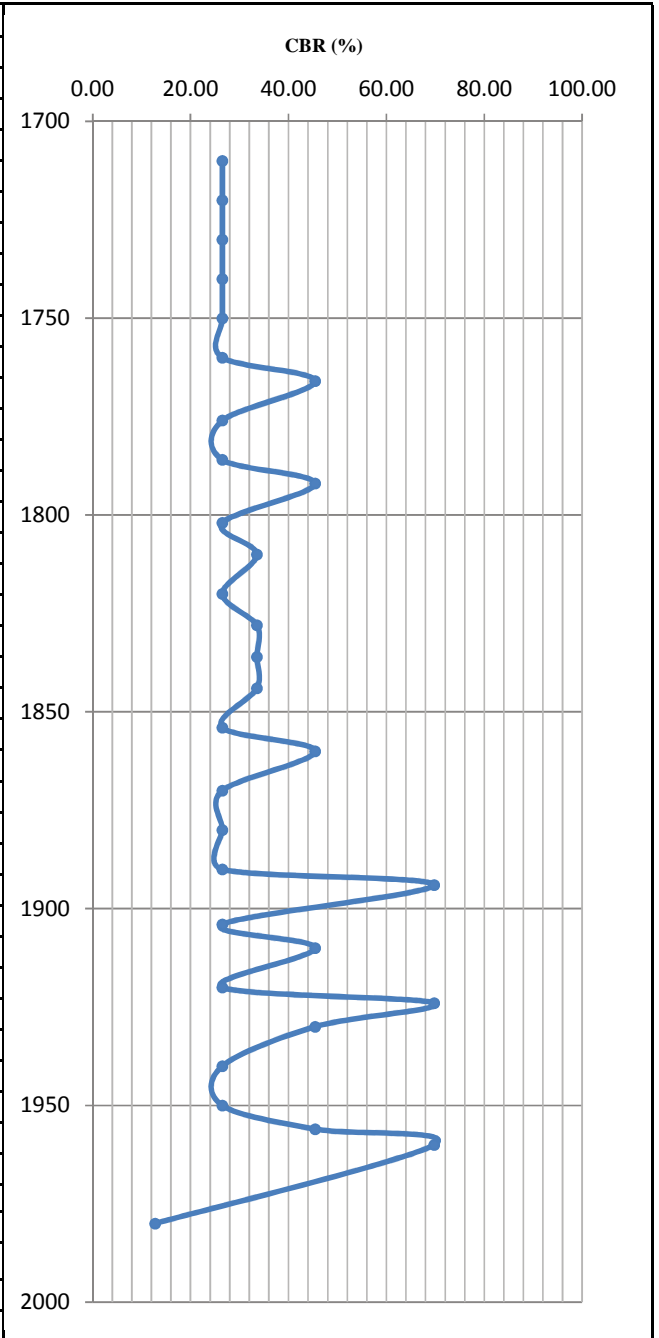
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1213		
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 13.99			
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540053.37, N264713.46	Initial Scale Reading (mm) 0	Sheet 2 of 2	

42	1730	10.00	1710	1.00	26.49
43	1740	10.00	1720	1.00	26.49
44	1750	10.00	1730	1.00	26.49
45	1760	10.00	1740	1.00	26.49
46	1770	10.00	1750	1.00	26.49
47	1780	10.00	1760	1.00	26.49
48	1786	6.00	1766	0.78	45.45
49	1796	10.00	1776	1.00	26.49
50	1806	10.00	1786	1.00	26.49
51	1812	6.00	1792	0.78	45.45
52	1822	10.00	1802	1.00	26.49
53	1830	8.00	1810	0.90	33.53
54	1840	10.00	1820	1.00	26.49
55	1848	8.00	1828	0.90	33.53
56	1856	8.00	1836	0.90	33.53
57	1864	8.00	1844	0.90	33.53
58	1874	10.00	1854	1.00	26.49
59	1880	6.00	1860	0.78	45.45
60	1890	10.00	1870	1.00	26.49
61	1900	10.00	1880	1.00	26.49
62	1910	10.00	1890	1.00	26.49
63	1914	4.00	1894	0.60	69.76
64	1924	10.00	1904	1.00	26.49
65	1930	6.00	1910	0.78	45.45
66	1940	10.00	1920	1.00	26.49
67	1944	4.00	1924	0.60	69.76
68	1950	6.00	1930	0.78	45.45
69	1960	10.00	1940	1.00	26.49
70	1970	10.00	1950	1.00	26.49
71	1976	6.00	1956	0.78	45.45
72	1980	4.00	1960	0.60	69.76
73	2000	20.00	1980	1.30	12.73

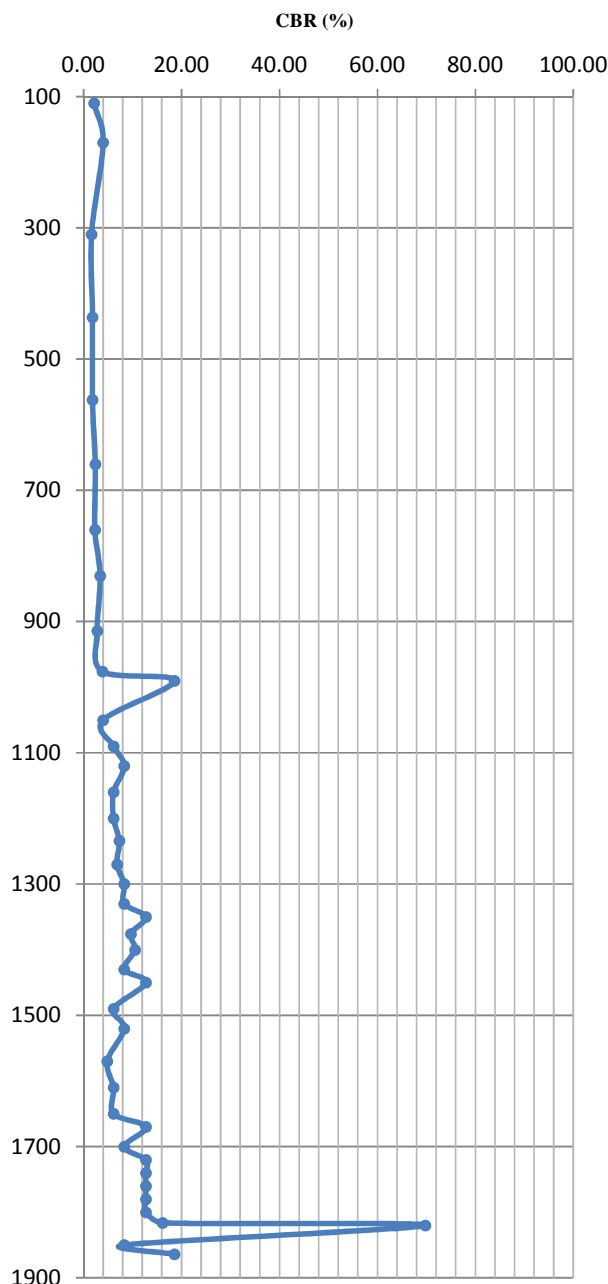


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1214	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 14.25		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539966.51, N264707.58	Initial Scale Reading (mm) 110	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	120	110.00	110	2.04	2.10
2	180	60.00	170	1.78	3.99
3	320	140.00	310	2.15	1.63
4	446	126.00	436	2.10	1.82
5	572	126.00	562	2.10	1.82
6	670	98.00	660	1.99	2.37
7	770	100.00	760	2.00	2.32
8	840	70.00	830	1.85	3.39
9	924	84.00	914	1.92	2.79
10	986	62.00	976	1.79	3.85
11	1000	14.00	990	1.15	18.56
12	1060	60.00	1050	1.78	3.99
13	1100	40.00	1090	1.60	6.12
14	1130	30.00	1120	1.48	8.29
15	1170	40.00	1160	1.60	6.12
16	1210	40.00	1200	1.60	6.12
17	1244	34.00	1234	1.53	7.26
18	1280	36.00	1270	1.56	6.84
19	1310	30.00	1300	1.48	8.29
20	1340	30.00	1330	1.48	8.29
21	1360	20.00	1350	1.30	12.73
22	1386	26.00	1376	1.41	9.65
23	1410	24.00	1400	1.38	10.50
24	1440	30.00	1430	1.48	8.29
25	1460	20.00	1450	1.30	12.73
26	1500	40.00	1490	1.60	6.12
27	1530	30.00	1520	1.48	8.29
28	1580	50.00	1570	1.70	4.83
29	1620	40.00	1610	1.60	6.12
30	1660	40.00	1650	1.60	6.12
31	1680	20.00	1670	1.30	12.73
32	1710	30.00	1700	1.48	8.29
33	1730	20.00	1720	1.30	12.73
34	1750	20.00	1740	1.30	12.73
35	1770	20.00	1760	1.30	12.73
36	1790	20.00	1780	1.30	12.73
37	1810	20.00	1800	1.30	12.73
38	1826	16.00	1816	1.20	16.12
39	1830	4.00	1820	0.60	69.76
40	1860	30.00	1850	1.48	8.29
41	1874	14.00	1864	1.15	18.56



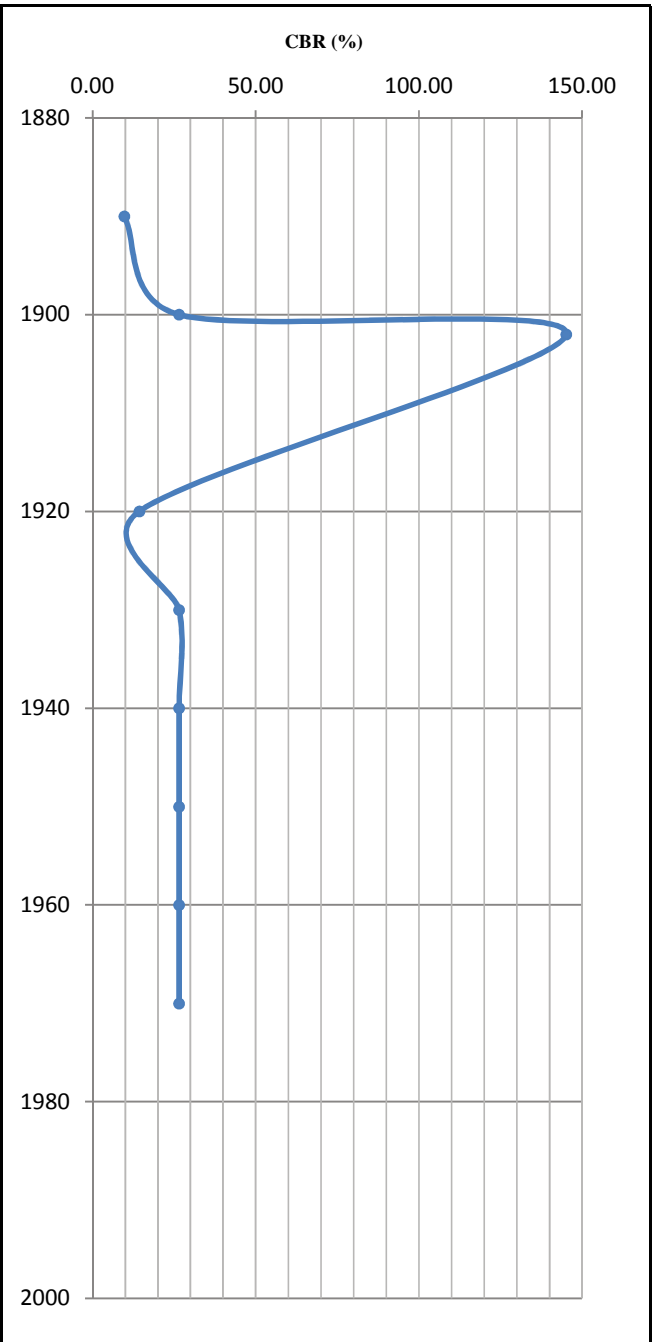
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1214		
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 14.25			
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539966.51, N264707.58		Initial Scale Reading (mm) 110	Sheet 2 of 2

42	1900	26.00	1890	1.41	9.65
43	1910	10.00	1900	1.00	26.49
44	1912	2.00	1902	0.30	145.15
45	1930	18.00	1920	1.26	14.23
46	1940	10.00	1930	1.00	26.49
47	1950	10.00	1940	1.00	26.49
48	1960	10.00	1950	1.00	26.49
49	1970	10.00	1960	1.00	26.49
50	1980	10.00	1970	1.00	26.49

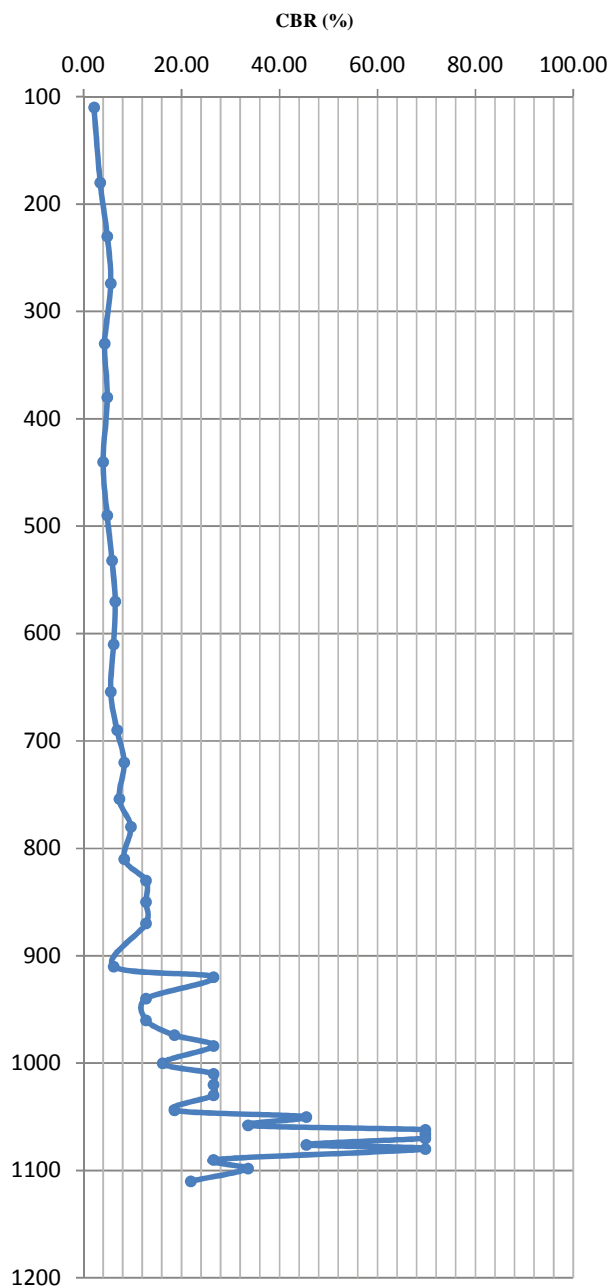


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1215	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.21		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539773.77, N264671.66	Initial Scale Reading (mm) 0	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	190	110.00	110	2.04	2.10
2	260	70.00	180	1.85	3.39
3	310	50.00	230	1.70	4.83
4	354	44.00	274	1.64	5.53
5	410	56.00	330	1.75	4.29
6	460	50.00	380	1.70	4.83
7	520	60.00	440	1.78	3.99
8	570	50.00	490	1.70	4.83
9	612	42.00	532	1.62	5.81
10	650	38.00	570	1.58	6.46
11	690	40.00	610	1.60	6.12
12	734	44.00	654	1.64	5.53
13	770	36.00	690	1.56	6.84
14	800	30.00	720	1.48	8.29
15	834	34.00	754	1.53	7.26
16	860	26.00	780	1.41	9.65
17	890	30.00	810	1.48	8.29
18	910	20.00	830	1.30	12.73
19	930	20.00	850	1.30	12.73
20	950	20.00	870	1.30	12.73
21	990	40.00	910	1.60	6.12
22	1000	10.00	920	1.00	26.49
23	1020	20.00	940	1.30	12.73
24	1040	20.00	960	1.30	12.73
25	1054	14.00	974	1.15	18.56
26	1064	10.00	984	1.00	26.49
27	1080	16.00	1000	1.20	16.12
28	1090	10.00	1010	1.00	26.49
29	1100	10.00	1020	1.00	26.49
30	1110	10.00	1030	1.00	26.49
31	1124	14.00	1044	1.15	18.56
32	1130	6.00	1050	0.78	45.45
33	1138	8.00	1058	0.90	33.53
34	1142	4.00	1062	0.60	69.76
35	1146	4.00	1066	0.60	69.76
36	1150	4.00	1070	0.60	69.76
37	1156	6.00	1076	0.78	45.45
38	1160	4.00	1080	0.60	69.76
39	1170	10.00	1090	1.00	26.49
40	1178	8.00	1098	0.90	33.53
41	1190	12.00	1110	1.08	21.84



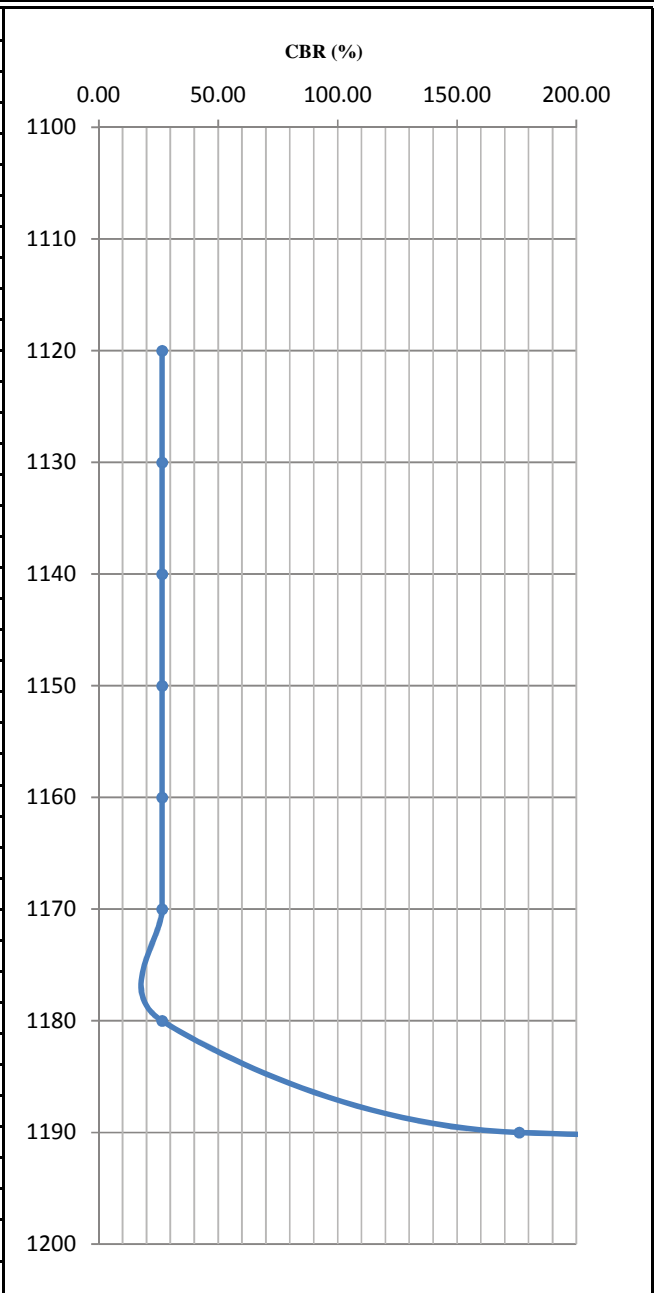
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID
			DCP1215
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.21	
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E539773.77, N264671.66	Initial Scale Reading (mm) 0	Sheet 2 of 2

42	1200	10.00	1120	1.00	26.49
43	1210	10.00	1130	1.00	26.49
44	1220	10.00	1140	1.00	26.49
45	1230	10.00	1150	1.00	26.49
46	1240	10.00	1160	1.00	26.49
47	1250	10.00	1170	1.00	26.49
48	1260	10.00	1180	1.00	26.49
54	1270	1.67	1190	0.22	176.00
64	1272	0.20	1192	-0.70	1655.05

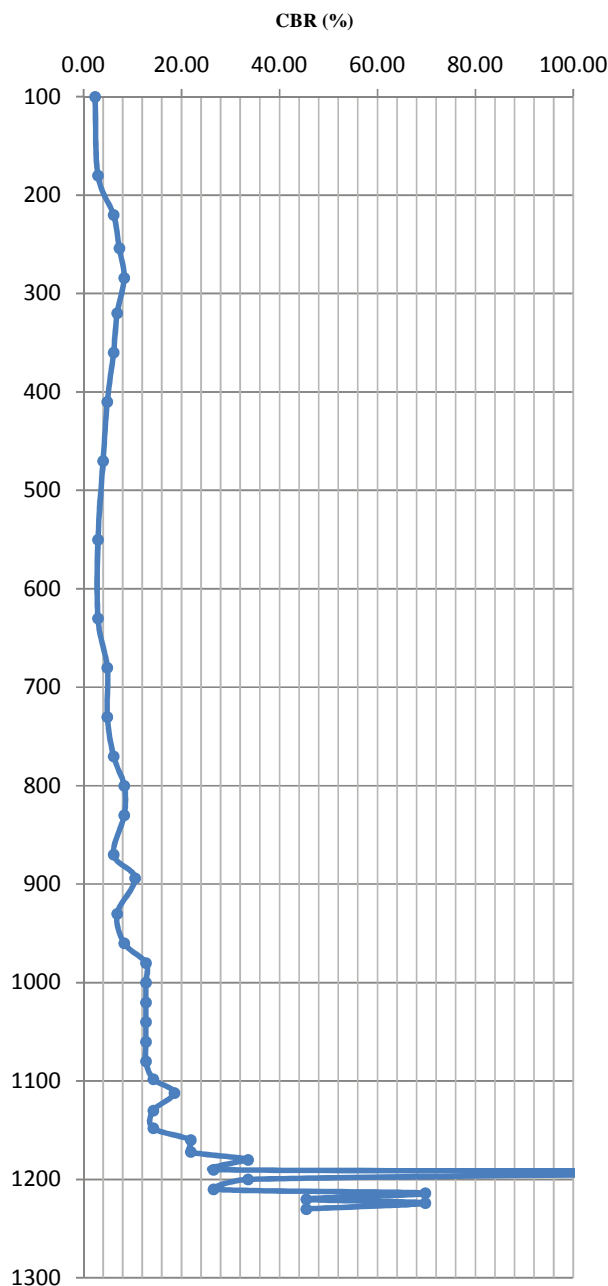


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1216	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.78		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539587.99, N264673.79	Initial Scale Reading (mm) 100	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	120	100.00	100	2.00	2.32
2	200	80.00	180	1.90	2.94
3	240	40.00	220	1.60	6.12
4	274	34.00	254	1.53	7.26
5	304	30.00	284	1.48	8.29
6	340	36.00	320	1.56	6.84
7	380	40.00	360	1.60	6.12
8	430	50.00	410	1.70	4.83
9	490	60.00	470	1.78	3.99
10	570	80.00	550	1.90	2.94
11	650	80.00	630	1.90	2.94
12	700	50.00	680	1.70	4.83
13	750	50.00	730	1.70	4.83
14	790	40.00	770	1.60	6.12
15	820	30.00	800	1.48	8.29
16	850	30.00	830	1.48	8.29
17	890	40.00	870	1.60	6.12
18	914	24.00	894	1.38	10.50
19	950	36.00	930	1.56	6.84
20	980	30.00	960	1.48	8.29
21	1000	20.00	980	1.30	12.73
22	1020	20.00	1000	1.30	12.73
23	1040	20.00	1020	1.30	12.73
24	1060	20.00	1040	1.30	12.73
25	1080	20.00	1060	1.30	12.73
26	1100	20.00	1080	1.30	12.73
27	1118	18.00	1098	1.26	14.23
28	1132	14.00	1112	1.15	18.56
29	1150	18.00	1130	1.26	14.23
30	1168	18.00	1148	1.26	14.23
31	1180	12.00	1160	1.08	21.84
32	1192	12.00	1172	1.08	21.84
33	1200	8.00	1180	0.90	33.53
34	1210	10.00	1190	1.00	26.49
35	1212	2.00	1192	0.30	145.15
36	1220	8.00	1200	0.90	33.53
37	1230	10.00	1210	1.00	26.49
38	1234	4.00	1214	0.60	69.76
39	1240	6.00	1220	0.78	45.45
40	1244	4.00	1224	0.60	69.76
41	1250	6.00	1230	0.78	45.45



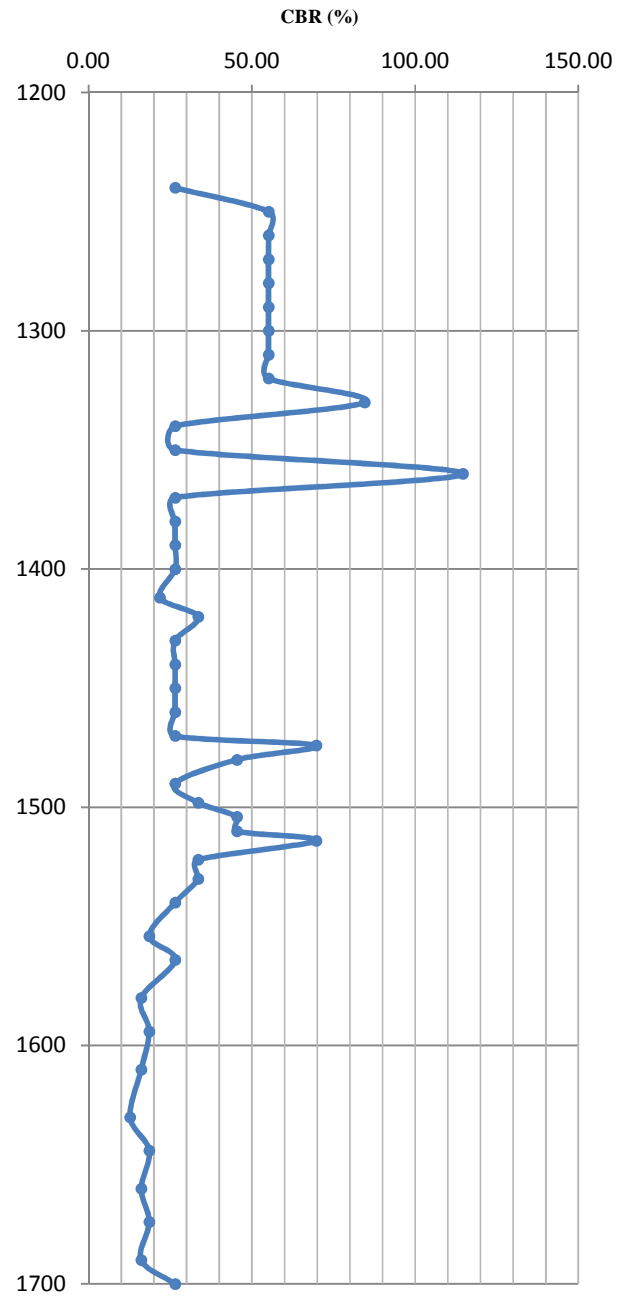
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1216		
Job No. UA008426-01		Date 01/02/2017		Ground Level (m) 15.78	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539587.99, N264673.79		Initial Scale Reading (mm) 100	
Sheet 2 of 3					

42	1260	10.00	1240	1.00	26.49
44	1270	5.00	1250	0.70	55.10
46	1280	5.00	1260	0.70	55.10
48	1290	5.00	1270	0.70	55.10
50	1300	5.00	1280	0.70	55.10
52	1310	5.00	1290	0.70	55.10
54	1320	5.00	1300	0.70	55.10
56	1330	5.00	1310	0.70	55.10
58	1340	5.00	1320	0.70	55.10
61	1350	3.33	1330	0.52	84.59
62	1360	10.00	1340	1.00	26.49
63	1370	10.00	1350	1.00	26.49
67	1380	2.50	1360	0.40	114.65
68	1390	10.00	1370	1.00	26.49
69	1400	10.00	1380	1.00	26.49
70	1410	10.00	1390	1.00	26.49
71	1420	10.00	1400	1.00	26.49
72	1432	12.00	1412	1.08	21.84
73	1440	8.00	1420	0.90	33.53
74	1450	10.00	1430	1.00	26.49
75	1460	10.00	1440	1.00	26.49
76	1470	10.00	1450	1.00	26.49
77	1480	10.00	1460	1.00	26.49
78	1490	10.00	1470	1.00	26.49
79	1494	4.00	1474	0.60	69.76
80	1500	6.00	1480	0.78	45.45
81	1510	10.00	1490	1.00	26.49
82	1518	8.00	1498	0.90	33.53
83	1524	6.00	1504	0.78	45.45
84	1530	6.00	1510	0.78	45.45
85	1534	4.00	1514	0.60	69.76
86	1542	8.00	1522	0.90	33.53
87	1550	8.00	1530	0.90	33.53
88	1560	10.00	1540	1.00	26.49
89	1574	14.00	1554	1.15	18.56
90	1584	10.00	1564	1.00	26.49
91	1600	16.00	1580	1.20	16.12
92	1614	14.00	1594	1.15	18.56
93	1630	16.00	1610	1.20	16.12
94	1650	20.00	1630	1.30	12.73
95	1664	14.00	1644	1.15	18.56
96	1680	16.00	1660	1.20	16.12
97	1694	14.00	1674	1.15	18.56
98	1710	16.00	1690	1.20	16.12
99	1720	10.00	1700	1.00	26.49

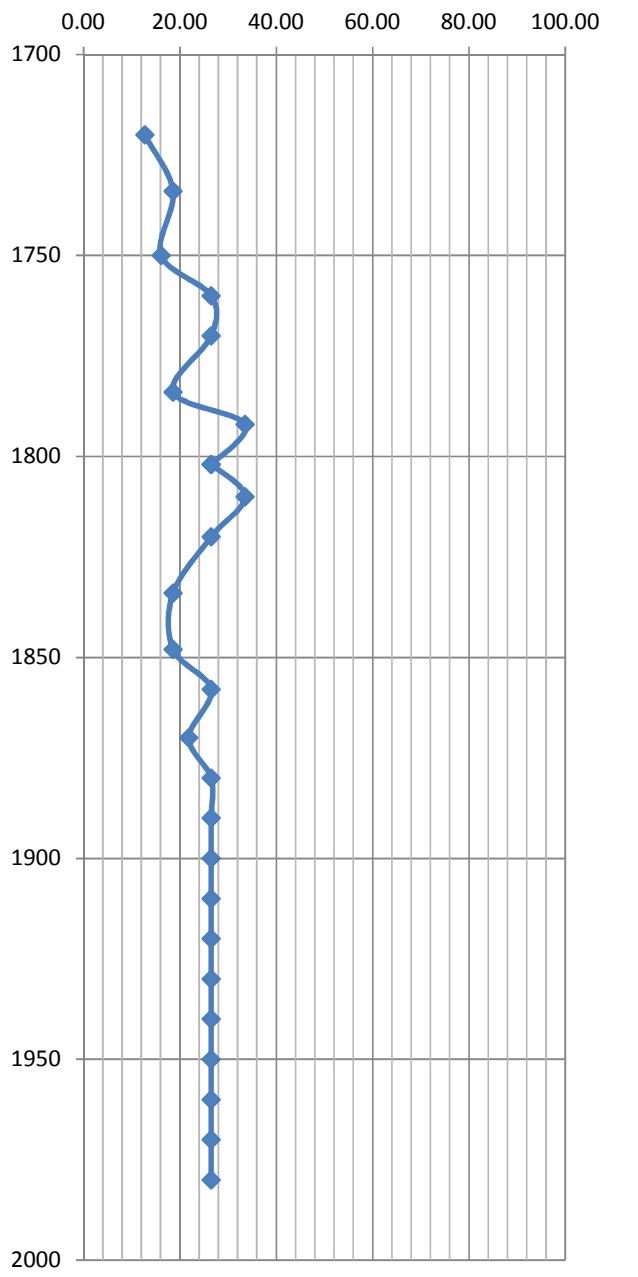


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1216		
Job No. UA008426-01	Date 01/02/2017		Ground Level (m) 15.78		Sheet 3 of 3
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E539587.99, N264673.79		Initial Scale Reading (mm) 100		

100	1740	20.00	1720	1.30	12.73
101	1754	14.00	1734	1.15	18.56
102	1770	16.00	1750	1.20	16.12
103	1780	10.00	1760	1.00	26.49
104	1790	10.00	1770	1.00	26.49
105	1804	14.00	1784	1.15	18.56
106	1812	8.00	1792	0.90	33.53
107	1822	10.00	1802	1.00	26.49
107	1822	10.00	1802	1.00	26.49
108	1830	8.00	1810	0.90	33.53
109	1840	10.00	1820	1.00	26.49
110	1854	14.00	1834	1.15	18.56
111	1868	14.00	1848	1.15	18.56
112	1878	10.00	1858	1.00	26.49
113	1890	12.00	1870	1.08	21.84
114	1900	10.00	1880	1.00	26.49
115	1910	10.00	1890	1.00	26.49
116	1920	10.00	1900	1.00	26.49
117	1930	10.00	1910	1.00	26.49
118	1940	10.00	1920	1.00	26.49
119	1950	10.00	1930	1.00	26.49
120	1960	10.00	1940	1.00	26.49
121	1970	10.00	1950	1.00	26.49
122	1980	10.00	1960	1.00	26.49
123	1990	10.00	1970	1.00	26.49
124	2000	10.00	1980	1.00	26.49

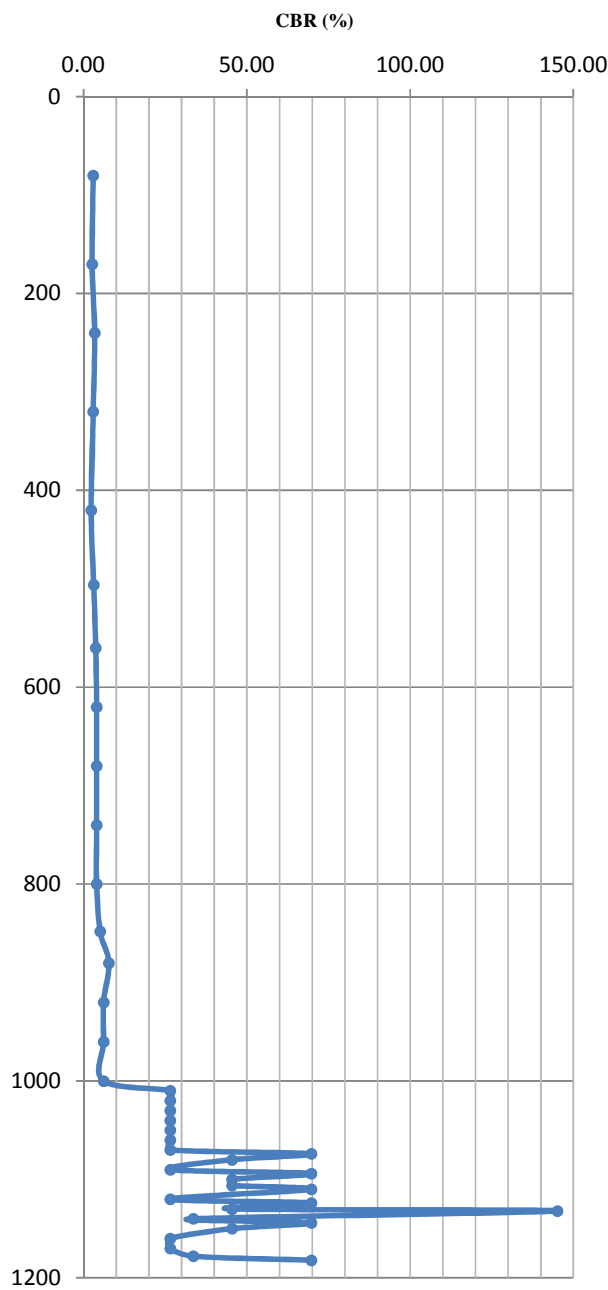


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\log_{10}(\text{CBR}) = 2.48 - 1.057 \times \log_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1217	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 16.22		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539438.62, N264648.72	Initial Scale Reading (mm) 80	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	110	80.00	80	1.90	2.94
2	200	90.00	170	1.95	2.60
3	270	70.00	240	1.85	3.39
4	350	80.00	320	1.90	2.94
5	450	100.00	420	2.00	2.32
6	526	76.00	496	1.88	3.10
7	590	64.00	560	1.81	3.72
8	650	60.00	620	1.78	3.99
9	710	60.00	680	1.78	3.99
10	770	60.00	740	1.78	3.99
11	830	60.00	800	1.78	3.99
12	878	48.00	848	1.68	5.05
13	910	32.00	880	1.51	7.75
14	950	40.00	920	1.60	6.12
15	990	40.00	960	1.60	6.12
16	1030	40.00	1000	1.60	6.12
17	1040	10.00	1010	1.00	26.49
18	1050	10.00	1020	1.00	26.49
19	1060	10.00	1030	1.00	26.49
20	1070	10.00	1040	1.00	26.49
21	1080	10.00	1050	1.00	26.49
22	1090	10.00	1060	1.00	26.49
23	1100	10.00	1070	1.00	26.49
24	1104	4.00	1074	0.60	69.76
25	1110	6.00	1080	0.78	45.45
26	1120	10.00	1090	1.00	26.49
27	1124	4.00	1094	0.60	69.76
28	1130	6.00	1100	0.78	45.45
29	1136	6.00	1106	0.78	45.45
30	1140	4.00	1110	0.60	69.76
31	1150	10.00	1120	1.00	26.49
32	1154	4.00	1124	0.60	69.76
33	1160	6.00	1130	0.78	45.45
34	1162	2.00	1132	0.30	145.15
35	1170	8.00	1140	0.90	33.53
36	1174	4.00	1144	0.60	69.76
37	1180	6.00	1150	0.78	45.45
38	1190	10.00	1160	1.00	26.49
39	1200	10.00	1170	1.00	26.49
40	1208	8.00	1178	0.90	33.53
41	1212	4.00	1182	0.60	69.76



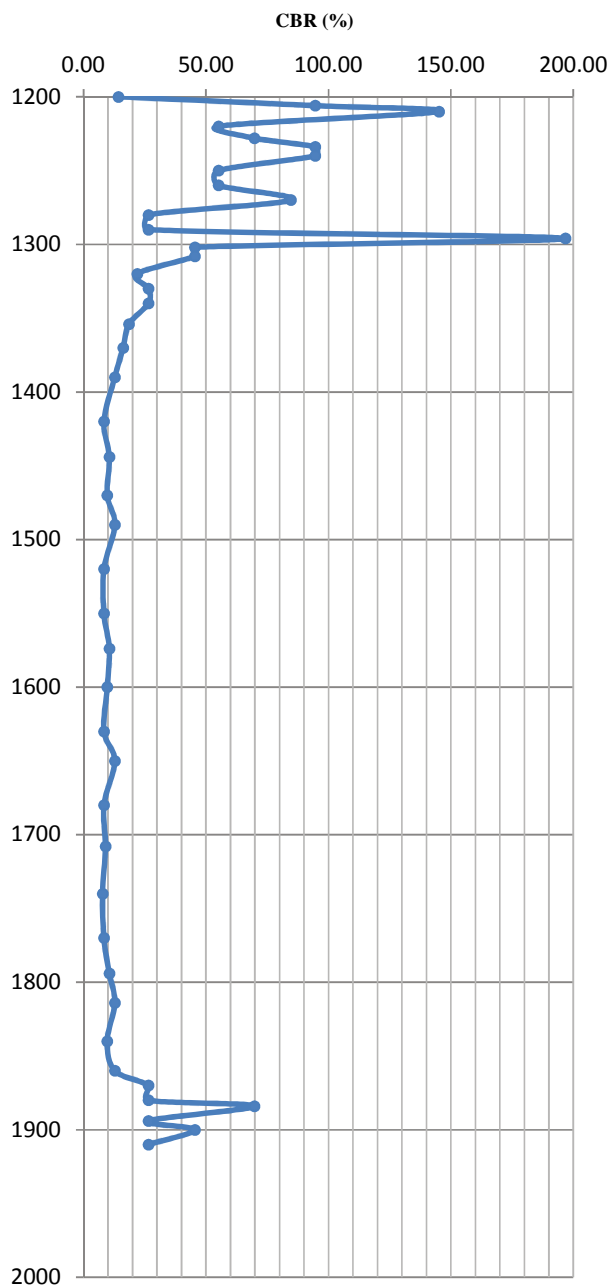
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1217		
Job No. UA008426-01		Date 01/02/2017		Ground Level (m) 16.22	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539438.62, N264648.72		Initial Scale Reading (mm) 80	
Sheet 2 of 3					

42	1230	18.00	1200	1.26	14.23
44	1236	3.00	1206	0.48	94.55
46	1240	2.00	1210	0.30	145.15
48	1250	5.00	1220	0.70	55.10
50	1258	4.00	1228	0.60	69.76
52	1264	3.00	1234	0.48	94.55
54	1270	3.00	1240	0.48	94.55
56	1280	5.00	1250	0.70	55.10
58	1290	5.00	1260	0.70	55.10
61	1300	3.33	1270	0.52	84.59
62	1310	10.00	1280	1.00	26.49
63	1320	10.00	1290	1.00	26.49
67	1326	1.50	1296	0.18	196.73
68	1332	6.00	1302	0.78	45.45
69	1338	6.00	1308	0.78	45.45
70	1350	12.00	1320	1.08	21.84
71	1360	10.00	1330	1.00	26.49
72	1370	10.00	1340	1.00	26.49
73	1384	14.00	1354	1.15	18.56
74	1400	16.00	1370	1.20	16.12
75	1420	20.00	1390	1.30	12.73
76	1450	30.00	1420	1.48	8.29
77	1474	24.00	1444	1.38	10.50
78	1500	26.00	1470	1.41	9.65
79	1520	20.00	1490	1.30	12.73
80	1550	30.00	1520	1.48	8.29
81	1580	30.00	1550	1.48	8.29
82	1604	24.00	1574	1.38	10.50
83	1630	26.00	1600	1.41	9.65
84	1660	30.00	1630	1.48	8.29
85	1680	20.00	1650	1.30	12.73
86	1710	30.00	1680	1.48	8.29
87	1738	28.00	1708	1.45	8.92
88	1770	32.00	1740	1.51	7.75
89	1800	30.00	1770	1.48	8.29
90	1824	24.00	1794	1.38	10.50
91	1844	20.00	1814	1.30	12.73
92	1870	26.00	1840	1.41	9.65
93	1890	20.00	1860	1.30	12.73
94	1900	10.00	1870	1.00	26.49
95	1910	10.00	1880	1.00	26.49
96	1914	4.00	1884	0.60	69.76
97	1924	10.00	1894	1.00	26.49
98	1930	6.00	1900	0.78	45.45
99	1940	10.00	1910	1.00	26.49

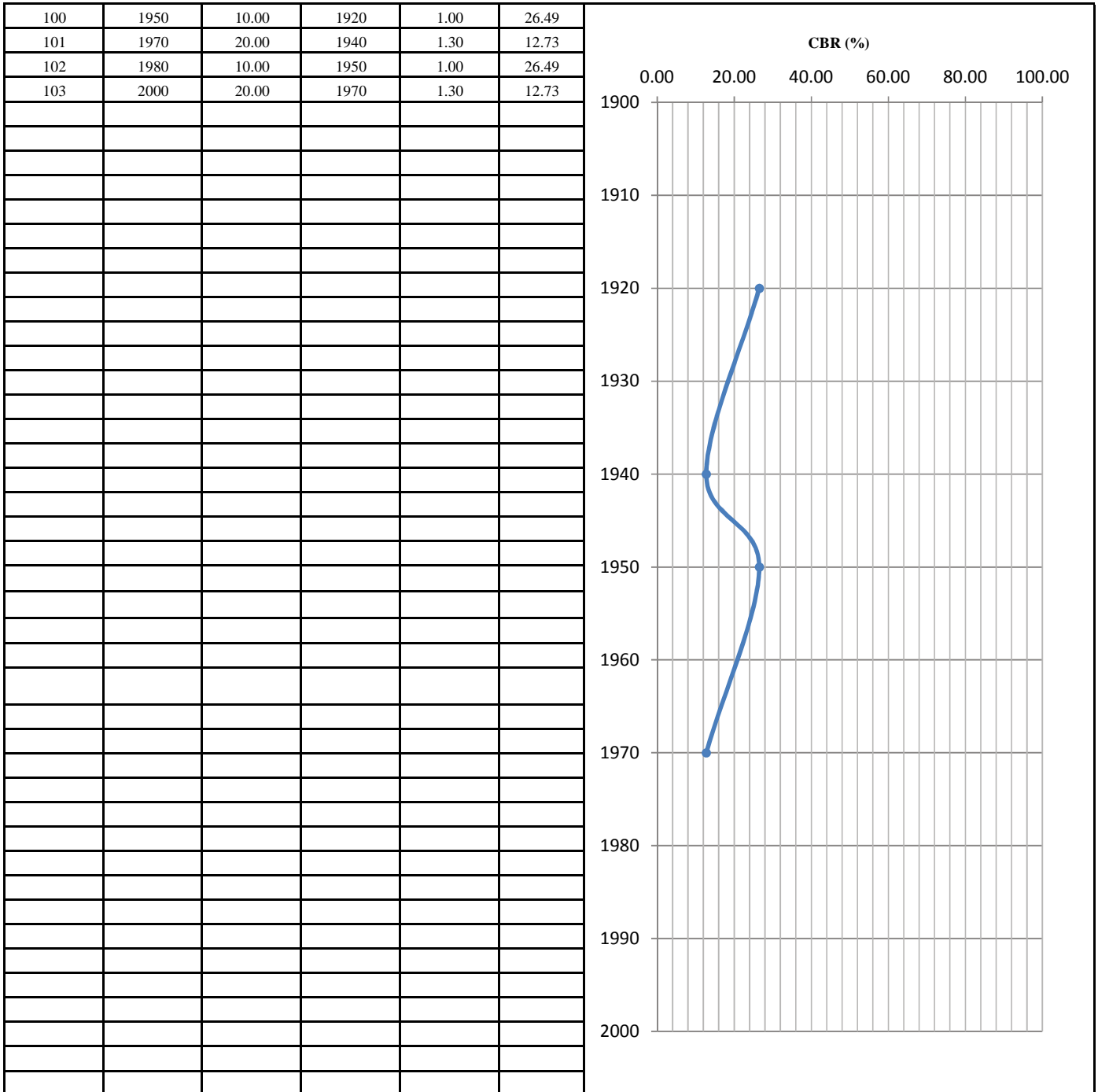


Remarks	Operator
Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	GSTL



TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1217	
Job No. UA008426-01		Date 01/02/2017	Ground Level (m) 16.22	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539438.62, N264648.72	Initial Scale Reading (mm) 80	Sheet 3 of 3

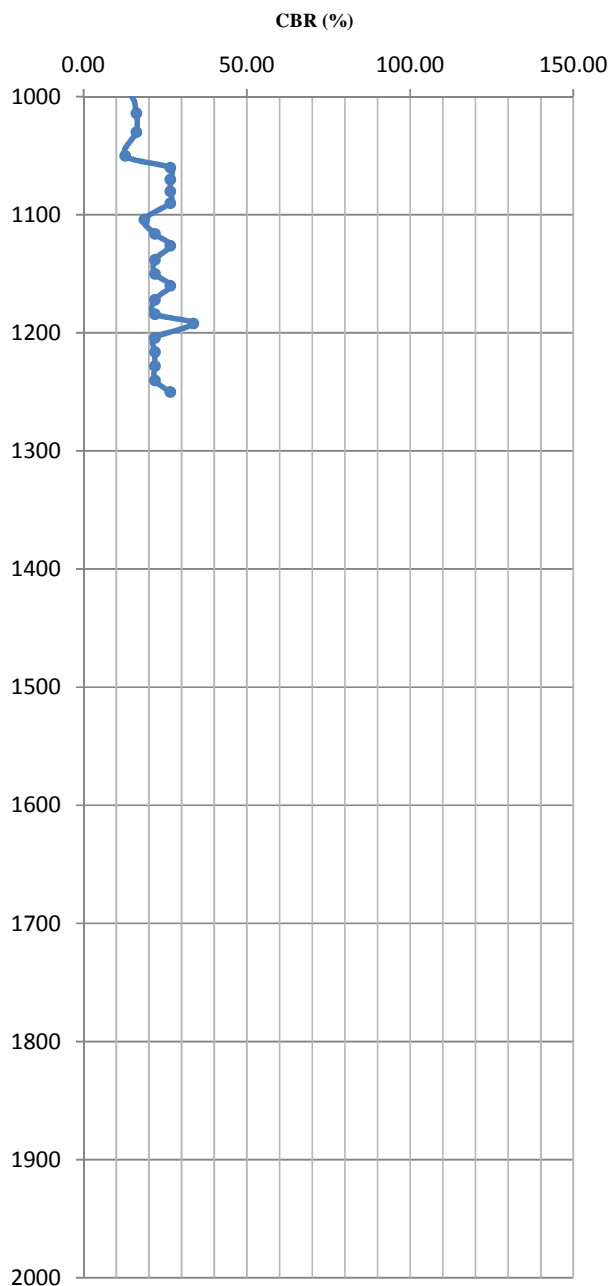


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator <p style="text-align: center;">GSTL</p>
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1218	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 16.11		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539360.14, N264679.29	Initial Scale Reading (mm) 0	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	160	110.00	110	2.04	2.10
2	220	60.00	170	1.78	3.99
3	264	44.00	214	1.64	5.53
4	320	56.00	270	1.75	4.29
5	380	60.00	330	1.78	3.99
6	426	46.00	376	1.66	5.28
7	486	60.00	436	1.78	3.99
8	552	66.00	502	1.82	3.60
9	620	68.00	570	1.83	3.49
10	682	62.00	632	1.79	3.85
11	730	48.00	680	1.68	5.05
12	778	48.00	728	1.68	5.05
13	820	42.00	770	1.62	5.81
14	860	40.00	810	1.60	6.12
15	890	30.00	840	1.48	8.29
16	920	30.00	870	1.48	8.29
17	950	30.00	900	1.48	8.29
18	980	30.00	930	1.48	8.29
19	1030	50.00	980	1.70	4.83
20	1048	18.00	998	1.26	14.23
21	1064	16.00	1014	1.20	16.12
22	1080	16.00	1030	1.20	16.12
23	1100	20.00	1050	1.30	12.73
24	1110	10.00	1060	1.00	26.49
25	1120	10.00	1070	1.00	26.49
26	1130	10.00	1080	1.00	26.49
27	1140	10.00	1090	1.00	26.49
28	1154	14.00	1104	1.15	18.56
29	1166	12.00	1116	1.08	21.84
30	1176	10.00	1126	1.00	26.49
31	1188	12.00	1138	1.08	21.84
32	1200	12.00	1150	1.08	21.84
33	1210	10.00	1160	1.00	26.49
34	1222	12.00	1172	1.08	21.84
35	1234	12.00	1184	1.08	21.84
36	1242	8.00	1192	0.90	33.53
37	1254	12.00	1204	1.08	21.84
38	1266	12.00	1216	1.08	21.84
39	1278	12.00	1228	1.08	21.84
40	1290	12.00	1240	1.08	21.84
41	1300	10.00	1250	1.00	26.49

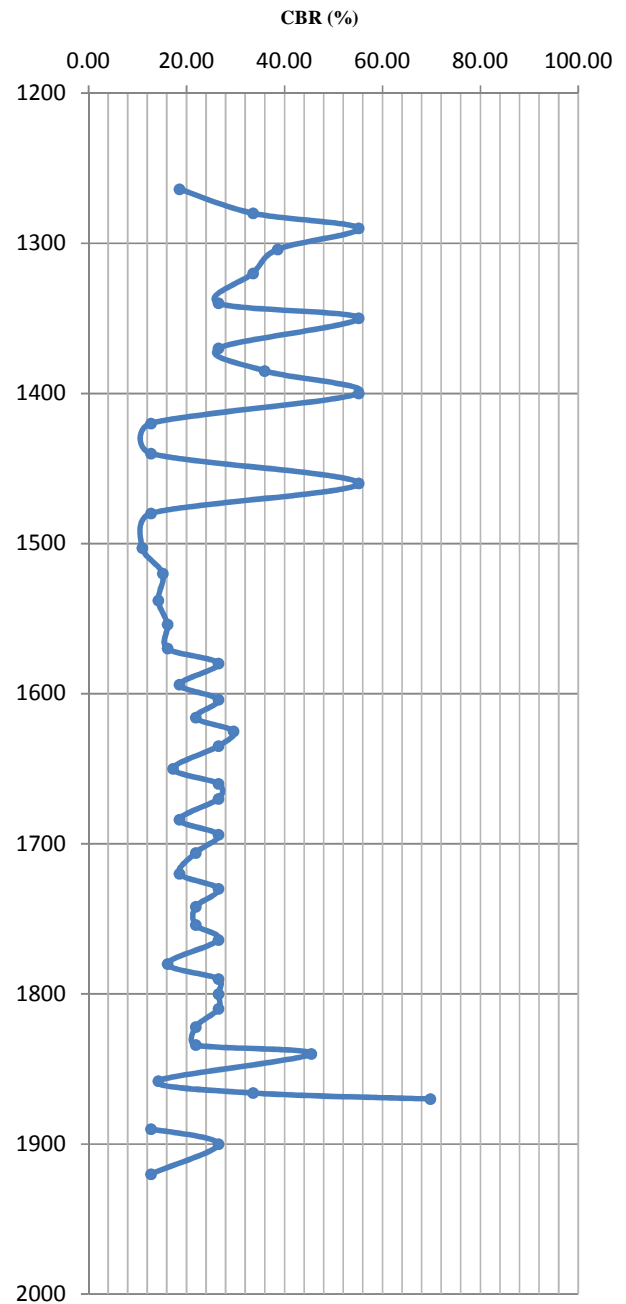


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1218		
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 16.11			
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539360.14, N264679.29		Initial Scale Reading (mm) 0	Sheet 2 of 3

42	1314	14.00	1264	1.15	18.56
44	1330	8.00	1280	0.90	33.53
46	1340	5.00	1290	0.70	55.10
48	1354	7.00	1304	0.85	38.61
50	1370	8.00	1320	0.90	33.53
52	1390	10.00	1340	1.00	26.49
54	1400	5.00	1350	0.70	55.10
56	1420	10.00	1370	1.00	26.49
58	1435	7.50	1385	0.88	35.90
61	1450	5.00	1400	0.70	55.10
62	1470	20.00	1420	1.30	12.73
63	1490	20.00	1440	1.30	12.73
67	1510	5.00	1460	0.70	55.10
68	1530	20.00	1480	1.30	12.73
69	1553	23.00	1503	1.36	10.98
70	1570	17.00	1520	1.23	15.12
71	1588	18.00	1538	1.26	14.23
72	1604	16.00	1554	1.20	16.12
73	1620	16.00	1570	1.20	16.12
74	1630	10.00	1580	1.00	26.49
75	1644	14.00	1594	1.15	18.56
76	1654	10.00	1604	1.00	26.49
77	1666	12.00	1616	1.08	21.84
78	1675	9.00	1625	0.95	29.61
79	1685	10.00	1635	1.00	26.49
80	1700	15.00	1650	1.18	17.25
81	1710	10.00	1660	1.00	26.49
82	1720	10.00	1670	1.00	26.49
83	1734	14.00	1684	1.15	18.56
84	1744	10.00	1694	1.00	26.49
85	1756	12.00	1706	1.08	21.84
86	1770	14.00	1720	1.15	18.56
87	1780	10.00	1730	1.00	26.49
88	1792	12.00	1742	1.08	21.84
89	1804	12.00	1754	1.08	21.84
90	1814	10.00	1764	1.00	26.49
91	1830	16.00	1780	1.20	16.12
92	1840	10.00	1790	1.00	26.49
93	1850	10.00	1800	1.00	26.49
94	1860	10.00	1810	1.00	26.49
95	1872	12.00	1822	1.08	21.84
96	1884	12.00	1834	1.08	21.84
97	1890	6.00	1840	0.78	45.45
98	1908	18.00	1858	1.26	14.23
99	1916	8.00	1866	0.90	33.53
100	1920	4.00	1870	0.60	69.76



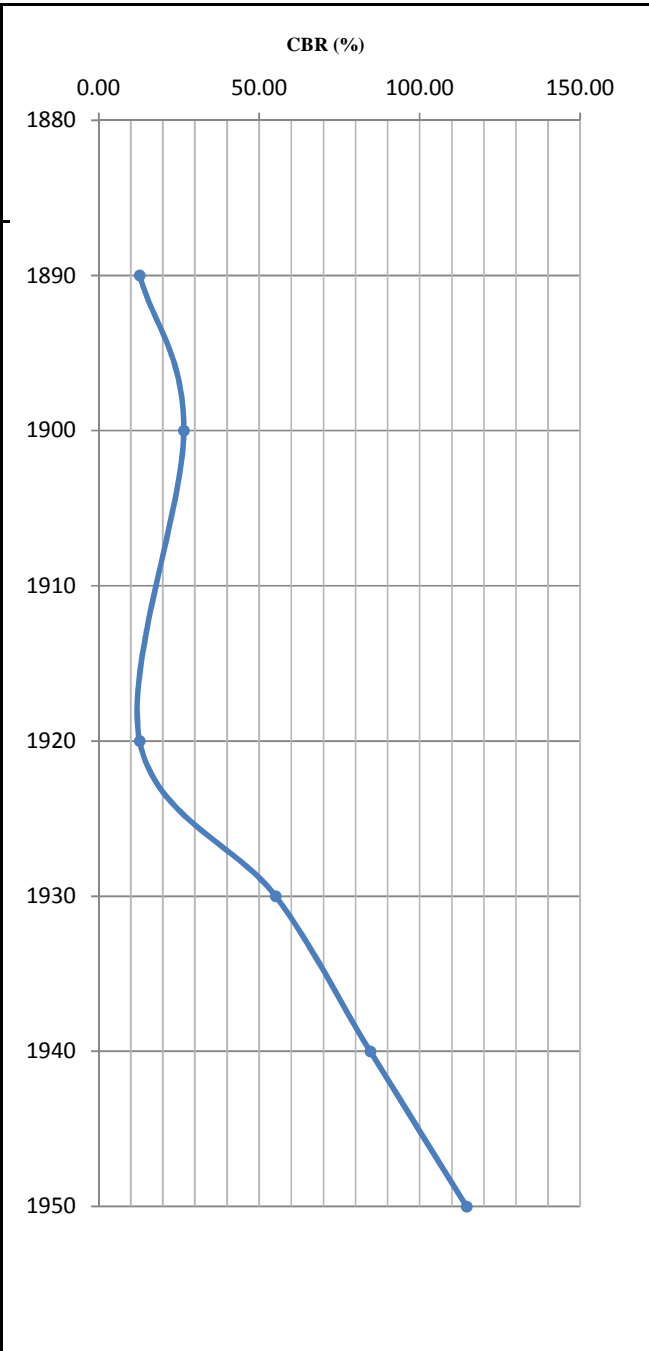
Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID		
Job No. UA008426-01		Date 01/02/2017	Ground Level (m) 16.11		DCP1218
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539360.14, N264679.29	Initial Scale Reading (mm) 0		
			Sheet		3 of 3

101	1940	20.00	1890	1.30	12.73
102	1950	10.00	1900	1.00	26.49
103	1970	20.00	1920	1.30	12.73
105	1980	5.00	1930	0.70	55.10
108	1990	3.33	1940	0.52	84.59
112	2000	2.50	1950	0.40	114.65

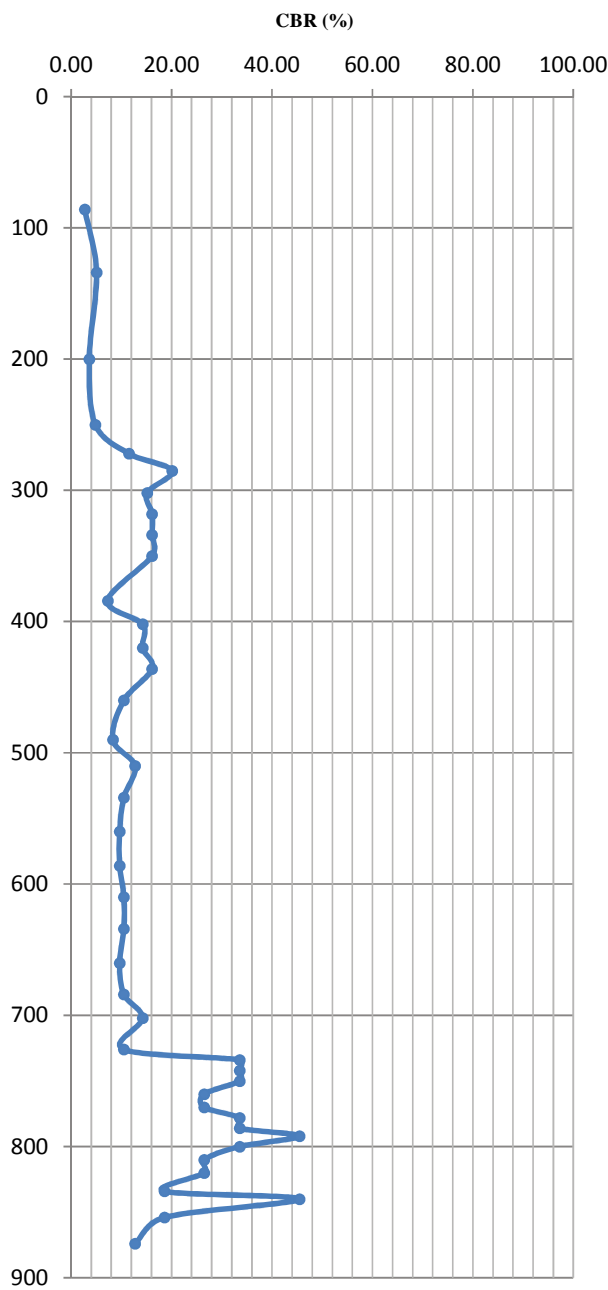


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\log_{10}(CBR) = 2.48 - 1.057 \times \log_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1219	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.83		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539118.52, N264715.40	Initial Scale Reading (mm) 50	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	136	86.00	86	1.93	2.72
2	184	48.00	134	1.68	5.05
3	250	66.00	200	1.82	3.60
4	300	50.00	250	1.70	4.83
5	322	22.00	272	1.34	11.51
6	335	13.00	285	1.11	20.07
7	352	17.00	302	1.23	15.12
8	368	16.00	318	1.20	16.12
9	384	16.00	334	1.20	16.12
10	400	16.00	350	1.20	16.12
11	434	34.00	384	1.53	7.26
12	452	18.00	402	1.26	14.23
13	470	18.00	420	1.26	14.23
14	486	16.00	436	1.20	16.12
15	510	24.00	460	1.38	10.50
16	540	30.00	490	1.48	8.29
17	560	20.00	510	1.30	12.73
18	584	24.00	534	1.38	10.50
19	610	26.00	560	1.41	9.65
20	636	26.00	586	1.41	9.65
21	660	24.00	610	1.38	10.50
22	684	24.00	634	1.38	10.50
23	710	26.00	660	1.41	9.65
24	734	24.00	684	1.38	10.50
25	752	18.00	702	1.26	14.23
26	776	24.00	726	1.38	10.50
27	784	8.00	734	0.90	33.53
28	792	8.00	742	0.90	33.53
29	800	8.00	750	0.90	33.53
30	810	10.00	760	1.00	26.49
31	820	10.00	770	1.00	26.49
32	828	8.00	778	0.90	33.53
33	836	8.00	786	0.90	33.53
34	842	6.00	792	0.78	45.45
35	850	8.00	800	0.90	33.53
36	860	10.00	810	1.00	26.49
37	870	10.00	820	1.00	26.49
38	884	14.00	834	1.15	18.56
39	890	6.00	840	0.78	45.45
40	904	14.00	854	1.15	18.56
41	924	20.00	874	1.30	12.73

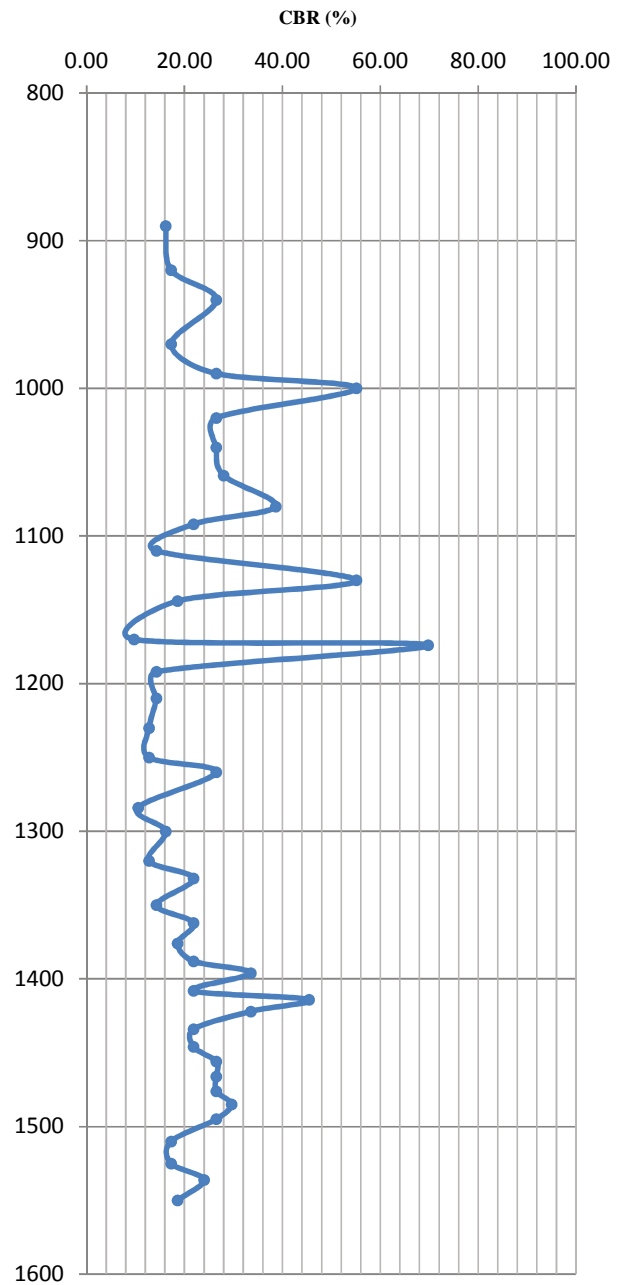


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1219		
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.83			
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539118.52, N264715.40	Initial Scale Reading (mm) 50	Sheet 2 of 3	

42	940	16.00	890	1.20	16.12
44	970	15.00	920	1.18	17.25
46	990	10.00	940	1.00	26.49
48	1020	15.00	970	1.18	17.25
50	1040	10.00	990	1.00	26.49
52	1050	5.00	1000	0.70	55.10
54	1070	10.00	1020	1.00	26.49
56	1090	10.00	1040	1.00	26.49
58	1109	9.50	1059	0.98	27.96
61	1130	7.00	1080	0.85	38.61
62	1142	12.00	1092	1.08	21.84
63	1160	18.00	1110	1.26	14.23
67	1180	5.00	1130	0.70	55.10
68	1194	14.00	1144	1.15	18.56
69	1220	26.00	1170	1.41	9.65
70	1224	4.00	1174	0.60	69.76
71	1242	18.00	1192	1.26	14.23
72	1260	18.00	1210	1.26	14.23
73	1280	20.00	1230	1.30	12.73
74	1300	20.00	1250	1.30	12.73
75	1310	10.00	1260	1.00	26.49
76	1334	24.00	1284	1.38	10.50
77	1350	16.00	1300	1.20	16.12
78	1370	20.00	1320	1.30	12.73
79	1382	12.00	1332	1.08	21.84
80	1400	18.00	1350	1.26	14.23
81	1412	12.00	1362	1.08	21.84
82	1426	14.00	1376	1.15	18.56
83	1438	12.00	1388	1.08	21.84
84	1446	8.00	1396	0.90	33.53
85	1458	12.00	1408	1.08	21.84
86	1464	6.00	1414	0.78	45.45
87	1472	8.00	1422	0.90	33.53
88	1484	12.00	1434	1.08	21.84
89	1496	12.00	1446	1.08	21.84
90	1506	10.00	1456	1.00	26.49
91	1516	10.00	1466	1.00	26.49
92	1526	10.00	1476	1.00	26.49
93	1535	9.00	1485	0.95	29.61
94	1545	10.00	1495	1.00	26.49
95	1560	15.00	1510	1.18	17.25
96	1575	15.00	1525	1.18	17.25
97	1586	11.00	1536	1.04	23.95
98	1600	14.00	1550	1.15	18.56



Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2					Position ID DCP1219	
Job No. UA008426-01			Date 01/02/2017		Ground Level (m) 15.83	
Contractor Arcadis Consulting (UK) Ltd			Co-ordinates E539118.52, N264715.40		Initial Scale Reading (mm) 50	
					Sheet 3 of 3	

107	1712	8.00	1662	0.90	33.53
108	1724	12.00	1674	1.08	21.84
109	1730	6.00	1680	0.78	45.45
110	1740	10.00	1690	1.00	26.49
111	1750	10.00	1700	1.00	26.49
112	1752	2.00	1702	0.30	145.15
113	1760	8.00	1710	0.90	33.53
114	1762	2.00	1712	0.30	145.15
115	1770	8.00	1720	0.90	33.53
116	1774	4.00	1724	0.60	69.76
117	1780	6.00	1730	0.78	45.45
118	1784	4.00	1734	0.60	69.76
119	1790	6.00	1740	0.78	45.45
120	1800	10.00	1750	1.00	26.49
121	1802	2.00	1752	0.30	145.15
122	1810	8.00	1760	0.90	33.53
123	1815	5.00	1765	0.70	55.10
124	1820	5.00	1770	0.70	55.10
127	1830	3.33	1780	0.52	84.59
131	1840	2.50	1790	0.40	114.65
134	1850	3.33	1800	0.52	84.59
138	1860	2.50	1810	0.40	114.65
148	1861	0.10	1811	-1.00	3443.50

CBR (%)

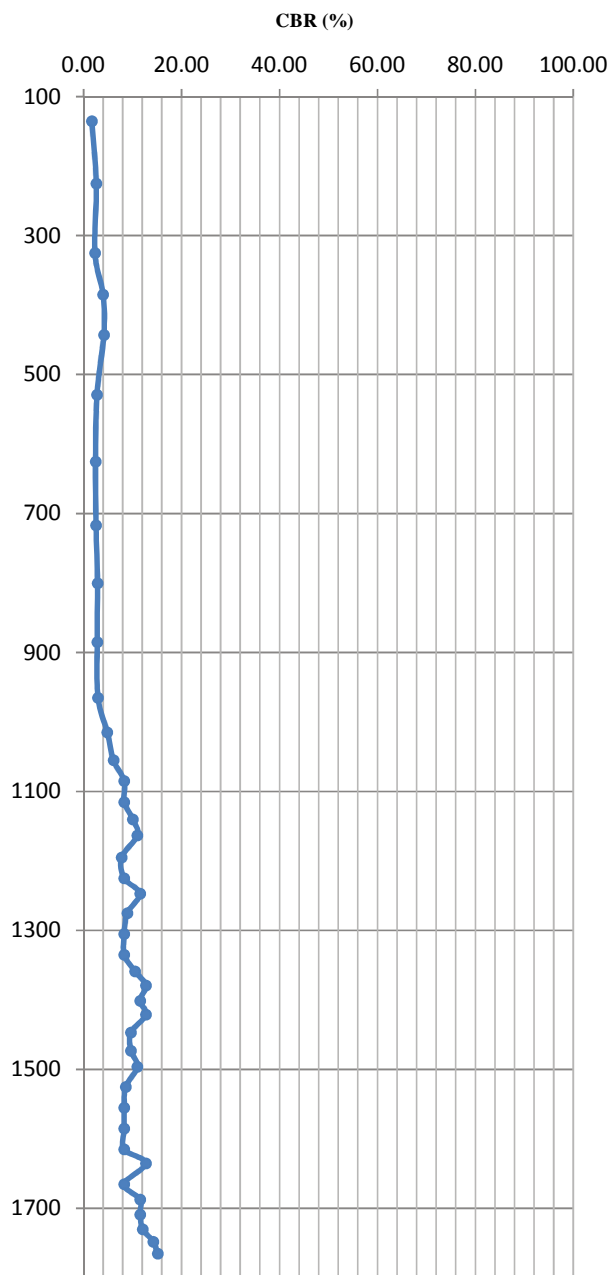
0.00 50.00 100.00 150.00

Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator <p style="text-align: center;">GSTL</p>
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1220	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.52		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539012.80, N264710.13	Initial Scale Reading (mm) 25	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	160	135.00	135	2.13	1.69
2	250	90.00	225	1.95	2.60
3	350	100.00	325	2.00	2.32
4	410	60.00	385	1.78	3.99
5	468	58.00	443	1.76	4.13
6	554	86.00	529	1.93	2.72
7	650	96.00	625	1.98	2.43
8	742	92.00	717	1.96	2.54
9	825	83.00	800	1.92	2.83
10	910	85.00	885	1.93	2.76
11	990	80.00	965	1.90	2.94
12	1040	50.00	1015	1.70	4.83
13	1080	40.00	1055	1.60	6.12
14	1110	30.00	1085	1.48	8.29
15	1140	30.00	1115	1.48	8.29
16	1165	25.00	1140	1.40	10.05
17	1188	23.00	1163	1.36	10.98
18	1220	32.00	1195	1.51	7.75
19	1250	30.00	1225	1.48	8.29
20	1272	22.00	1247	1.34	11.51
21	1300	28.00	1275	1.45	8.92
22	1330	30.00	1305	1.48	8.29
23	1360	30.00	1335	1.48	8.29
24	1384	24.00	1359	1.38	10.50
25	1404	20.00	1379	1.30	12.73
26	1426	22.00	1401	1.34	11.51
27	1446	20.00	1421	1.30	12.73
28	1472	26.00	1447	1.41	9.65
29	1498	26.00	1473	1.41	9.65
30	1521	23.00	1496	1.36	10.98
31	1550	29.00	1525	1.46	8.59
32	1580	30.00	1555	1.48	8.29
33	1610	30.00	1585	1.48	8.29
34	1640	30.00	1615	1.48	8.29
35	1660	20.00	1635	1.30	12.73
36	1690	30.00	1665	1.48	8.29
37	1712	22.00	1687	1.34	11.51
38	1734	22.00	1709	1.34	11.51
39	1755	21.00	1730	1.32	12.09
40	1773	18.00	1748	1.26	14.23
41	1790	17.00	1765	1.23	15.12



Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1220		
Job No. UA008426-01		Date 01/02/2017		Ground Level (m) 15.52	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E539012.80, N264710.13		Initial Scale Reading (mm) 25	
				Sheet 2 of 2	

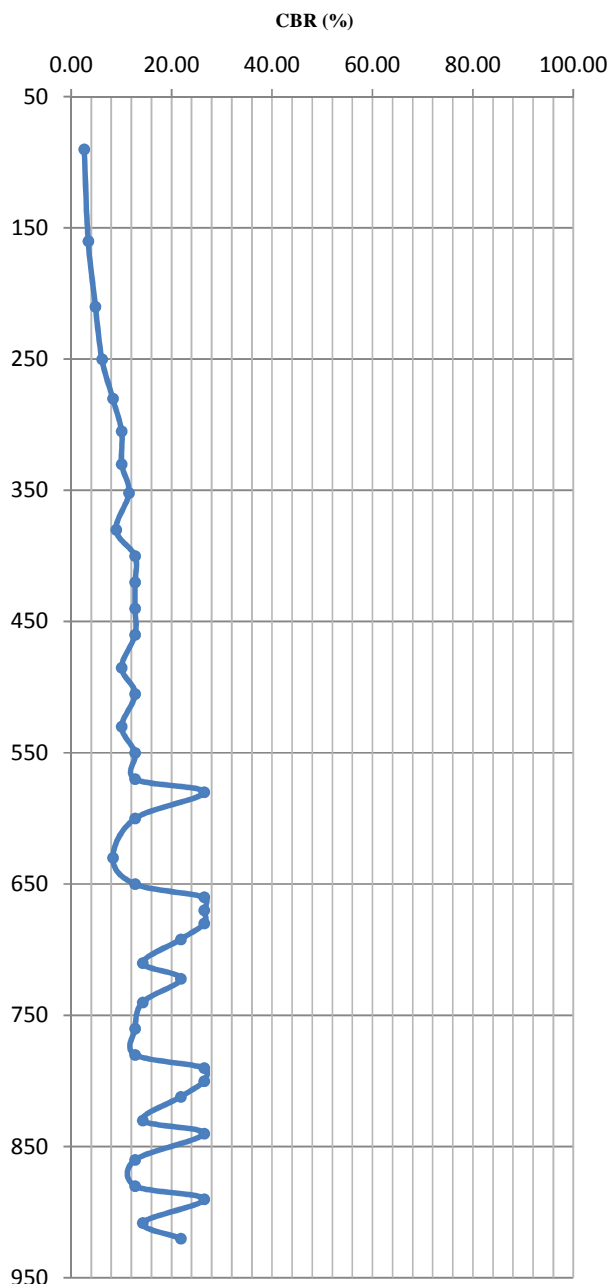
42	1802	12.00	1777	1.08	21.84	
44	1820	9.00	1795	0.95	29.61	
46	1830	5.00	1805	0.70	55.10	
48	1842	6.00	1817	0.78	45.45	
50	1860	9.00	1835	0.95	29.61	
52	1870	5.00	1845	0.70	55.10	
54	1880	5.00	1855	0.70	55.10	
56	1890	5.00	1865	0.70	55.10	
58	1900	5.00	1875	0.70	55.10	
61	1912	4.00	1887	0.60	69.76	
62	1920	8.00	1895	0.90	33.53	
63	1932	12.00	1907	1.08	21.84	
67	1940	2.00	1915	0.30	145.15	
68	1950	10.00	1925	1.00	26.49	
69	1960	10.00	1935	1.00	26.49	
70	1970	10.00	1945	1.00	26.49	
71	1980	10.00	1955	1.00	26.49	
72	1990	10.00	1965	1.00	26.49	
73	2000	10.00	1975	1.00	26.49	

Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1223	
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 15.70		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538694.54, N264709.56	Initial Scale Reading (mm) 90	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	220	90.00	90	1.95	2.60
2	290	70.00	160	1.85	3.39
3	340	50.00	210	1.70	4.83
4	380	40.00	250	1.60	6.12
5	410	30.00	280	1.48	8.29
6	435	25.00	305	1.40	10.05
7	460	25.00	330	1.40	10.05
8	482	22.00	352	1.34	11.51
9	510	28.00	380	1.45	8.92
10	530	20.00	400	1.30	12.73
11	550	20.00	420	1.30	12.73
12	570	20.00	440	1.30	12.73
13	590	20.00	460	1.30	12.73
14	615	25.00	485	1.40	10.05
15	635	20.00	505	1.30	12.73
16	660	25.00	530	1.40	10.05
17	680	20.00	550	1.30	12.73
18	700	20.00	570	1.30	12.73
19	710	10.00	580	1.00	26.49
20	730	20.00	600	1.30	12.73
21	760	30.00	630	1.48	8.29
22	780	20.00	650	1.30	12.73
23	790	10.00	660	1.00	26.49
24	800	10.00	670	1.00	26.49
25	810	10.00	680	1.00	26.49
26	822	12.00	692	1.08	21.84
27	840	18.00	710	1.26	14.23
28	852	12.00	722	1.08	21.84
29	870	18.00	740	1.26	14.23
30	890	20.00	760	1.30	12.73
31	910	20.00	780	1.30	12.73
32	920	10.00	790	1.00	26.49
33	930	10.00	800	1.00	26.49
34	942	12.00	812	1.08	21.84
35	960	18.00	830	1.26	14.23
36	970	10.00	840	1.00	26.49
37	990	20.00	860	1.30	12.73
38	1010	20.00	880	1.30	12.73
39	1020	10.00	890	1.00	26.49
40	1038	18.00	908	1.26	14.23
41	1050	12.00	920	1.08	21.84

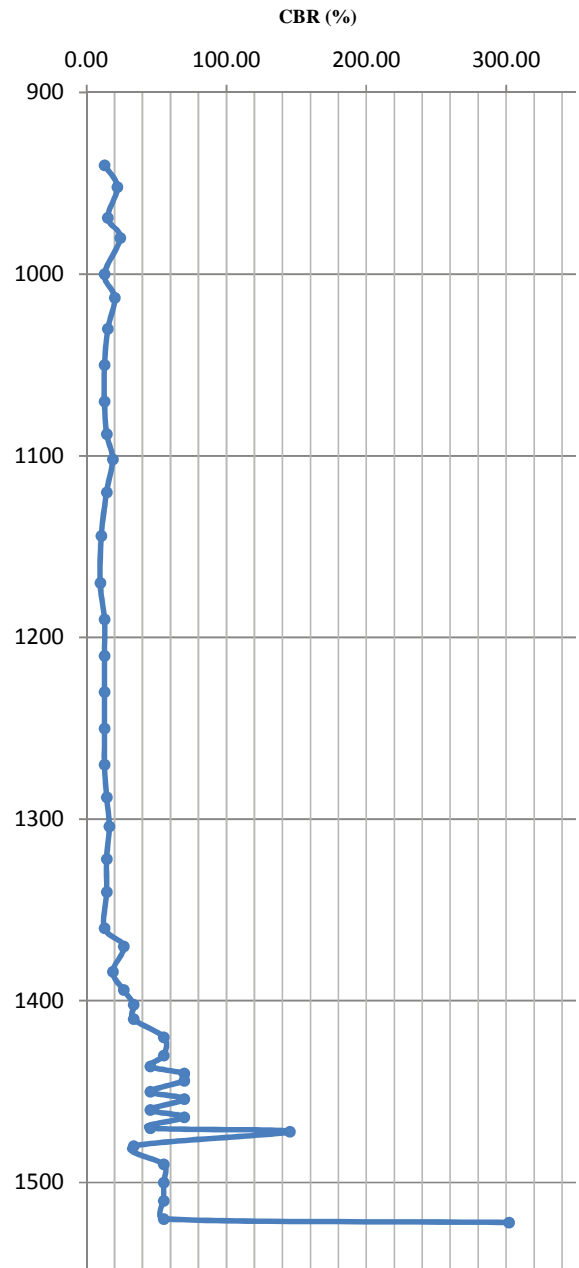


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1223		
Job No. UA008426-01		Date 19/01/2017		Ground Level (m) 15.70	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538694.54, N264709.56		Initial Scale Reading (mm) 90	
Sheet 2 of 3					

42	1070	20.00	940	1.30	12.73
43	1082	12.00	952	1.08	21.84
44	1099	17.00	969	1.23	15.12
45	1110	11.00	980	1.04	23.95
46	1130	20.00	1000	1.30	12.73
47	1143	13.00	1013	1.11	20.07
48	1160	17.00	1030	1.23	15.12
49	1180	20.00	1050	1.30	12.73
50	1200	20.00	1070	1.30	12.73
51	1218	18.00	1088	1.26	14.23
52	1232	14.00	1102	1.15	18.56
53	1250	18.00	1120	1.26	14.23
54	1274	24.00	1144	1.38	10.50
55	1300	26.00	1170	1.41	9.65
56	1320	20.00	1190	1.30	12.73
57	1340	20.00	1210	1.30	12.73
58	1360	20.00	1230	1.30	12.73
59	1380	20.00	1250	1.30	12.73
60	1400	20.00	1270	1.30	12.73
61	1418	18.00	1288	1.26	14.23
62	1434	16.00	1304	1.20	16.12
63	1452	18.00	1322	1.26	14.23
64	1470	18.00	1340	1.26	14.23
65	1490	20.00	1360	1.30	12.73
66	1500	10.00	1370	1.00	26.49
67	1514	14.00	1384	1.15	18.56
68	1524	10.00	1394	1.00	26.49
69	1532	8.00	1402	0.90	33.53
70	1540	8.00	1410	0.90	33.53
72	1550	5.00	1420	0.70	55.10
74	1560	5.00	1430	0.70	55.10
75	1566	6.00	1436	0.78	45.45
76	1570	4.00	1440	0.60	69.76
77	1574	4.00	1444	0.60	69.76
78	1580	6.00	1450	0.78	45.45
79	1584	4.00	1454	0.60	69.76
80	1590	6.00	1460	0.78	45.45
81	1594	4.00	1464	0.60	69.76
82	1600	6.00	1470	0.78	45.45
83	1602	2.00	1472	0.30	145.15
84	1610	8.00	1480	0.90	33.53
86	1620	5.00	1490	0.70	55.10
88	1630	5.00	1500	0.70	55.10
90	1640	5.00	1510	0.70	55.10
92	1650	5.00	1520	0.70	55.10
94	1652	1.00	1522	0.00	302.00



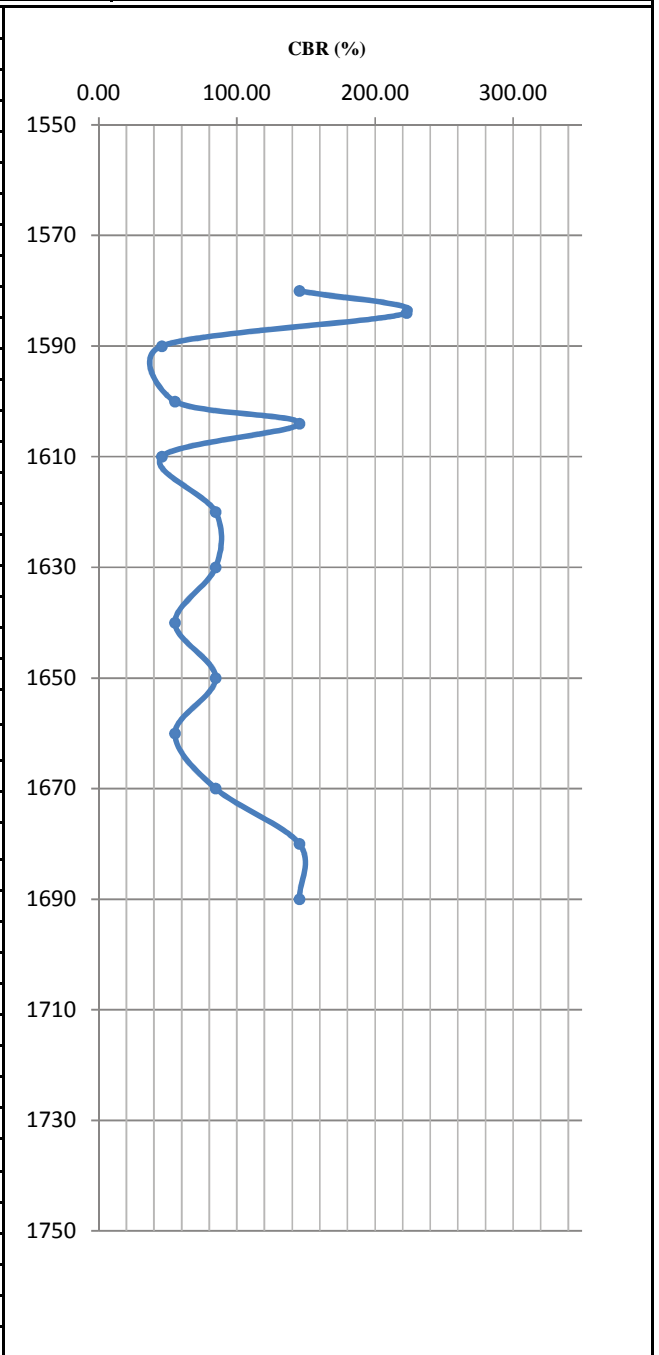
Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1223		
Job No. UA008426-01		Date 19/01/2017		Ground Level (m) 15.70	
Contractor Arcadis Consulting (UK) Ltd			Co-ordinates E538694.54, N264709.56		Sheet 3 of 3

111	1710	2.00	1580	0.30	145.15
114	1714	1.33	1584	0.12	222.81
115	1720	6.00	1590	0.78	45.45
117	1730	5.00	1600	0.70	55.10
119	1734	2.00	1604	0.30	145.15
120	1740	6.00	1610	0.78	45.45
123	1750	3.33	1620	0.52	84.59
126	1760	3.33	1630	0.52	84.59
128	1770	5.00	1640	0.70	55.10
131	1780	3.33	1650	0.52	84.59
133	1790	5.00	1660	0.70	55.10
136	1800	3.33	1670	0.52	84.59
141	1810	2.00	1680	0.30	145.15
146	1820	2.00	1690	0.30	145.15

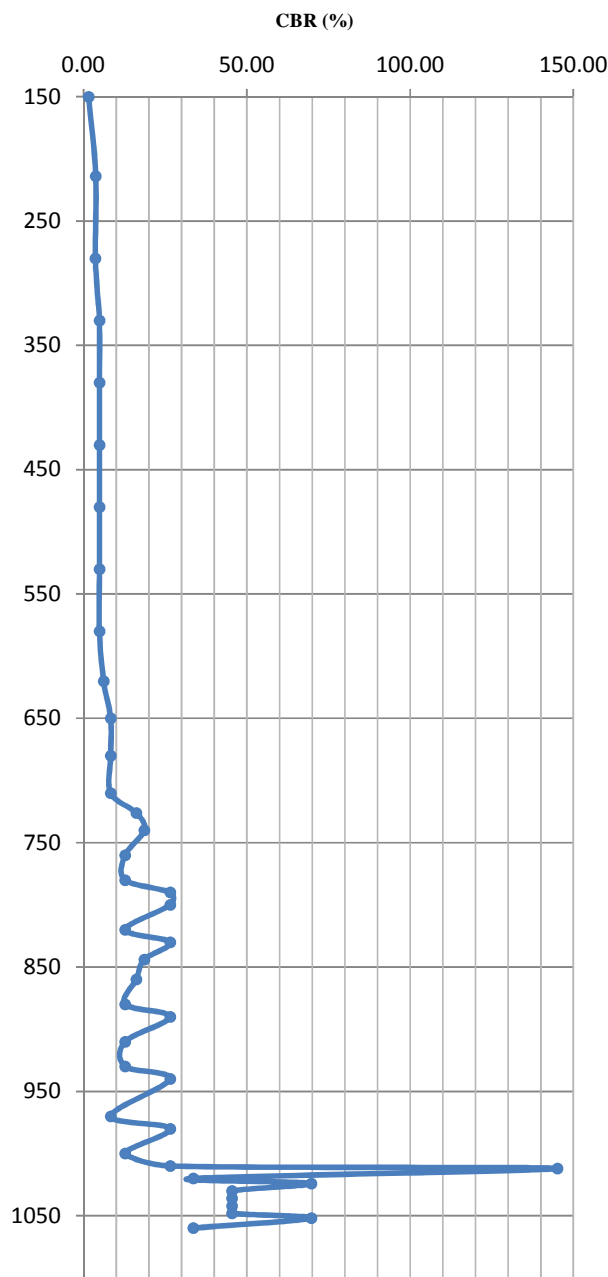


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1224	
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 15.39		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538668.28, N264746.24	Initial Scale Reading (mm) 150	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	200	150.00	150	2.18	1.51
2	264	64.00	214	1.81	3.72
3	330	66.00	280	1.82	3.60
4	380	50.00	330	1.70	4.83
5	430	50.00	380	1.70	4.83
6	480	50.00	430	1.70	4.83
7	530	50.00	480	1.70	4.83
8	580	50.00	530	1.70	4.83
9	630	50.00	580	1.70	4.83
10	670	40.00	620	1.60	6.12
11	700	30.00	650	1.48	8.29
12	730	30.00	680	1.48	8.29
13	760	30.00	710	1.48	8.29
14	776	16.00	726	1.20	16.12
15	790	14.00	740	1.15	18.56
16	810	20.00	760	1.30	12.73
17	830	20.00	780	1.30	12.73
18	840	10.00	790	1.00	26.49
19	850	10.00	800	1.00	26.49
20	870	20.00	820	1.30	12.73
21	880	10.00	830	1.00	26.49
22	894	14.00	844	1.15	18.56
23	910	16.00	860	1.20	16.12
24	930	20.00	880	1.30	12.73
25	940	10.00	890	1.00	26.49
26	960	20.00	910	1.30	12.73
27	980	20.00	930	1.30	12.73
28	990	10.00	940	1.00	26.49
29	1020	30.00	970	1.48	8.29
30	1030	10.00	980	1.00	26.49
31	1050	20.00	1000	1.30	12.73
32	1060	10.00	1010	1.00	26.49
33	1062	2.00	1012	0.30	145.15
34	1070	8.00	1020	0.90	33.53
35	1074	4.00	1024	0.60	69.76
36	1080	6.00	1030	0.78	45.45
37	1086	6.00	1036	0.78	45.45
38	1092	6.00	1042	0.78	45.45
39	1098	6.00	1048	0.78	45.45
40	1102	4.00	1052	0.60	69.76
41	1110	8.00	1060	0.90	33.53



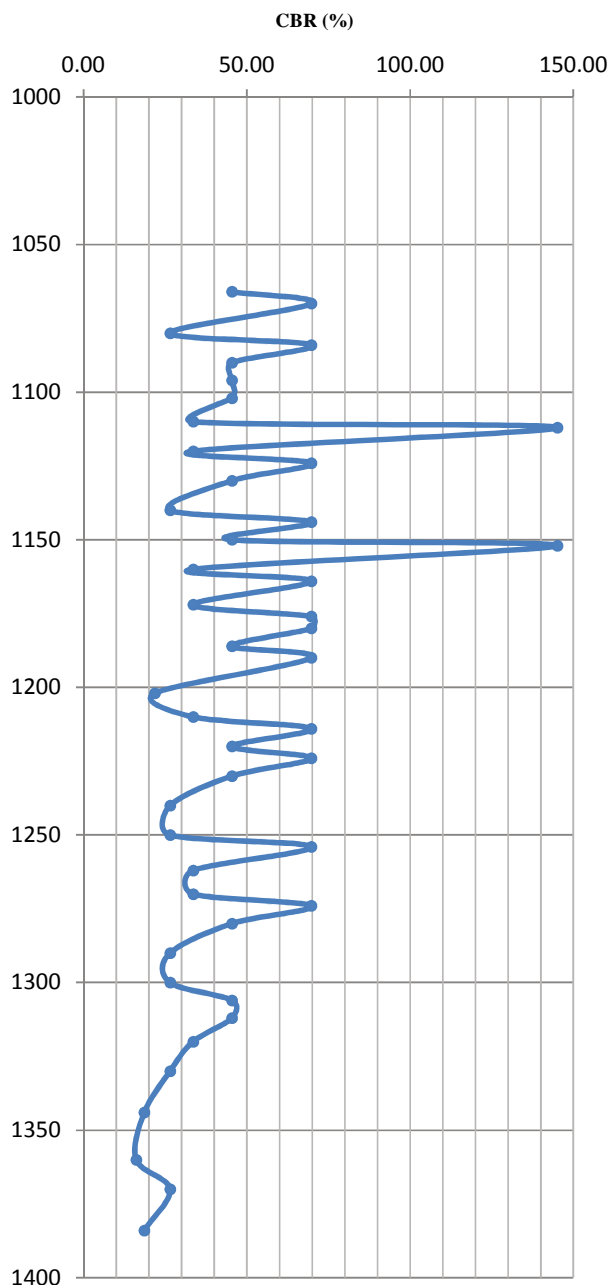
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1224		
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 15.39			
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538668.28, N264746.24		Initial Scale Reading (mm) 150	Sheet 2 of 3

42	1116	6.00	1066	0.78	45.45
43	1120	4.00	1070	0.60	69.76
44	1130	10.00	1080	1.00	26.49
45	1134	4.00	1084	0.60	69.76
46	1140	6.00	1090	0.78	45.45
47	1146	6.00	1096	0.78	45.45
48	1152	6.00	1102	0.78	45.45
49	1160	8.00	1110	0.90	33.53
50	1162	2.00	1112	0.30	145.15
51	1170	8.00	1120	0.90	33.53
52	1174	4.00	1124	0.60	69.76
53	1180	6.00	1130	0.78	45.45
54	1190	10.00	1140	1.00	26.49
55	1194	4.00	1144	0.60	69.76
56	1200	6.00	1150	0.78	45.45
57	1202	2.00	1152	0.30	145.15
58	1210	8.00	1160	0.90	33.53
59	1214	4.00	1164	0.60	69.76
60	1222	8.00	1172	0.90	33.53
61	1226	4.00	1176	0.60	69.76
62	1230	4.00	1180	0.60	69.76
63	1236	6.00	1186	0.78	45.45
64	1240	4.00	1190	0.60	69.76
65	1252	12.00	1202	1.08	21.84
66	1260	8.00	1210	0.90	33.53
67	1264	4.00	1214	0.60	69.76
68	1270	6.00	1220	0.78	45.45
69	1274	4.00	1224	0.60	69.76
70	1280	6.00	1230	0.78	45.45
71	1290	10.00	1240	1.00	26.49
72	1300	10.00	1250	1.00	26.49
73	1304	4.00	1254	0.60	69.76
74	1312	8.00	1262	0.90	33.53
75	1320	8.00	1270	0.90	33.53
76	1324	4.00	1274	0.60	69.76
77	1330	6.00	1280	0.78	45.45
78	1340	10.00	1290	1.00	26.49
79	1350	10.00	1300	1.00	26.49
80	1356	6.00	1306	0.78	45.45
81	1362	6.00	1312	0.78	45.45
82	1370	8.00	1320	0.90	33.53
83	1380	10.00	1330	1.00	26.49
84	1394	14.00	1344	1.15	18.56
85	1410	16.00	1360	1.20	16.12
86	1420	10.00	1370	1.00	26.49
87	1434	14.00	1384	1.15	18.56



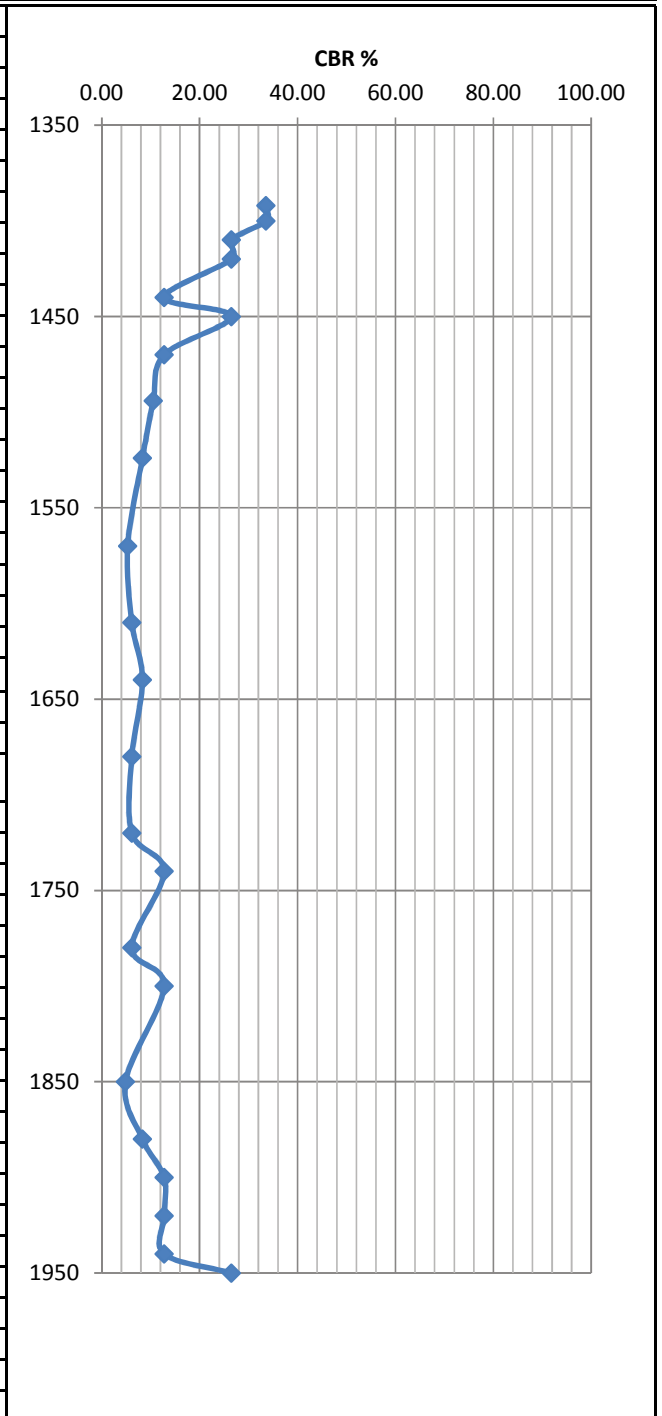
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1224		
Job No. UA008426-01		Date 19/01/2017		Ground Level (m) 15.39	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538668.28, N264746.24		Initial Scale Reading (mm) 150	
Sheet 3 of 3					

88	1442	8.00	1392	0.90	33.53
89	1450	8.00	1400	0.90	33.53
90	1460	10.00	1410	1.00	26.49
91	1470	10.00	1420	1.00	26.49
92	1490	20.00	1440	1.30	12.73
93	1500	10.00	1450	1.00	26.49
94	1520	20.00	1470	1.30	12.73
95	1544	24.00	1494	1.38	10.50
96	1574	30.00	1524	1.48	8.29
97	1620	46.00	1570	1.66	5.28
98	1660	40.00	1610	1.60	6.12
99	1690	30.00	1640	1.48	8.29
100	1730	40.00	1680	1.60	6.12
101	1770	40.00	1720	1.60	6.12
102	1790	20.00	1740	1.30	12.73
103	1830	40.00	1780	1.60	6.12
104	1850	20.00	1800	1.30	12.73
105	1900	50.00	1850	1.70	4.83
106	1930	30.00	1880	1.48	8.29
107	1950	20.00	1900	1.30	12.73
108	1970	20.00	1920	1.30	12.73
109	1990	20.00	1940	1.30	12.73
110	2000	10.00	1950	1.00	26.49

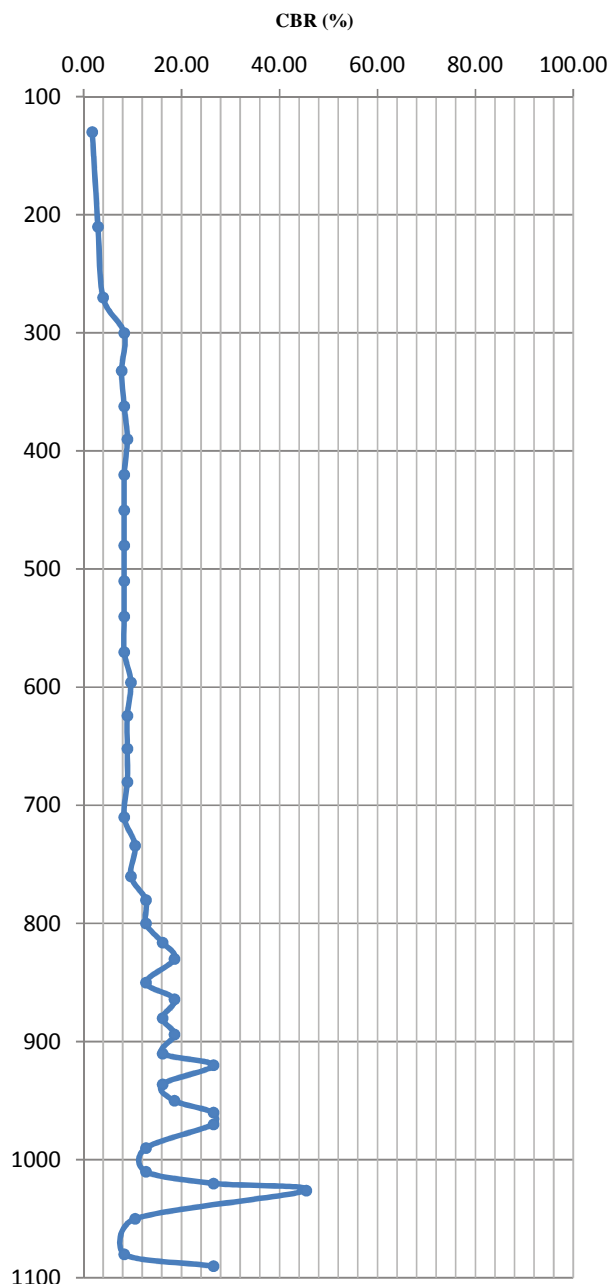


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1226	
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 14.48		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538728.40, N264990.60	Initial Scale Reading (mm) 0	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	160	130.00	130	2.11	1.76
2	240	80.00	210	1.90	2.94
3	300	60.00	270	1.78	3.99
4	330	30.00	300	1.48	8.29
5	362	32.00	332	1.51	7.75
6	392	30.00	362	1.48	8.29
7	420	28.00	390	1.45	8.92
8	450	30.00	420	1.48	8.29
9	480	30.00	450	1.48	8.29
10	510	30.00	480	1.48	8.29
11	540	30.00	510	1.48	8.29
12	570	30.00	540	1.48	8.29
13	600	30.00	570	1.48	8.29
14	626	26.00	596	1.41	9.65
15	654	28.00	624	1.45	8.92
16	682	28.00	652	1.45	8.92
17	710	28.00	680	1.45	8.92
18	740	30.00	710	1.48	8.29
19	764	24.00	734	1.38	10.50
20	790	26.00	760	1.41	9.65
21	810	20.00	780	1.30	12.73
22	830	20.00	800	1.30	12.73
23	846	16.00	816	1.20	16.12
24	860	14.00	830	1.15	18.56
25	880	20.00	850	1.30	12.73
26	894	14.00	864	1.15	18.56
27	910	16.00	880	1.20	16.12
28	924	14.00	894	1.15	18.56
29	940	16.00	910	1.20	16.12
30	950	10.00	920	1.00	26.49
31	966	16.00	936	1.20	16.12
32	980	14.00	950	1.15	18.56
33	990	10.00	960	1.00	26.49
34	1000	10.00	970	1.00	26.49
35	1020	20.00	990	1.30	12.73
36	1040	20.00	1010	1.30	12.73
37	1050	10.00	1020	1.00	26.49
38	1056	6.00	1026	0.78	45.45
39	1080	24.00	1050	1.38	10.50
40	1110	30.00	1080	1.48	8.29
41	1120	10.00	1090	1.00	26.49



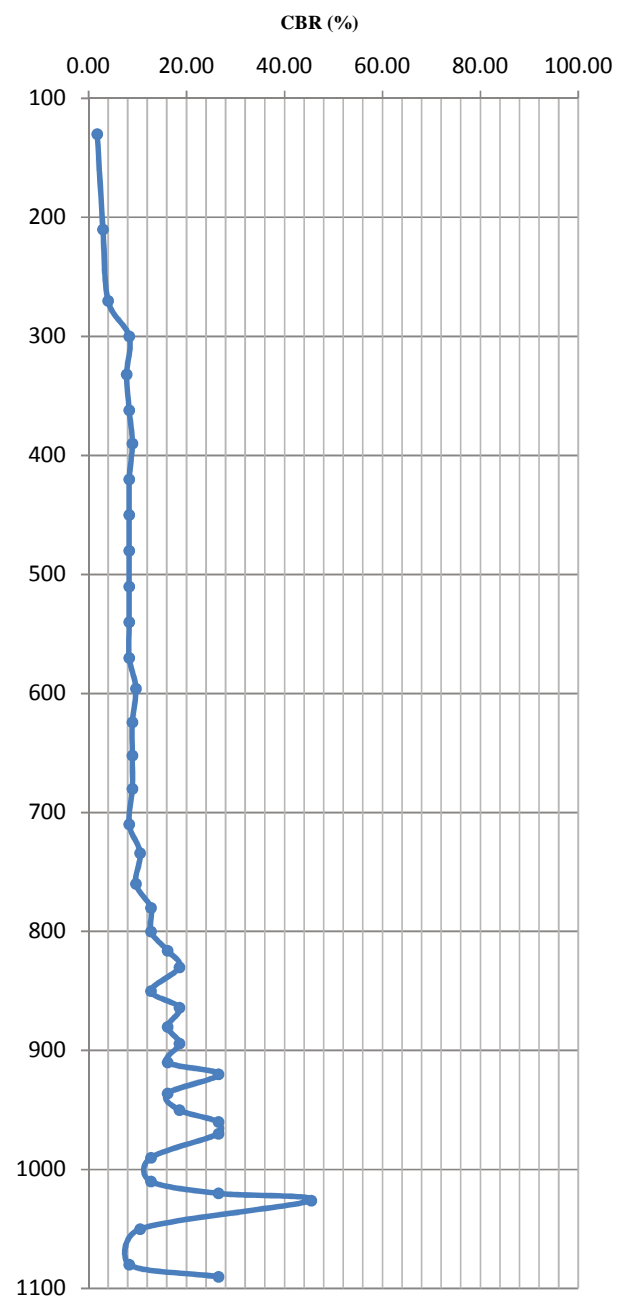
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1226		
Job No. UA008426-01		Date 19/01/2017		Ground Level (m) 14.48	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538728.40, N264990.60		Initial Scale Reading (mm) 0	
Sheet 2 of 3					

42	1130	10.00	1100	1.00	26.49
43	1140	10.00	1110	1.00	26.49
44	1150	10.00	1120	1.00	26.49
45	1160	10.00	1130	1.00	26.49
46	1170	10.00	1140	1.00	26.49
47	1180	10.00	1150	1.00	26.49
48	1190	10.00	1160	1.00	26.49
49	1210	20.00	1180	1.30	12.73
50	1224	14.00	1194	1.15	18.56
51	1240	16.00	1210	1.20	16.12
52	1260	20.00	1230	1.30	12.73
53	1270	10.00	1240	1.00	26.49
54	1280	10.00	1250	1.00	26.49
55	1290	10.00	1260	1.00	26.49
56	1306	16.00	1276	1.20	16.12
57	1320	14.00	1290	1.15	18.56
58	1330	10.00	1300	1.00	26.49
59	1360	30.00	1330	1.48	8.29
60	1371	11.00	1341	1.04	23.95
61	1390	19.00	1360	1.28	13.44
62	1410	20.00	1380	1.30	12.73
63	1430	20.00	1400	1.30	12.73
64	1450	20.00	1420	1.30	12.73
65	1470	20.00	1440	1.30	12.73
66	1490	20.00	1460	1.30	12.73
67	1510	20.00	1480	1.30	12.73
68	1536	26.00	1506	1.41	9.65
69	1560	24.00	1530	1.38	10.50
70	1580	20.00	1550	1.30	12.73
71	1602	22.00	1572	1.34	11.51
72	1622	20.00	1592	1.30	12.73
73	1644	22.00	1614	1.34	11.51
74	1664	20.00	1634	1.30	12.73
75	1680	16.00	1650	1.20	16.12
76	1702	22.00	1672	1.34	11.51
77	1720	18.00	1690	1.26	14.23
78	1730	10.00	1700	1.00	26.49
79	1740	10.00	1710	1.00	26.49
80	1760	20.00	1730	1.30	12.73
81	1780	20.00	1750	1.30	12.73
82	1790	10.00	1760	1.00	26.49
83	1800	10.00	1770	1.00	26.49
84	1812	12.00	1782	1.08	21.84
85	1820	8.00	1790	0.90	33.53
86	1838	18.00	1808	1.26	14.23
87	1850	12.00	1820	1.08	21.84

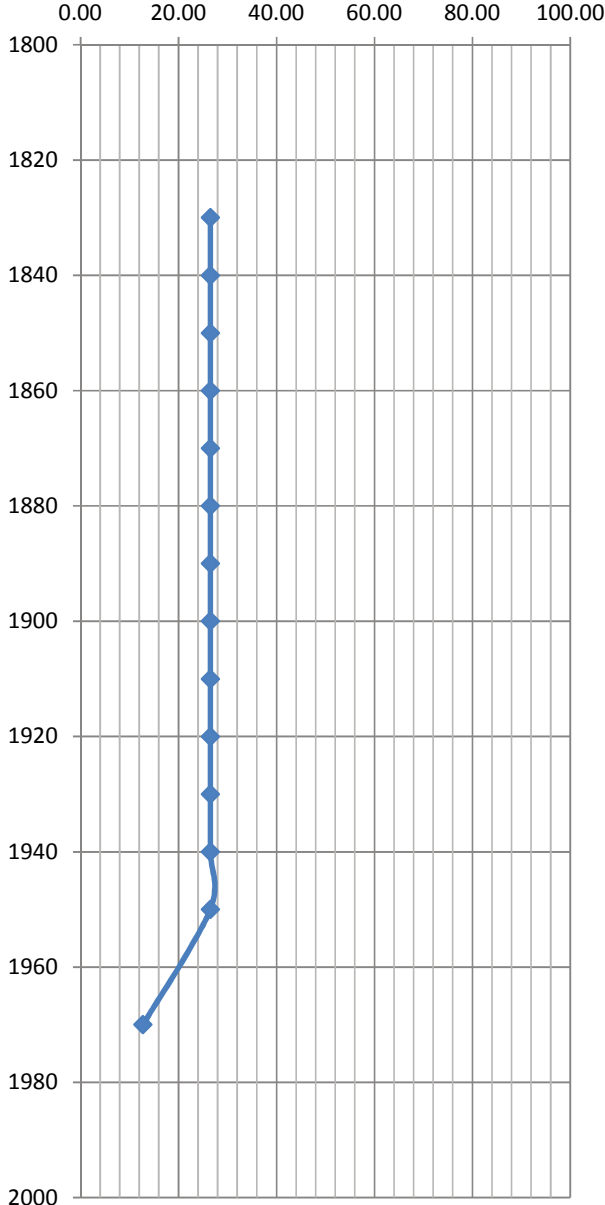


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID
			DCP1226
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 14.48	
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E538728.40, N264990.60	Initial Scale Reading (mm) 0	Sheet 3 of 3

No.	S	D	R	C	F	Penetration (mm)
88	1860	10.00	1830	1.00		26.49
89	1870	10.00	1840	1.00		26.49
90	1880	10.00	1850	1.00		26.49
91	1890	10.00	1860	1.00		26.49
92	1900	10.00	1870	1.00		26.49
93	1910	10.00	1880	1.00		26.49
94	1920	10.00	1890	1.00		26.49
95	1930	10.00	1900	1.00		26.49
96	1940	10.00	1910	1.00		26.49
97	1950	10.00	1920	1.00		26.49
98	1960	10.00	1930	1.00		26.49
99	1970	10.00	1940	1.00		26.49
100	1980	10.00	1950	1.00		26.49
101	2000	20.00	1970	1.30		12.73

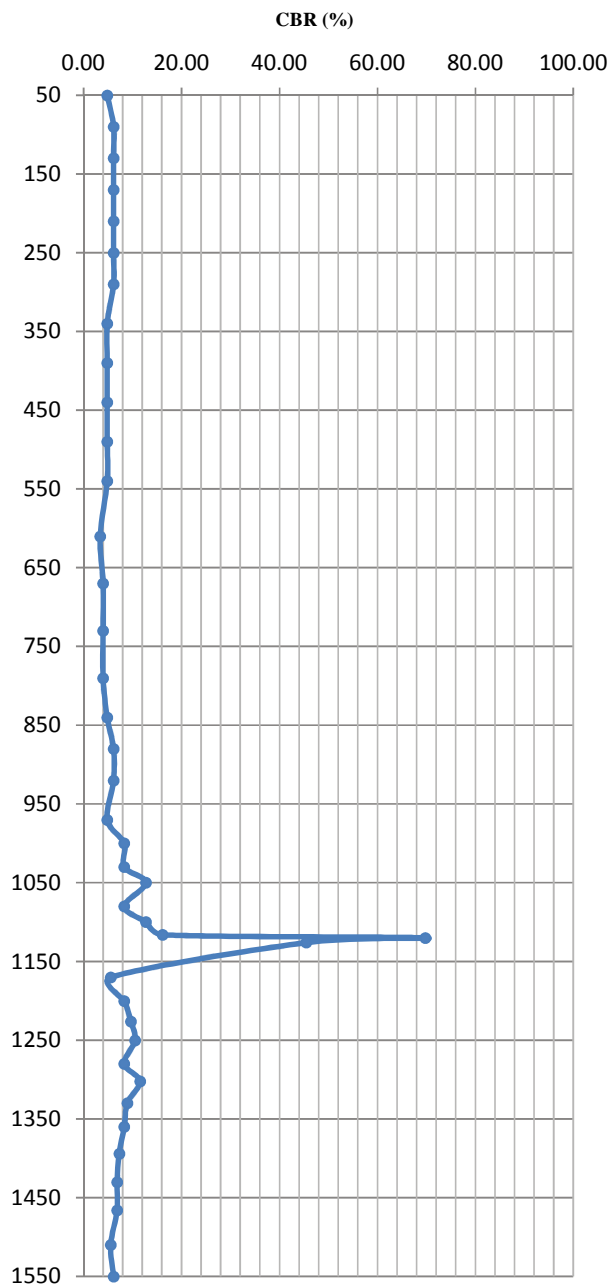


<p>Remarks: Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.</p>	<p>Operator: GSTL</p>
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1227	
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 14.60		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538701.40, N264933.41	Initial Scale Reading (mm) 0	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	110	50.00	50	1.70	4.83
2	150	40.00	90	1.60	6.12
3	190	40.00	130	1.60	6.12
4	230	40.00	170	1.60	6.12
5	270	40.00	210	1.60	6.12
6	310	40.00	250	1.60	6.12
7	350	40.00	290	1.60	6.12
8	400	50.00	340	1.70	4.83
9	450	50.00	390	1.70	4.83
10	500	50.00	440	1.70	4.83
11	550	50.00	490	1.70	4.83
12	600	50.00	540	1.70	4.83
13	670	70.00	610	1.85	3.39
14	730	60.00	670	1.78	3.99
15	790	60.00	730	1.78	3.99
16	850	60.00	790	1.78	3.99
17	900	50.00	840	1.70	4.83
18	940	40.00	880	1.60	6.12
19	980	40.00	920	1.60	6.12
20	1030	50.00	970	1.70	4.83
21	1060	30.00	1000	1.48	8.29
22	1090	30.00	1030	1.48	8.29
23	1110	20.00	1050	1.30	12.73
24	1140	30.00	1080	1.48	8.29
25	1160	20.00	1100	1.30	12.73
26	1176	16.00	1116	1.20	16.12
27	1180	4.00	1120	0.60	69.76
28	1186	6.00	1126	0.78	45.45
29	1230	44.00	1170	1.64	5.53
30	1260	30.00	1200	1.48	8.29
31	1286	26.00	1226	1.41	9.65
32	1310	24.00	1250	1.38	10.50
33	1340	30.00	1280	1.48	8.29
34	1362	22.00	1302	1.34	11.51
35	1390	28.00	1330	1.45	8.92
36	1420	30.00	1360	1.48	8.29
37	1454	34.00	1394	1.53	7.26
38	1490	36.00	1430	1.56	6.84
39	1526	36.00	1466	1.56	6.84
40	1570	44.00	1510	1.64	5.53
41	1610	40.00	1550	1.60	6.12



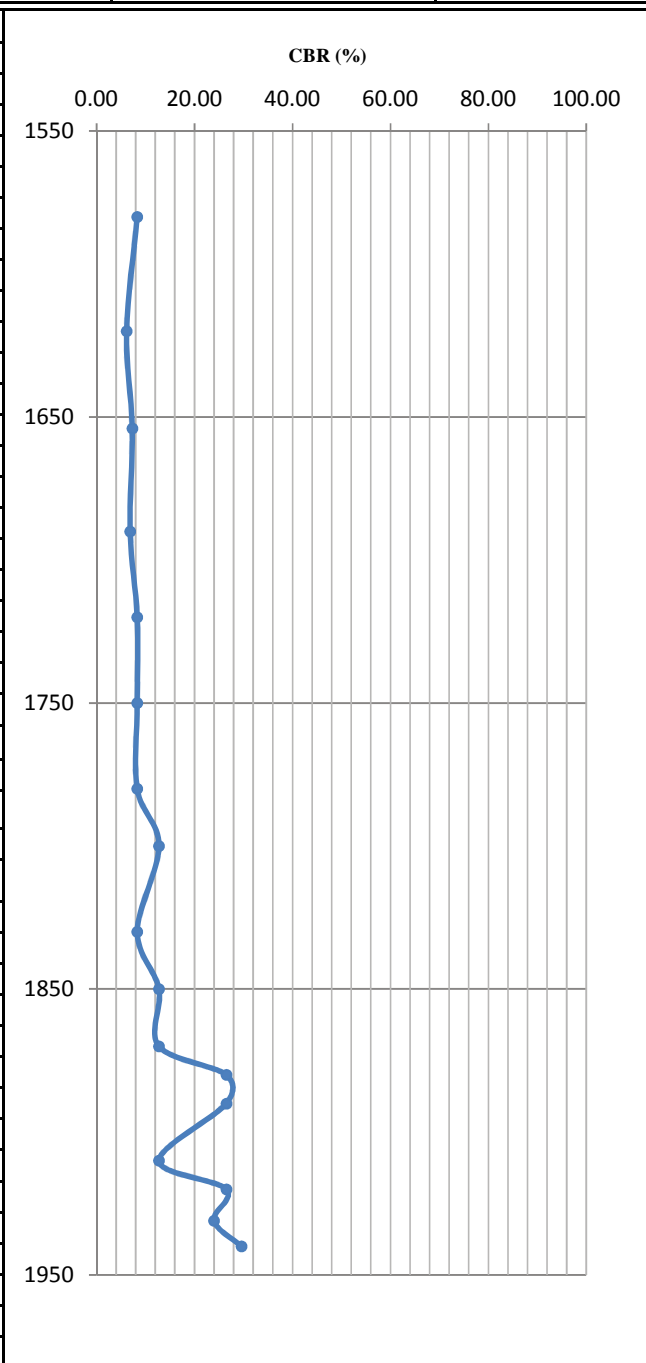
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1227		
Job No. UA008426-01	Date 19/01/2017	Ground Level (m) 14.60			
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E538701.40, N264933.41	Initial Scale Reading (mm) 0	Sheet 2 of 2		

42	1640	30.00	1580	1.48	8.29
43	1680	40.00	1620	1.60	6.12
44	1714	34.00	1654	1.53	7.26
45	1750	36.00	1690	1.56	6.84
46	1780	30.00	1720	1.48	8.29
47	1810	30.00	1750	1.48	8.29
48	1840	30.00	1780	1.48	8.29
49	1860	20.00	1800	1.30	12.73
50	1890	30.00	1830	1.48	8.29
51	1910	20.00	1850	1.30	12.73
52	1930	20.00	1870	1.30	12.73
53	1940	10.00	1880	1.00	26.49
54	1950	10.00	1890	1.00	26.49
55	1970	20.00	1910	1.30	12.73
56	1980	10.00	1920	1.00	26.49
57	1991	11.00	1931	1.04	23.95
58	2000	9.00	1940	0.95	29.61

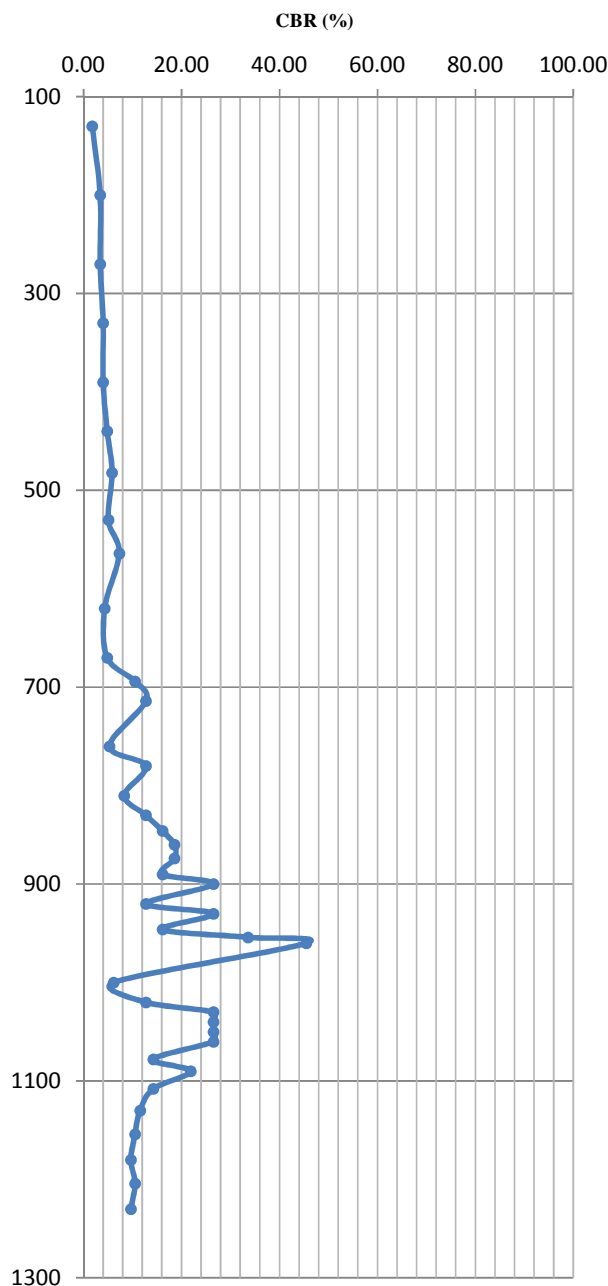


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\log_{10}(\text{CBR}) = 2.48 - 1.057 \times \log_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1228	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.91		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538596.10, N264684.08	Initial Scale Reading (mm) 0	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	160	130.00	130	2.11	1.76
2	230	70.00	200	1.85	3.39
3	300	70.00	270	1.85	3.39
4	360	60.00	330	1.78	3.99
5	420	60.00	390	1.78	3.99
6	470	50.00	440	1.70	4.83
7	512	42.00	482	1.62	5.81
8	560	48.00	530	1.68	5.05
9	594	34.00	564	1.53	7.26
10	650	56.00	620	1.75	4.29
11	700	50.00	670	1.70	4.83
12	724	24.00	694	1.38	10.50
13	744	20.00	714	1.30	12.73
14	790	46.00	760	1.66	5.28
15	810	20.00	780	1.30	12.73
16	840	30.00	810	1.48	8.29
17	860	20.00	830	1.30	12.73
18	876	16.00	846	1.20	16.12
19	890	14.00	860	1.15	18.56
20	904	14.00	874	1.15	18.56
21	920	16.00	890	1.20	16.12
22	930	10.00	900	1.00	26.49
23	950	20.00	920	1.30	12.73
24	960	10.00	930	1.00	26.49
25	976	16.00	946	1.20	16.12
26	984	8.00	954	0.90	33.53
27	990	6.00	960	0.78	45.45
28	1030	40.00	1000	1.60	6.12
29	1050	20.00	1020	1.30	12.73
30	1060	10.00	1030	1.00	26.49
31	1070	10.00	1040	1.00	26.49
32	1080	10.00	1050	1.00	26.49
33	1090	10.00	1060	1.00	26.49
34	1108	18.00	1078	1.26	14.23
35	1120	12.00	1090	1.08	21.84
36	1138	18.00	1108	1.26	14.23
37	1160	22.00	1130	1.34	11.51
38	1184	24.00	1154	1.38	10.50
39	1210	26.00	1180	1.41	9.65
40	1234	24.00	1204	1.38	10.50
41	1260	26.00	1230	1.41	9.65

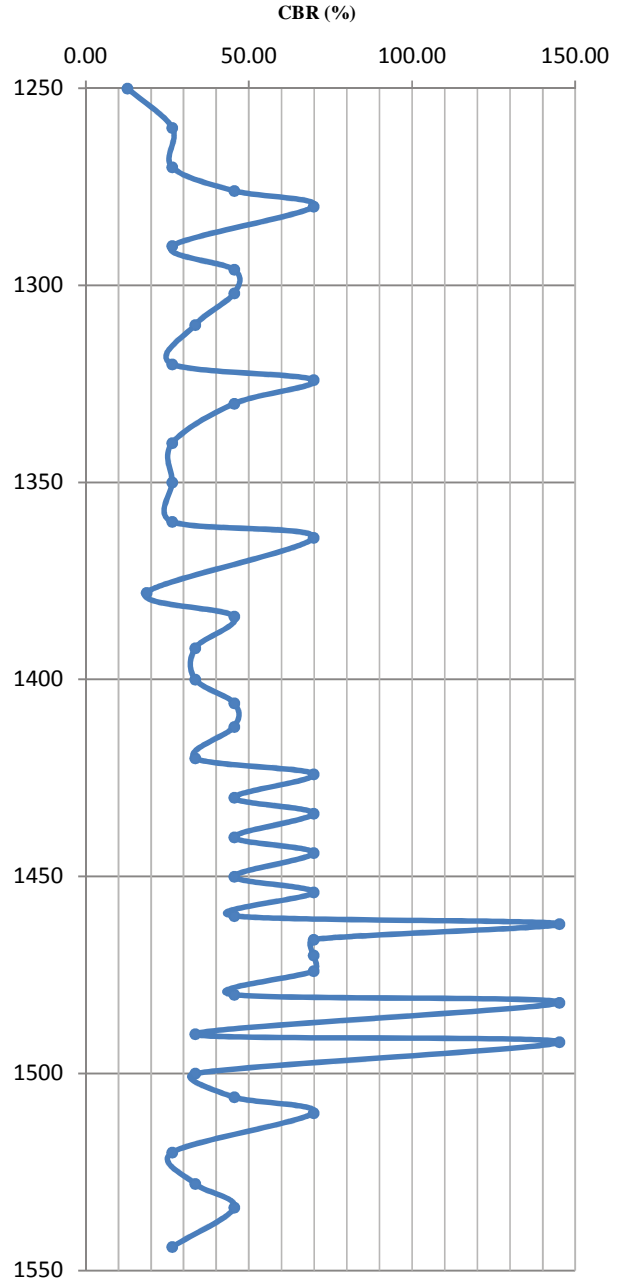


Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1228		
Job No. UA008426-01		Date 01/02/2017		Ground Level (m) 15.91	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538596.10, N264684.08		Initial Scale Reading (mm) 0	
Sheet 2 of 3					

42	1280	20.00	1250	1.30	12.73
43	1290	10.00	1260	1.00	26.49
44	1300	10.00	1270	1.00	26.49
45	1306	6.00	1276	0.78	45.45
46	1310	4.00	1280	0.60	69.76
47	1320	10.00	1290	1.00	26.49
48	1326	6.00	1296	0.78	45.45
49	1332	6.00	1302	0.78	45.45
50	1340	8.00	1310	0.90	33.53
51	1350	10.00	1320	1.00	26.49
52	1354	4.00	1324	0.60	69.76
53	1360	6.00	1330	0.78	45.45
54	1370	10.00	1340	1.00	26.49
55	1380	10.00	1350	1.00	26.49
56	1390	10.00	1360	1.00	26.49
57	1394	4.00	1364	0.60	69.76
58	1408	14.00	1378	1.15	18.56
59	1414	6.00	1384	0.78	45.45
60	1422	8.00	1392	0.90	33.53
61	1430	8.00	1400	0.90	33.53
62	1436	6.00	1406	0.78	45.45
63	1442	6.00	1412	0.78	45.45
64	1450	8.00	1420	0.90	33.53
65	1454	4.00	1424	0.60	69.76
66	1460	6.00	1430	0.78	45.45
67	1464	4.00	1434	0.60	69.76
68	1470	6.00	1440	0.78	45.45
69	1474	4.00	1444	0.60	69.76
70	1480	6.00	1450	0.78	45.45
71	1484	4.00	1454	0.60	69.76
72	1490	6.00	1460	0.78	45.45
73	1492	2.00	1462	0.30	145.15
74	1496	4.00	1466	0.60	69.76
75	1500	4.00	1470	0.60	69.76
76	1504	4.00	1474	0.60	69.76
77	1510	6.00	1480	0.78	45.45
78	1512	2.00	1482	0.30	145.15
79	1520	8.00	1490	0.90	33.53
80	1522	2.00	1492	0.30	145.15
81	1530	8.00	1500	0.90	33.53
82	1536	6.00	1506	0.78	45.45
83	1540	4.00	1510	0.60	69.76
84	1550	10.00	1520	1.00	26.49
85	1558	8.00	1528	0.90	33.53
86	1564	6.00	1534	0.78	45.45
87	1574	10.00	1544	1.00	26.49



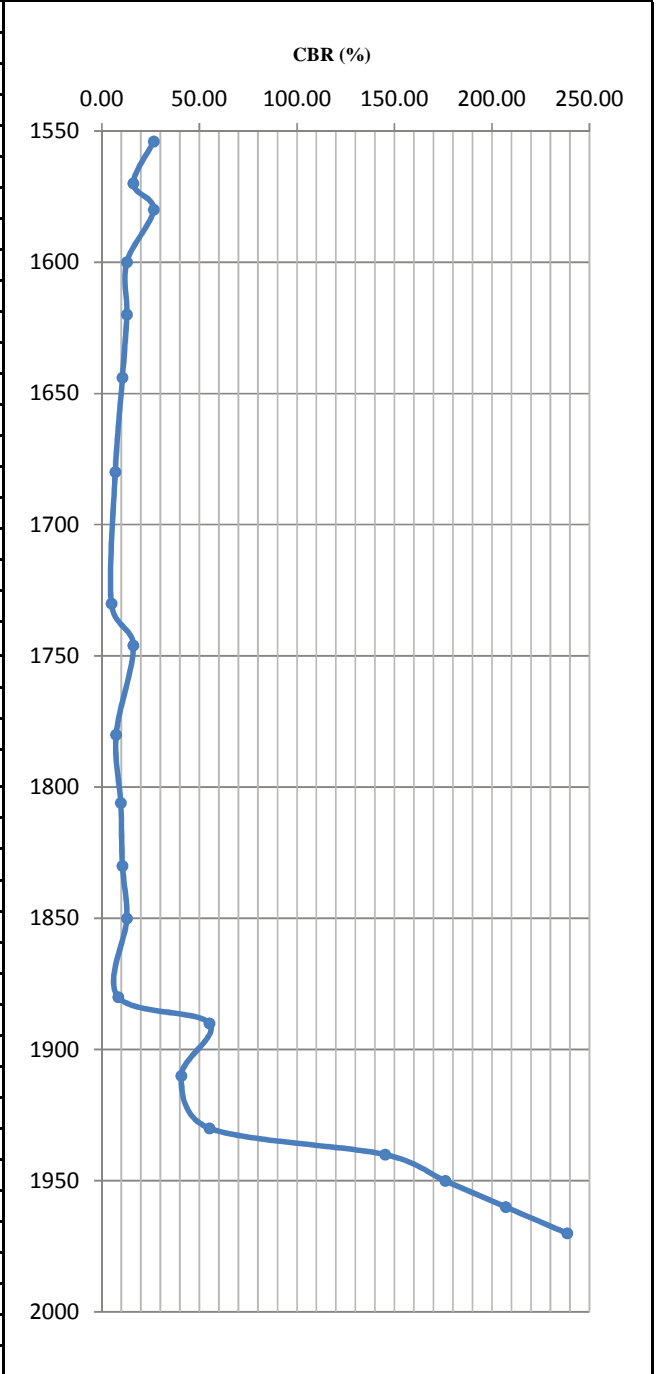
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2				Position ID DCP1228	
Job No. UA008426-01		Date 01/02/2017		Ground Level (m) 15.91	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538596.10, N264684.08		Initial Scale Reading (mm) 0	
Sheet 3 of 3					

88	1584	10.00	1554	1.00	26.49
89	1600	16.00	1570	1.20	16.12
90	1610	10.00	1580	1.00	26.49
91	1630	20.00	1600	1.30	12.73
92	1650	20.00	1620	1.30	12.73
93	1674	24.00	1644	1.38	10.50
94	1710	36.00	1680	1.56	6.84
95	1760	50.00	1730	1.70	4.83
96	1776	16.00	1746	1.20	16.12
97	1810	34.00	1780	1.53	7.26
98	1836	26.00	1806	1.41	9.65
99	1860	24.00	1830	1.38	10.50
100	1880	20.00	1850	1.30	12.73
101	1910	30.00	1880	1.48	8.29
103	1920	5.00	1890	0.70	55.10
106	1940	6.67	1910	0.82	40.66
110	1960	5.00	1930	0.70	55.10
115	1970	2.00	1940	0.30	145.15
121	1980	1.67	1950	0.22	176.00
128	1990	1.43	1960	0.15	207.14
136	2000	1.25	1970	0.10	238.54

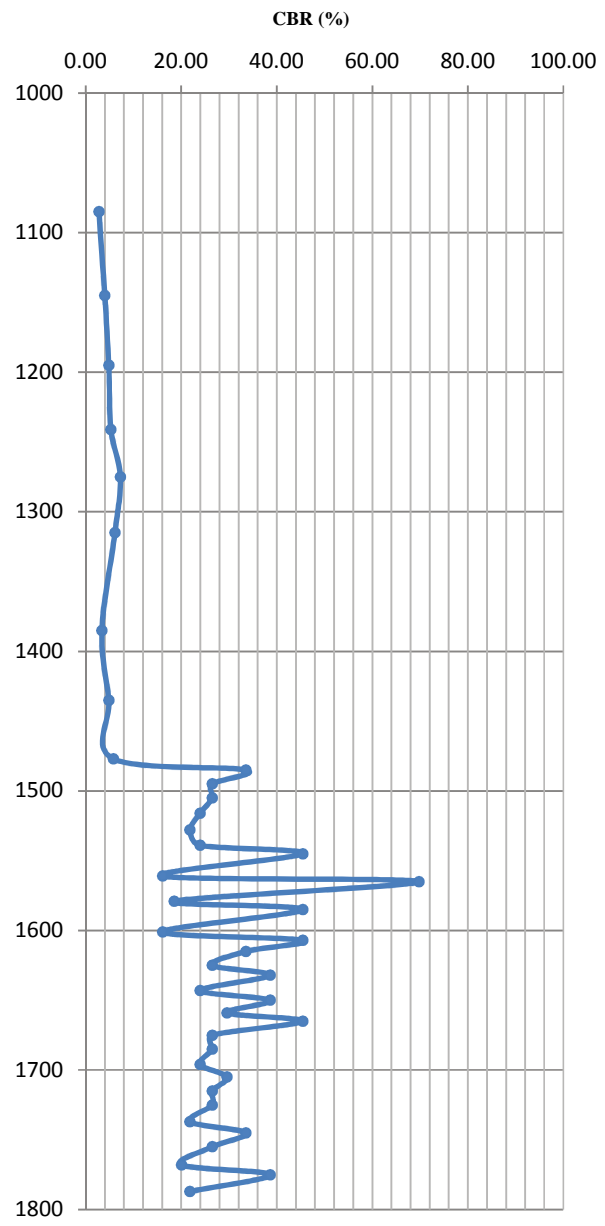


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.			Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1231	
Job No. UA008426-01	Date 01/02/2017	Ground Level (m)		
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E541426.943, N265340.43	Initial Scale Reading (mm) 35	Sheet 1 of 3	

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	120	85.00	1085	1.93	2.76
2	180	60.00	1145	1.78	3.99
3	230	50.00	1195	1.70	4.83
4	276	46.00	1241	1.66	5.28
5	310	34.00	1275	1.53	7.26
6	350	40.00	1315	1.60	6.12
7	420	70.00	1385	1.85	3.39
8	470	50.00	1435	1.70	4.83
9	512	42.00	1477	1.62	5.81
10	520	8.00	1485	0.90	33.53
11	530	10.00	1495	1.00	26.49
12	540	10.00	1505	1.00	26.49
13	551	11.00	1516	1.04	23.95
14	563	12.00	1528	1.08	21.84
15	574	11.00	1539	1.04	23.95
16	580	6.00	1545	0.78	45.45
17	596	16.00	1561	1.20	16.12
18	600	4.00	1565	0.60	69.76
19	614	14.00	1579	1.15	18.56
20	620	6.00	1585	0.78	45.45
21	636	16.00	1601	1.20	16.12
22	642	6.00	1607	0.78	45.45
23	650	8.00	1615	0.90	33.53
24	660	10.00	1625	1.00	26.49
25	667	7.00	1632	0.85	38.61
26	678	11.00	1643	1.04	23.95
27	685	7.00	1650	0.85	38.61
28	694	9.00	1659	0.95	29.61
29	700	6.00	1665	0.78	45.45
30	710	10.00	1675	1.00	26.49
31	720	10.00	1685	1.00	26.49
32	731	11.00	1696	1.04	23.95
33	740	9.00	1705	0.95	29.61
34	750	10.00	1715	1.00	26.49
35	760	10.00	1725	1.00	26.49
36	772	12.00	1737	1.08	21.84
37	780	8.00	1745	0.90	33.53
38	790	10.00	1755	1.00	26.49
39	803	13.00	1768	1.11	20.07
40	810	7.00	1775	0.85	38.61
41	822	12.00	1787	1.08	21.84



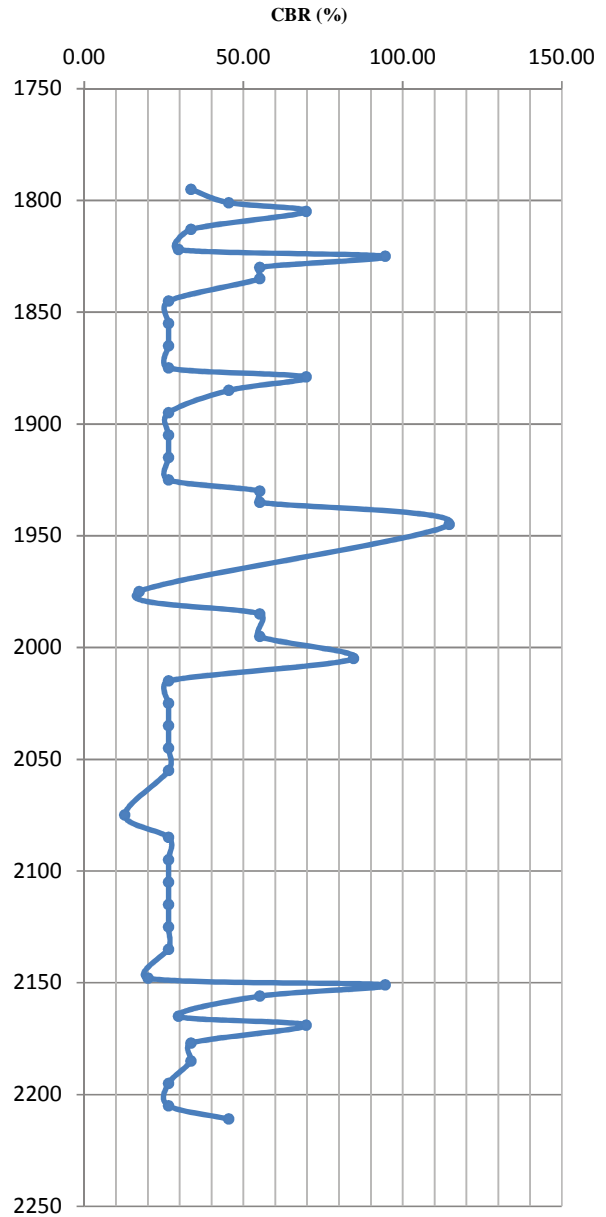
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1231		
Job No. UA008426-01		Date 01/02/2017		Ground Level (m)	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E541426.943, N265340.43		Initial Scale Reading (mm) 35	
Sheet 2 of 3					

42	830	8.00	1795	0.90	33.53
43	836	6.00	1801	0.78	45.45
44	840	4.00	1805	0.60	69.76
45	848	8.00	1813	0.90	33.53
46	857	9.00	1822	0.95	29.61
47	860	3.00	1825	0.48	94.55
48	865	5.00	1830	0.70	55.10
49	870	5.00	1835	0.70	55.10
50	880	10.00	1845	1.00	26.49
51	890	10.00	1855	1.00	26.49
52	900	10.00	1865	1.00	26.49
53	910	10.00	1875	1.00	26.49
54	914	4.00	1879	0.60	69.76
55	920	6.00	1885	0.78	45.45
56	930	10.00	1895	1.00	26.49
57	940	10.00	1905	1.00	26.49
58	950	10.00	1915	1.00	26.49
59	960	10.00	1925	1.00	26.49
60	965	5.00	1930	0.70	55.10
61	970	5.00	1935	0.70	55.10
65	980	2.50	1945	0.40	114.65
67	1010	15.00	1975	1.18	17.25
69	1020	5.00	1985	0.70	55.10
71	1030	5.00	1995	0.70	55.10
74	1040	3.33	2005	0.52	84.59
75	1050	10.00	2015	1.00	26.49
76	1060	10.00	2025	1.00	26.49
77	1070	10.00	2035	1.00	26.49
78	1080	10.00	2045	1.00	26.49
79	1090	10.00	2055	1.00	26.49
80	1110	20.00	2075	1.30	12.73
81	1120	10.00	2085	1.00	26.49
82	1130	10.00	2095	1.00	26.49
83	1140	10.00	2105	1.00	26.49
84	1150	10.00	2115	1.00	26.49
85	1160	10.00	2125	1.00	26.49
86	1170	10.00	2135	1.00	26.49
87	1183	13.00	2148	1.11	20.07
88	1186	3.00	2151	0.48	94.55
89	1191	5.00	2156	0.70	55.10
90	1200	9.00	2165	0.95	29.61
91	1204	4.00	2169	0.60	69.76
92	1212	8.00	2177	0.90	33.53
93	1220	8.00	2185	0.90	33.53
94	1230	10.00	2195	1.00	26.49
95	1240	10.00	2205	1.00	26.49
96	1246	6.00	2211	0.78	45.45



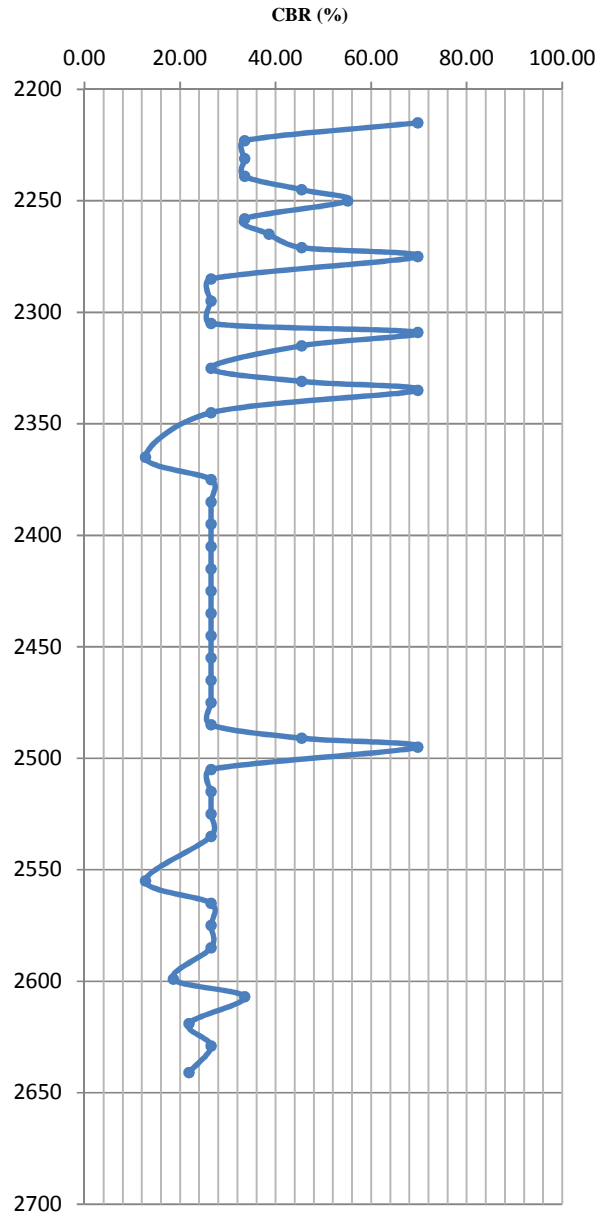
Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1231		
Job No. UA008426-01		Date 01/02/2017		Ground Level (m)	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E541426.943, N265340.43		Initial Scale Reading (mm) 35	
Sheet 3 of 3					

97	1250	4.00	2215	0.60	69.76
98	1258	8.00	2223	0.90	33.53
99	1266	8.00	2231	0.90	33.53
100	1274	8.00	2239	0.90	33.53
101	1280	6.00	2245	0.78	45.45
102	1285	5.00	2250	0.70	55.10
103	1293	8.00	2258	0.90	33.53
104	1300	7.00	2265	0.85	38.61
105	1306	6.00	2271	0.78	45.45
106	1310	4.00	2275	0.60	69.76
107	1320	10.00	2285	1.00	26.49
108	1330	10.00	2295	1.00	26.49
109	1340	10.00	2305	1.00	26.49
110	1344	4.00	2309	0.60	69.76
111	1350	6.00	2315	0.78	45.45
112	1360	10.00	2325	1.00	26.49
113	1366	6.00	2331	0.78	45.45
114	1370	4.00	2335	0.60	69.76
115	1380	10.00	2345	1.00	26.49
116	1400	20.00	2365	1.30	12.73
117	1410	10.00	2375	1.00	26.49
118	1420	10.00	2385	1.00	26.49
119	1430	10.00	2395	1.00	26.49
120	1440	10.00	2405	1.00	26.49
121	1450	10.00	2415	1.00	26.49
122	1460	10.00	2425	1.00	26.49
123	1470	10.00	2435	1.00	26.49
124	1480	10.00	2445	1.00	26.49
125	1490	10.00	2455	1.00	26.49
126	1500	10.00	2465	1.00	26.49
127	1510	10.00	2475	1.00	26.49
128	1520	10.00	2485	1.00	26.49
129	1526	6.00	2491	0.78	45.45
130	1530	4.00	2495	0.60	69.76
131	1540	10.00	2505	1.00	26.49
132	1550	10.00	2515	1.00	26.49
133	1560	10.00	2525	1.00	26.49
134	1570	10.00	2535	1.00	26.49
135	1590	20.00	2555	1.30	12.73
136	1600	10.00	2565	1.00	26.49
137	1610	10.00	2575	1.00	26.49
138	1620	10.00	2585	1.00	26.49
139	1634	14.00	2599	1.15	18.56
140	1642	8.00	2607	0.90	33.53
141	1654	12.00	2619	1.08	21.84
142	1664	10.00	2629	1.00	26.49
143	1676	12.00	2641	1.08	21.84

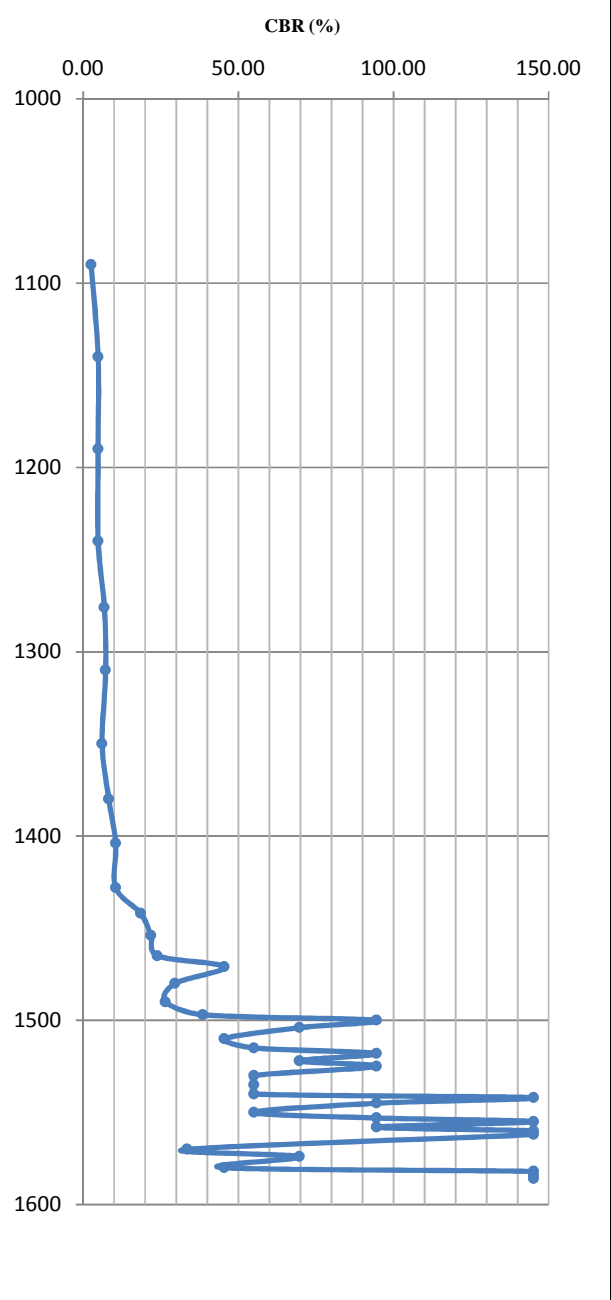


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1233
Job No. UA008426-01	Date 01/02/2017	Ground Level (m) 15.70	
Contractor Arcadis Consulting (UK) Ltd	Co-ordinates E538694.47, N264709.26	Initial Scale Reading (mm) 40	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	130	90.00	1090	1.95	2.60
2	180	50.00	1140	1.70	4.83
3	230	50.00	1190	1.70	4.83
4	280	50.00	1240	1.70	4.83
5	316	36.00	1276	1.56	6.84
6	350	34.00	1310	1.53	7.26
7	390	40.00	1350	1.60	6.12
8	420	30.00	1380	1.48	8.29
9	444	24.00	1404	1.38	10.50
10	468	24.00	1428	1.38	10.50
11	482	14.00	1442	1.15	18.56
12	494	12.00	1454	1.08	21.84
13	505	11.00	1465	1.04	23.95
14	511	6.00	1471	0.78	45.45
15	520	9.00	1480	0.95	29.61
16	530	10.00	1490	1.00	26.49
17	537	7.00	1497	0.85	38.61
18	540	3.00	1500	0.48	94.55
19	544	4.00	1504	0.60	69.76
20	550	6.00	1510	0.78	45.45
21	555	5.00	1515	0.70	55.10
22	558	3.00	1518	0.48	94.55
23	562	4.00	1522	0.60	69.76
24	565	3.00	1525	0.48	94.55
25	570	5.00	1530	0.70	55.10
26	575	5.00	1535	0.70	55.10
27	580	5.00	1540	0.70	55.10
28	582	2.00	1542	0.30	145.15
29	585	3.00	1545	0.48	94.55
30	590	5.00	1550	0.70	55.10
31	593	3.00	1553	0.48	94.55
32	595	2.00	1555	0.30	145.15
33	598	3.00	1558	0.48	94.55
34	600	2.00	1560	0.30	145.15
35	602	2.00	1562	0.30	145.15
36	610	8.00	1570	0.90	33.53
37	614	4.00	1574	0.60	69.76
38	620	6.00	1580	0.78	45.45
39	622	2.00	1582	0.30	145.15
40	624	2.00	1584	0.30	145.15
41	626	2.00	1586	0.30	145.15



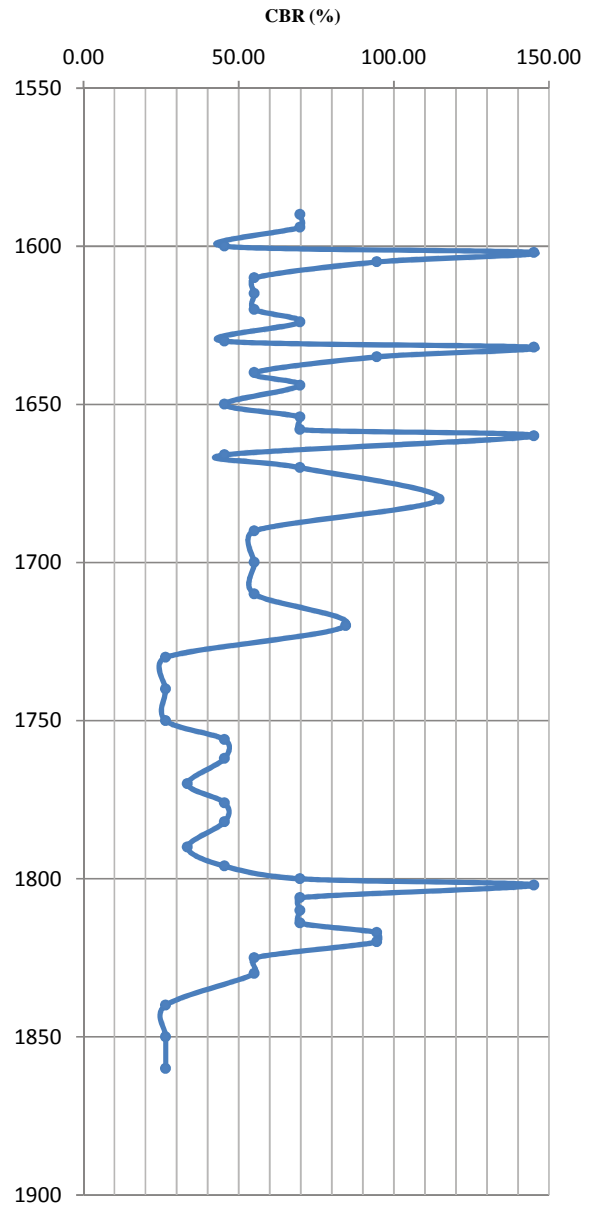
Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1233		
Job No. UA008426-01		Date 01/02/2017		Ground Level (m) 15.70	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538694.47, N264709.26		Initial Scale Reading (mm) 40	
Sheet 2 of 3					

42	630	4.00	1590	0.60	69.76
43	634	4.00	1594	0.60	69.76
44	640	6.00	1600	0.78	45.45
45	642	2.00	1602	0.30	145.15
46	645	3.00	1605	0.48	94.55
47	650	5.00	1610	0.70	55.10
48	655	5.00	1615	0.70	55.10
49	660	5.00	1620	0.70	55.10
50	664	4.00	1624	0.60	69.76
51	670	6.00	1630	0.78	45.45
52	672	2.00	1632	0.30	145.15
53	675	3.00	1635	0.48	94.55
54	680	5.00	1640	0.70	55.10
55	684	4.00	1644	0.60	69.76
56	690	6.00	1650	0.78	45.45
57	694	4.00	1654	0.60	69.76
58	698	4.00	1658	0.60	69.76
59	700	2.00	1660	0.30	145.15
60	706	6.00	1666	0.78	45.45
61	710	4.00	1670	0.60	69.76
65	720	2.50	1680	0.40	114.65
67	730	5.00	1690	0.70	55.10
69	740	5.00	1700	0.70	55.10
71	750	5.00	1710	0.70	55.10
74	760	3.33	1720	0.52	84.59
75	770	10.00	1730	1.00	26.49
76	780	10.00	1740	1.00	26.49
77	790	10.00	1750	1.00	26.49
78	796	6.00	1756	0.78	45.45
79	802	6.00	1762	0.78	45.45
80	810	8.00	1770	0.90	33.53
81	816	6.00	1776	0.78	45.45
82	822	6.00	1782	0.78	45.45
83	830	8.00	1790	0.90	33.53
84	836	6.00	1796	0.78	45.45
85	840	4.00	1800	0.60	69.76
86	842	2.00	1802	0.30	145.15
87	846	4.00	1806	0.60	69.76
88	850	4.00	1810	0.60	69.76
89	854	4.00	1814	0.60	69.76
90	857	3.00	1817	0.48	94.55
91	860	3.00	1820	0.48	94.55
92	865	5.00	1825	0.70	55.10
93	870	5.00	1830	0.70	55.10
94	880	10.00	1840	1.00	26.49
95	890	10.00	1850	1.00	26.49
96	900	10.00	1860	1.00	26.49



Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2					Position ID DCP1233	
Job No. UA008426-01		Date 01/02/2017		Ground Level (m) 15.70		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E538694.47, N264709.26		Initial Scale Reading (mm) 40		
				Sheet 3 of 3		

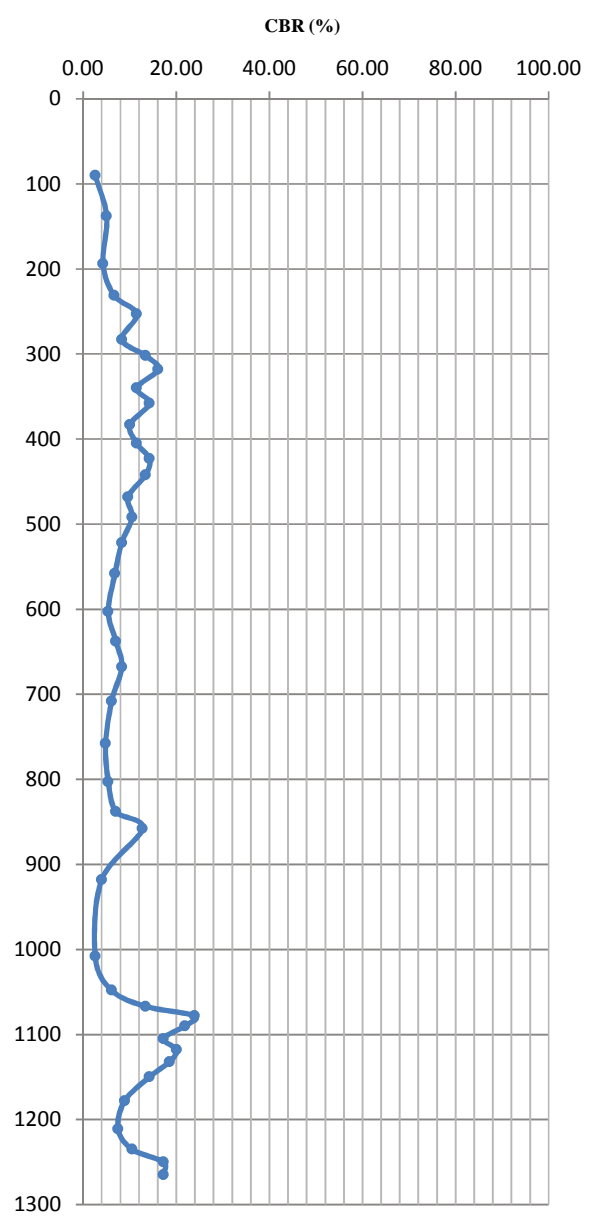
97	910	10.00	1870	1.00	26.49
98	914	4.00	1874	0.60	69.76
99	920	6.00	1880	0.78	45.45
100	930	10.00	1890	1.00	26.49
101	940	10.00	1900	1.00	26.49
102	950	10.00	1910	1.00	26.49
103	960	10.00	1920	1.00	26.49
104	965	5.00	1925	0.70	55.10
105	970	5.00	1930	0.70	55.10
106	980	10.00	1940	1.00	26.49
107	1010	30.00	1970	1.48	8.29
108	1020	10.00	1980	1.00	26.49
109	1030	10.00	1990	1.00	26.49
110	1040	10.00	2000	1.00	26.49
111	1050	10.00	2010	1.00	26.49
112	1060	10.00	2020	1.00	26.49
113	1070	10.00	2030	1.00	26.49
114	1080	10.00	2040	1.00	26.49
115	1090	10.00	2050	1.00	26.49
116	1100	10.00	2060	1.00	26.49
117	1110	10.00	2070	1.00	26.49
118	1120	10.00	2080	1.00	26.49
119	1130	10.00	2090	1.00	26.49
120	1140	10.00	2100	1.00	26.49
121	1150	10.00	2110	1.00	26.49
122	1155	5.00	2115	0.70	55.10
123	1160	5.00	2120	0.70	55.10
124	1164	4.00	2124	0.60	69.76
125	1170	6.00	2130	0.78	45.45
126	1172	2.00	2132	0.30	145.15
127	1177	5.00	2137	0.70	55.10
128	1183	6.00	2143	0.78	45.45
129	1186	3.00	2146	0.48	94.55
130	1191	5.00	2151	0.70	55.10
131	1195	4.00	2155	0.60	69.76
132	1200	5.00	2160	0.70	55.10
133	1204	4.00	2164	0.60	69.76
134	1210	6.00	2170	0.78	45.45
135	1212	2.00	2172	0.30	145.15
136	1214	2.00	2174	0.30	145.15
137	1220	6.00	2180	0.78	45.45
138	1230	10.00	2190	1.00	26.49
139	1234	4.00	2194	0.60	69.76
140	1240	6.00	2200	0.78	45.45
141	1246	6.00	2206	0.78	45.45
142	1250	4.00	2210	0.60	69.76

Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1234	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 12.35		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540292.26, N265176.55	Initial Scale Reading (mm) 165	Sheet 1 of 3

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	212	90.00	90	1.95	2.60
2	260	48.00	138	1.68	5.05
3	316	56.00	194	1.75	4.29
4	353	37.00	231	1.57	6.64
5	375	22.00	253	1.34	11.51
6	405	30.00	283	1.48	8.29
7	424	19.00	302	1.28	13.44
8	440	16.00	318	1.20	16.12
9	462	22.00	340	1.34	11.51
10	480	18.00	358	1.26	14.23
11	505	25.00	383	1.40	10.05
12	527	22.00	405	1.34	11.51
13	545	18.00	423	1.26	14.23
14	564	19.00	442	1.28	13.44
15	590	26.00	468	1.41	9.65
16	614	24.00	492	1.38	10.50
17	644	30.00	522	1.48	8.29
18	680	36.00	558	1.56	6.84
19	725	45.00	603	1.65	5.40
20	760	35.00	638	1.54	7.05
21	790	30.00	668	1.48	8.29
22	830	40.00	708	1.60	6.12
23	880	50.00	758	1.70	4.83
24	925	45.00	803	1.65	5.40
25	960	35.00	838	1.54	7.05
26	980	20.00	858	1.30	12.73
27	1040	60.00	918	1.78	3.99
28	1130	90.00	1008	1.95	2.60
29	1170	40.00	1048	1.60	6.12
30	1189	19.00	1067	1.28	13.44
31	1200	11.00	1078	1.04	23.95
32	1212	12.00	1090	1.08	21.84
33	1227	15.00	1105	1.18	17.25
34	1240	13.00	1118	1.11	20.07
35	1254	14.00	1132	1.15	18.56
36	1272	18.00	1150	1.26	14.23
37	1300	28.00	1178	1.45	8.92
38	1333	33.00	1211	1.52	7.50
39	1357	24.00	1235	1.38	10.50
40	1372	15.00	1250	1.18	17.25
41	1387	15.00	1265	1.18	17.25



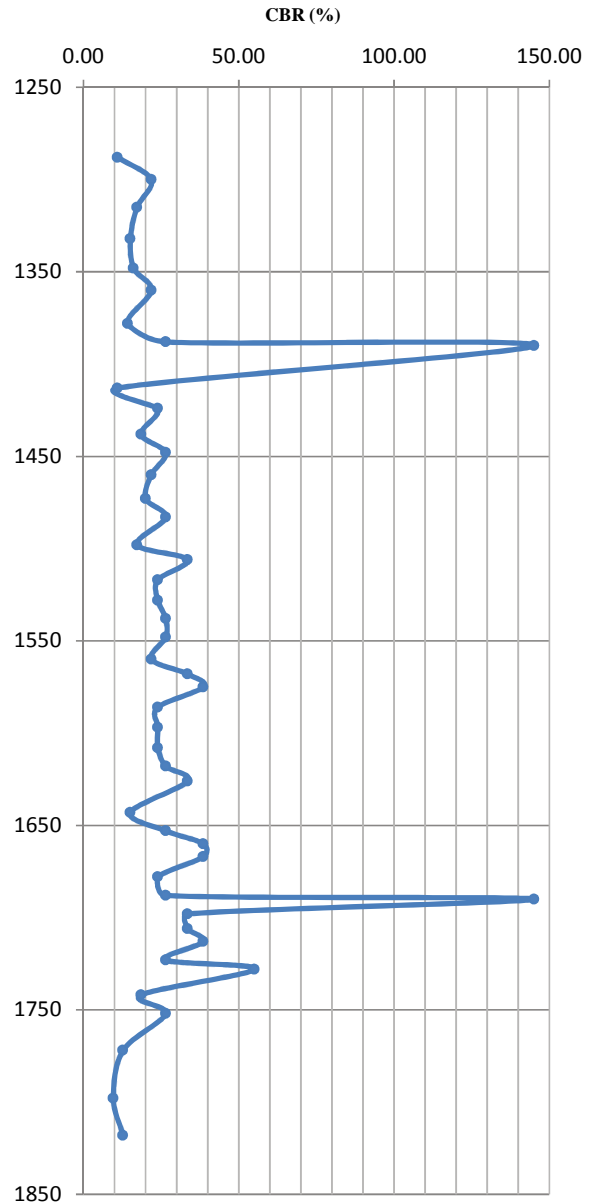
Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1234		
Job No. UA008426-01		Date 02/02/2017		Ground Level (m) 12.35	
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540292.26, N265176.55		Initial Scale Reading (mm) 165	
Sheet 2 of 3					

42	1410	23.00	1288	1.36	10.98
43	1422	12.00	1300	1.08	21.84
44	1437	15.00	1315	1.18	17.25
45	1454	17.00	1332	1.23	15.12
46	1470	16.00	1348	1.20	16.12
47	1482	12.00	1360	1.08	21.84
48	1500	18.00	1378	1.26	14.23
49	1510	10.00	1388	1.00	26.49
50	1512	2.00	1390	0.30	145.15
51	1535	23.00	1413	1.36	10.98
52	1546	11.00	1424	1.04	23.95
53	1560	14.00	1438	1.15	18.56
54	1570	10.00	1448	1.00	26.49
55	1582	12.00	1460	1.08	21.84
56	1595	13.00	1473	1.11	20.07
57	1605	10.00	1483	1.00	26.49
58	1620	15.00	1498	1.18	17.25
59	1628	8.00	1506	0.90	33.53
60	1639	11.00	1517	1.04	23.95
61	1650	11.00	1528	1.04	23.95
62	1660	10.00	1538	1.00	26.49
63	1670	10.00	1548	1.00	26.49
64	1682	12.00	1560	1.08	21.84
65	1690	8.00	1568	0.90	33.53
66	1697	7.00	1575	0.85	38.61
67	1708	11.00	1586	1.04	23.95
68	1719	11.00	1597	1.04	23.95
69	1730	11.00	1608	1.04	23.95
70	1740	10.00	1618	1.00	26.49
71	1748	8.00	1626	0.90	33.53
72	1765	17.00	1643	1.23	15.12
73	1775	10.00	1653	1.00	26.49
74	1782	7.00	1660	0.85	38.61
75	1789	7.00	1667	0.85	38.61
76	1800	11.00	1678	1.04	23.95
77	1810	10.00	1688	1.00	26.49
78	1812	2.00	1690	0.30	145.15
79	1820	8.00	1698	0.90	33.53
80	1828	8.00	1706	0.90	33.53
81	1835	7.00	1713	0.85	38.61
82	1845	10.00	1723	1.00	26.49
83	1850	5.00	1728	0.70	55.10
84	1864	14.00	1742	1.15	18.56
85	1874	10.00	1752	1.00	26.49
86	1894	20.00	1772	1.30	12.73
87	1920	26.00	1798	1.41	9.65
88	1940	20.00	1818	1.30	12.73



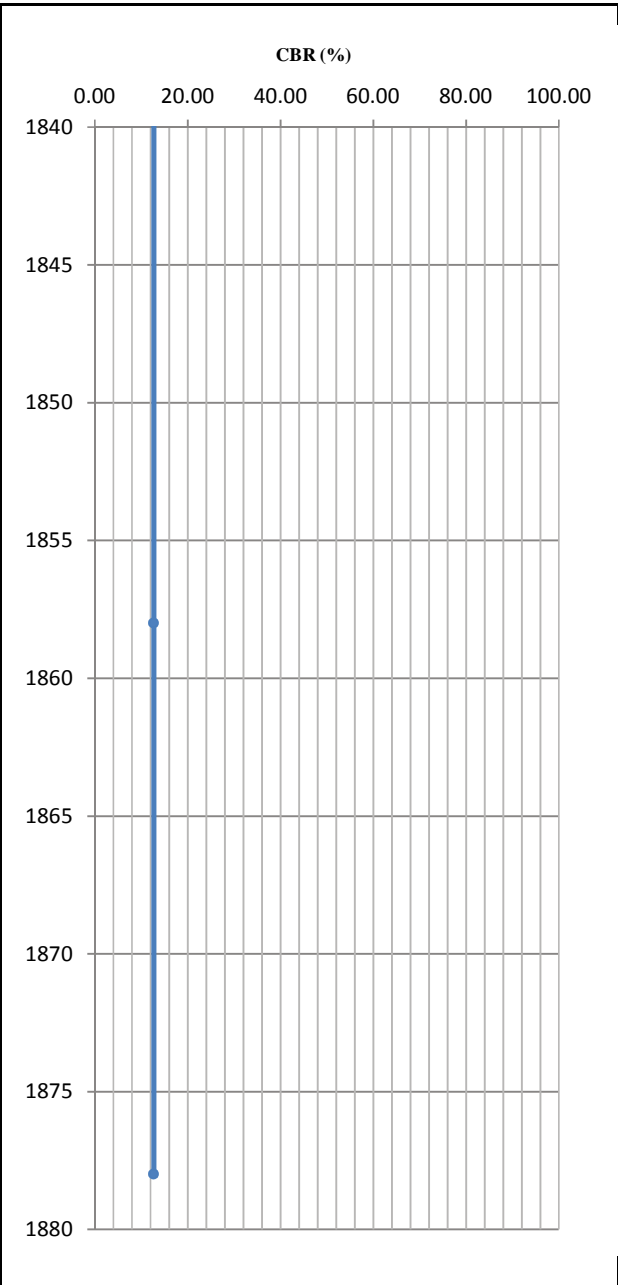
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1234	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 12.35		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540292.26, N265176.55	Initial Scale Reading (mm) 165	Sheet 3 of 3

89	1960	20.00	1838	1.30	12.73
90	1980	20.00	1858	1.30	12.73
91	2000	20.00	1878	1.30	12.73

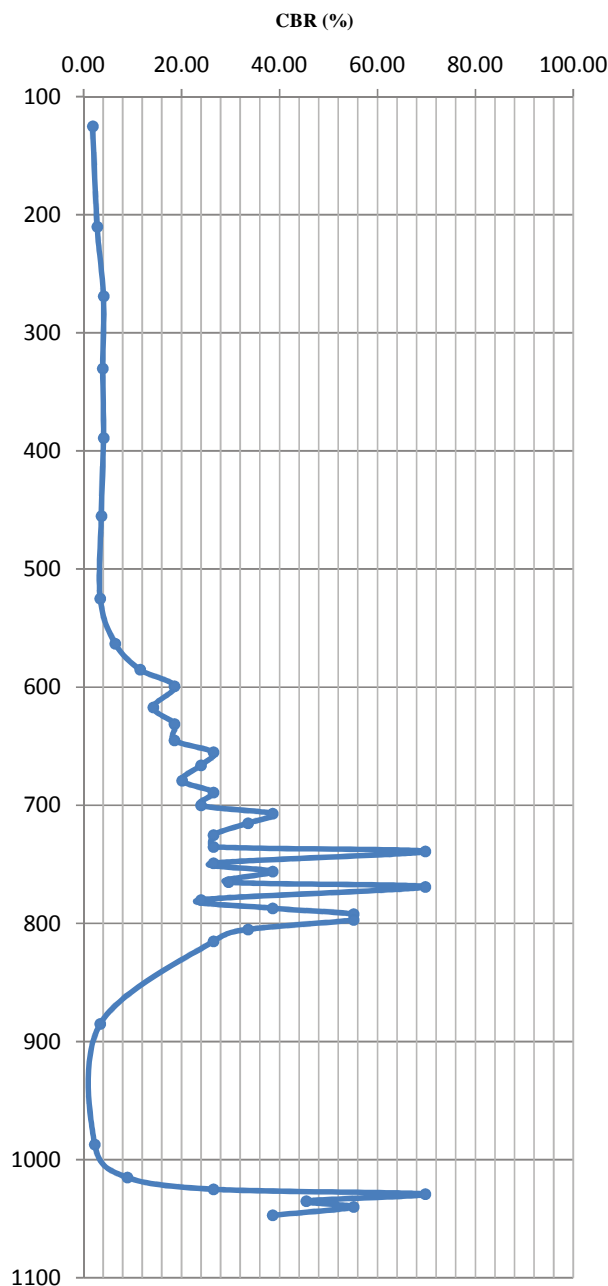


Remarks Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1235	
Job No. UA008426-01	Date 02/02/2017	Ground Level (m) 12.50		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540281.87, N265046.24	Initial Scale Reading (mm) 165	Sheet 1 of 2

Total No. of Blows	Scale Reading (mm)	DCP (mm/blow)	Depth Below Ground Level (mm)	Log ₁₀ (mm/blow)	CBR (%)
1	290	125.00	125	2.10	1.83
2	375	85.00	210	1.93	2.76
3	434	59.00	269	1.77	4.06
4	495	61.00	330	1.79	3.92
5	554	59.00	389	1.77	4.06
6	620	66.00	455	1.82	3.60
7	690	70.00	525	1.85	3.39
8	728	38.00	563	1.58	6.46
9	750	22.00	585	1.34	11.51
10	764	14.00	599	1.15	18.56
11	782	18.00	617	1.26	14.23
12	796	14.00	631	1.15	18.56
13	810	14.00	645	1.15	18.56
14	820	10.00	655	1.00	26.49
15	831	11.00	666	1.04	23.95
16	844	13.00	679	1.11	20.07
17	854	10.00	689	1.00	26.49
18	865	11.00	700	1.04	23.95
19	872	7.00	707	0.85	38.61
20	880	8.00	715	0.90	33.53
21	890	10.00	725	1.00	26.49
22	900	10.00	735	1.00	26.49
23	904	4.00	739	0.60	69.76
24	914	10.00	749	1.00	26.49
25	921	7.00	756	0.85	38.61
26	930	9.00	765	0.95	29.61
27	934	4.00	769	0.60	69.76
28	945	11.00	780	1.04	23.95
29	952	7.00	787	0.85	38.61
30	957	5.00	792	0.70	55.10
31	962	5.00	797	0.70	55.10
32	970	8.00	805	0.90	33.53
33	980	10.00	815	1.00	26.49
34	1050	70.00	885	1.85	3.39
35	1152	102.00	987	2.01	2.27
36	1180	28.00	1015	1.45	8.92
37	1190	10.00	1025	1.00	26.49
38	1194	4.00	1029	0.60	69.76
39	1200	6.00	1035	0.78	45.45
40	1205	5.00	1040	0.70	55.10
41	1212	7.00	1047	0.85	38.61



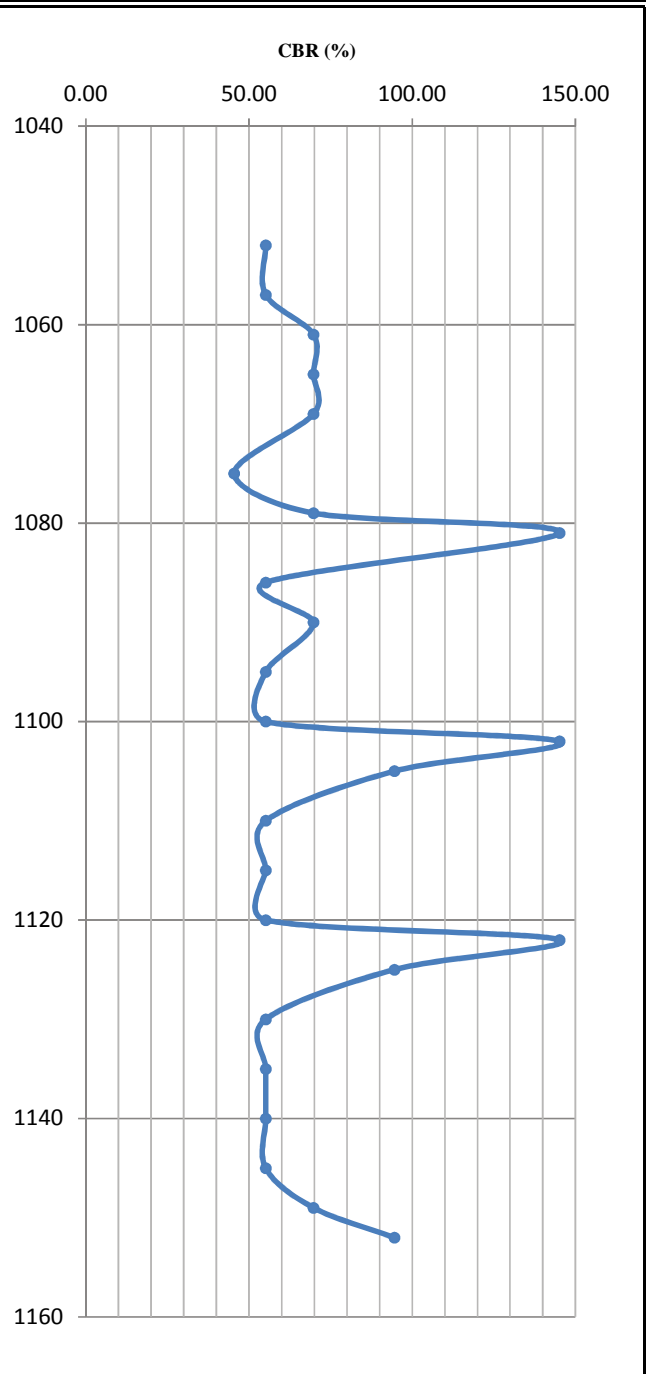
Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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TRL PENETROMETER TESTING

Project Northstowe Phase 2			Position ID DCP1235		
Job No. UA008426-01		Date 02/02/2017	Ground Level (m) 12.50		
Contractor Arcadis Consulting (UK) Ltd		Co-ordinates E540281.9 N265046.2	Initial Scale Reading (mm) 165		Sheet 2 of 2

42	1217	5.00	1052	0.70	55.10
43	1222	5.00	1057	0.70	55.10
44	1226	4.00	1061	0.60	69.76
45	1230	4.00	1065	0.60	69.76
46	1234	4.00	1069	0.60	69.76
47	1240	6.00	1075	0.78	45.45
48	1244	4.00	1079	0.60	69.76
49	1246	2.00	1081	0.30	145.15
50	1251	5.00	1086	0.70	55.10
51	1255	4.00	1090	0.60	69.76
52	1260	5.00	1095	0.70	55.10
53	1265	5.00	1100	0.70	55.10
54	1267	2.00	1102	0.30	145.15
55	1270	3.00	1105	0.48	94.55
56	1275	5.00	1110	0.70	55.10
57	1280	5.00	1115	0.70	55.10
58	1285	5.00	1120	0.70	55.10
59	1287	2.00	1122	0.30	145.15
60	1290	3.00	1125	0.48	94.55
61	1295	5.00	1130	0.70	55.10
62	1300	5.00	1135	0.70	55.10
63	1305	5.00	1140	0.70	55.10
64	1310	5.00	1145	0.70	55.10
65	1314	4.00	1149	0.60	69.76
66	1317	3.00	1152	0.48	94.55
76	1320	0.30	1155	-0.52	1078.16
86	1321	0.10	1156	-1.00	3443.50



Remarks	Test carried out in accordance with the operating instructions for the TRL dynamic cone penetrometer. CBR correlation based on the relationship $\text{Log}_{10}(\text{CBR}) = 2.48 - 1.057 \times \text{Log}_{10}(\text{mm/blow})$ developed by TRL taken from the Highways Agency Interim Advice Note 76-03 - Design Guide for Road Pavement Foundations (2006). Levels are to Local Datum of Colas Survey.	Operator GSTL
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APPENDIX D

CERTIFICATION OF FIELD APPARATUS

Testconsult Ltd
Ruby House
40a, Hardwick Grange
Woolston
Warrington
WA1 4RF

SPT Hammer Ref: PB14 (Dick)
Test Date: 12/12/2015
Report Date: 21/12/2015
File Name: PB06.spt
Test Operator: BW



Instrumented Rod Data

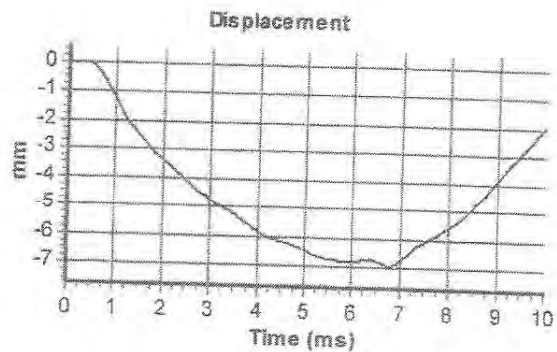
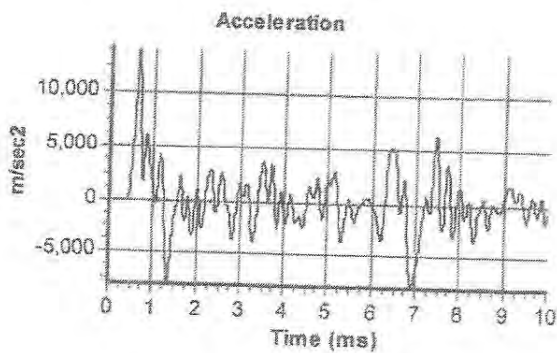
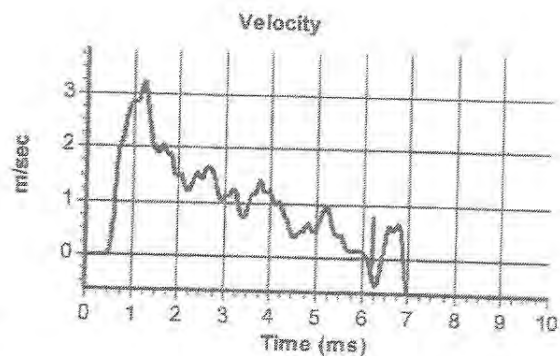
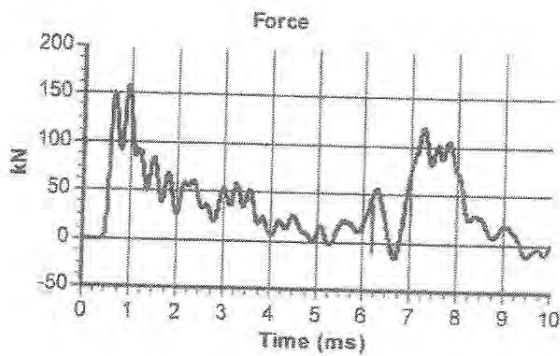
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 7.0
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 8965
Accelerometer No.2: 8966

SPT Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
SPT String Length L (m): 14.5

Comments / Location

Client: Paul Blackledge Drilling
Location: Warrington Laboratory
Type: Trip Hammer



Calculations

Area of Rod A (mm^2): 1034
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 383

Energy Ratio E_r (%): **81**

The recommended calibration interval is 12 months

Signed: **reg. 13**

Title: Senior Technician





Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
6-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref: BS8
Test Date: 20/12/2016
Report Date:
File Name: BS8.spt
Test Operator: TP

Instrumented Rod Data

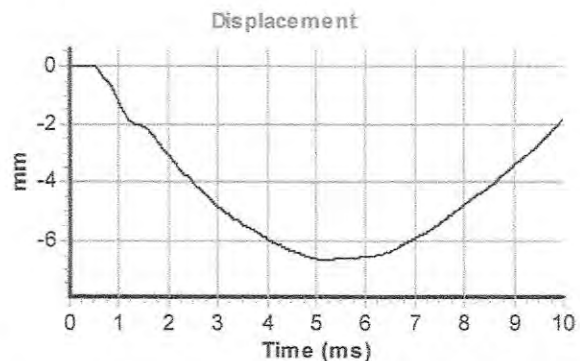
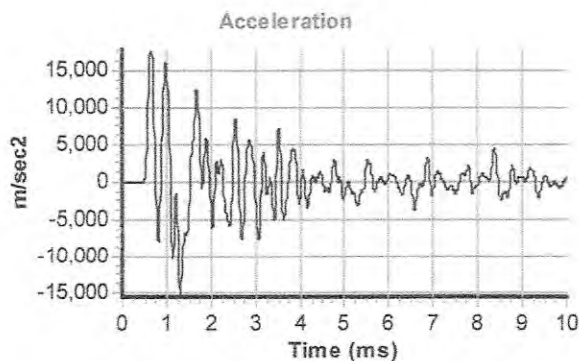
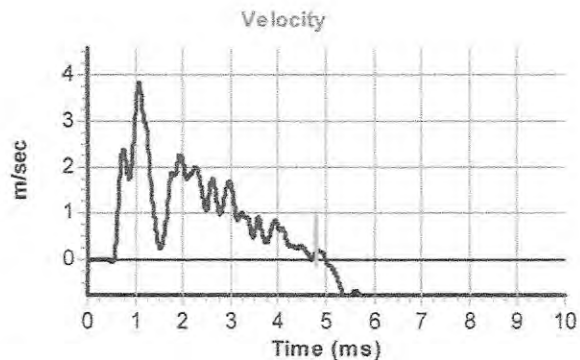
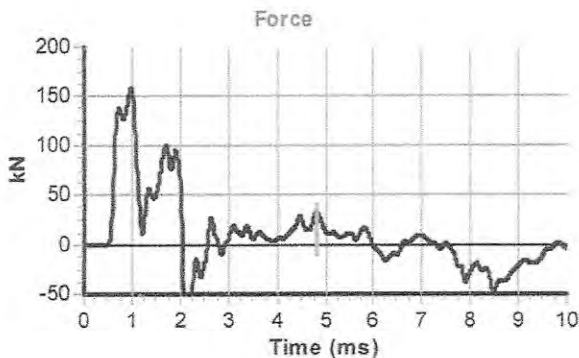
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.9
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 6455
Accelerometer No.2: 6457

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Borehole solutions hammer tested at
Dynamic sampling yard.



Calculations

Area of Rod A (mm²): 1021
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 301

Energy Ratio E_r (%): **64**

reg. 13

Title: Manager

The recommended calibration interval is 12 months



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
6-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref: BS10
Test Date: 20/12/2016
Report Date:
File Name: BS10.spt
Test Operator: TP

Instrumented Rod Data

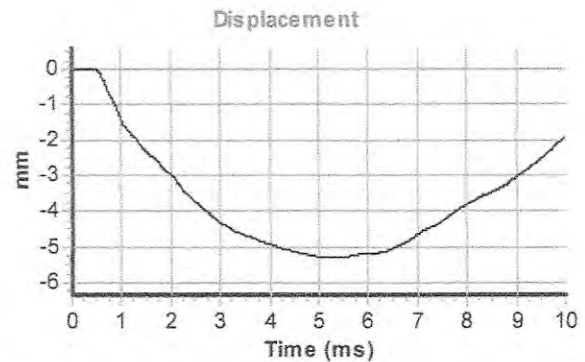
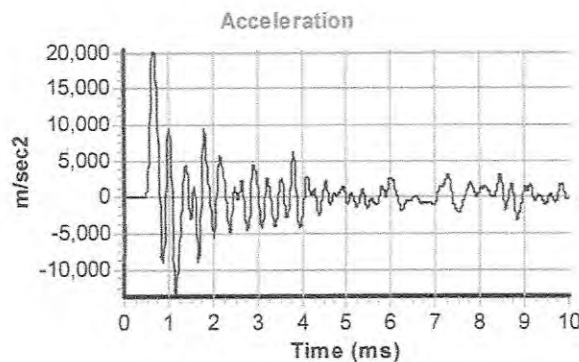
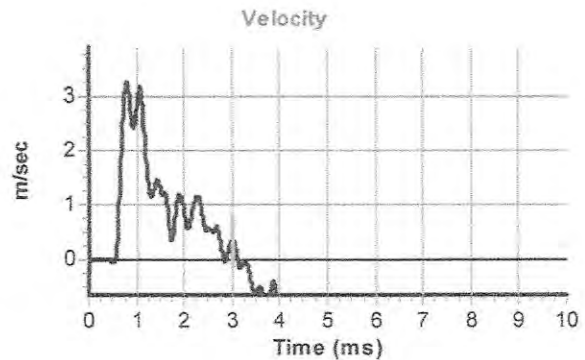
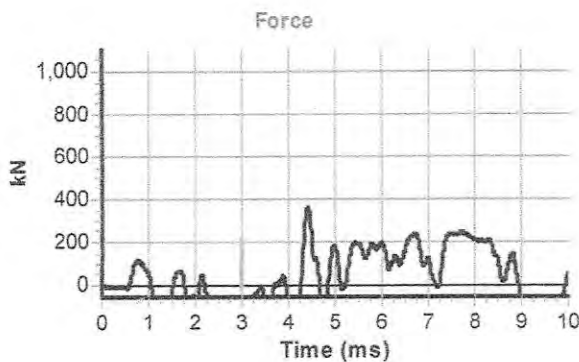
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.9
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 6455
Accelerometer No.2: 6457

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Borehole solutions hammer tested at
Dynamic samplings yard.



Calculations

Area of Rod A (mm^2): 1021
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 283

Energy Ratio E_r (%): **60**

reg. 13

Title: Manager

The recommended calibration interval is 12 months



Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Dynamic sampling uk ltd
6-8 victory parkway
victory road
Derby
DE24 8ZF

Hammer Ref: BS13
Test Date: 20/12/2016
Report Date:
File Name: BS13.spt
Test Operator: TP

Instrumented Rod Data

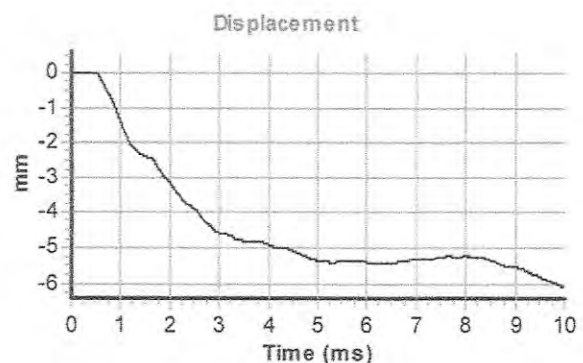
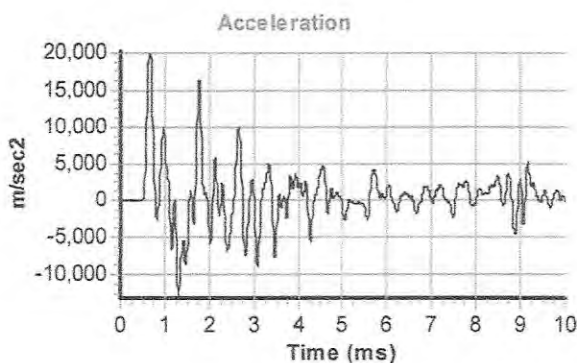
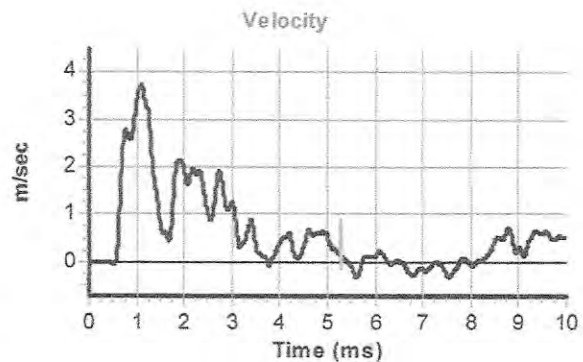
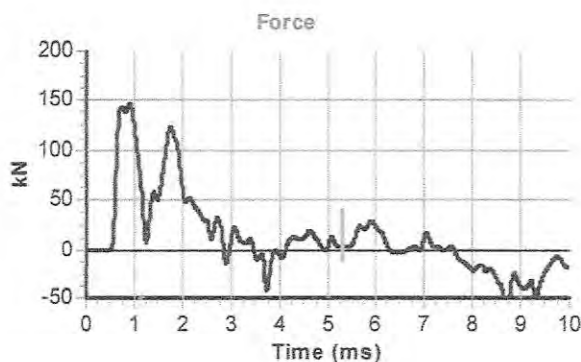
Diameter d_r (mm): 54
Wall Thickness t_r (mm): 6.9
Assumed Modulus E_a (GPa): 208
Accelerometer No.1: 6455
Accelerometer No.2: 6457

Hammer Information

Hammer Mass m (kg): 63.5
Falling Height h (mm): 760
String Length L (m): 15.0

Comments / Location

Borehole solutions hammer tested at
Dynamic samplings yard.



Calculations

Area of Rod A (mm²): 1021
Theoretical Energy E_{theor} (J): 473
Measured Energy E_{meas} (J): 328

Energy Ratio E_r (%): **69**

reg. 13

Title: Manager

The recommended calibration interval is 12 months

SPT Calibration Report



Hammer Energy Measurement Report

Type of Hammer: DART
 Client: GSTL
 Test No: EQU1647
 Test Depth (m): 8.50
 Date of Test: **14 November 2016**
 Valid until: **14 November 2017**
 Hammer ID: **365**

Mass of the hammer: $m = 63.5\text{kg}$
 Falling height: $h = 0.76\text{m}$
 $E_{\text{theor}} = m \times g \times h = 473\text{J}$

Characteristics of the instrumented rod

Diameter: $d_r = 0.052\text{ m}$
 Length of the instrumented rod: 0.558 m
 Area: $A = 11.61\text{ cm}^2$
 Modulus: $E_a = 206843\text{ MPa}$

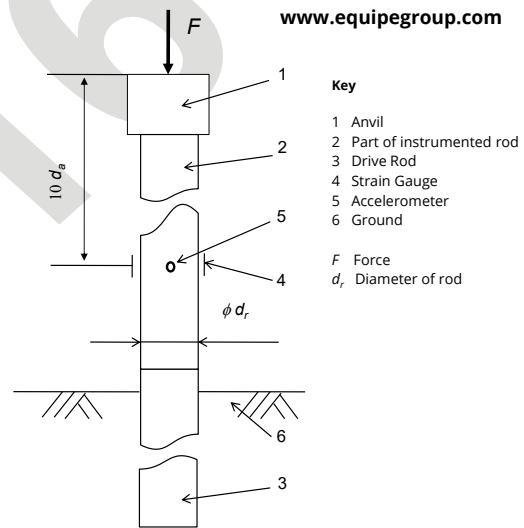
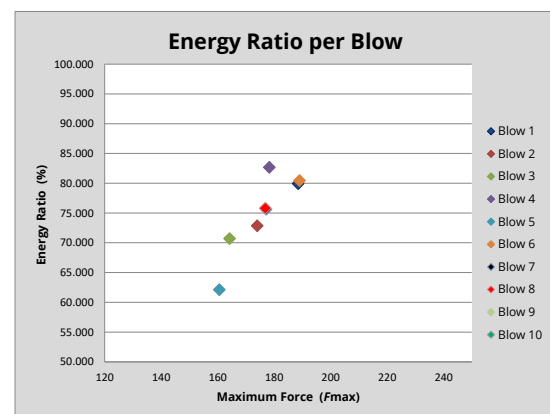
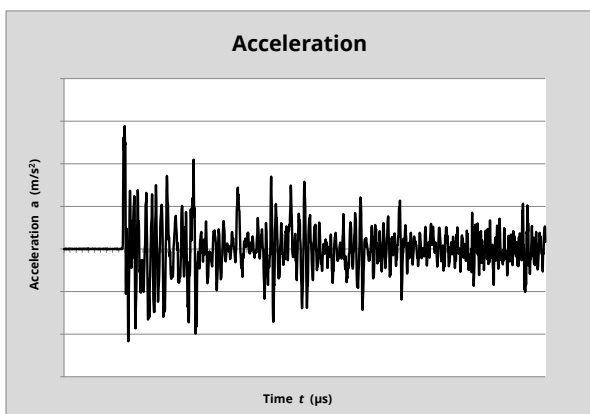
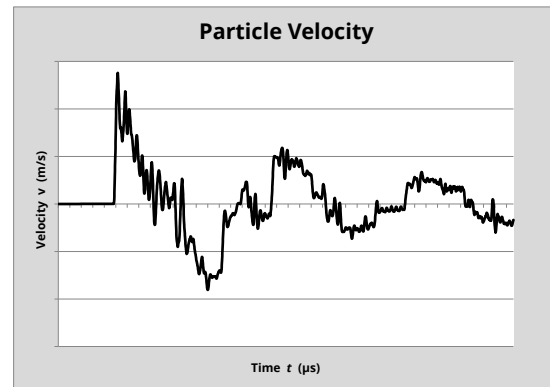
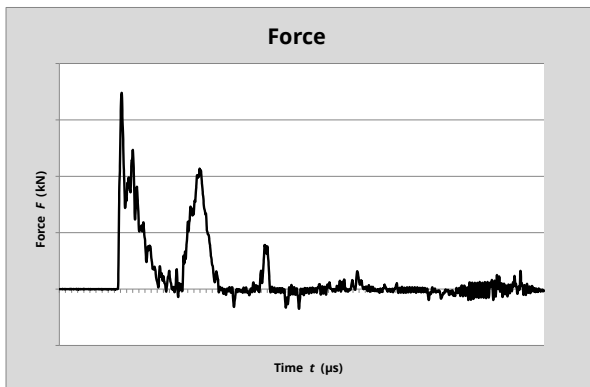


Fig. B.1 and B.2 BS EN ISO 22476-3 : 2005 + A1 : 2011



Observations:
 1.

$E_{\text{meas}} = 0.354\text{ kN-m}$
 $E_{\text{theor}} = 0.473\text{ kN-m}$

Energy Ratio = $\frac{E_{\text{meas}}}{E_{\text{theor}}}$: 74.75%

Equipe SPT Analyzer Operators:

KS

Prepared by:

reg. 13

Checked by:

Date

22/11/2016

SPT Calibration Report



Hammer Energy Measurement Report

Type of Hammer: SPT HAMMER
 Client: CJ ASSOCIATES
 Test No: EQU 1595
 Test Depth (m): 8.50
 Date of Test: 20 July 2016
 Valid until: 20 July 2017
 Hammer ID: CJ08

Mass of the hammer: $m = 63.5\text{kg}$
 Falling height: $h = 0.76\text{m}$
 $E_{\text{theor}} = m \times g \times h = 473\text{J}$

Characteristics of the instrumented rod

Diameter: $d_r = 0.052\text{m}$
 Length of the instrumented rod: 0.558m
 Area: $A = 11.61\text{cm}^2$
 Modulus: $E_a = 206843\text{MPa}$

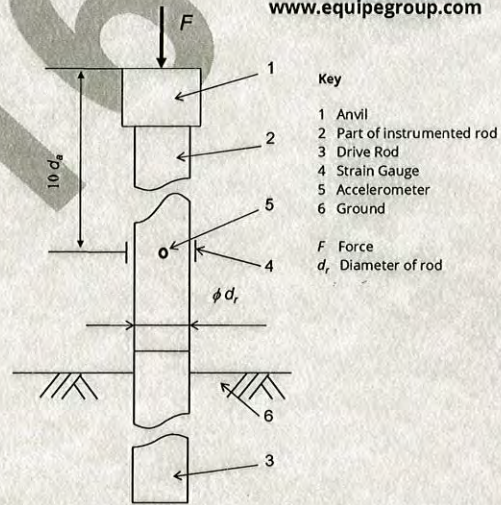
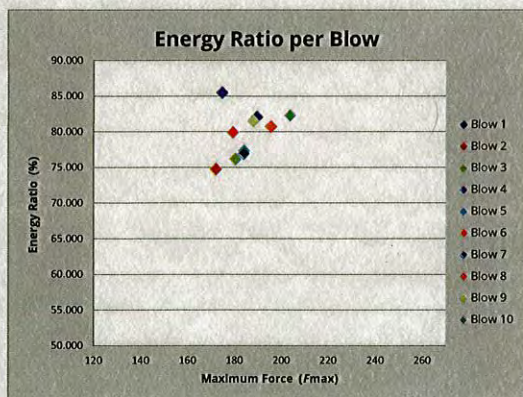
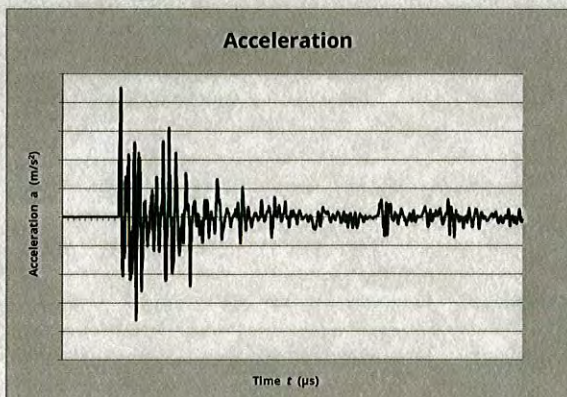
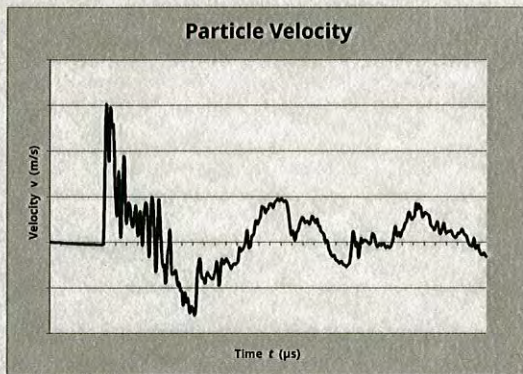
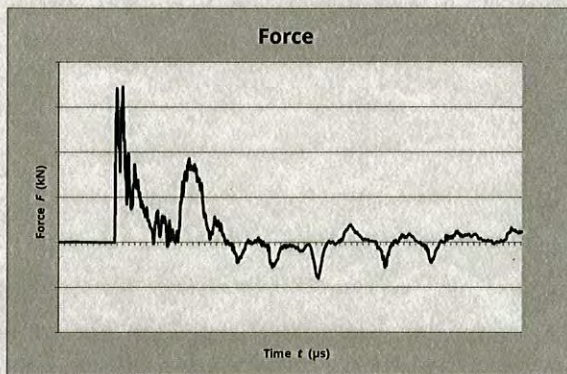


Fig. B.1 and B.2 BS EN ISO 22476-3 : 2005 + A1 : 2011



Observations:
 1.

$E_{\text{meas}} = 0.377\text{ kN-m}$

$E_{\text{theor}} = 0.473\text{ kN-m}$

$$\text{Energy Ratio } (E_r) = \frac{E_{\text{meas}}}{E_{\text{theor}}} = 79.75\%$$

Equipe SPT Analyzer Operators:

KS

reg. 13

Prepared by: reg. 13

Checked by:

Date: 04/08/2016

APPENDIX E

MONITORING DATA

Project:	Northstowe
Job Number:	UA008426

Date:	15/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1001 Shallow	15/02/2017	1031		Peak:	-0.1	Initial	0.2	0.0	0.2	20.7	0.0	0.0			0.0	0.7	2.9	Sample at 2.0m, 3x bails, Sample no.: W2
						30	0.2	0.0	0.2	20.7	0.0	0.0	0.0					
						60	0.2	0.0	0.1	20.7	0.0	0.0	0.0					
						90	0.2	0.0	0.1	20.7	0.0	0.0	0.0					
				Steady:		120												
						150												
	180																	
BH1001 Deep	15/02/2017	1031		Peak:	-0.1	Initial	0.0	0.0	0.1	20.6	0.0	0.0			0.0	0.7	6.5	Sample at 2.0m, 3x bails, Sample no.: W1
						30	0.0	0.0	0.4	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.3	20.6	0.0	0.0	0.0					
						90	0.0	0.0	0.3	20.6	0.0	0.0	0.0					
				Steady:		120	0.0	0.0	0.2	20.6	0.0	0.0	0.0					
						150												
	180																	
BH602 Deep	15/02/2017	1030		Peak:	+20.10	Initial	0.0	0.0	0.1	20.0	0.0	0.0			0.0	0.5	10.0	Sample at 1.4m, 3x bails, Sample no.: W1
						30	0.0	0.0	1.1	18.8	0.0	2.0	0.0					
						60	0.0	0.0	1.1	18.6	0.0	2.0	0.0					
						90	0.0	0.0	1.1	18.5	0.0	2.0	0.0					
				Steady:		120												
						150												
	180																	
BH602 Shallow	15/02/2017	1030		Peak:	-9.50	Initial	0.0	0.0	0.2	19.1	0.0	1.0			0.0	0.5	4.9	Sample at 1.2m, 3x bails, Sample no.: W2
						30	0.0	0.0	2.1	18.3	0.0	1.0	0.0					
						60	0.0	0.0	2.1	18.2	0.0	1.0	0.0					
						90	0.0	0.0	2.1	18.0	0.0	1.0	0.0					
				Steady:		120	0.0	0.0	2.2	17.8	0.0	1.0	0.0					
						150	0.0	0.0	2.3	17.7	0.0	0.0	0.0					
	180	0.0	0.0	2.3	17.6	0.0	0.0	0.0										
BH603 Deep	15/02/2017	1030		Peak:	-0.00	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.8	9.1	Sample at 2.3m 3x bails, Sample no.: W1
						30	0.0	0.0	0.7	20.3	0.0	0.0	0.0					
						60	0.0	0.0	0.5	20.4	0.0	0.0	0.0					
						90	0.0	0.0	0.4	20.5	0.0	0.0	0.0					
				Steady:		120	0.0	0.0	0.3	20.5	0.0	0.0	0.0					
						150	0.0	0.0	0.2	20.6	0.0	0.0	0.0					
	180																	

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	15/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH608	15/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.2	8.8	Sample at 1.22m, 3x bails, Sample no.: W1
				+11.76	+11.60	30	0.0	0.0	1.2	18.0	0.0	0.0	0.0					
						60	0.0	0.0	1.2	17.4	0.0	0.0	0.0					
						90	0.0	0.0	1.2	17.2	0.0	0.0	0.0					
						120	0.0	0.0	1.2	17.2	0.0	0.0	0.0					
						150	0.0	0.0	1.2	17.4	0.0	0.0	0.0					
				Steady:	Steady:	180												
+11.72	+9.0																	
BH607 Deep	15/02/2017	1027		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.2	10.2	Sample at 1.60m, 3x bails, Sample no.: W1
				+0.12	+0.10	30	0.0	0.0	1.1	18.6	0.0	1.0	0.0					
						60	0.0	0.0	1.1	18.3	0.0	1.0	0.0					
						90	0.0	0.0	1.1	18.3	0.0	1.0	0.0					
						120	0.0	0.0	1.1	18.3	0.0	1.0	0.0					
						150												
				Steady:	Steady:	180												
+0.09	+0.0																	
BH607 Shallow	15/02/2017	1027		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.5	4.0	Sample at 0.60m, 3x bails, Sample no.: W2
				-0.07	+0.0	30	0.0	0.0	2.2	17.8	0.0	1.0	0.0					
						60	0.0	0.0	2.1	17.8	0.0	0.0	0.0					
						90	0.0	0.0	2.1	17.9	0.0	1.0	0.0					
						120	0.0	0.0	2.1	17.9	0.0	1.0	0.0					
						150												
				Steady:	Steady:	180												
-0.02	+0.0																	
BH606 Deep	15/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	1.4	4.9	Sample at 2.7, 3x bails, Sample no.: W1 Gas tap was left open upon arrival, however 24 hours was given and gas tested
				+0.03	+0.0	30	0.0	0.0	0.2	20.7	0.0	0.0	0.0					
						60	0.0	0.0	0.2	20.7	0.0	0.0	0.0					
						90	0.0	0.0	0.3	20.7	0.0	0.0	0.0					
						120	0.0	0.0	0.3	20.7	0.0	0.0	0.0					
						150												
				Steady:	Steady:	180												
+0.0	+0.0																	
BH606 Shallow	15/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	1.0	2.1	Sample at 1.1, 1x bails, Sample no.: W2 Gas tap was left open upon arrival, however 24 hours was given and gas tested
				+0.0	+0.0	30	0.0	0.0	0.1	20.9	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.9	0.0	0.0	0.0					
						90	0.0	0.0	0.1	20.9	0.0	0.0	0.0					
						120												
						150												
				Steady:	Steady:	180												
+0.0	+0.0																	

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	15/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH611 Shallow	15/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	0.6	3.4	Sample at 2.00m, 3x bails, Sample no.: W2
						30	0.0	0.0	0.4	20.5	0.0	0.0		0.0				
						60	0.0	0.0	0.8	19.8	0.0	0.0		0.0				
						90	0.0	0.0	1.3	12.1	0.0	0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	1.3	8.6	0.0	0.0		0.0				
						150	0.0	0.0	1.3	6.1	0.0	0.0		0.0				
						180												
BH611 Deep	15/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	0.6	10.1	Sample at 1.60m, 3x bails, Sample no.: W1
						30	0.0	0.0	0.2	20.6	0.0	0.0		0.0				
						60	0.0	0.0	0.2	20.7	0.0	0.0		0.0				
						90	0.0	0.0	0.1	20.8	0.0	0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.1	20.8	0.0	0.0		0.0				
						150												
						180												
BH603 Shallow	15/02/2017	1030		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.2	2.4	Sample at 1.20m, 3x bails, Sample no.: W2
						30	0.0	0.0	0.6	20.6	0.0	0.0		0.0				
						60	0.0	0.0	0.7	20.4	0.0	0.0		0.0				
						90	0.0	0.0	0.7	20.3	0.0	0.0		0.0				
				Steady:	Steady:	120												
						150												
						180												
BH604 Shallow	15/02/2017	1030		Peak:	Peak:	Initial	0.0	0.0	0.1	20.6	0.0	0.0			0.0	0.3	2.9	Sample at 2.7, 3x bails, Sample no.: W1
						30	0.0	0.0	0.2	20.6	0.0	0.0		0.0				
						60	0.0	0.0	0.1	20.6	0.0	0.0		0.0				
						90	0.0	0.0	0.1	20.6	0.0	0.0		0.0				
				Steady:	Steady:	120												
						150												
						180												
BH610 Deep	15/02/2017	1030		Peak:	Peak:	Initial	0.0	0.0	0.1	20.6	0.0	0.0			0.0	0.1	7.9	Sample at 1.7, 3x bails, Sample no.: W1
						30	0.0	0.0	2.2	20.6	0.0	0.0		0.0				
						60	0.0	0.0	2.2	20.6	0.0	0.0		0.0				
						90	0.0	0.0	2.1	20.6	0.0	0.0		0.0				
				Steady:	Steady:	120												
						150												
						180												

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	15/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH610 Shallow	15/02/2017	1030		Peak:	Peak:	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	0.2	4.6	Sample at 1.80m, 3x bails, Sample no.: W2
				-0.04	+0.0	30	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						90	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
				Steady:	Steady:	120												
				-0.03	+0.0	150												
						180												
BH605 Deep	15/02/2017	1028		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.5	9.9	Sample at 1.80m, 3x bails, Sample no.: W1
				-0.32	-0.00	30	0.0	0.0	1.3	19.5	0.0	1.0	0.0					
						60	0.0	0.0	1.8	18.8	0.0	1.0	0.0					
						90	0.0	0.0	1.8	18.8	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.6	18.9	0.0	0.0	0.0					
				-0.30	-0.00	150	0.0	0.0	1.2	19.4	0.0	0.0	0.0					
						180	0.0	0.0	1.1	19.5	0.0	0.0	0.0					
BH605 Shallow	15/02/2017	1028		Peak:	Peak:	Initial	0.1	0.0	0.4	19.6	0.0	0.0			0.0	0.5	4.5	Sample at 1.80m, 3x bails, Sample no.: W2
				-0.02	-0.00	30	0.1	0.0	0.5	20.3	0.0	0.0	0.0					
						60	0.1	0.1	0.3	20.4	0.0	0.0	0.0					
						90	0.1	0.1	0.2	20.5	0.0	0.0	0.0					
				Steady:	Steady:	120	0.1	0.1	0.2	20.5	0.0	0.0	0.0					
				-0.00	-0.00	150												
						180												
BH609 Deep	15/02/2017	1028		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	2.7	9.0	Sample at 4.10m, 3x bails, Sample no.: W1
				+0.03	-0.00	30	0.0	0.0	1.7	14.5	0.0	0.0	0.0					
						60	0.0	0.0	1.8	13.5	0.0	1.0	0.0					
						90	0.0	0.0	0.8	16.4	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.3	19.0	0.0	0.0	0.0					
				+0.01	-0.00	150	0.0	0.0	0.1	20.0	0.0	0.0	0.0					
						180	0.0	0.0	0.1	20.2	0.0	0.0	0.0					
BH609 Shallow	15/02/2017	1028		Peak:	Peak:	Initial										1.2	3.3	Sample at 1.24, 3x bails, Sample no.: W1 Gas tap was left open upon arrival. Tap closed in order to be monitored upon next visit
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	14/02/2017-15/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°c)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)					
BH608 Shallow	15/02/2017	1028		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.2	3.3	Sample at 1.24m, 3x bails, Sample no.: W2					
				+0.0	+0.1	30	0.0	0.0	1.3	19.5	0.0	1.0	0.0										
						60	0.0	0.0	1.3	19.2	0.0	1.0	0.0										
						90	0.0	0.0	1.3	19.1	0.0	0.0	0.0										
				Steady:	Steady:	120	0.0	0.0	1.3	19.2	0.0	0.0	0.0										
						150	0.0	0.0	1.3	19.3	0.0	0.0	0.0										
				+0.0	+0.0	180																	
BH1002 Deep	14/02/2017	1024		Peak:	Peak:	Initial	0.0	0.0	0.2	20.8	0.0	0.0			0.0	0.8	8.6	Sample at 1.80m, 3x bails, Sample no.: W1 Gas tap was left open upon arrival, however 24 hours was given and gas tested					
				+27.01	+12.2	30	0.0	0.0	0.2	20.6	0.0	0.0	0.0										
						60	0.0	0.0	0.2	20.6	0.0	0.0	0.0										
						90	0.0	0.0	0.2	20.6	0.0	0.0	0.0										
				Steady:	Steady:	120	0.0	0.0	0.2	20.6	0.0	0.0	0.0										
						150																	
				+27.01	+4.1	180																	
WS904	14/02/2017	1024		Peak:	Peak:	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.0	0.4	2.5	Sample at 1.20m, 3x bails, Sample no.: W1					
				+0.13	+0.20	30	0.0	0.0	0.7	20.5	0.0	0.0	0.0										
						60	0.0	0.0	0.7	20.5	0.0	0.0	0.0										
						90	0.0	0.0	0.6	20.5	0.0	0.0	0.0										
				Steady:	Steady:	120	0.0	0.0	0.6	20.5	0.0	0.0	0.0										
						150																	
				+0.05	+0.00	180																	
WS901	14/02/2017	1024		Peak:	Peak:	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.0	0.4	1.3	Sample at 0.70m, 1x bails, Sample no.: W1					
				+0.29	+0.0	30	0.0	0.0	0.1	20.9	0.0	0.0	0.0										
						60	0.1	0.0	0.1	20.9	0.0	0.0	0.0										
						90	0.1	0.0	0.2	20.4	0.0	0.0	0.0										
				Steady:	Steady:	120	0.1	0.0	0.3	20.1	0.0	0.0	0.0										
						150	0.1	0.0	0.3	19.8	0.0	0.0	0.0										
				+0.00	+0.00	180	0.1	0.0	0.4	20.1	0.0	0.0	0.0										
WS1001	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0						Dry hole					
				+0.71	+0.00	30	0.1	0.0	0.0	19.8	0.0	0.0											
						60	0.1	0.0	0.8	19.5	0.0	0.0											
						90	0.1	0.0	0.8	19.4	0.0	0.0											
				Steady:	Steady:	120	0.0	0.0	0.8	19.4	0.0	0.0											
						150	0.0	0.0	0.8	19.4	0.0	0.0											
				-1.08	+0.00	180																	

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	14/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS905	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.8	2.5	Sample at 1.40m, 2x bails, Sample no.: W1
				-0.0	+0.0	30	0.0	0.0	1.2	19.2	0.0	0.0	1.1					
						60	0.0	0.0	1.2	19.1	0.0	0.0	1.1					
						90	0.0	0.0	1.2	19.1	0.0	0.0	1.1					
				Steady:	Steady:	120	0.0	0.0	1.2	19.1	0.0	0.0	1.0					
						150												
				-0.0	+0.0	180												
WS902	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.9	1.0	Sample at 0.86m, x0 bails, Sample no.:W1
				-0.02	+0.00	30	0.0	0.4	0.0	19.6	0.0	0.0	0.2					
						60	0.0	0.4	0.0	19.3	0.0	0.0	0.2					
						90	0.0	0.4	0.0	19.4	0.0	0.0	0.3					
				Steady:	Steady:	120	0.0	0.3	0.0	19.5	0.0	0.0	0.2					
						150	0.0	0.2	0.0	19.9	0.0	0.0	0.2					
				-0.00	+0.00	180												
BH1004 Shallow	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.6	2.8	Sample at 1.20m, x3 bails, Sample no.:W2
				+0.00	+0.00	30	0.0	0.0	0.2	20.8	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.8	0.0	0.0	0.0					
						90	0.0	0.0	0.1	20.8	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	20.8	0.0	0.0	0.0					
						150												
				+0.00	+0.00	180												
BH1004 Deep	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	1.4	7.6	Sample at 2.8m, x3 bails, Sample no.: W1
				+2.89	+0.20	30	0.0	0.0	1.2	20.3	0.0	0.0	0.0					
						60	0.0	0.0	1.3	20.2	0.0	0.0	0.0					
						90	1.0	0.0	1.4	20.2	0.0	0.0	0.0					
				Steady:	Steady:	120	1.0	0.0	1.4	20.2	0.0	0.0	0.0					
						150												
				+2.81	+0.10	180												
WS701	14/02/2017	1025		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.2	1.7	Sample at 1.20m, x2 bails, Sample no.: W1
				+0.07	+0.10	30	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
						90	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
				Steady:	Steady:	120												
						150												
				+0.01	+0.00	180												

Notes:

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Project:	Northstowe
Job Number:	UA008426

Date:	13/02/2017-14/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS906	14/02/2017	1024		Peak:	+0.0	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.0	1.0	1.5	Sampled at 1.0m, 0x bails, Sample no.: W1
						30	0.0	0.0	0.9	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.9	20.5	0.0	0.0	0.0					
					+0.0	90	0.0	0.0	0.9	20.5	0.0	0.0	0.0	0.0				
				Steady:		120	0.0	0.0	0.9	20.5	0.0	0.0	0.0					
						150												
					180													
BH1002 Shallow	14/02/2017	1024		Peak:	-0.0	Initial	0.0	0.0	0.0	21.2	0.0	0.0			0.0	0.8	2.6	Sampled at 2.0m, 3x bails, Sample no.: W2
						30	0.0	0.0	0.1	21.2	0.0	0.0	0.0					
						60	0.0	0.0	0.1	21.2	0.0	0.0	0.0					
					-0.0	90	0.0	0.0	0.1	21.2	0.0	0.0	0.0					
				Steady:		120	0.0	0.0	0.1	21.3	0.0	0.0	0.0					
						150												
					180													
BH1003 Shallow	14/02/2017	1024		Peak:	+0.0	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	1.1	3.6	Sampled at 1.3m, 1x bails, Sample no.: W2
						30	0.0	0.0	0.2	18.7	0.0	1.0	0.0					
						60	0.0	0.0	0.2	18.6	0.0	1.0	0.0					
					+0.0	90	0.0	0.0	0.2	18.5	0.0	1.0	0.0					
				Steady:		120	0.0	0.0	0.2	18.5	0.0	1.0	0.0					
						150	0.0	0.0	0.2	18.5	0.0	1.0	0.0					
					180													
BH1003 Deep	14/02/2017	1024		Peak:	+30.0	Initial	0.0	0.0	0.0	20.8	0.0	0.0			1.8	1.6	8.9	Sampled at 2.4m, x3 bails, Sample no.: W1
						30	0.0	0.0	1.4	17.2	0.0	2.0	1.9					
						60	0.0	0.0	1.4	17.0	0.0	1.0	1.8					
					+30.0	90	0.0	0.0	1.4	17.0	0.0	1.0	1.8					
				Steady:		120	0.0	0.0	1.4	17.0	0.0	2.0	1.8					
						150												
					180													
BH1204 Shallow	13/02/2017	1024		Peak:	+0.0	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.4	0.3	2.0	Sampled at 0.3m, 0x bails, Sample no.: W2
						30	0.0	0.0	0.0	20.9	0.0	0.0	0.5					
						60	0.0	0.0	0.0	20.9	0.0	0.0	0.5					
					+0.0	90	0.0	0.0	0.0	20.9	0.0	0.0	0.6					
				Steady:		120												
						150												
					180													

Notes:

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Project:	Northstowe
Job Number:	UA008426

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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°c)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1203 Deep	13/02/2017	1024		Peak:	+0.0	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.2	1.9	9.6	Sampled at 2.55m, 3x bails, Sample no.: W1
				-0.06		30	0.0	0.0	0.8	20.6	0.0	0.0	0.4					
						60	0.0	0.0	1.0	20.4	0.0	0.0	0.4					
						90	0.0	0.0	1.1	20.3	0.0	0.0	0.4					
				Steady:		120	0.0	0.0	1.2	20.3	0.0	0.0	0.4					
						150	0.0	0.0	1.3	20.2	0.0	0.0	0.4					
				-0.05		180												
BH1203 Shallow	13/02/2017	1024		Peak:	+0.0	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.0	1.1	1.1	Borehole Dry
				-0.01		30	0.0	0.0	0.4	20.7	0.0	0.0	0.0					
						60	0.0	0.0	0.4	20.7	0.0	0.0	0.0					
						90	0.0	0.0	0.4	20.7	0.0	0.0	0.0					
				Steady:		120												
						150												
				-0.01		180												
BH1205 Deep	13/02/2017	1024		Peak:	-3.2	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.2	1.0	19.9	Sampled at 2.80m, 3x bails, Sample no.: W1
				+0.08		30	0.0	0.0	0.0	21.1	0.0	0.0	0.3					
						60	0.0	0.0	0.0	21.2	0.0	0.0	0.4					
						90	0.0	0.0	0.0	21.2	0.0	0.0	0.3					
				Steady:		120												
						150												
				+0.03		180												
BH1205 Shallow	13/02/2017	1024		Peak:	+15.0	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.4	1.1	3.9	Sampled at 2.00m, 1x bails, Sample no.: W2
				+0.12		30	0.0	0.0	0.0	21.1	0.0	0.0	0.2					
						60	0.0	0.0	0.0	21.1	0.0	0.0	0.3					
						90	0.0	0.0	0.0	21.1	0.0	0.0	0.3					
				Steady:		120	0.0	0.0	0.0	21.1	0.0	0.0	0.3					
						150												
				+0.03		180												
BH613	14/02/2017	1026		Peak:	+0.0	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	1.2	3.0	Sampled at 2.40m, 3x bails, Sample no.: W1
				-0.0		30	0.0	0.0	0.0	19.4	0.0	0.0	0.0					
						60	0.0	0.0	0.4	19.5	0.0	0.0	0.0					
						90	0.0	0.0	0.3	19.9	0.0	0.0	0.0					
				Steady:		120	0.0	0.0	0.3	20.0	0.0	0.0	0.0					
						150	0.0	0.0	0.3	20.0	0.0	0.0	0.0					
				-0.0		180												

Notes:

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Project:	Northstowe
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH601 Shallow	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.5	3.6	Sampled at 2.20m, 3x bails, Sample no.: W2
				+0.0	+0.0	30	0.0	0.0	2.6	19.0	0.0	0.0	0.0					
						60	0.0	0.0	2.5	19.0	0.0	0.0	0.0					
						90	0.0	0.0	2.4	19.1	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	2.3	19.2	0.0	0.0	0.0					
						150	0.0	0.0	2.9	19.4	0.0	0.0	0.0					
				+0.0	+0.0	180	0.0	0.0	1.6	19.6	0.0	0.0	0.6					
BH601 Deep	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	1.7	9.8	Sampled at 3.20m, 4x bails, Sample no.: W1
				+0.0	+0.0	30	0.0	0.0	0.3	20.5	0.0	0.0	0.4					
						60	0.0	0.0	0.3	20.5	0.0	0.0	0.4					
						90	0.0	0.0	0.3	20.5	0.0	0.0	0.4					
				Steady:	Steady:	120	0.0	0.0	0.2	20.5	0.0	0.0	0.4					
						150												
				+0.0	+0.0	180												
WS903	14/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	1.1	1.5	Sampled at 1.15m, 0x bails, Sample no.: W1
				-0.02	+0.0	30	0.0	0.0	2.0	17.9	0.0	0.0	0.1					
						60	0.0	0.0	2.0	17.9	0.0	0.0	0.2					
						90	0.0	0.0	2.0	17.8	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	2.0	17.8	0.0	0.0	0.0					
						150												
				-0.02	+0.0	180												
WS401				Peak:	Peak:	Initial												Not accessible due to livestock
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												
WS402				Peak:	Peak:	Initial												Not accessible due to livestock
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	13/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1201	13/02/2017	1026		Peak:	Peak:	Initial										1.1	-	Bailer could not fit down 19mm pipe. No gas tap installed so neither gas or water readings could be recorded
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
		180																
BH1206 Deep	13/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.3	2.0	15.2	Sampled at 4.20m, 5x bails, Sample no.: W1
						30	0.0	0.0	0.2	20.7	0.0	0.0		0.4				
						60	0.0	0.0	0.2	20.7	0.0	0.0		0.5				
						90								0.6				
				Steady:	Steady:	120												
						150												
		180																
BH1206 Shallow	13/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.4	1.9	3.7	Sampled at 1.93m, 0x bails, Sample no.: W2
						30	0.0	0.0	0.0	20.9	0.0	0.0		0.5				
						60	0.0	0.0	0.0	20.8	0.0	0.0		0.5				
						90	0.0	0.0	0.0	20.9	0.0	0.0		0.6				
				Steady:	Steady:	120	0.0	0.0	0.0	20.9	0.0	0.0		0.6				
						150												
		180																
BH1204 Deep	13/02/2017	1024		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.5	0.3	15.0	Sampled at 3.3m, 5x bails, Sample no.: W1
						30	0.0	0.0	0.0	20.8	0.0	0.0		0.6				
						60	0.0	0.0	0.0	20.8	0.0	0.0		0.8				
						90	0.0	0.0	0.0	20.9	0.0	0.0		0.8				
				Steady:	Steady:	120												
						150												
		180																
BH1107 Shallow	13/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	1.5	2.4	Sampled at 1.7m, 0x bails, Sample no.: W2
						30	0.0	0.0	0.7	20.5	0.0	0.0		1.2				
						60	0.0	0.0	0.7	20.3	0.0	0.0		1.2				
						90	0.0	0.0	0.7	20.3	0.0	0.0		1.2				
				Steady:	Steady:	120	0.0	0.0	0.7	20.3	0.0	0.0		1.2				
						150												
		180																

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	13/02/2017-16/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1107 Deep	13/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.5	4.8	Sampled at 3.5m, 3x bails, Sample no.: W1
				-0.42	-0.6	30	0.0	0.0	1.7	17.9	0.0	0.0	1.4					
						60	0.0	0.0	1.7	17.8	0.0	0.0	1.9					
						90	0.0	0.0	1.7	17.8	0.0	0.0	1.9					
				Steady:	Steady:	120	0.0	0.0	1.7	17.8	0.0	0.0	1.9					
						150												
				-0.41	-0.2	180												
BH1110 Deep	13/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	1.6	9.4	Sampled at 3.6m, 4x bails, Sample no.: W1
				+0.0	+2.4	30	0.0	0.0	1.3	17.4	0.0	0.0	1.1					
						60	0.0	0.0	1.3	17.4	0.0	0.0	1.1					
						90	0.0	0.0	1.3	17.4	0.0	0.0	1.1					
				Steady:	Steady:	120												
						150												
				+0.0	+0.0	180												
BH1110 Shallow	13/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.3	3.2	Sampled at 2.4m, 1x bails, Sample no.: W2
				+0.04	+0.1	30	0.0	0.0	1.6	19.8	0.0	0.0	0.3					
						60	0.0	0.0	1.5	19.8	0.0	0.0	0.4					
						90	0.0	0.0	1.5	19.8	0.0	0.0	0.4					
				Steady:	Steady:	120	0.0	0.0	1.4	19.8	0.0	0.0	0.4					
						150												
				+0.0	+0.1	180												
BH1202	13/02/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	1.1	10.0	Sampled at 3.23m, 4x bails, Sample no.: W1
				+0.12	+0.1	30	0.0	0.0	1.0	20.6	0.0	0.0	0.4					
						60	0.0	0.0	0.7	20.7	0.0	0.0	0.4					
						90	0.0	0.0	0.5	20.7	0.0	0.0	0.5					
				Steady:	Steady:	120	0.0	0.0	0.4	20.8	0.0	0.0	0.5					
						150	0.0	0.0	0.3	20.8	0.0	0.0	0.5					
				+0.1	+0.1	180												
BH1108	16/02/2017	1029		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	1.1	5.9	Sampled at 1.15m, 3x bails, Sample no.: W1
				+0.02	+0.0	30	0.0	0.0	0.0	18.5	0.0	0.0	0.0					
						60	0.0	0.0	1.0	18.2	0.0	0.0	0.0					
						90	0.0	0.0	0.8	18.6	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.7	18.7	0.0	0.0	0.0					
						150	0.0	0.0	0.6	19.0	0.0	0.0	0.0					
				+0.01	+0.0	180	0.0	0.0	0.6	19.2	0.0	0.0	0.0					

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	16/02/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1103 Deep	16/02/2017	1029		Peak:	Peak:	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.0	2.0	9.3	Sampled at 3.00m, 3x bails, Sample no.: W1
				+0.0	-0.0	30	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						90	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
				+0.0	-0.0	150	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						180												
BH1103 Shallow	16/02/2017	1029		Peak:	Peak:	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.0	1.9	2.8	Sampled at 1.90m, 0x bails, Sample no.: W2
				-0.03	-0.0	30	0.0	0.0	0.0	20.9	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.9	0.0	0.0	0.0					
						90	0.0	0.0	0.0	20.9	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.0	20.9	0.0	0.0	0.0					
				-0.0	-0.0	150												
						180												
BH1112 Deep	16/02/2017	1029		Peak:	Peak:	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	1.6	9.7	Sampled at 3.00m, 3x bails, Sample no.: W1
				+0.0	+0.0	30	0.0	0.0	0.3	20.5	0.0	0.0	0.0					
						60	0.0	0.0	0.2	20.5	0.0	0.0	0.0					
						90	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	20.6	0.0	0.0	0.0					
				+0.0	+0.0	150	0.0	0.0	0.1	20.6	0.0	0.0	0.0					
						180	0.0	0.0	0.1	20.6	0.0	0.0	0.0					
BH1112 Shallow	16/02/2017	1029		Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.7	4.7	Sampled at 3.10m, 3x bails, Sample no.: W2
				+0.0	+0.0	30	0.0	0.0	1.2	19.6	0.0	0.0	0.0					
						60	0.0	0.0	1.2	19.6	0.0	0.0	0.0					
						90	0.0	0.0	1.2	19.5	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.2	19.5	0.0	0.0	0.0					
				+0.0	+0.0	150	0.0	0.0	1.2	19.5	0.0	0.0	0.0					
						180												
BH1109	16/02/2017	1029		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.8	4.9	Sampled at 1.10m, 3x bails, Sample no.: W1 Only one standpipe in hole
				-0.35	-0.6	30	0.0	0.0	1.3	13.0	0.0	0.0	0.0					
						60	0.0	0.0	1.6	13.7	0.0	0.0	0.0					
						90	0.0	0.0	1.6	13.4	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.6	13.4	0.0	0.0	0.0					
				-0.35	-0.2	150	0.0	0.0	1.6	13.4	0.0	0.0	0.0					
						180												

Notes:

conditions,

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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1111 Shallow	16/12/2017	1028		Peak:	Peak:	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	1.1	5.3	Sampled at 2.50m, 3x bails, Sample no.: W2
				-0.0	-0.0	30	0.0	0.0	0.3	20.7	0.0	0.0	0.0					
						60	0.0	0.0	0.2	20.8	0.0	0.0	0.0					
						90	0.0	0.0	0.1	20.8	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	20.8	0.0	0.0	0.0					
						150												
				-0.0	-0.0	180												
BH1111 Deep	16/12/2017	1028		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	1.1	9.0	Sampled at 1.20m, 3x bails, Sample no.: W1
				+0.13	+0.01	30	0.0	0.0	2.1	18.0	0.0	1.0	0.0					
						60	0.0	0.0	2.1	17.8	0.0	1.0	0.0					
						90	0.0	0.0	2.1	17.8	0.0	1.0	0.0					
				Steady:	Steady:	120	0.0	0.0	2.1	17.8	0.0	1.0	0.0					
						150	0.0	0.0	2.0	18.0	0.0	1.0	0.0					
				+0.11	+0.01	180	0.0	0.0	2.0	18.0	0.0	1.0	0.0					
BH1102 Deep	16/12/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	21.0	0.0	0.0			0.0	1.0	5.0	Sampled at 1.20m, 3x bails, Sample no.: W1
				+0.0	+0.0	30	0.0	0.0	0.2	20.9	0.0	1.0	0.0					
						60	0.0	0.0	0.1	20.9	0.0	1.0	0.0					
						90	0.0	0.0	0.1	21.0	0.0	1.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	21.0	0.0	1.0	0.0					
						150	0.0	0.0	0.0	21.0	0.0	1.0	0.0					
				+0.0	+0.0	180												
BH1102 Shallow	16/12/2017	1026		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	1.1	3.2	Sampled at 1.30m, 3x bails, Sample no.: W2
				+0.0	+0.0	30	0.0	0.0	1.7	19.9	0.0	1.0	0.0					
						60	0.0	0.0	1.7	19.8	0.0	1.0	0.0					
						90	0.0	0.0	1.7	19.8	0.0	1.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.7	19.8	0.0	1.0	0.0					
						150	0.0	0.0	1.7	19.8	0.0	1.0	0.0					
				+0.0	+0.0	180	0.0	0.0	1.7	19.8	0.0	1.0	0.0					
BH1101	16/02/2017	1028		Peak:	Peak:	Initial	0.0	0.0	0.0	20.9	0.0	0.0			0.0	0.7	4.7	Sampled at 1.40m, 3x bails, Sample no.: W1 One standpipe in hole
				-0.09	+0.0	30	0.0	0.0	1.4	20.0	0.0	0.0	0.0					
						60	0.0	0.0	1.4	19.6	0.0	0.0	0.0					
						90	0.0	0.0	1.4	19.6	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.4	19.6	0.0	0.0	0.0					
						150												
				-0.07	+0.0	180												

Notes:

conditions,

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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS1101	17/02/2017	1031		Peak:	Peak:	Initial	0.0	0.0	0.1	20.7	0.0	0.0			0.0	1.2	1.5	Sampled at 1.20m, Ox bails, Sample no.: W1
				+0.0	+0.0	30	0.0	0.0	1.2	19.2	0.0	0.0	0.0					
						60	0.0	0.0	1.2	19.7	0.0	0.0	0.0					
						90	0.0	0.0	1.2	19.7	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.2	19.7	0.0	0.0	0.0					
				+0.0	+0.0	150	0.0	0.0	1.2	19.7	0.0	0.0	0.0					
						180	0.0	0.0	1.3	19.7	0.0	0.0	0.0					
WS1102	17/02/2017	1031		Peak:	Peak:	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	2.0	2.5	Sampled at 2.00m, Ox bails, Sample no.: W1
				+0.0	+0.0	30	0.0	0.0	0.6	20.4	0.0	0.0	0.0					
						60	0.0	0.0	0.6	20.3	0.0	0.0	0.0					
						90	0.0	0.0	0.6	20.3	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.7	20.3	0.0	0.0	0.0					
				+0.0	+0.0	150	0.0	0.0	0.6	20.3	0.0	0.0	0.0					
						180	0.0	0.0	0.6	20.3	0.0	0.0	0.0					
WS1103	17/02/2017	1031		Peak:	Peak:	Initial	0.0	0.0	0.0	20.1	0.0	0.0			0.0	1.8	2.2	Sampled at 2.20m, Ox bails, Sample no.: W1
				+0.0	+0.0	30	0.0	0.0	1.2	19.5	0.0	0.0	0.0					
						60	0.0	0.0	1.2	19.2	0.0	0.0	0.0					
						90	0.0	0.0	1.3	19.1	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.4	19.1	0.0	0.0	0.0					
				+0.0	+0.0	150	0.0	0.0	1.4	19.0	0.0	0.0	0.0					
						180								0.0				
				Peak:	Peak:	Initial												
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												
				Peak:	Peak:	Initial												
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

Project:	Northstowe
Job Number:	UA008426

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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°c)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1111 Shallow	08/03/2017	1011	9	Peak:	Peak:	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	1.0	5.3	
				0.0	+0.7	30	0.0	0.0	0.2	20.3	0.0	0.0	0.0					
						60	0.0	0.0	0.2	20.3	0.0	0.0	0.0					
						90	0.0	0.0	0.4	20.2	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.4	20.2	0.0	0.0	0.0					
				0.0	+0.0	150	0.0	0.0	0.5	20.1	0.0	0.0	0.0					
						180	0.0	0.0	0.6	20.1	0.0	0.0	0.0					
WS1101	08/03/2017	1011	10	Peak:	Peak:	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	1.0	1.6	
				0.0	+0.0	30	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
						90	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
				0.0	+0.0	150	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
						180	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
BH1101	08/03/2017	1011	10	Peak:	Peak:	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	1.0	4.6	
				0.0	+0.0	30	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
						90	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
				0.0	+0.0	150	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
						180	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
WS1102	08/03/2017	1011	10	Peak:	Peak:	Initial	0.0	0.0	0.0	20.5	0.0	0.0			0.0	1.9	2.6	
				0.0	+0.0	30	0.0	0.0	0.5	20.1	0.0	0.0	0.0					
						60	0.0	0.0	0.9	19.8	0.0	0.0	0.0					
						90	0.0	0.0	1.1	19.5	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.2	19.4	0.0	0.0	0.0					
				0.0	+0.0	150	0.0	0.0	1.3	19.4	0.0	0.0	0.0					
						180	0.0	0.0	1.4	19.3	0.0	0.0	0.0					
BH1112 Shallow	08/03/2017	1012	11	Peak:	Peak:	Initial	0.0	0.0	0.0	20.5	0.0	0.0			0.0	1.8	4.8	
				0.0	+0.0	30	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
						60	0.0	0.0	0.3	20.3	0.0	0.0	0.0					
						90	0.0	0.0	0.4	20.2	0.0	0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.6	20.0	0.0	0.0	0.0					
				0.0	+0.0	150	0.0	0.0	0.7	19.8	0.0	0.0	0.0					
						180	0.0	0.0	0.7	19.8	0.0	0.0	0.0					

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

Project:	Northstowe
Job Number:	UA008426

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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1102 Shallow	08/03/2017	1012	11	Peak:	+0.0	Initial	0.0	0.0	0.0	20.5	0.0	0.0			0.0	1.1	3.2	
				0.0		30	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
				Steady:	+0.0	120	0.0	0.0	0.1	20.6	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.1	20.6	0.0	0.0	0.0					
						180	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
BH1109	08/03/2017	1012	12	Peak:	+0.0	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.9	4.9	
				0.0		30	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
				Steady:	+0.0	120	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						180	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
BH1110 Shallow	08/03/2017	1012	12	Peak:	-0.0	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.4	3.3	Groundwater sample at 2.0 m (W1)
				0.0		30	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
				Steady:	-0.0	120	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
						180	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
BH1108	08/03/2017	1011	11	Peak:	-0.0	Initial	0.0	0.0	0.0	20.4	0.0	1.0			0.0	1.0	5.9	Groundwater sample at 3.5 m (W1)
				0.0		30	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
				Steady:	-0.0	120	0.0	0.0	0.1	20.4	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
						180	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
BH1107 Shallow	08/03/2017	1011	12	Peak:	-0.0	Initial	0.0	0.0	0.0	20.5	0.0	0.0			0.0	1.6	2.5	
				0.0		30	0.0	0.0	0.4	19.9	0.0	0.0	0.0					
						60	0.0	0.0	0.6	19.7	0.0	0.0	0.0					
				Steady:	-0.0	120	0.0	0.0	0.8	19.3	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.9	19.2	0.0	0.0	0.0					
						180	0.0	0.0	0.9	19.2	0.0	0.0	0.0					

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

Project:	Northstowe
Job Number:	UA008426

Date:	08/03/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS1103	08/03/2017	1011	11	Peak:	+0.0	Initial	0.0	0.0	0.0	20.5	0.0	0.0			0.0	1.7	2.2	Groundwater sample at 2.0 m (W1)
						30	0.0	0.0	0.2	20.2	0.0	0.0		0.0				
						60	0.0	0.0	0.2	20.1	0.0	0.0		0.0				
					90	0.0	0.0	0.4	19.9	0.0	0.0		0.0					
				Steady:	+0.0	120	0.0	0.0	0.5	19.8	0.0	0.0		0.0				
						150	0.0	0.0	0.6	19.8	0.0	0.0		0.0				
						180	0.0	0.0	0.6	19.7	0.0	0.0		0.0				
BH1103 Shallow	08/03/2017	1011	10	Peak:	+0.0	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	1.9	2.8	Groundwater sample at 2.5 m (W1 - Shallow)
						30	0.0	0.0	0.0	20.4	0.0	0.0		0.0				
						60	0.0	0.0	0.0	20.4	0.0	0.0		0.0				
					90	0.0	0.0	0.0	20.4	0.0	0.0		0.0					
				Steady:	+0.0	120	0.0	0.0	0.0	20.4	0.0	0.0		0.0				
						150	0.0	0.0	0.0	20.4	0.0	0.0		0.0				
						180	0.0	0.0	0.0	20.4	0.0	0.0		0.0				
BH611 Shallow	08/03/2017	1012	11	Peak:	+0.1	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	0.7	3.4	
						30	0.0	0.0	0.4	20.2	0.0	0.0		0.0				
						60	0.0	0.0	1.0	19.3	0.0	0.0		0.0				
					90	0.0	0.0	1.3	18.8	0.0	0.0		0.0					
				Steady:	+0.0	120	0.0	0.0	1.3	18.8	0.0	0.0		0.0				
						150												
						180												
BH606 Shallow	08/03/2017	1012	11	Peak:	-0.1	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	1.1	2.1	
						30	0.0	0.0	0.0	20.8	0.0	0.0		0.0				
						60	0.0	0.0	0.0	20.8	0.0	0.0		0.0				
					90	0.0	0.0	0.0	20.8	0.0	0.0		0.0					
				Steady:	-0.0	120	0.0	0.0	0.0	20.8	0.0	0.0		0.0				
						150												
						180												
BH607 Shallow	08/03/2017	1012	11	Peak:	+0.0	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	0.5	3.9	
						30	0.0	0.0	0.1	20.7	0.0	0.0		0.0				
						60	0.0	0.0	0.1	20.7	0.0	0.0		0.0				
					90	0.0	0.0	0.1	20.7	0.0	0.0		0.0					
				Steady:	+0.0	120												
						150												
						180												

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

Project:	Northstowe
Job Number:	UA008426

Date:	8/3/17 - 9/3/17
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH608 Shallow	08/03/2017	1012	12	Peak:	+0.0	Initial	0.0	0.0	0.1	20.7	0.0	0.0			0.0	1.2	3.2	
				0.0		30	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.8	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
				0.0		150												
						180												
BH609 Shallow	09/03/2017	1019	10	Peak:	+0.0	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	1.3	4.6	
				0.0		30	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.6	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
				0.0		150												
						180												
BH605 Shallow	09/03/2017	1019	10	Peak:	-0.1	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	0.6	4.5	
				0.0		30	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.1	20.6	0.0	0.0	0.0					
					90	0.0	0.0	0.1	20.6	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
						180	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
BH610 Shallow	09/03/2017	1019	10	Peak:	+0.1	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	0.3	4.7	Groundwater sample at 3.0 m (W1)
				0.0		30	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.7	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
						180	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
BH604 Shallow	09/03/2017	1019	10	Peak:	-0.2	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.3	3.0	
				0.0		30	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.8	0.0	0.0	0.0						
				Steady:	-0.2	120	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
				0.0		150												
						180												

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

Project:	Northstowe
Job Number:	UA008426

Date:	09/03/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH603 Shallow	09/03/2017	1019	11	Peak:	+0.0	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.3	2.5	
				0.0		30	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
					90	0.0	0.0	0.1	20.5	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.1	20.5	0.0	0.0	0.0					
				0.0		150												
						180												
BH602 Shallow	09/03/2017	1019	11	Peak:	+0.0	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.5	5.0	
				0.0		30	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.5	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
				0.0		150												
						180												
BH601 Shallow	09/03/2017	1019	12	Peak:	+0.0	Initial	0.0	0.0	0.0	20.5	0.0	0.0			0.0	1.2	3.7	Groundwater sample at 3.0 m (W1 - Shallow) Groundwater sample at 8.0 m (W2 - Deep)
				0.0		30	0.0	0.0	0.2	20.4	0.0	0.0	0.0					
						60	0.0	0.0	0.2	20.4	0.0	0.0	0.0					
					90	0.0	0.0	0.3	20.4	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.3	20.4	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.3	20.4	0.0	0.0	0.0					
						180												
BH613	09/03/2017	1020	12	Peak:	+0.0	Initial	0.0	0.0	0.0	20.5	0.0	1.0			0.0	1.1	3.1	
				0.0		30	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.5	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
				0.0		150												
						180												
WS904	09/03/2017	1020	12	Peak:	+1.5	Initial	0.0	0.0	0.0	20.5	0.0	3.0			0.0	0.6	2.6	
				0.1		30	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.5	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.4	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
				0.1		150	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
						180												

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

Project:	Northstowe
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS902	09/03/2017	1020	12	Peak:	-0.2	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	0.9	1.1	
				0.0		30	0.0	0.0	0.2	19.2	0.0	0.0	0.0					
						60	0.0	0.0	0.7	18.4	0.0	0.0	0.0					
					90	0.0	0.0	0.9	17.3	0.0	0.0	0.0						
				Steady:	-0.1	120	0.0	0.0	1.0	17.3	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.7	18.1	0.0	0.0	0.0					
						180	0.0	0.0	0.6	18.7	0.0	0.0	0.0					
WS901	09/03/2017	1020	13	Peak:	+0.5	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.5	1.3	Groundwater sample at 1.1 m (W1)
				0.0		30	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.6	0.0	0.0	0.0					
					90	0.0	0.0	0.1	20.5	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.1	20.3	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.3	20.0	0.0	0.0	0.0					
						180	0.0	0.0	0.5	19.8	0.0	0.0	0.0					
WS903	09/03/2017	1020	13	Peak:	+0.7	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	1.0	1.5	
				0.0		30	0.0	0.0	0.0	20.4	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.3	0.0	0.0	0.0					
					90	0.0	0.0	0.1	20.3	0.0	0.0	0.0						
				Steady:	+0.3	120	0.0	0.0	0.1	20.3	0.0	0.0	0.0					
				0.0		150	0.0	0.0	0.1	20.3	0.0	0.0	0.0					
						180												
WS906	09/03/2017	1021	14	Peak:	+0.2	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.9	1.6	
				0.1		30	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.8	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.8	0.0	0.0	0.0						
				Steady:	+0.0	120	0.0	0.0	0.1	20.3	0.0	0.0	0.0					
				0.1		150	0.0	0.0	0.3	19.9	0.0	0.0	0.0					
						180	0.0	0.0	0.5	19.9	0.0	0.0	0.0					
WS701	09/03/2017	1021	14	Peak:	-0.1	Initial	0.0	0.0	0.0	20.8	0.0	0.0			0.0	0.2	0.9	
				0.0		30	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
						60	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
					90	0.0	0.0	0.0	20.7	0.0	0.0	0.0						
				Steady:	-0.0	120	0.0	0.0	0.0	20.7	0.0	0.0	0.0					
				0.0		150												
						180												

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

Project:	Northstowe
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1002 Shallow	09/03/2017	1021	14	Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.9	2.7	
				0.0	+0.4	30	0.0	0.0	0.0	20.6	0.0	0.0			0.0			
						60	0.0	0.0	0.0	20.6	0.0	0.0			0.0			
						90	0.0	0.0	0.0	20.6	0.0	0.0			0.0			
				Steady:	Steady:	120	0.0	0.0	0.0	20.6	0.0	0.0			0.0			
						150												
						180												
WS905	09/03/2017	1021	14	Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.8	2.6	
				0.1	-0.1	30	0.0	0.0	0.4	19.8	0.0	0.0			0.0			
						60	0.0	0.0	0.8	18.9	0.0	0.0			0.0			
						90	0.0	0.0	1.0	18.4	0.0	0.0			0.0			
				Steady:	Steady:	120	0.0	0.0	1.1	18.2	0.0	0.0			0.0			
						150	0.0	0.0	1.1	18.2	0.0	0.0			0.0			
						180	0.0	0.0	1.0	18.4	0.0	0.0			0.0			
BH1001 Shallow	09/03/2017	1021	14	Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.7	3.0	
				0.1	-0.1	30	0.0	0.0	0.0	20.5	0.0	0.0			0.0			
						60	0.0	0.0	0.0	20.5	0.0	0.0			0.0			
						90	0.0	0.0	0.0	20.5	0.0	0.0			0.0			
				Steady:	Steady:	120	0.0	0.0	0.0	20.5	0.0	0.0			0.0			
						150	0.0	0.0	0.0	20.5	0.0	0.0			0.0			
						180												
BH1003 Shallow	09/03/2017	1021	14	Peak:	Peak:	Initial	0.0	0.0	0.0	20.5	0.0	0.0			0.0	0.9	3.7	Groundwater sample at 2.5 m (W1 - Shallow) Groundwater sample at 8.0 m (W2 - Deep)
				0.1	+0.1	30	0.0	0.0	0.0	20.5	0.0	0.0			0.0			
						60	0.0	0.0	0.0	20.5	0.0	0.0			0.0			
						90	0.0	0.0	0.0	20.6	0.0	0.0			0.0			
				Steady:	Steady:	120	0.0	0.0	0.0	20.6	0.0	0.0			0.0			
						150	0.0	0.0	0.0	20.6	0.0	0.0			0.0			
						180												
WS1001	09/03/2017	1021	13	Peak:	Peak:	Initial	0.0	0.0	0.0	20.4	0.0	0.0			0.0	1.1	1.5	
				0.1	+0.0	30	0.0	0.0	0.3	20.0	0.0	0.0			0.0			
						60	0.0	0.0	0.4	19.9	0.0	0.0			0.0			
						90	0.0	0.0	0.5	19.8	0.0	0.0			0.0			
				Steady:	Steady:	120	0.0	0.0	0.6	19.7	0.0	0.0			0.0			
						150	0.0	0.0	0.7	19.6	0.0	0.0			0.0			
						180	0.0	0.0	0.7	19.6	0.0	0.0			0.0			

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.



Project:	Northstowe
Job Number:	UA008426

Date:	9/3/17 - 10/3/17
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1004 Shallow	09/03/2017	1021	13	Peak:	+0.1	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	0.8	2.9	Groundwater sample at 2.5 m (W1)
						30	0.0	0.0	0.0	20.7	0.0	0.0		0.0				
						60	0.0	0.0	0.0	20.7	0.0	0.0		0.0				
					90	0.0	0.0	0.0	20.7	0.0	0.0		0.0					
				Steady:	+0.1	120	0.0	0.0	0.0	20.7	0.0	0.0		0.0				
						150												
						180												
BH1205 Shallow	10/03/2017	1028	9	Peak:	+0.6	Initial	0.0	0.0	0.1	20.6	0.0	0.0			0.0	0.7	3.9	Groundwater sample at 3.0 m (W1 - Shallow)
						30	0.0	0.0	0.1	20.6	0.0	0.0		0.0				
						60	0.0	0.0	0.1	20.6	0.0	0.0		0.0				
					90	0.1	0.0	0.1	20.5	0.0	0.0		0.0					
				Steady:	+0.1	120	0.1	0.0	0.1	20.5	0.0	0.0		0.0				
						150	0.1	0.0	0.1	20.5	0.0	0.0		0.0				
						180												
BH1203 Shallow	10/03/2017	1028	9	Peak:	-0.1	Initial	0.0	0.0	0.1	20.5	0.0	0.0			0.0	DRY	1.1	
						30	0.0	0.0	0.2	20.3	0.0	0.0		0.0				
						60	0.0	0.0	0.3	20.0	0.0	0.0		0.0				
				90	0.0	0.0	0.4	19.9	0.0	0.0		0.0						
			Steady:	-0.0	120	0.0	0.0	0.4	19.9	0.0	0.0		0.0					
					150	0.0	0.0	0.4	19.9	0.0	0.0		0.0					
					180													
BH1204 Shallow	10/03/2017	1028	9	Peak:	+0.6	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	0.3	1.9	
						30	0.0	0.0	0.0	20.6	0.0	0.0		0.0				
						60	0.0	0.0	0.0	20.7	0.0	0.0		0.0				
					90	0.0	0.0	0.0	20.7	0.0	0.0		0.0					
				Steady:	-0.0	120	0.0	0.0	0.0	20.7	0.0	0.0		0.0				
						150												
						180												
BH1206 Shallow	10/03/2017	1028	9	Peak:	+0.0	Initial	0.0	0.0	0.0	20.7	0.0	0.0			0.0	1.7	3.7	
						30	0.0	0.0	0.2	20.5	0.0	0.0		0.0				
						60	0.0	0.0	0.3	20.4	0.0	0.0		0.0				
					90	0.0	0.0	0.3	20.4	0.0	0.0		0.0					
				Steady:	+0.0	120	0.0	0.0	0.4	20.3	0.0	0.0		0.0				
						150	0.0	0.0	0.4	20.3	0.0	0.0		0.0				
						180	0.0	0.0	0.4	20.3	0.0	0.0		0.0				

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.



Project:	Northstowe
Job Number:	UA008426

Date:	10/03/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1202	10/03/2017	1028	9	Peak:	Peak:	Initial	0.0	0.0	0.0	20.6	0.0	0.0			0.0	1.1	9.9	Bolt very stiff on cover. Only one install.
						30	0.0	0.0	0.1	20.6	0.0	0.0			0.0			
						60	0.0	0.0	0.2	20.6	0.0	0.0			0.0			
						90	0.0	0.0	0.7	20.4	0.0	0.0			0.0			
				Steady:	Steady:	120	0.0	0.0	0.6	20.4	0.0	0.0			0.0			
						150	0.0	0.0	0.4	20.5	0.0	0.0			0.0			
						180	0.0	0.0	0.3	20.5	0.0	0.0			0.0			
						0.0	-0.0											
				Peak:	Peak:	Initial												
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												
				Peak:	Peak:	Initial												
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.



Project:	Northstowe
Job Number:	UA008426

Date:	07/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS903	07/04/2017	1032	14	Peak:	Peak:	Initial	0.0	0.0	0.1	19.8		0.0			0.0	1.12	1.50	
						30	0.0	0.0	2.3	18.5		0.0		0.0				
						60	0.0	0.0	2.6	18.9		0.0		0.0				
						90	0.0	0.0	2.5	18.3		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	2.4	18.3		0.0		0.0				
						150												
						180												
BH1203 Shallow	07/04/2017	1028	14	Peak:	Peak:	Initial	0.0	0.0	0.1	21.1		0.0			0.1	Dry	1.08	BH1023 deep GW: 1.87m Base: 9.87m
						30	0.0	0.0	1.7	21.4		0.0		0.0				
						60	0.0	0.0	1.8	21.3		0.0		0.2				
						90	0.0	0.0	1.8	21.3		0.0		0.2				
				Steady:	Steady:	120	0.0	0.0	1.8	21.3		0.0		0.0				
						150												
						180												
BH1205 Shallow	07/04/2017	1027	14	Peak:	Peak:	Initial	0.0	0.0	0.1	22.0		0.0			0.1	0.84	4.00	
						30	0.0	0.0	0.0	22.1		0.0		0.0				
						60	0.0	0.0	0.0	22.1		0.0		0.1				
						90	0.0	0.0	0.0	22.1		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.0	22.1		0.0		0.1				
						150												
						180												
BH1025 Deep	07/04/2017	1027	14	Peak:	Peak:	Initial	0.0	0.0	0.0	21.7		0.0			0.0	0.82	19.86	
						30	0.0	0.0	0.0	22.0		0.0		0.0				
						60	0.0	0.0	0.0	22.1		0.0		0.0				
						90	0.0	0.0	0.0	22.0		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.0	22.0		0.0		0.0				
						150												
						180												
WS402	07/04/2017	1029	14	Peak:	Peak:	Initial	0.0	0.0	0.3	21.3		0.0			0.0	1.51	2.10	
						30	0.0	0.0	0.9	20.5		0.0		0.0				
						60	0.0	0.0	0.8	20.4		0.0		0.0				
						90	0.0	0.0	0.6	20.9		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.6	21.0		0.0		0.0				
						150												
						180												

Notes:

conditions,



Project:	Northstowe
Job Number:	UA008426

Date:	07/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1001 Shallow	07/04/2017	1028	15	Peak:	Peak:	Initial	0.0	0.0	0.0	21.0		0.0			0.0	0.82	2.80	BH1001 deep GW: 0.7m Base: 6.47m
				0.0	0.0	30	0.0	0.0	0.1	21.9		0.0	0.0					
						60	0.0	0.0	0.1	21.9		0.0	0.0					
						90	0.0	0.0	0.1	21.9		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	21.9		0.0	0.0					
				0.0	0.0	150	0.0	0.0	0.1	21.9		0.0	0.0					
						180												
BH605 Shallow	07/04/2017	1028	15	Peak:	Peak:	Initial	0.0	0.0	0.1	21.2		0.0			0.0	0.70	4.60	BH605 deep GW: 0.7m Base: 6.47m
				0.0	0.0	30	0.0	0.0	0.3	20.8		0.0	0.0					
						60	0.0	0.0	0.7	20.9		0.0	0.0					
						90	0.0	0.0	0.6	21.2		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.5	21.3		0.0	0.0					
				0.0	0.0	150												
						180												
BH609 Shallow	07/04/2017	1028	15	Peak:	Peak:	Initial	0.0	0.0	0.0	21.4		0.0			0.0	0.96	4.50	BH609 deep GW: 1.03m Base: 9.00m
				0.0	0.0	30	0.0	0.0	0.2	22.4		0.0	0.0					
						60	0.0	0.0	0.1	22.4		0.0	0.0					
						90	0.0	0.0	0.1	22.3		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	22.4		0.0	0.0					
				0.0	0.0	150												
						180												
BH608 Shallow	07/04/2017	1028	15	Peak:	Peak:	Initial	0.0	0.0	0.1	22.7		0.0			0.0	1.27	3.10	
				0.0	0.0	30	0.0	0.0	0.4	22.6		0.0	0.0					
						60	0.0	0.0	0.3	22.5		0.0	0.0					
						90	0.0	0.0	0.3	22.5		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.4	22.6		0.0	0.0					
				0.0	0.0	150												
						180												
BH608 Deep	07/04/2017	1028	15	Peak:	Peak:	Initial	0.0	0.0	0.1	22.9		0.0			0.0	1.27	9.10	
				0.0	0.0	30	0.0	0.0	0.1	22.6		0.0	0.0					
						60	0.0	0.0	0.1	22.6		0.0	0.0					
						90	0.0	0.0	0.1	22.6		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.1	22.6		0.0	0.0					
				0.0	0.0	150												
						180												

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017-07/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH607 Shallow	07/04/2017	1027	14	Peak:	Peak:	Initial	0.0	0.0	0.1	22.9		0.0			0.0	1.17	3.70	BH607 deep GW: 1.18m Base: 10.0m
				0.0	0.0	30	0.0	0.0	0.1	22.6		0.0						
						60	0.0	0.0	0.1	22.6		0.0						
						90	0.0	0.0	0.1	22.6		0.0						
				Steady:	Steady:	120	0.0	0.0	0.1	22.6		0.0						
				0.0	0.0	150												
						180												
BH611 Shallow	07/04/2017	1027	14	Peak:	Peak:	Initial	0.0	0.0	0.1	22.4		0.0			0.0	0.73	3.39	BH611 deep GW: 0.79m Base: 10.0m
				0.0	0.0	30	0.0	0.0	1.6	20.2		0.0						
						60	0.0	0.0	1.7	20.1		0.0						
						90	0.0	0.0	1.7	20.2		0.0						
				Steady:	Steady:	120	0.0	0.0	1.7	20.1		0.0						
				0.0	0.0	150												
						180												
BH606 Shallow	07/04/2017	1027	14	Peak:	Peak:	Initial	0.0	0.0	0.1	21.3		0.0			0.0	0.83	2.18	BH606 deep GW: 0.89m Base: 5.0m
				0.0	0.0	30	0.0	0.0	0.1	21.4		0.0						
						60	0.0	0.0	0.2	22.1		0.0						
						90	0.0	0.0	0.1	22.3		0.0						
				Steady:	Steady:	120	0.0	0.0	0.1	22.3		0.0						
				0.0	0.0	150												
						180												
BH603 Shallow	06/04/2017	1025	15	Peak:	Peak:	Initial	0.0	0.0	0.2	21.4		0.0		0.1	0.50	2.55	BH603 deep GW: 1.11m Base: 9.92m	
				0.0	0.0	30	0.0	0.0	0.2	21.6		0.0						
						60	0.0	0.0	0.2	21.8		0.0						
						90	0.0	0.0	0.2	21.8		0.0						
				Steady:	Steady:	120	0.0	0.0	0.2	21.8		0.0						
				0.0	0.0	150												
						180												
BH604 Shallow	06/04/2017	1025	14	Peak:	Peak:	Initial	0.0	0.0	0.2	21.5		0.0		0.0	0.67	2.94	Piezo installed at deeper hole	
				0.0	0.0	30	0.0	0.0	0.1	22.2		0.0						
						60	0.0	0.0	0.1	22.1		0.0						
						90	0.0	0.0	0.1	22.1		0.0						
				Steady:	Steady:	120	0.0	0.0	0.1	22.2		0.0						
				0.0	0.0	150												
						180												

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017-07/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH610 Shallow	06/04/2017	1025	14	Peak:	Peak:	Initial	0.0	0.0	0.1	21.9		0.0			0.0	0.65	4.67	BH610 deep GW: 0.66m Base: 8.0m
				0.0	0.0	30	0.0	0.0	0.1	22.3		0.0						
						60	0.0	0.0	0.1	22.2		0.0						
						90	0.0	0.0	0.1	22.3		0.0						
				Steady:	Steady:	120	0.0	0.0	0.1	22.3		0.0						
				0.0	0.0	150												
						180												
BH1202	07/04/2017	1029	11	Peak:	Peak:	Initial	0.0	0.0	0.1	21.3		0.0			0.0	1.20	10.00	
				0.0	0.0	30	0.0	0.0	1.8	21.5		0.0						
						60	0.0	0.0	1.9	21.5		0.0						
						90	0.0	0.0	2.8	21.5		0.0						
				Steady:	Steady:	120	0.0	0.0	2.1	21.4		0.0						
				0.0	0.0	150												
						180												
BH1201	07/04/2017			Peak:	Peak:	Initial												Unable to monitor due to thin width of pipe.
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												
BH1206 Shallow	07/04/2017	1028	11	Peak:	Peak:	Initial	0.0	0.0	0.0	21.3		0.0			0.0			BH1206 deep GW: 1.96m Base: 15.00m
				0.0	0.0	30	0.0	0.0	0.6	21.5		0.0						
						60	0.0	0.0	0.6	21.5		0.0						
						90	0.0	0.0	0.6	21.5		0.0						
				Steady:	Steady:	120	0.0	0.0	0.5	21.4		0.0						
				0.0	0.0	150												
						180												
BH1204 Shallow	07/04/2017	1208	10	Peak:	Peak:	Initial	0.0	0.0	0.0	22.0		0.0			0.1	0.76	1.97	BH1204 deep GW: 0.72m Base: 13.89m
				0.0	0.0	30	0.0	0.0	0.0	22.1		0.0						
						60	0.0	0.0	0.0	22.0		0.0						
						90	0.0	0.0	0.0	22.0		0.0						
				Steady:	Steady:	120	0.0	0.0	0.0	22.0		0.0						
				0.0	0.0	150												
						180												

Notes:

conditions,



Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS701	06/04/2017	1025	16	Peak:	Peak:	Initial	0.0	0.0	0.0	21.3		0.0			0.0	0.52	1.80	
				0.0	0.0	30	0.0	0.0	0.2	22.9		0.0		0.0				
						60	0.0	0.0	0.1	22.9		0.0		0.0				
						90	0.0	0.0	0.1	22.8		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.1	22.9		0.0		0.0				
				0.0	0.0	150												
						180												
BH613	06/04/2017	1025	16	Peak:	Peak:	Initial	0.0	0.0	0.1	22.0		0.0			0.0	1.10	3.00	
				0.0	0.0	30	0.0	0.0	0.1	22.5		0.0		0.0				
						60	0.0	0.0	0.1	22.6		0.0		0.0				
						90	0.0	0.0	0.1	22.7		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.1	22.6		0.0		0.0				
				0.0	0.0	150												
						180												
BH601 Shallow	06/04/2017	1025	16	Peak:	Peak:	Initial	0.0	0.0	0.5	22.3		0.0			0.0	1.15	3.90	BH601 deep GW: 1.90m Base: 9.80m
				0.0	0.0	30	0.0	0.0	0.9	22.0		0.0		0.0				
						60	0.0	0.0	1.1	21.9		0.0		0.0				
						90	0.0	0.0	0.9	22.0		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.7	22.2		0.0		0.0				
				0.0	0.0	150	0.0	0.0	0.6	22.1		0.0		0.0				
						180	0.0	0.0	0.7	22.2		0.0		0.0				
BH602 Shallow	06/04/2017	1024	16	Peak:	Peak:	Initial	0.0	0.0	0.0	21.3		0.0			0.1	0.60	5.00	
				0.0	0.0	30	0.0	0.0	0.2	22.1		0.0		0.2				
						60	0.0	0.0	0.1	22.0		0.0		0.3				
						90	0.0	0.0	0.2	21.9		0.0		0.2				
				Steady:	Steady:	120	0.0	0.0	0.1	22.0		0.0		0.3				
				0.0	0.0	150												
						180												
BH602 Deep	06/04/2017	1024	16	Peak:	Peak:	Initial	0.0	0.0	0.2	22.0		0.0			0.2	0.56	10.00	
				0.0	0.0	30	0.0	0.0	0.2	22.3		0.0		0.4				
						60	0.0	0.0	0.2	22.2		0.0		0.6				
						90	0.0	0.0	0.2	23.3		0.0		0.4				
				Steady:	Steady:	120	0.0	0.0	0.2	22.2		0.0		0.5				
				0.0	0.0	150												
						180												

Notes:

.....
conditions,



Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1101	06/04/2017	1034	13	Peak:	Peak:	Initial	0.0	0.0	0.1	21.0		0.0			0.0	0.93	4.30	
				0.0	0.0	30	0.0	0.0	0.1	21.4		0.0						
						60	0.0	0.0	0.1	21.3		0.0						
						90	0.0	0.0	0.1	21.3		0.0						
				Steady:	Steady:	120	0.0	0.0	0.1	21.3		0.0						
				0.0	0.0	150												
						180												
WS1102	06/04/2017	1032	14	Peak:	Peak:	Initial	0.0	0.0	0.0	21.3		0.0			0.0	1.64	2.40	
				0.0	0.0	30	0.0	0.0	0.9	20.8		0.0						
						60	0.0	0.0	0.9	20.7		0.0						
						90	1.9	0.0	0.9	20.7		0.0						
				Steady:	Steady:	120	0.0	0.0	0.9	20.8		0.0						
				0.0	0.0	150												
						180												
BH1112 Shallow	06/04/2017	1030	14	Peak:	Peak:	Initial	0.0	0.0	0.0	20.7		0.0			0.0	1.90	4.90	BH1112 deep GW: 1.34m Base: 9.68m
				0.0	0.0	30	0.0	0.0	0.6	21.0		0.0						
						60	0.0	0.0	0.5	21.3		0.0						
					90	0.0	0.0	0.6	21.3		0.0							
			Steady:	Steady:	120	0.0	0.0	0.6	21.2		0.0							
			0.0	0.0	150													
					180													
WS1103	06/04/2017	1031	14	Peak:	Peak:	Initial	0.0	0.0	0.6	21.3		0.0			0.0	1.52	2.11	
				0.0	0.0	30	0.0	0.0	0.8	20.5		0.0						
						60	0.0	0.0	0.8	20.6		0.0						
						90	0.0	0.0	0.8	20.6		0.0						
				Steady:	Steady:	120	0.0	0.0	0.8	20.6		0.0						
				0.0	0.0	150												
						180												
BH1103 Shallow	06/04/2017	1029	14	Peak:	Peak:	Initial	0.0	0.0	0.2	21.0		0.0			0.0	1.94	2.40	BH1103 deep GW: 2.2m Base: 9.35m
				0.0	0.0	30	0.0	0.0	0.1	22.0		0.0						
						60	0.0	0.0	0.0	22.0		0.0						
						90	0.0	0.0	0.0	22.0		0.0						
				Steady:	Steady:	120	0.0	0.0	0.0	21.1		0.0						
				0.0	0.0	150	0.0	0.0	0.0	0.0		0.0						
						180												

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1108	06/04/2017	1029	14	Peak:	Peak:	Initial	0.0	0.0	0.2	21.0		0.0			0.0	1.94	2.40	
						30	0.0	0.0	0.1	22.0		0.0	0.4					
						60	0.0	0.0	0.0	22.0		0.0	0.5					
						90	0.0	0.0	0.0	22.0		0.0	0.5					
				Steady:	Steady:	120	0.0	0.0	0.0	22.0		0.0	0.6					
						150	0.0	0.0	0.0	22.1		0.0	0.5					
						180												
BH1109	06/04/2017	1029	14	Peak:	Peak:	Initial	0.0	0.0	0.1	21.5		0.0			0.0	0.96	4.80	
						30	0.0	0.0	0.0	21.9		0.0	0.0					
						60	0.0	0.0	0.0	21.9		0.0	0.0					
						90	0.0	0.0	0.0	21.9		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.0	21.9		0.0	0.0					
						150												
						180												
BH1102 Shallow	06/04/2017	1029	13	Peak:	Peak:	Initial	0.0	0.0	0.1	21.3		0.0			0.0	1.23	3.10	BH1102 deep GW: 1.13m Base: 4.88m
						30	0.0	0.0	0.1	21.9		0.0	0.0					
						60	0.0	0.0	0.0	21.9		0.0	0.0					
						90	0.0	0.0	0.0	21.9		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	0.0	21.9		0.0	0.0					
						150												
						180												
BH1003 Deep	06/04/2017	1025	15	Peak:	Peak:	Initial	0.0	0.0	0.0	20.1		0.0			0.0	0.86	8.88	
						30	0.0	0.0	0.7	21.8		0.0	0.0					
						60	0.0	0.0	1.1	21.4		0.0	0.0					
						90	0.0	0.0	1.2	21.3		0.0	0.0					
				Steady:	Steady:	120	0.0	0.0	1.3	21.1		0.0	0.0					
						150												
						180												
BH1003 Shallow	06/04/2017	1025	15	Peak:	Peak:	Initial	0.0	0.0	0.0	21.3		0.0			0.0	0.99	3.60	
						30	0.0	0.0	0.1	22.5		0.0	0.0					
						60	0.0	0.0	0.1	22.5		0.0	0.0					
						90	0.0	0.0	0.1	22.5		0.0	0.0					
				Steady:	Steady:	120												
						150												
						180												

Notes:

conditions,



Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1004 Shallow	06/04/2017	1025	16	Peak:	Peak:	Initial	0.0	0.0	0.1	22.0		0.0			0.0	0.88	2.81	
				0.0	0.0	30	0.0	0.0	0.0	22.5		0.0		0.0				
						60	0.0	0.0	0.1	22.5		0.0		0.0				
						90	0.0	0.0	0.1	22.5		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.1	22.4		0.0		0.0				
				0.0	0.0	150												
						180												
BH1004 Deep	06/04/2017	1025	16	Peak:	Peak:	Initial	0.0	0.0	0.1	22.0		0.0			0.0	1.47	7.72	
				0.0	0.0	30	0.0	0.0	0.8	21.7		0.0		0.0				
						60	0.0	0.0	0.8	21.7		0.0		0.0				
						90	0.0	0.0	0.8	21.6		0.0		0.0				
				Steady:	Steady:	120	0.0	0.0	0.8	21.6		0.0		0.0				
				0.0	0.0	150												
						180												
WS906	06/04/2017	1025	16	Peak:	Peak:	Initial	0.0	0.0	0.1	21.3		0.0			0.0	0.96	1.50	
				0.0	0.0	30	0.0	0.0	0.7	21.5		0.0		0.0				
						60	0.0	0.0	0.8	21.3		0.0		0.0				
					90	0.0	0.0	0.8	21.3		0.0		0.0					
			Steady:	Steady:	120	0.0	0.0	0.9	21.0		0.0		0.0					
			0.0	0.0	150													
					180													
BH1110 Shallow	06/04/2017	1029	13	Peak:	Peak:	Initial	0.0	0.0	0.0	21.3		0.0			0.0	1.54	3.30	
				0.0	0.0	30	0.0	0.0	0.3	21.7		0.0		0.0				
						60	0.0	0.0	0.3	21.6		0.0		0.0				
					90	0.0	0.0	0.3	21.6		0.0		0.0					
			Steady:	Steady:	120	0.0	0.0	0.4	21.6		0.0		0.0					
			0.0	0.0	150													
					180													
BH1110 Deep	06/04/2017	1029		Peak:	Peak:	Initial	0.0	0.0	0.0	21.4		0.0			0.0	1.53	9.50	
						30	0.0	0.0	0.4	21.4		0.0		0.0				
						60	0.0	0.0	0.5	21.3		0.0		0.5				
						90	0.0	0.0	0.5	21.4		0.0		0.6				
				Steady:	Steady:	120	0.0	0.0	0.5	21.4		0.0		0.5				
						150												
						180												

Notes:

conditions,



Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
BH1107 Shallow	06/04/2017	1031	14	Peak:	Peak:	Initial	0.0	0.0	0.0	21.2		0.0			0.0	1.57	2.40	BH1107 deep GW: 1.52m Base: 4.80m
				0.0	0.0	30	0.0	0.0	0.4	21.2		0.0						
						60	0.0	0.0	0.7	21.2		0.0						
						90	0.0	0.0	0.7	21.0		0.0						
				Steady:	Steady:	120	0.0	0.0	0.8	20.9		0.0						
				0.0	0.0	150	0.0	0.0	0.8	20.6		0.0						
						180	0.0	0.0	0.8	20.4		0.0						
WS905	06/04/2017	1028	13	Peak:	Peak:	Initial	0.0	0.0	0.4	21.3		0.0			0.0	1.00	1.47	
				0.0	0.0	30	0.0	0.0	2.7	18.0		0.0						
						60	0.0	0.0	2.8	17.9		0.0						
						90	0.0	0.0	2.8	17.9		0.0						
				Steady:	Steady:	120	0.0	0.0	2.8	17.8		0.0						
				0.0	0.0	150												
						180												
BH1002 Deep	06/04/2017	1029	13	Peak:	Peak:	Initial	0.0	0.0	0.8	21.3		0.0			1.1	1.00	8.71	
				0.0	+0.2	30	0.0	0.0	0.8	20.4		0.0	1.2					
						60	0.0	0.0	0.8	19.7		0.0	1.6					
					90	0.0	0.0	0.8	19.6		0.0	1.3						
			Steady:	Steady:	120	0.0	0.0	0.8	19.6		0.0	1.3						
			0.0	0.0	150													
					180													
BH1002 Shallow	06/04/2017	1029	13	Peak:	Peak:	Initial	0.0	0.0	0.1	19.3		0.0			0.0	1.01	2.65	
				0.0	-1.2	30	0.0	0.0	0.4	20.7		0.0	0.0					
						60	0.0	0.0	0.4	21.5		0.0	0.0					
					90	0.0	0.0	0.3	22.0		0.0	0.0						
			Steady:	Steady:	120	0.0	0.0	0.3	22.1		0.0	0.0						
			0.0	0.0	150													
					180													
WS901	06/04/2017	1029	13	Peak:	Peak:	Initial	0.0	0.0	0.1	20.1		0.0			0.0	0.61	1.23	
				0.0	0.0	30	0.0	0.0	0.7	20.8		0.0	0.0					
						60	0.0	0.0	0.6	20.9		0.0	0.0					
					90	0.0	0.0	0.6	20.9		0.0	0.0						
			Steady:	Steady:	120	0.0	0.0	0.6	20.9		0.0	0.0						
			0.0	0.0	150													
					180													

Notes:

conditions,

Project:	Northstowe
Job Number:	UA008426

Date:	06/04/2017
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Monitoring Point Reference	Date/ Time	Atmos. Pressure (mbar)	Temp. (°C)	Well Pressure (Pa)	Flow Rate (l/h)	Time (sec)	CH4 (% v/v)	LEL (%)	CO2 (% v/v)	O2 (% v/v)	H2S (ppm)	CO (ppm)	Hex. (%)	PID cf	VOC (ppm)	Depth to water (m)	Depth to base (m)	Comments (all readings from GL, note datum height if different)
WS902	06/04/2017	1027	13	Peak:	Peak:	Initial	0.0	0.0	0.8	21.3		0.0			0.0	0.92	1.05	
				0.0	0.0	30	0.0	0.0	1.9	19.2		0.0						
						60	0.0	0.0	1.9	19.0		0.0						
						90	0.0	0.0	1.9	19.0		0.0						
				Steady:	Steady:	120	0.0	0.0	2.0	19.0		0.0						
				0.0	0.0	150												
						180												
WS904	06/04/2017	1026	14	Peak:	Peak:	Initial	0.0	0.0	0.0	20.9		0.0			0.0	0.79	2.50	
				0.0	0.0	30	0.0	0.0	0.4	22.9		0.0						
						60	0.0	0.0	0.4	22.9		0.0						
						90	0.0	0.0	0.4	22.9		0.0						
				Steady:	Steady:	120	0.0	0.0	0.4	22.9		0.0						
				0.0	0.0	150												
						180												
WS1001	06/04/2017	1025	14	Peak:	Peak:	Initial	0.0	0.0	0.0	21.0		0.0			0.0	1.30	1.50	
				0.0	0.0	30	0.0	0.0	1.4	20.4		0.0						
						60	0.0	0.0	1.5	20.4		0.0						
					90	0.0	0.0	1.5	20.3		0.0							
			Steady:	Steady:	120	0.0	0.0	1.5	20.2		0.0							
			0.0	0.0	150													
					180													
				Peak:	Peak:	Initial												
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												
				Peak:	Peak:	Initial												
						30												
						60												
						90												
				Steady:	Steady:	120												
						150												
						180												

Notes:

Previous weather conditions, Atmospheric pressure trend and rate, flooding, soil moisture, water draw in tube, wind direction/strength, condition of monitoring point, missing/open tap, datum level, vegetation stress, odours, bubbles, etc.

APPENDIX F

GEOTECHNICAL LABORATORY TEST DATA



Laboratory Report



GEO Site & Testing Services Ltd

Contract Number: 34142

Client's Reference: **UA008426-01**

Report Date:

Client **Arcadis**
1st Floor
2 Glass Wharf
Temple Quay
Bristol
BS2 0FR

Contract Title: **Northstowe Phase 2**
For the attention of: **reg. 13**

Date Received: **10-02-2017**

Date Commenced: **10-02-2017**

Date Completed:

Test Description	Qty
Moisture Content 1377 : 1990 Part 2 : 3.2 - * UKAS	264
4 Point Liquid & Plastic Limit (LL/PL) 1377 : 1990 Part 2 : 4.3 & 5.3 - * UKAS	264
PSD Wet Sieve method 1377 : 1990 Part 2 : 9.2 - * UKAS	53
PSD: Sedimentation by pipette carried out with Wet Sieve 1377 : 1990 Part 2 : 9.4 - * UKAS	49
Water Soluble Sulphate 2:1 extract 1377 : 1990 Part 3 : 5 - @ Non Accredited Test	4
(GI) BRE Suite Total Sulphate, Aqueous Sulphate, Total Sulphur, Aqueous Nitrate, Aqueous Mag, Chloride, 1377 : 1990 Part 3 & BRE CP2/79 - @ Non Accredited Test	17

Notes: Observations and Interpretations are outside the UKAS Accreditation
* - denotes test included in laboratory scope of accreditation
- denotes test carried out by approved contractor
@ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved Signatories:

reg. 13



2788

Laboratory Report



GEO Site & Testing Services Ltd

Contract Number: 34142

Test Description	Qty
BRE Suite B Greenfield Ph, SO4 2:1, Acid Sol, total Sulphur BS 1377 Parts 3, Methods 9,5,3,5.5 & TRL 447 - @ Non Accredited Test	14
BRE Suite D Ph Total Sulphate, Aqueous Sulphate, Total Sulphur, Aqueous Nitrate, Aqueous Mag, Chloride, - @ Non Accredited Test	5
Dry Den/MC (2.5kg Rammer Method 1 Litre Mould) 1377 : 1990 Part 4 : 3.3 - * UKAS	25
Dry Den/MC (4.5kg Rammer Method 1 Litre Mould) 1377 : 1990 Part 4 : 3.5 - * UKAS	22
(MCV) at as received Moisture Content 1377:1990 Part 4 : 5.4 - * UKAS	28
MCV/Moisture Content Relation 1377 : 1990 Part 4 : 5.5 - * UKAS	38
CBR: Remoulded Specimen and tested at top only 1377 : 1990 Part 4 : 7 - * UKAS	33
Max Density Cohesionless Soil 1377 : 1990 Part 4 : 4.2 - @ Non Accredited Test	20
One-dimensional Consolidation 75mm or 50mm diameter specimens (5 days) 1377 : 1990 Part 5 : 3 - * UKAS	15
Natural Shear Strength by Hand Vane (3 measurements) - @ Non Accredited Test	5
Quick Undrained Triaxial Compression Test - Multi-stage Loading of a single specimen (100mm diameter) 1377 : 1990 Part 7 : 9 - * UKAS	13
Quick undrained Shear Box 60mm Suitable sands only BS1377 : Part 7 : 1990 Clause 4 - * UKAS	5

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Approved Signatories:

reg. 13



Contract Number: 34142

Test Description	Qty
CUD 100mm Consolidated undrained triaxial compression test on a Single Specimen with Multistage Loading with the measurement of pore water pressure including saturation and consolidation, test duration FOUR days. BS1377 : Part 8 : Clause 7 : 1990 - @ Non Accredited Test	22
CD 100mm Consolidated drained Triaxial compression test on a single 100 mm diameter specimens Multistage loading with the measurement of volume change and pore water pressure including saturation and consolidation, test duration FOUR days. BS1377 : Part 8 : Clause 7 : 1990 - @ Non Accredited Test	8
Extra over items for test duration in excess of four days.	120
Disposal of Samples on Project	1

Notes: Observations and Interpretations are outside the UKAS Accreditation
 * - denotes test included in laboratory scope of accreditation
 # - denotes test carried out by approved contractor
 @ - denotes non accredited tests

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved Signatories:

reg. 13

Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH1001	20	D	3.00 - 3.45	Grey silty CLAY
BH1001	21	D	4.45	Grey silty CLAY
BH1001	22	D	5.00 - 5.45	Grey silty CLAY
BH1001	31	D	9.95	Grey silty CLAY
BH1001	27	D	12.95	Grey silty CLAY
BH1001	31	D	15.00 - 15.45	Grey silty CLAY
BH1002	24	D	3.30	Brown slightly fine to medium sandy fine to medium gravelly silty CLAY
BH1002	26	D	4.00	Grey silty CLAY
BH1002	28	D	6.00	Grey silty CLAY
BH1002	29	D	7.00	Brown silty CLAY
BH1002	32	D	9.50	Grey silty CLAY
BH1002	35	D	12.00	Grey silty CLAY
BH1002	38	D	14.00	Grey silty CLAY
BH1003	7	D	1.20 - 1.65	Brown fine to medium gravelly fine to medium sandy CLAY
BH1003	14	D	4.00 - 4.45	Grey silty CLAY
BH1003	17	D	5.45	Grey silty CLAY
BH1003	22	D	8.45	Grey silty CLAY
BH1003	23	D	11.45	Grey silty CLAY
BH1003	28	D	15.00 - 15.45	Grey silty CLAY
BH1004	5	D	0.30	Brown fine gravelly silty CLAY with rootlets

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13
5311



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

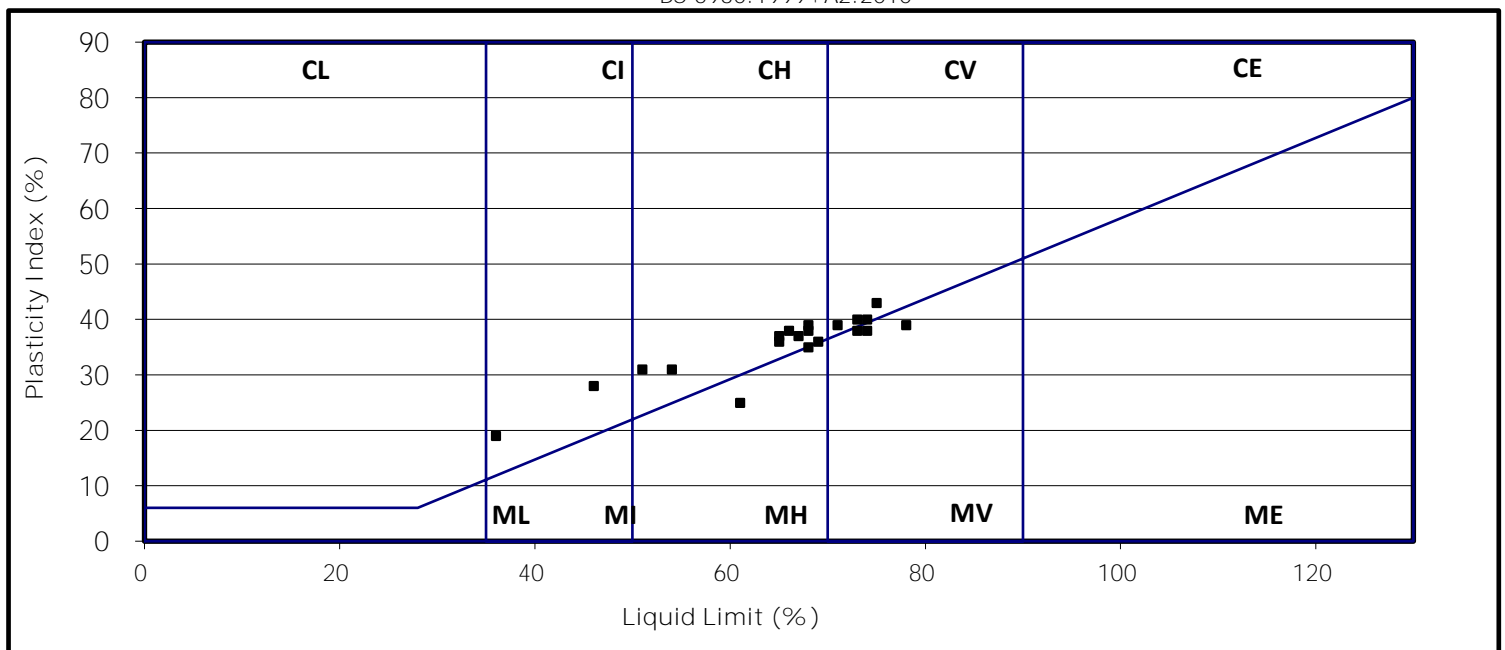
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH1001/20	D	3.00 - 3.45	39	65	29	36	100	CH High Plasticity
BH1001/21	D	4.45	42	61	36	25	100	MH High Plasticity
BH1001/22	D	5.00 - 5.45	14	46	18	28	100	CI Intermediate Plasticity
BH1001/31	D	9.95	31	74	34	40	100	CV Very High Plasticity
BH1001/27	D	12.95	43	71	32	39	100	CV Very High Plasticity
BH1001/31	D	15.00 - 15.45	31	69	33	36	100	CH High Plasticity
BH1002/24	D	3.30	33	74	36	38	70	MV Very High Plasticity
BH1002/26	D	4.00	37	78	39	39	100	MV Very High Plasticity
BH1002/28	D	6.00	24	65	28	37	100	CH High Plasticity
BH1002/29	D	7.00	27	68	30	38	100	CH High Plasticity
BH1002/32	D	9.50	28	68	29	39	100	CH High Plasticity
BH1002/35	D	12.00	32	73	35	38	100	MV Very High Plasticity
BH1002/38	D	14.00	29	67	30	37	100	CH High Plasticity
BH1003/7	D	1.20 - 1.65	14	36	17	19	70	CI Intermediate Plasticity
BH1003/14	D	4.00 - 4.45	36	73	33	40	100	CV Very High Plasticity
BH1003/17	D	5.45	20	54	23	31	100	CH High Plasticity
BH1003/22	D	8.45	30	68	33	35	100	MH High Plasticity
BH1003/23	D	11.45	29	75	32	43	100	CV Very High Plasticity
BH1003/28	D	15.00 - 15.45	31	66	28	38	100	CH High Plasticity
BH1004/5	D	0.30	23	51	20	31	90	CH High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:

reg. 13

Date: 3.3.17

reg. 13



Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH1004	10	D	4.00	Brown silty CLAY
BH1004	12	D	5.00	Brown silty CLAY
BH1004	14	D	7.00	Grey silty CLAY
BH1004	15	D	8.00	Grey silty CLAY
BH1004	16	D	9.00	Grey silty CLAY
BH1004	11	D	11.00	Grey silty CLAY
BH1004	21	D	14.00	Grey silty CLAY
BH1101	7	D	0.20	Brown fine gravelly silty CLAY
BH1101	19	D	5.20	Grey silty CLAY
BH1101	36	D	14.00	Grey silty CLAY
BH1102	2	D	0.30	Brown silty CLAY
BH1102	10	D	2.90	Brown silty CLAY
BH1102	14	D	3.70	Brown fine to medium gravelly silty CLAY
BH1102	20	D	5.00	Brown silty CLAY
BH1102	33	D	11.00	Grey silty CLAY
BH1102	38	D	14.00	Grey silty CLAY
BH1102	40	D	14.50	Grey SILTSTONE
BH1103	15	D	6.80	Grey slightly fine to coarse sandy silty CLAY
BH1103	18	D	8.00	Brown silty CLAY
BH1103	23	D	11.00	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:  reg. 13

reg. 13

Date: 23.17



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

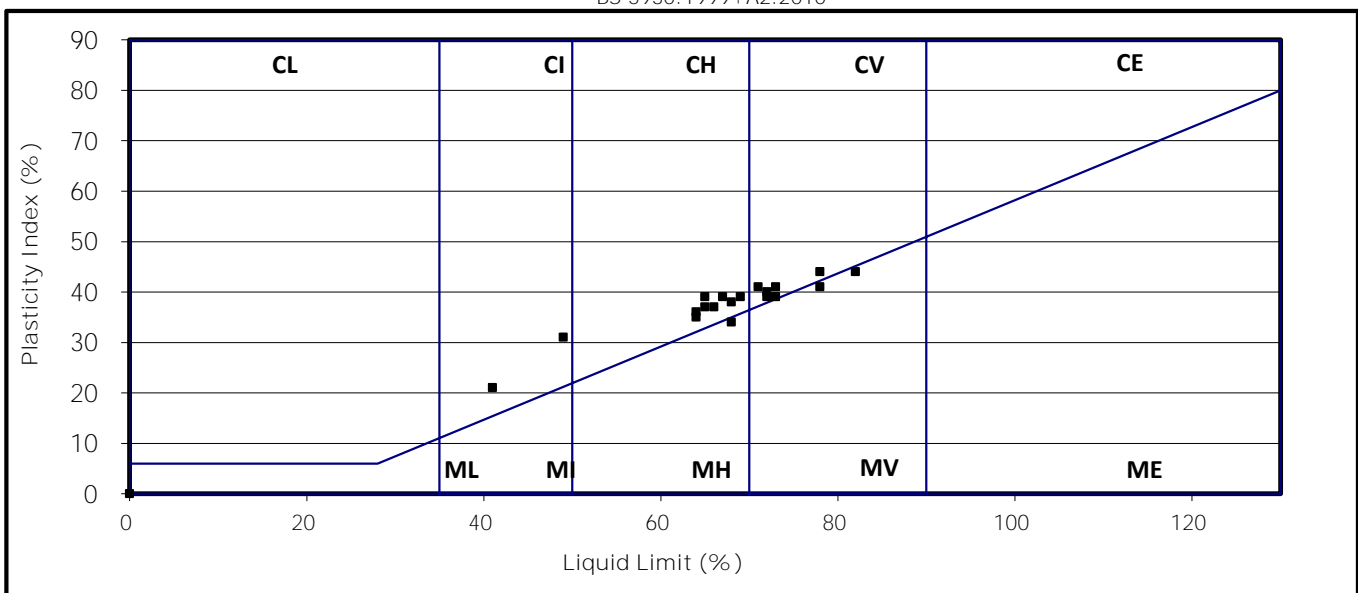
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH1004/10	D	4.00	35	65	26	39	100	CH High Plasticity
BH1004/12	D	5.00	34	78	37	41	100	MV Very High Plasticity
BH1004/14	D	7.00	27	66	29	37	100	CH High Plasticity
BH1004/15	D	8.00	31	78	34	44	100	CV Very High Plasticity
BH1004/16	D	9.00	41	82	38	44	100	MV Very High Plasticity
BH1004/11	D	11.00	30	64	28	36	100	CH High Plasticity
BH1004/21	D	14.00	27	69	30	39	100	CH High Plasticity
BH1101/7	D	0.20	16	41	20	21	90	CI Intermediate Plasticity
BH1101/19	D	5.20	25	65	28	37	100	CH High Plasticity
BH1101/36	D	14.00	28	73	32	41	100	CV Very High Plasticity
BH1102/2	D	0.30	19	49	18	31	100	CI Intermediate Plasticity
BH1102/10	D	2.90	45	68	34	34	100	MH High Plasticity
BH1102/14	D	3.70	34	64	29	35	90	CH High Plasticity
BH1102/20	D	5.00	27	68	30	38	100	CH High Plasticity
BH1102/33	D	11.00	31	73	34	39	100	CV Very High Plasticity
BH1102/38	D	14.00	26	71	30	41	100	CV Very High Plasticity
BH1102/40	D	14.50	6.4		NP		15	
BH1103/15	D	6.80	26	67	28	39	98	CH High Plasticity
BH1103/18	D	8.00	30	72	32	40	100	CV Very High Plasticity
BH1103/23	D	11.00	30	72	33	39	100	CV Very High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:
reg. 13
Date: 23.11

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH1107	21	D	3.80	Grey/ brown silty CLAY
BH1107	24	D	5.00	Grey SILTSTONE
BH1107	26	D	6.00 - 6.45	Brown/ grey silty CLAY
BH1107	28	D	9.00 - 9.45	Grey silty CLAY
BH1107	30	D	11.00	Grey silty CLAY
BH1107	34	D	12.00 - 12.45	Grey silty CLAY
BH1107	32	D	14.00	Grey silty CLAY
BH1107	10	D	15.00 - 15.45	Grey silty CLAY
BH1108	21	D	0.20	Brown fine to medium gravelly silty CLAY
BH1108	22	D	0.60	Brown fine to medium gravelly sandy silty CLAY
BH1108	23	D	1.50 - 1.95	Brown fine gravelly fine to medium sandy silty CLAY
BH1108	24	D	2.00	Brown fine to coarse SAND
BH1108	27	D	3.50	Brown/ grey silty CLAY
BH1108	31	D	7.00	Brown silty CLAY
BH1108	33	D	9.50	Grey silty CLAY
BH1108	37	D	13.50 - 13.95	Grey silty CLAY
BH1109	20	D	0.30	Brown fine to medium gravelly silty sandy CLAY
BH1109	29	D	1.50 - 1.95	Brown fine to medium gravelly sandy CLAY
BH1109	3	UT	3.00 - 3.45	Brown slightly sandy silty CLAY
BH1109	22	D	3.50	Brown silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 23.17

reg. 13



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

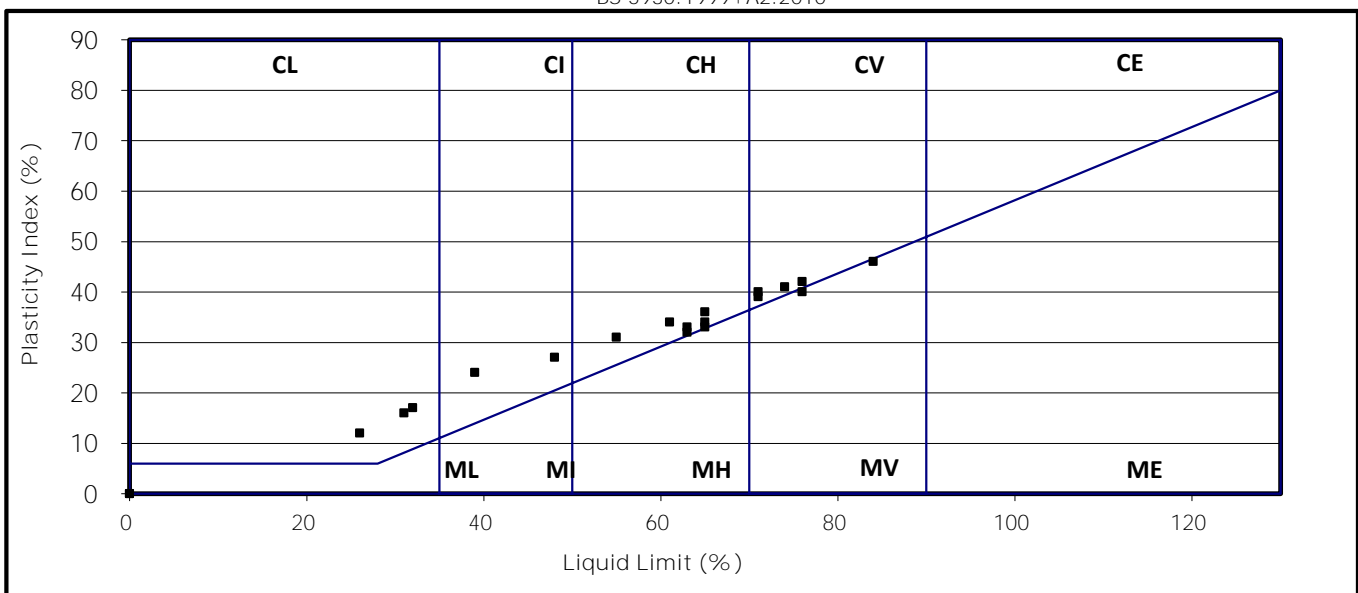
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH1107/21	D	3.80	30	65	32	33	100	CH High Plasticity
BH1107/24	D	5.00	9.1		NP		68	
BH1107/26	D	6.00 - 6.45	26	55	24	31	100	CH High Plasticity
BH1107/28	D	9.00 - 9.45	29	71	32	39	100	CV Very High Plasticity
BH1107/30	D	11.00	34	76	36	40	100	MV Very High Plasticity
BH1107/34	D	12.00 - 12.45	30	63	31	32	100	CH High Plasticity
BH1107/32	D	14.00	28	74	33	41	100	CV Very High Plasticity
BH1107/10	D	15.00 - 15.45	27	71	31	40	100	CV Very High Plasticity
BH1108/21	D	0.20	19	48	21	27	73	CI Intermediate Plasticity
BH1108/22	D	0.60	19	39	15	24	85	CI Intermediate Plasticity
BH1108/23	D	1.50 - 1.95	15	32	15	17	90	CL Low Plasticity
BH1108/24	D	2.00	17		NP		60	
BH1108/27	D	3.50	39	65	29	36	100	CH High Plasticity
BH1108/31	D	7.00	33	65	31	34	100	CH High Plasticity
BH1108/33	D	9.50	35	84	38	46	100	MV Very High Plasticity
BH1108/37	D	13.50 - 13.95	31	76	34	42	100	CV Very High Plasticity
BH1109/20	D	0.30	18	31	15	16	85	CL Low Plasticity
BH1109/29	D	1.50 - 1.95	26	26	14	12	73	CL Low Plasticity
BH1109/3	UT	3.00 - 3.45	25	61	27	34	100	CH High Plasticity
BH1109/22	D	3.50	33	63	30	33	100	CH High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:

reg. 13

Date: 23.11

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH1110	4	D	0.20	Brown fine to medium gravelly fine to medium sandy silty CLAY
BH1110	12	D	3.90	Brown fine to medium gravelly silty CLAY
BH1110	28	D	11.00	Grey silty CLAY
BH1110	30	D	12.00 - 12.45	Grey silty CLAY
BH1111	8	D	2.40	Grey silty CLAY
BH1111	13	D	4.00	Brown/ grey silty CLAY
BH1111	22	D	8.00	Brown silty CLAY
BH1111	30	D	12.00 - 12.45	Grey silty CLAY
BH1111	38	D	15.00 - 15.45	Grey silty CLAY
BH1112	25	D	6.80	Grey slightly fine gravelly silty CLAY
BH1112	27	D	8.00 - 8.45	Grey fine gravelly silty CLAY
BH1112	29	D	9.00 - 9.45	Grey silty CLAY
BH1112	31	D	11.00	Grey silty CLAY
BH1112	34	D	14.00	Grey SILTSTONE
BH1112	36	D	15.45	Grey silty CLAY
BH1201	14	D	1.20	Brown/ grey fine to coarse sandy silty CLAY
BH1201	4	D	3.50	Brown/ grey fine to coarse sandy silty CLAY
BH1201	7	D	6.50	Grey silty CLAY
BH1201	10	D	9.50	Grey silty CLAY
BH1201	13	D	12.50	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13

reg. 13



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

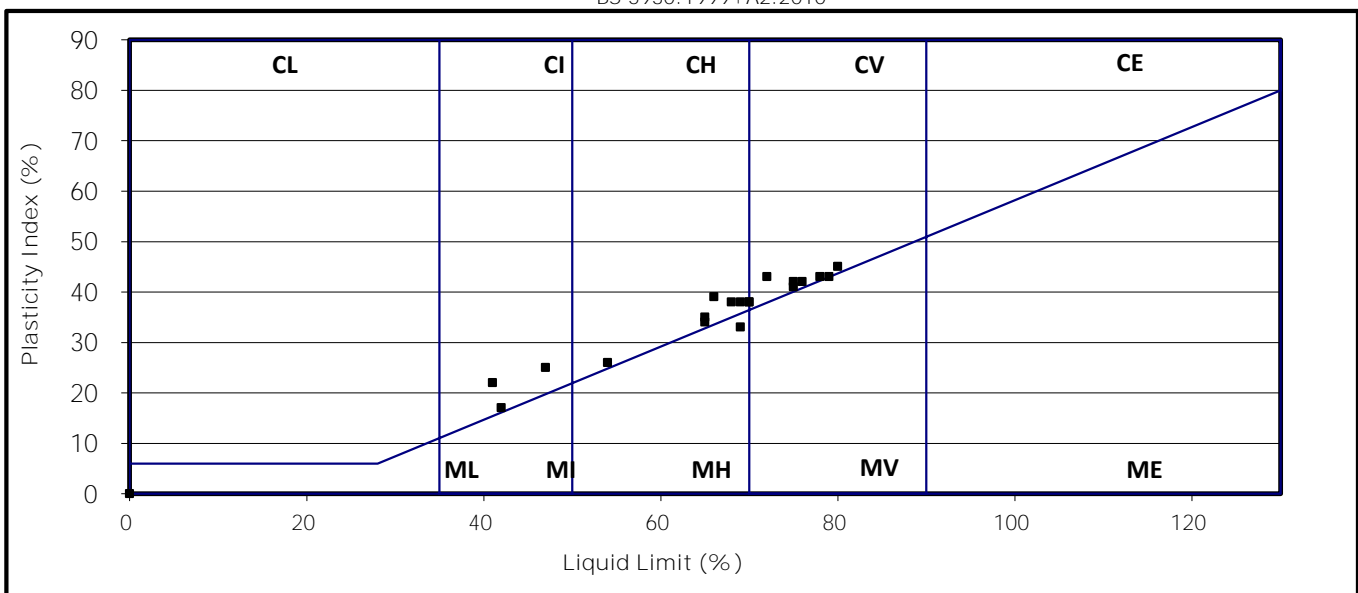
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH1110/4	D	0.20	16	41	19	22	85	CI Intermediate Plasticity
BH1110/12	D	3.90	23	47	22	25	90	CI Intermediate Plasticity
BH1110/28	D	11.00	31	78	35	43	100	CV Very High Plasticity
BH1110/30	D	12.00 - 12.45	32	80	35	45	100	CV Very High Plasticity
BH1111/8	D	2.40	28	42	25	17	100	CI Intermediate Plasticity
BH1111/13	D	4.00	34	54	28	26	100	CH High Plasticity
BH1111/22	D	8.00	32	69	31	38	100	CH High Plasticity
BH1111/30	D	12.00 - 12.45	29	68	30	38	100	CH High Plasticity
BH1111/38	D	15.00 - 15.45	29	70	32	38	100	CH/V High/High Plasticity
BH1112/25	D	6.80	25	66	27	39	97	CH High Plasticity
BH1112/27	D	8.00 - 8.45	46	69	36	33	80	MH High Plasticity
BH1112/29	D	9.00 - 9.45	31	76	34	42	100	CV Very High Plasticity
BH1112/31	D	11.00	29	75	33	42	100	CV Very High Plasticity
BH1112/34	D	14.00	6.6		NP		8	
BH1112/36	D	15.45	27	65	30	35	100	CH High Plasticity
BH1201/14	D	1.20	43	65	31	34	90	CH High Plasticity
BH1201/4	D	3.50	42	79	36	43	90	M/CV Very High Plasticity
BH1201/7	D	6.50	29	70	32	38	100	CH High Plasticity
BH1201/10	D	9.50	26	72	29	43	100	CV Very High Plasticity
BH1201/13	D	12.50	31	75	34	41	100	CV Very High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH1201	15	D	14.50	Grey silty CLAY
BH1201	17	D	16.50	Grey silty CLAY
BH1201	19	D	18.50	Grey silty CLAY
BH1201	21	D	20.50	Grey silty CLAY
BH1201	23	D	22.50	Grey silty CLAY
BH1202	30	D	1.00	Brown fine to coarse sandy silty CLAY
BH1202	33	D	3.50	Grey silty CLAY
BH1202	35	D	5.50	Grey silty CLAY
BH1202	37	D	7.00	Grey silty CLAY
BH1202	39	D	8.50	Brown silty CLAY
BH1202	41	D	10.50	Grey silty CLAY
BH1202	43	D	12.50	Grey silty CLAY
BH1202	45	D	14.50	Grey silty CLAY
BH1202	47	D	16.50	Grey silty CLAY
BH1202	49	D	19.50	Grey silty CLAY
BH1202	51	D	24.50	Grey silty CLAY
BH1203	11	D	2.60	Grey silty CLAY
BH1204	4	D	4.00	Brown silty CLAY
BH1204	17	D	6.50	Brown silty CLAY
BH1204	21	d	9.50	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd
 Authorised By: **reg. 13**
 Date: **3.3.17**



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

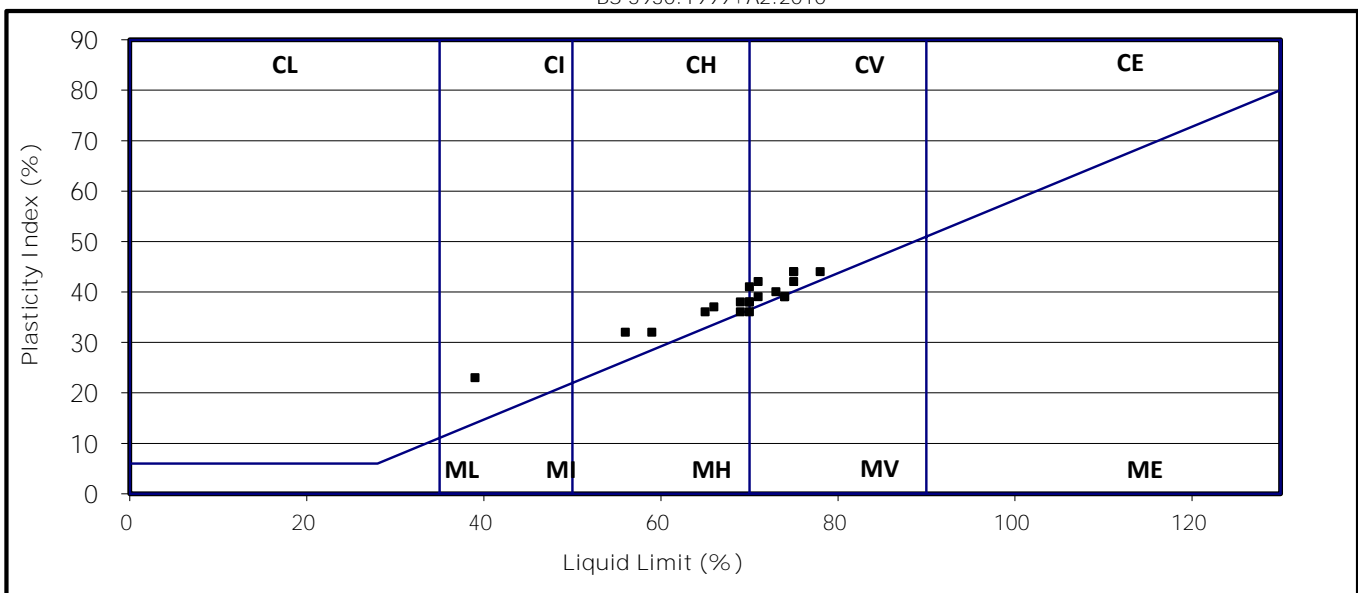
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH1201/15	D	14.50	28	69	31	38	100	CH High Plasticity
BH1201/17	D	16.50	22	56	24	32	100	CH High Plasticity
BH1201/19	D	18.50	27	75	31	44	100	CV Very High Plasticity
BH1201/21	D	20.50	25	59	27	32	100	CH High Plasticity
BH1201/23	D	22.50	28	70	32	38	100	CH/V High/High Plasticity
BH1202/30	D	1.00	37	69	33	36	90	CH High Plasticity
BH1202/33	D	3.50	37	70	34	36	100	MH/V High/High Plasticity
BH1202/35	D	5.50	30	73	33	40	100	CV Very High Plasticity
BH1202/37	D	7.00	26	70	29	41	100	CH/V High/High Plasticity
BH1202/39	D	8.50	27	75	31	44	100	CV Very High Plasticity
BH1202/41	D	10.50	31	74	35	39	100	MV Very High Plasticity
BH1202/43	D	12.50	34	65	29	36	100	CH High Plasticity
BH1202/45	D	14.50	27	66	29	37	100	CH High Plasticity
BH1202/47	D	16.50	26	71	29	42	100	CV Very High Plasticity
BH1202/49	D	19.50	30	78	34	44	100	CV Very High Plasticity
BH1202/51	D	24.50	29	71	32	39	100	CV Very High Plasticity
BH1203/11	D	2.60	29	70	32	38	100	CH High Plasticity
BH1204/4	D	4.00	31	74	35	39	100	MV Very High Plasticity
BH1204/17	D	6.50	30	75	33	42	100	CV Very High Plasticity
BH1204/21	d	9.50	12	39	16	23	100	CI Intermediate Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:
reg. 13

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH1204	29	D	14.45	Grey fine gravelly silty CLAY
BH1204	37	D	19.45	Grey fine gravelly silty CLAY
BH1204	42	D	22.45	Grey fine gravelly silty CLAY
BH1204	46	D	25.00	Grey fine gravelly silty CLAY
BH1205	6	D	1.50 - 1.95	Brown fine to coarse gravelly sandy CLAY
BH1205	11	D	3.50	Grey fine gravelly silty CLAY
BH1205	13	D	4.50 - 4.95	Grey silty CLAY
BH1205	19	D	9.00 - 9.45	Grey silty CLAY
BH1205	22	D	10.60	Grey SILTSTONE
BH1205	27	D	13.50 - 13.95	Grey silty CLAY
BH1205	32	D	16.50 - 16.95	Grey silty CLAY
BH1205	37	D	19.50 - 19.95	Grey silty CLAY
BH1205	41	D	22.50 - 22.95	Grey silty CLAY
BH1205	43	D	24.00 - 24.45	Grey silty CLAY
BH1206	9	D	2.00	Brown silty CLAY
BH1206	14	D	4.00	Grey silty CLAY
BH1206	19	D	6.50	Grey silty CLAY
BH1206	24	D	9.50	Grey fine to medium gravelly silty CLAY
BH1206	32	D	15.50	Grey silty CLAY
BH1206	40	D	21.50	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13
 Date: 4.3.17

reg. 13



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

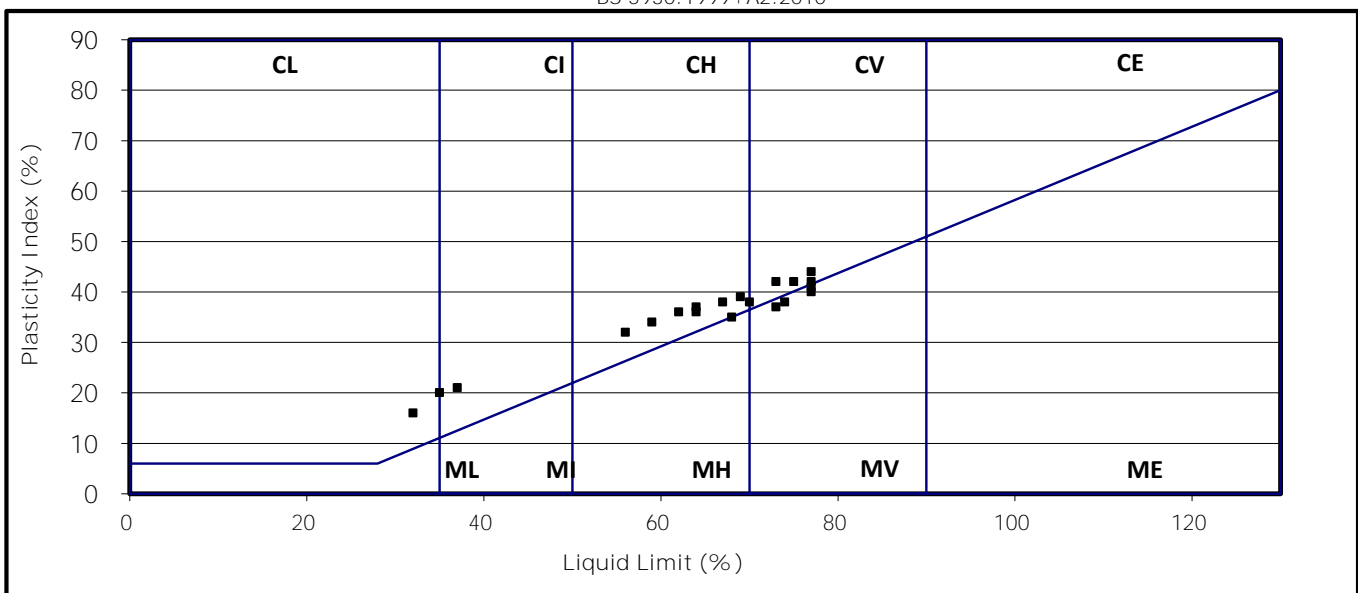
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH1204/29	D	14.45	31	68	33	35	94	MH High Plasticity
BH1204/37	D	19.45	26	67	29	38	100	CH High Plasticity
BH1204/42	D	22.45	24	64	27	37	100	CH High Plasticity
BH1204/46	D	25.00	22	56	24	32	100	CH High Plasticity
BH1205/6	D	1.50 - 1.95	10	35	15	20	40	CL/I Low/Inter. Plasticity
BH1205/11	D	3.50	33	77	37	40	100	MV Very High Plasticity
BH1205/13	D	4.50 - 4.95	32	77	35	42	100	CV Very High Plasticity
BH1205/19	D	9.00 - 9.45	27	69	30	39	100	CH High Plasticity
BH1205/22	D	10.60	9.0	32	16	16	100	CL Low Plasticity
BH1205/27	D	13.50 - 13.95	29	73	31	42	100	CV Very High Plasticity
BH1205/32	D	16.50 - 16.95	23	59	25	34	100	CH High Plasticity
BH1205/37	D	19.50 - 19.95	24	62	26	36	100	CH High Plasticity
BH1205/41	D	22.50 - 22.95	29	77	33	44	100	CV Very High Plasticity
BH1205/43	D	24.00 - 24.45	27	70	32	38	100	CH High Plasticity
BH1206/9	D	2.00	40	73	36	37	100	MV Very High Plasticity
BH1206/14	D	4.00	30	75	33	42	100	CV Very High Plasticity
BH1206/19	D	6.50	32	77	36	41	100	MV Very High Plasticity
BH1206/24	D	9.50	12	37	16	21	70	CI Intermediate Plasticity
BH1206/32	D	15.50	34	74	36	38	100	MV Very High Plasticity
BH1206/40	D	21.50	26	64	28	36	100	CH High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:

reg. 13

Date: 4.3.17

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH601	18	D	1.00	Brown fine to medium gravelly silty CLAY
BH601	19	D	1.20	Brown fine to medium gravelly silty CLAY
BH601	20	D	2.00	Grey/ brown silty CLAY
BH601	23	D	4.00	Brown silty CLAY
BH601	25	D	6.00	Grey silty CLAY
BH601	26	D	7.00	Grey silty CLAY
BH601	28	D	9.00	Grey silty CLAY
BH602	17	D	1.80	Brown fine to medium gravelly fine to medium sandy silty CLAY
BH602	18	D	3.00	Brown silty CLAY
BH602	20	D	3.50	Grey clayey SILT
BH602	22	D	5.00	Grey clayey SILT
BH602	23	D	6.00	Brown silty CLAY
BH602	26	D	9.00	Grey silty CLAY
BH603	15	D	1.20	Grey/ brown silty CLAY
BH603	17	D	2.00	Brown silty CLAY
BH603	20	D	3.00 - 3.45	Grey silty CLAY
BH603	21	D	4.00	Brown silty CLAY
BH603	25	D	7.00	Grey silty CLAY
BH603	26	D	8.00	Grey silty CLAY
BH603	27	D	9.00	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13
 Date: 4.3.17



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

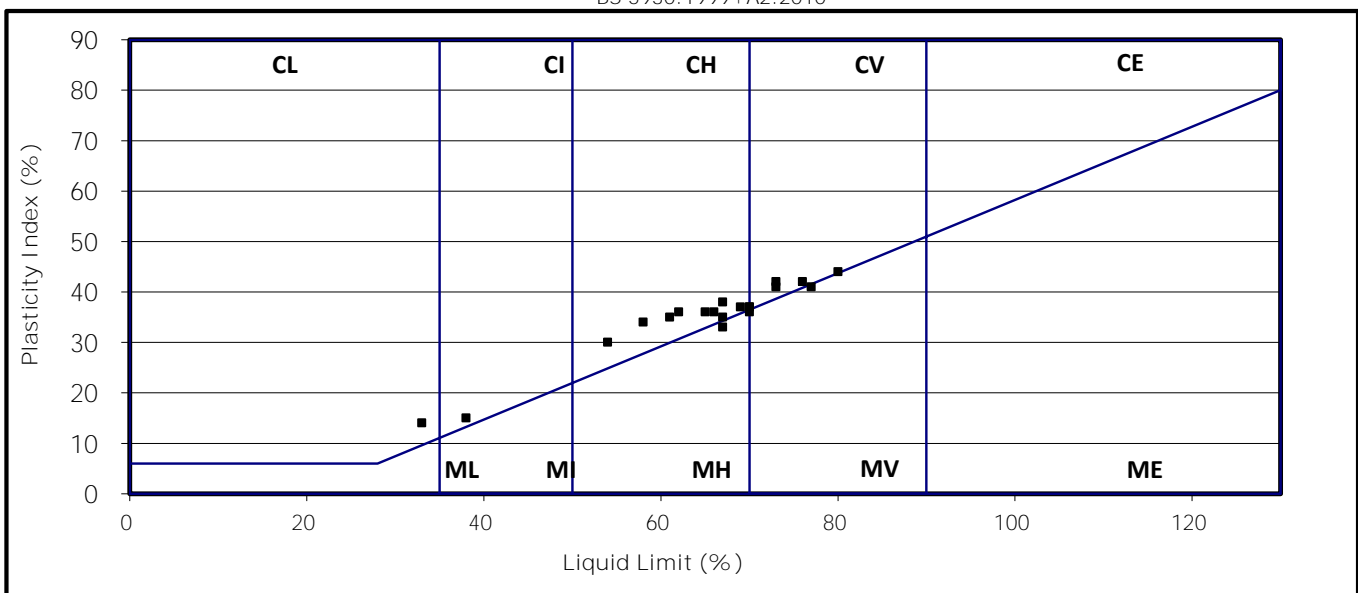
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH601/18	D	1.00	32	73	31	42	90	CV Very High Plasticity
BH601/19	D	1.20	27	65	29	36	83	CH High Plasticity
BH601/20	D	2.00	35	66	30	36	100	CH High Plasticity
BH601/23	D	4.00	30	70	33	37	100	CH/V High/High Plasticity
BH601/25	D	6.00	27	67	29	38	100	CH High Plasticity
BH601/26	D	7.00	33	77	36	41	100	MV Very High Plasticity
BH601/28	D	9.00	32	76	34	42	100	CV Very High Plasticity
BH602/17	D	1.80	30	67	32	35	84	CH High Plasticity
BH602/18	D	3.00	29	69	32	37	100	CH High Plasticity
BH602/20	D	3.50	14	33	19	14	100	CL Low Plasticity
BH602/22	D	5.00	19	38	23	15	100	CI Intermediate Plasticity
BH602/23	D	6.00	29	62	26	36	100	CH High Plasticity
BH602/26	D	9.00	30	70	33	37	100	CH High Plasticity
BH603/15	D	1.20	28	58	24	34	100	CH High Plasticity
BH603/17	D	2.00	41	67	34	33	100	MH High Plasticity
BH603/20	D	3.00 - 3.45	23	61	26	35	100	CH High Plasticity
BH603/21	D	4.00	22	54	24	30	100	CH High Plasticity
BH603/25	D	7.00	36	70	34	36	100	MH High Plasticity
BH603/26	D	8.00	34	80	36	44	100	CV Very High Plasticity
BH603/27	D	9.00	30	73	32	41	100	CV Very High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:
reg. 13
Date: 4.3.17

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH604	9	D	1.20	Brown silty CLAY
BH604	7	D	5.50	Brown silty CLAY
BH604	8	D	6.50	Grey slightly fine to medium gravelly silty CLAY
BH605	3	D	1.20 - 1.65	Brown silty CLAY
BH605	5	D	3.50	Brown silty CLAY
BH605	7	D	5.50	Grey silty CLAY
BH605	8	D	6.50	Grey silty CLAY
BH606	17	D	1.00	Brown fine to medium gravelly silty CLAY
BH606	20	D	2.50	Brown silty CLAY
BH606	22	D	4.50	Grey silty CLAY
BH606	25	D	7.50	Grey silty CLAY
BH607	25	D	5.80	Grey silty CLAY
BH607	26	D	6.50	Grey silty CLAY
BH608	16	D	1.20	Brown fine gravelly fine to coarse SAND
BH608	17	D	3.00	Brown fine gravelly fine to coarse SAND
BH608	19	D	6.45	Grey slightly fine gravelly silty CLAY
BH609	17	D	1.20	Brown silty CLAY
BH609	18	D	2.50	Brown silty CLAY
BH609	20	D	4.00	Grey silty CLAY
BH609	22	D	5.50	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13
 Date: *4.3.17*

reg. 13



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

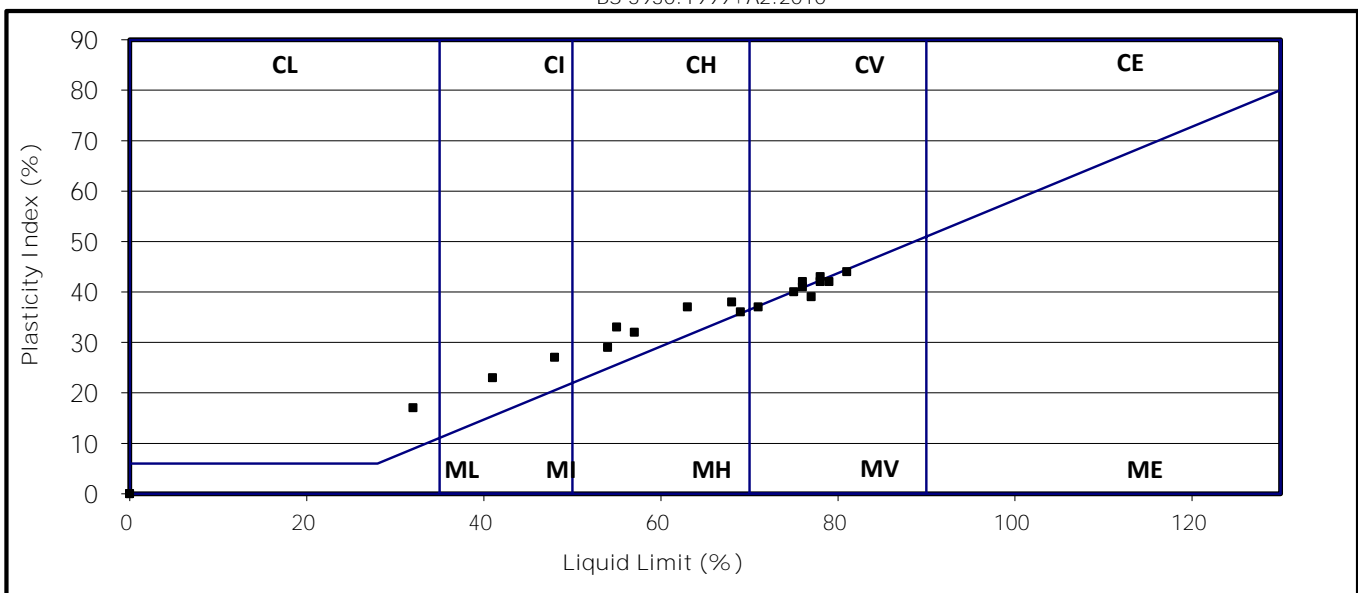
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH604/9	D	1.20	25	48	21	27	100	CI Intermediate Plasticity
BH604/7	D	5.50	34	78	36	42	100	MV Very High Plasticity
BH604/8	D	6.50	33	76	35	41	98	CV Very High Plasticity
BH605/3	D	1.20 - 1.65	27	54	25	29	100	CH High Plasticity
BH605/5	D	3.50	35	71	34	37	100	MV Very High Plasticity
BH605/7	D	5.50	34	81	37	44	100	MV Very High Plasticity
BH605/8	D	6.50	31	76	34	42	100	CV Very High Plasticity
BH606/17	D	1.00	11	32	15	17	76	CL Low Plasticity
BH606/20	D	2.50	28	55	22	33	100	CH High Plasticity
BH606/22	D	4.50	22	63	26	37	100	CH High Plasticity
BH606/25	D	7.50	28	68	30	38	100	CH High Plasticity
BH607/25	D	5.80	35	77	38	39	100	MV Very High Plasticity
BH607/26	D	6.50	35	79	37	42	100	MV Very High Plasticity
BH608/16	D	1.20	13		NP		50	
BH608/17	D	3.00	12		NP		45	
BH608/19	D	6.45	35	69	33	36	97	CH High Plasticity
BH609/17	D	1.20	24	57	25	32	100	CH High Plasticity
BH609/18	D	2.50	34	75	35	40	100	MV Very High Plasticity
BH609/20	D	4.00	20	41	18	23	100	CI Intermediate Plasticity
BH609/22	D	5.50	31	78	35	43	100	CV Very High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:
reg. 13

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

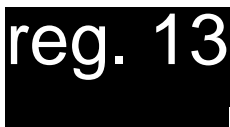
Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
BH609	24	D	7.50	Grey silty CLAY
BH610	6	D	2.00 - 2.45	Grey silty CLAY
BH610	11	D	4.00 - 4.45	Grey silty CLAY
BH611	9	D	3.00	Brown silty CLAY
BH613	17	D	1.00	Brown silty CLAY
BH613	18	D	1.20	Brown silty CLAY
BH613	21	D	3.50	Brown silty CLAY
BH613	23	D	4.00	Brown silty CLAY with occasional siltstone pockets
BH613	27	D	6.50	Brown silty CLAY
TP1001	1	D	1.00 - 1.10	Grey fine to coarse sandy silty CLAY
TP1001	2	D	1.80 - 1.90	Grey fine to coarse sandy silty CLAY
TP601	5	D	1.00 - 1.20	Brown silty CLAY
TP602	11	D	2.70 - 3.00	Grey fine to medium sandy silty CLAY
TP603	11	D	0.90 - 1.10	Grey silty CLAY
TP604	9	D	2.00 - 2.20	Grey silty CLAY
TP605	10	D	1.70 - 1.80	Brown silty CLAY
TP607	8	D	2.15	Brown silty fine to medium SAND
TP608	13	D	3.00	Grey silty CLAY
TP611	6	D	0.70 - 1.00	Brown slightly fine to medium gravelly silty CLAY
TP612	6	D	0.50 - 0.80	Brown fine to medium gravelly silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13
 Date: **4.3.17**



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

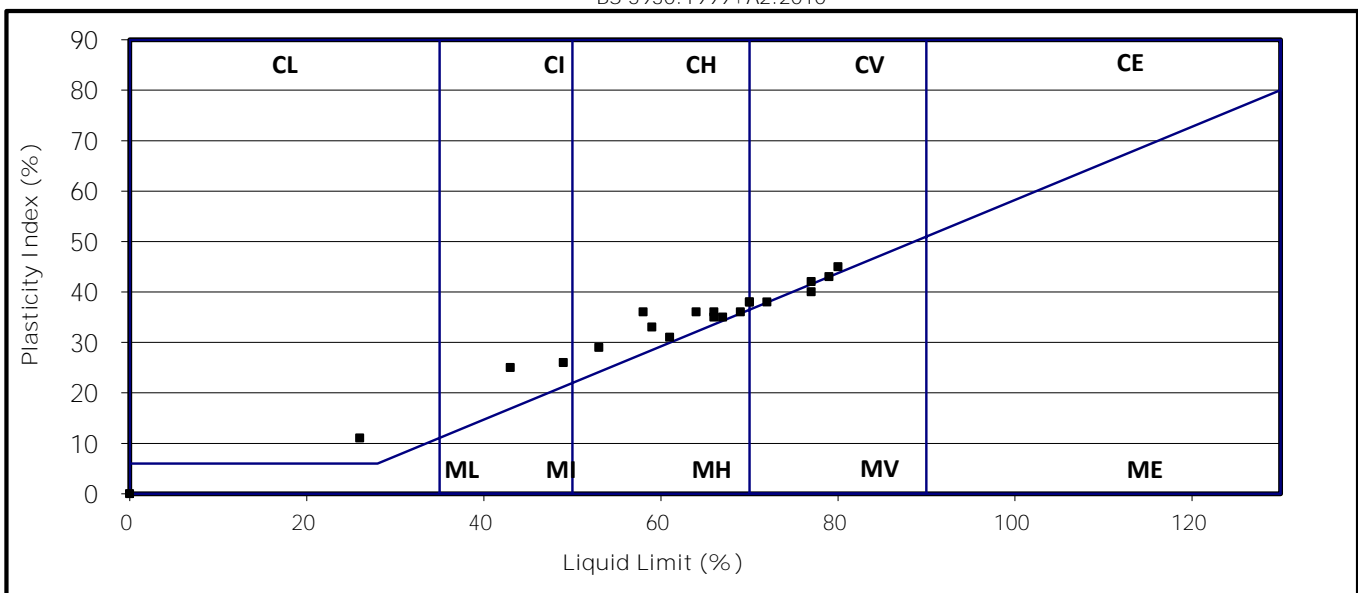
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
BH609/24	D	7.50	35	77	37	40	100	MV Very High Plasticity
BH610/6	D	2.00 - 2.45	22	53	24	29	100	CH High Plasticity
BH610/11	D	4.00 - 4.45	27	61	30	31	100	CH High Plasticity
BH611/9	D	3.00	26	26	15	11	100	CL Low Plasticity
BH613/17	D	1.00	28	66	30	36	100	CH High Plasticity
BH613/18	D	1.20	29	67	32	35	100	CH High Plasticity
BH613/21	D	3.50	32	77	35	42	100	CV Very High Plasticity
BH613/23	D	4.00	32	79	36	43	96	M/CV Very High Plasticity
BH613/27	D	6.50	33	80	35	45	100	CV Very High Plasticity
TP1001/1	D	1.00 - 1.10	33	66	31	35	95	CH High Plasticity
TP1001/2	D	1.80 - 1.90	37	72	34	38	97	CV Very High Plasticity
TP601/5	D	1.00 - 1.20	30	59	26	33	100	CH High Plasticity
TP602/11	D	2.70 - 3.00	25	49	23	26	100	CI Intermediate Plasticity
TP603/11	D	0.90 - 1.10	29	70	32	38	100	CH High Plasticity
TP604/9	D	2.00 - 2.20	26	64	28	36	100	CH High Plasticity
TP605/10	D	1.70 - 1.80	30	70	32	38	100	CH High Plasticity
TP607/8	D	2.15	19		NP		70	
TP608/13	D	3.00	30	69	33	36	100	CH High Plasticity
TP611/6	D	0.70 - 1.00	21	43	18	25	90	CI Intermediate Plasticity
TP612/6	D	0.50 - 0.80	30	58	22	36	83	CH High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 4.3.17

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
TP623	3	D	0.10	Brown fine to medium gravelly fine to medium sandy silty CLAY
TP623	13	D	1.00	Brown slightly fine to coarse sandy silty CLAY
TP625	11	D	2.00	Grey clayey SILT
TP630	3	D	0.10	Brown fine gravelly silty CLAY
TP632	12	D	2.80 - 3.00	Grey silty CLAY
TP634	3	D	0.10	Brown fine to medium gravelly silty CLAY with rootlets
TP901	4	D	2.00	Grey slightly sandy slightly fine gravelly silty CLAY
TP902	1	D	0.10	Brown slightly fine to coarse gravelly silty CLAY
TP902	3	D	0.50	Brown fine to medium gravelly silty CLAY
TP902	5	D	1.40	Brown fine sandy fine gravelly silty CLAY
TP906	1	D	0.10	Brown fine to medium gravelly silty CLAY
TP906	3	D	0.35	Brown silty CLAY
TP906A	5	D	1.20	Brown silty CLAY
TP907	6	D	3.00	Brown SILT
TP912	4	D	0.10	Brown slightly fine to medium gravelly slightly fine sandy silty CLAY
TP912	6	D	2.20 -	Grey silty CLAY
TP916	8	D	1.60	Grey slightly fine to medium gravelly slightly sandy silty CLAY
TP906	9	D	2.50	Grey silty CLAY
TP917	2	D	0.10	Brown fine to medium gravelly fine to medium sandy silty CLAY
TP917	6	D	2.50	Grey slightly fine gravelly silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By: [Redacted]
 reg. 13
 Date: 4.3.17
 reg. 13



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

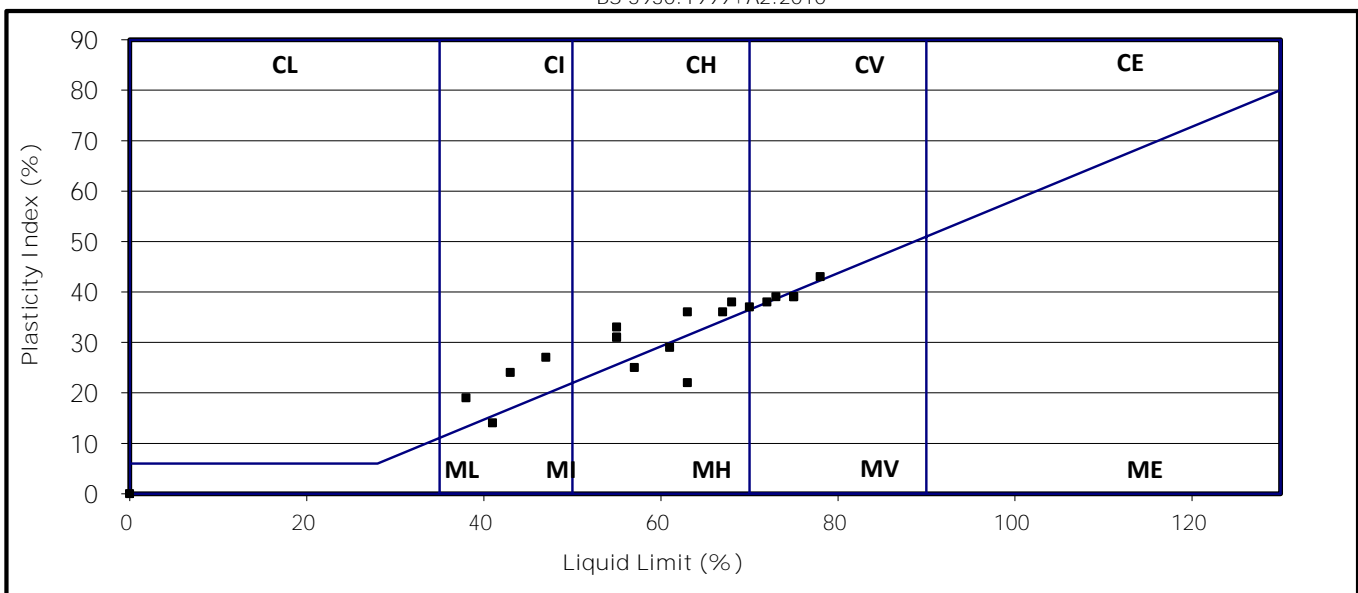
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
TP623/3	D	0.10	33	57	32	25	79	MH High Plasticity
TP623/13	D	1.00	27	68	30	38	96	CH High Plasticity
TP625/11	D	2.00	34	41	27	14	100	MI Intermediate Plasticity
TP630/3	D	0.10	30	55	24	31	100	CH High Plasticity
TP632/12	D	2.80 - 3.00	31	78	35	43	100	CV Very High Plasticity
TP634/3	D	0.10	47	63	41	22	73	MH High Plasticity
TP901/4	D	2.00	43	61	32	29	94	MH High Plasticity
TP902/1	D	0.10	19	55	22	33	85	CH High Plasticity
TP902/3	D	0.50	21	47	20	27	80	CI Intermediate Plasticity
TP902/5	D	1.40	39	75	36	39	90	MV Very High Plasticity
TP906/1	D	0.10	25	55	24	31	80	CH High Plasticity
TP906/3	D	0.35	33	63	27	36	100	CH High Plasticity
TP906A/5	D	1.20	30	70	33	37	100	CH High Plasticity
TP907/6	D	3.00	25		NP			
TP912/4	D	0.10	17	43	19	24	92	CI Intermediate Plasticity
TP912/6	D	2.20 -	29	67	31	36	100	CH High Plasticity
TP916/8	D	1.60	34	75	36	39	90	MV Very High Plasticity
TP906/9	D	2.50	38	73	34	39	100	CV Very High Plasticity
TP917/2	D	0.10	16	38	19	19	81	CI Intermediate Plasticity
TP917/6	D	2.50	31	72	34	38	96	CV Very High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:

reg. 13

Date: 4.3.17

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
TP921	2	D	0.10	Brown fine to coarse gravelly fine to medium sandy silty CLAY
TP923	4	D	0.20 - 0.30	Brown fine to medium gravelly silty CLAY
TP923	12	D	1.30 - 1.40	Grey slightly fine to coarse sandy silty CLAY
TP923	14	D	2.20 - 2.30	Grey silty CLAY
TP923	17	D	3.00 - 3.10	Grey silty CLAY
TP924	3	D	0.30 - 0.40	Brown silty CLAY
TP924	11	D	0.70 - 0.90	Brown fine to medium gravelly slightly sandy silty CLAY
TP924	10	D	2.40	Grey silty CLAY
TP925	3	D	0.50 - 0.60	Brown fine to medium gravelly fine to coarse sandy silty CLAY
TP925	8	D	1.60 - 1.70	Brown fine gravelly slightly sandy silty CLAY
TP925	10	D	2.50 - 2.60	Grey fine to medium gravelly silty CLAY
TP927	2	D	0.10 - 0.20	Brown sandy fine gravelly silty CLAY
TP927	12	D	2.00 - 2.10	Grey silty CLAY
TP927	13	D	2.50 - 2.70	Grey silty CLAY
TP928	5	D	0.50 - 0.80	Brown silty CLAY
TP928	8	D	1.10 - 1.30	Grey fine to medium sandy silty CLAY
TP928	11	D	2.00 - 2.30	Brown fine to medium gravelly silty CLAY
TP929	3	D	0.30 - 0.40	Brown fine sandy silty CLAY
TP929	6	D	0.90 - 1.00	Brown slightly fine sandy fine to medium gravelly silty CLAY
TP929	10	D	2.20 - 2.30	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
 reg. 13
 Date: 5.3.17



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

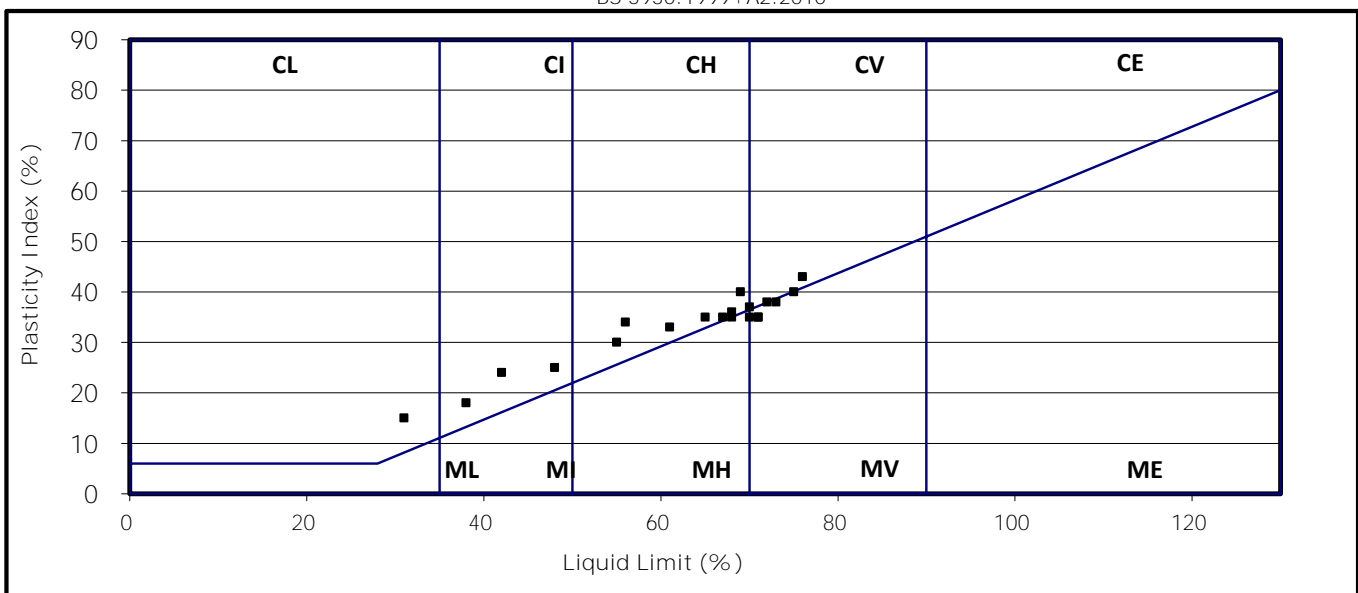
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
TP921/2	D	0.10	20	48	23	25	68	CI Intermediate Plasticity
TP923/4	D	0.20 - 0.30	15	38	20	18	70	CI Intermediate Plasticity
TP923/12	D	1.30 - 1.40	38	70	35	35	96	MH/V High/High Plasticity
TP923/14	D	2.20 - 2.30	33	75	35	40	100	MV Very High Plasticity
TP923/17	D	3.00 - 3.10	33	73	35	38	100	MV Very High Plasticity
TP924/3	D	0.30 - 0.40	21	42	18	24	100	CI Intermediate Plasticity
TP924/11	D	0.70 - 0.90	32	65	30	35	75	CH High Plasticity
TP924/10	D	2.40	34	71	36	35	100	MV Very High Plasticity
TP925/3	D	0.50 - 0.60	17	31	16	15	78	CL Low Plasticity
TP925/8	D	1.60 - 1.70	31	67	32	35	94	CH High Plasticity
TP925/10	D	2.50 - 2.60	32	69	29	40	85	CH High Plasticity
TP927/2	D	0.10 - 0.20	22	55	25	30	90	CH High Plasticity
TP927/12	D	2.00 - 2.10	31	72	34	38	100	CV Very High Plasticity
TP927/13	D	2.50 - 2.70	30	68	32	36	100	CH High Plasticity
TP928/5	D	0.50 - 0.80	29	76	33	43	100	CV Very High Plasticity
TP928/8	D	1.10 - 1.30	36	70	33	37	100	CH High Plasticity
TP928/11	D	2.00 - 2.30	39	68	33	35	85	MH High Plasticity
TP929/3	D	0.30 - 0.40	26	56	22	34	100	CH High Plasticity
TP929/6	D	0.90 - 1.00	33	61	28	33	88	CH High Plasticity
TP929/10	D	2.20 - 2.30	40	71	36	35	100	MV Very High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:

reg. 13

Date: 5.3.17

reg. 13



Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
TP929	13	D	3.00 - 3.10	Grey silty CLAY
TP930	2	D	1.00 - 1.10	Brown slightly fine gravelly sandy silty CLAY
TP930	5	D	1.70 - 2.00	Grey slightly fine to coarse sandy silty CLAY
TP931	4	D	0.50 - 0.60	Brown fine to medium gravelly silty CLAY
TP931	7	D	0.90 - 1.00	Brown slightly fine sandy silty CLAY
TP931	10	D	1.40 - 1.50	Brown silty CLAY
TP931	12	D	1.80 - 1.90	Grey/ brown silty CLAY
TP931	13	D	2.50 - 2.60	Grey slightly fine to coarse sandy fine to medium gravelly silty CLAY
TP932	3	D	0.10 - 0.60	Brown fine to medium gravelly silty CLAY with rootlets
TP932	5	D	0.60 - 0.70	Brown silty CLAY
TPSA1004	8	D	2.50 - 2.80	Grey fine to coarse sandy silty CLAY
TPSA911	3	D	0.10	Brown fine to medium gravelly silty CLAY with rootlets
W1001	5	D	1.00 - 1.20	Brown fine to medium gravelly sandy silty CLAY
W1001	9	D	2.00	Grey silty CLAY
W1001	10	D	3.00	Grey silty CLAY
WS1101	10	D	2.00	Grey sandy silty CLAY
WS1101	11	D	3.00	Brown fine gravelly silty CLAY
WS1102	5	D	1.20	Brown fine to medium gravelly slightly clayey silty SAND
WS601	6	D	1.00 - 1.20	Brown silty CLAY
WS605	9	D	2.00	Grey silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By: **reg. 13**
Date: **5.3.17**



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

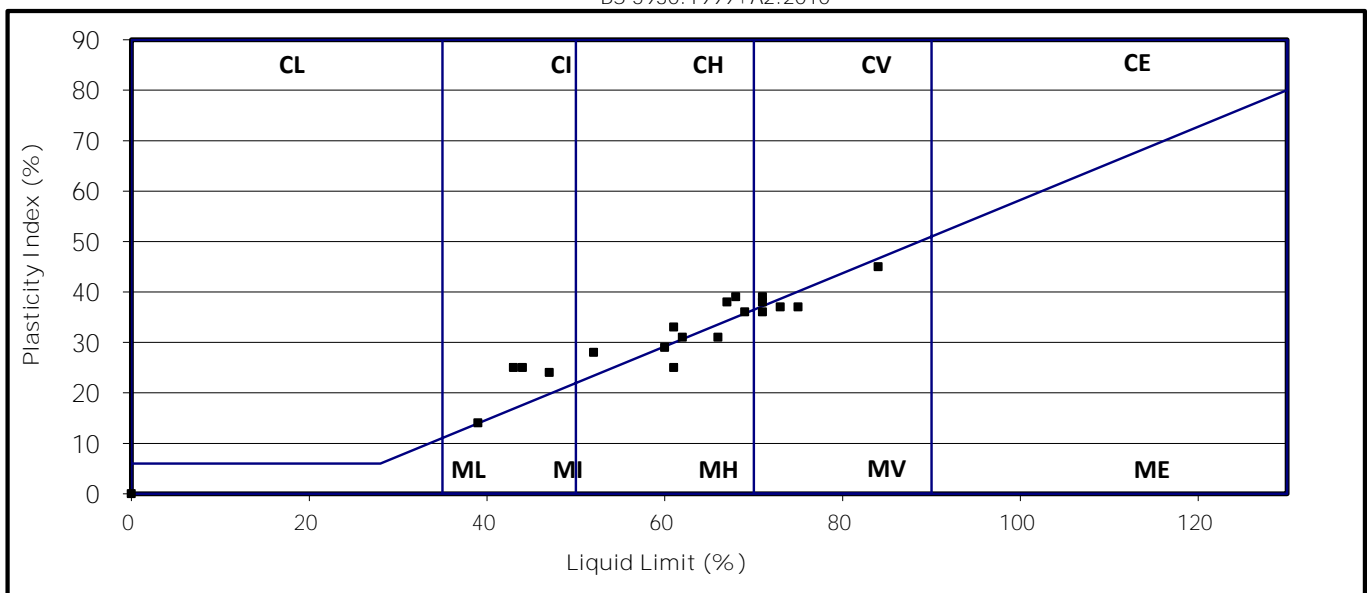
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
TP929/13	D	3.00 - 3.10	37	68	29	39	100	CH High Plasticity
TP930/2	D	1.00 - 1.10	27	67	29	38	90	CH High Plasticity
TP930/5	D	1.70 - 2.00	38	84	39	45	96	MV Very High Plasticity
TP931/4	D	0.50 - 0.60	20	44	19	25	88	CI Intermediate Plasticity
TP931/7	D	0.90 - 1.00	34	71	32	39	100	CV Very High Plasticity
TP931/10	D	1.40 - 1.50	37	69	33	36	100	CH High Plasticity
TP931/12	D	1.80 - 1.90	38	66	35	31	100	MH High Plasticity
TP931/13	D	2.50 - 2.60	41	61	36	25	90	MH High Plasticity
TP932/3	D	0.10 - 0.60	20	47	23	24	86	CI Intermediate Plasticity
TP932/5	D	0.60 - 0.70	30	71	33	38	100	CV Very High Plasticity
TPSA1004/8	D	2.50 - 2.80	26	61	28	33	90	CH High Plasticity
TPSA911/3	D	0.10	23	39	25	14	88	CI Intermediate Plasticity
W1001/5	D	1.00 - 1.20	16	43	18	25	66	CI Intermediate Plasticity
W1001/9	D	2.00	36	75	38	37	100	MV Very High Plasticity
W1001/10	D	3.00	34	73	36	37	100	MV Very High Plasticity
WS1101/10	D	2.00	26	52	24	28	100	CH High Plasticity
WS1101/11	D	3.00	43	62	31	31	90	CH High Plasticity
WS1102/5	D	1.20	11		NP			
WS601/6	D	1.00 - 1.20	33	60	31	29	100	MH High Plasticity
WS605/9	D	2.00	33	71	35	36	100	MV Very High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:

reg. 13

Date: 5.3.17

reg. 13



Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
WS606	2	D	0.00 - 0.30	Brown fine to medium gravelly silty CLAY
WS606	14	D	1.60 - 1.70	Grey silty CLAY
WS606	13	D	3.00	Brown silty CLAY
WS608	11	D	1.20 - 2.00	Brown slightly fine to coarse sandy silty CLAY
WS611	9	D	1.20 - 2.00	Brown silty CLAY
WS613	2	D	0.10 - 1.20	Brown slightly fine gravelly silty CLAY
WS614	11	D	2.70	Grey silty CLAY
WS616	5	D	1.20	Brown fine to medium gravelly sandy silty CLAY
WS618	5	D	1.20	Brown fine to medium gravelly slightly clayey silty SAND
WS619	8	D	2.00	Brown silty CLAY
WS620	5	D	0.40 - 0.70	Brown slightly fine to medium sandy fine gravelly silty CLAY
WS621	5	D	0.50 - 0.80	Brown fine to medium gravelly silty CLAY
WS621	11	D	3.00	Brown silty CLAY
WS901	5	D	1.20 - 1.30	Grey slightly fine to medium gravelly slightly sandy silty CLAY
WS902	6	D	1.20	Grey slightly fine to coarse sandy silty CLAY
WS903	7	D	2.00	Brown/ grey fine to coarse sandy silty CLAY
WS904	2	D	0.20 - 0.50	Brown fine to medium gravelly sandy silty CLAY
WS904	8	D	1.20	Brown fine to medium sandy silty CLAY
WS904	9	D	2.00	Grey slightly fine gravelly silty CLAY
WS904	10	D	3.00	Grey sandy fine to medium gravelly silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 5.3.17

reg. 13



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
BS 1377 : Part 2 : 5 : 1990

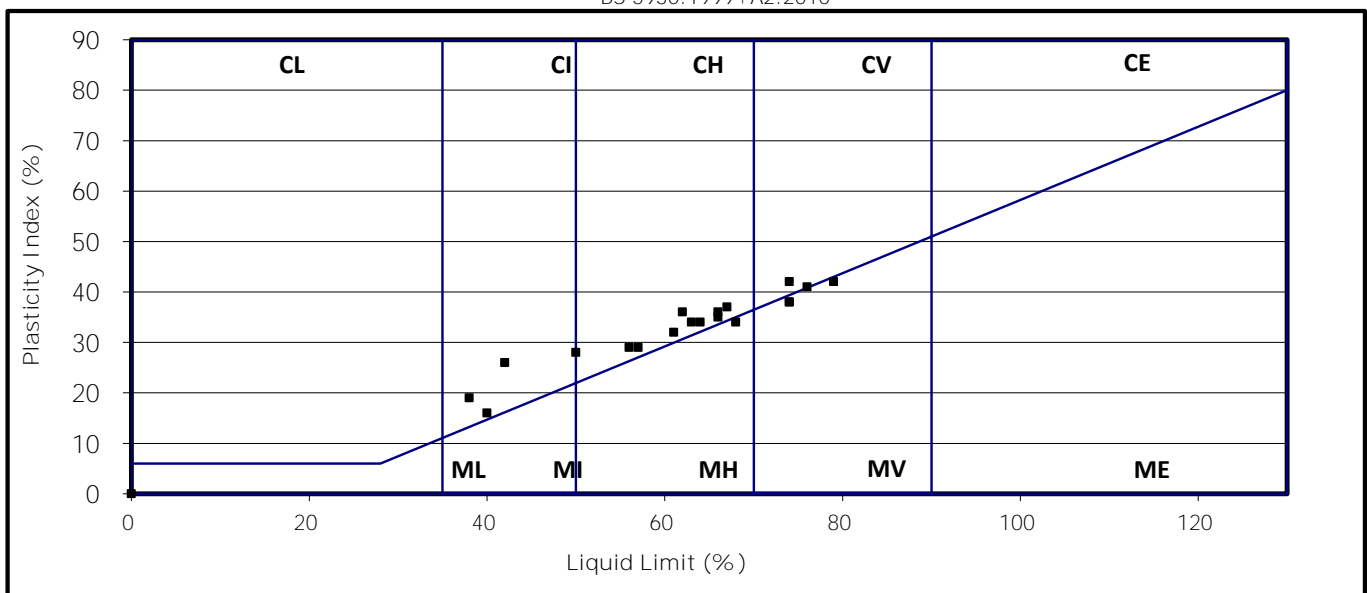
Client Ref.: UA008426-01
Contract Location: Northstowe Phase 2
Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
WS606/2	D	- 0.30	20	50	22	28	80	CI/H Inter/High Plasticity
WS606/14	D	1.60 - 1.70	22	40	24	16	100	CI Intermediate Plasticity
WS606/13	D	3.00	29	74	32	42	100	CV Very High Plasticity
WS608/11	D	1.20 - 2.00	34	74	36	38	97	MV Very High Plasticity
WS611/9	D	1.20 - 2.00	28	66	31	35	100	CH High Plasticity
WS613/2	D	0.10 - 1.20	34	79	37	42	95	MV Very High Plasticity
WS614/11	D	2.70	28	67	30	37	100	CH High Plasticity
WS616/5	D	1.20	18	38	19	19	90	CI Intermediate Plasticity
WS618/5	D	1.20	12			NP		
WS619/8	D	2.00	33	66	30	36	100	CH High Plasticity
WS620/5	D	0.40 - 0.70	27	64	30	34	90	CH High Plasticity
WS621/5	D	0.50 - 0.80	33	61	29	32	75	CH High Plasticity
WS621/11	D	3.00	32	76	35	41	100	CV Very High Plasticity
WS901/5	D	1.20 - 1.30	26	63	29	34	90	CH High Plasticity
WS902/6	D	1.20	32	74	36	38	93	MV Very High Plasticity
WS903/7	D	2.00	32	62	26	36	75	CH High Plasticity
WS904/2	D	0.20 - 0.50	17	42	16	26	76	CI Intermediate Plasticity
WS904/8	D	1.20	31	57	28	29	100	CH High Plasticity
WS904/9	D	2.00	38	68	34	34	92	MH High Plasticity
WS904/10	D	3.00	33	56	27	29	93	CH High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:
reg. 13
Date: 5.3.17

reg. 13



Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole Number	Sample Number	Type	Depth (m)	Description of Sample*
WS905	6	D	2.00	Brown fine gravelly fine to medium sandy silty CLAY
WS905	7	D	3.00	Grey fine sandy silty CLAY
WS906	8	D	2.00	Brown fine to medium sandy silty CLAY
WS906	10	D	3.00	Grey fine to medium gravelly fine to medium sandy silty CLAY

Note: Results on this table are in summary format and may not meet the requirements of the relevant standards, additional information is held by the laboratory



For and on behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13
 Date: 5.3.17 **reg. 13**



Test Report: Method of the Determination of the Plastic Limit and Plasticity Index
 BS 1377 : Part 2 : 5 : 1990

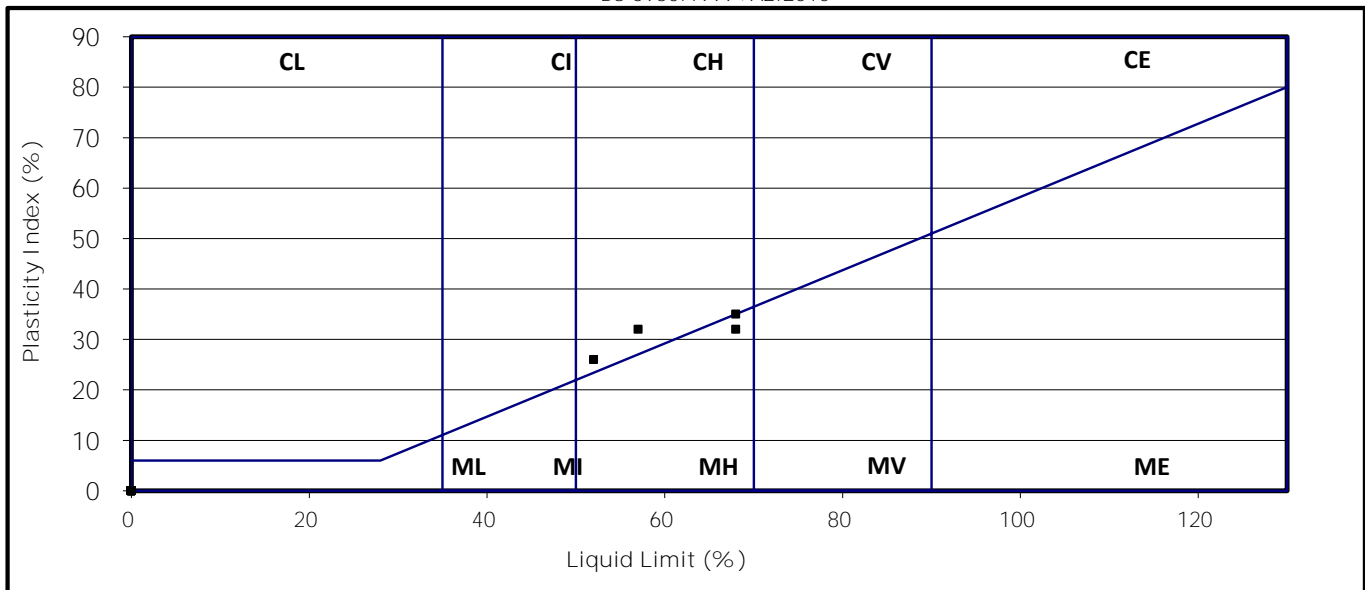
Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142

Hole/ Sample Number	Sample Type	Depth m	Moisture Content % Cl. 3.2	Liquid Limit % Cl. 4.3/4.4	Plastic Limit % Cl. 5.3	Plasticity Index % Cl. 5.4	% Passing .425mm	Remarks
WS905/6	D	2.00	28	57	25	32	94	CH High Plasticity
WS905/7	D	3.00	30	68	33	35	100	MH High Plasticity
WS906/8	D	2.00	41	68	36	32	100	MH High Plasticity
WS906/10	D	3.00	24	52	26	26	93	CH High Plasticity

Symbols: NP : Non Plastic # : Liquid Limit and Plastic Limit Wet Sieved

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.

BS 5930:1999+A2:2010



For and on behalf of GEO Site & Testing Services Ltd



Authorised By:
reg. 13

reg. 13



Test Report:

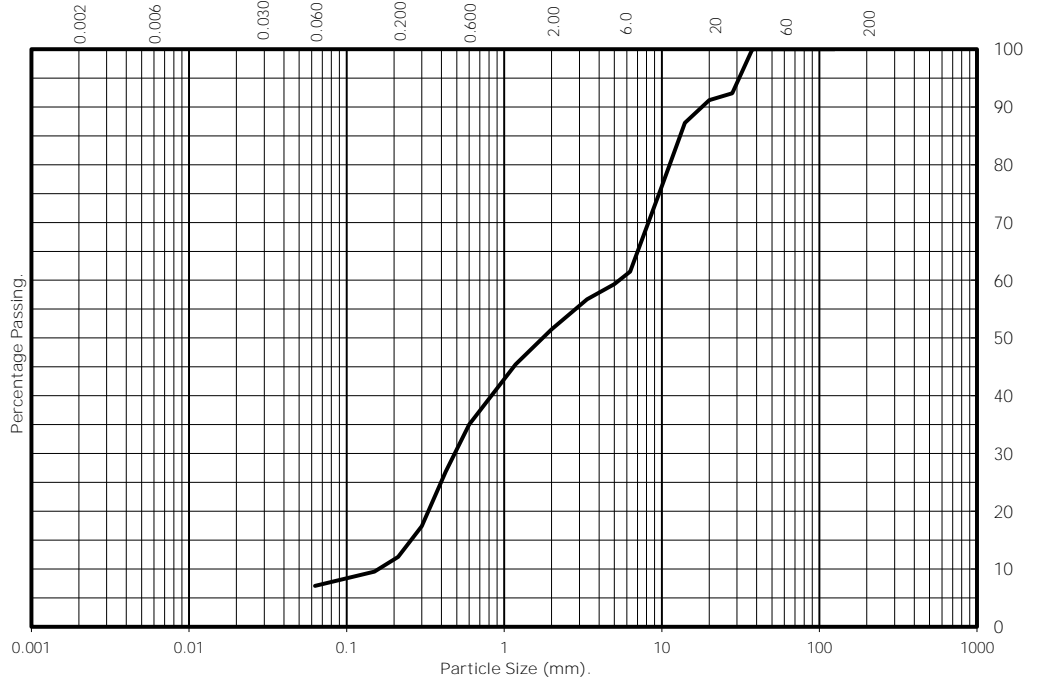
Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 2
 Contract Number: 34142 Depth from (m): 0.30
 Hole Number: BH608 Depth to (m): 1.20
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown slightly silty fine to coarse sandy GRAVEL

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	92
20	91
14	87
10	76
6.3	61
5.0	59
3.35	57
2.00	51
1.18	45
0.60	35
0.425	27
0.300	17
0.212	12
0.150	10
0.063	7



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	7	44	49	0	Total Percentage

Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



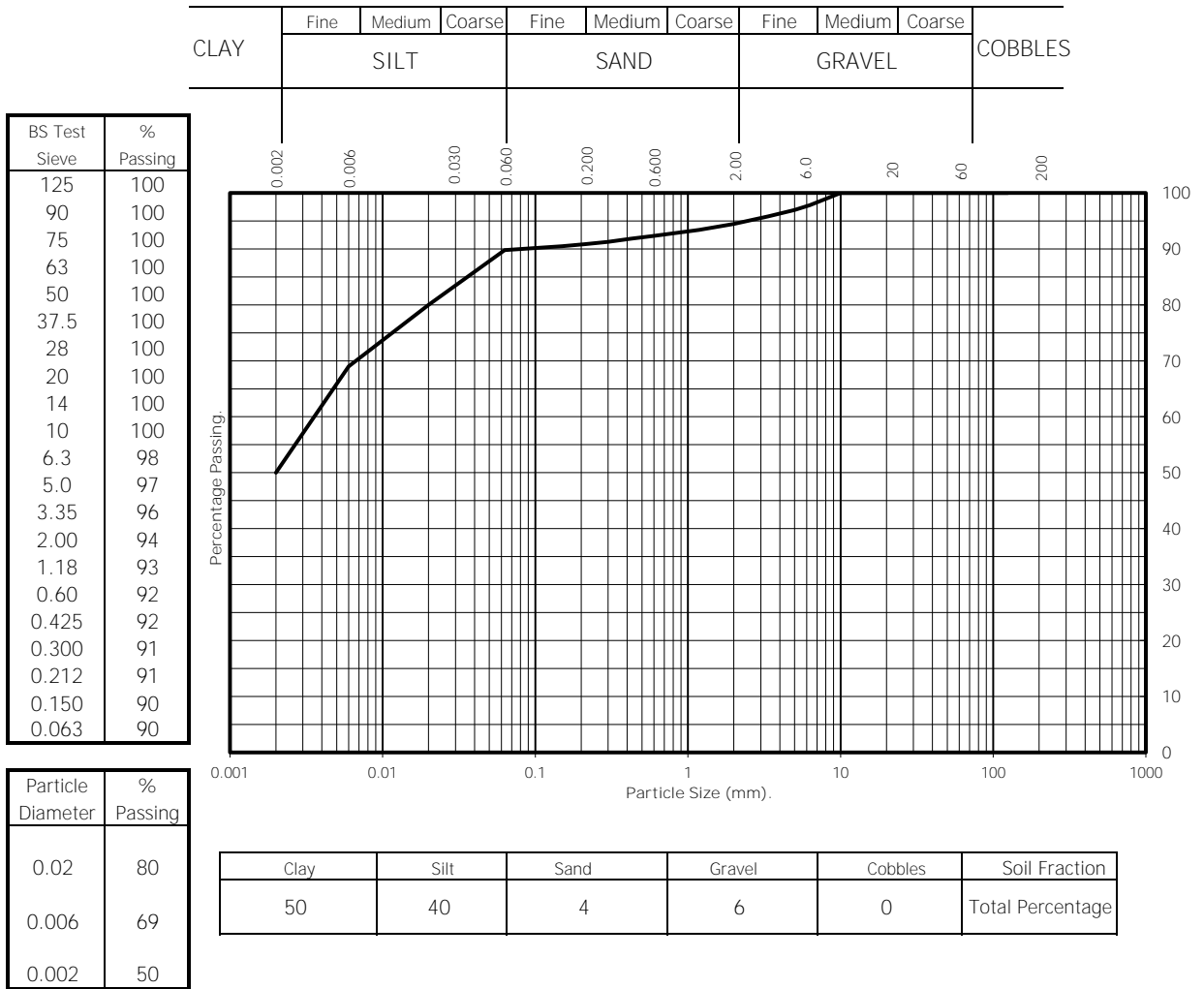
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	23
Contract Number:	34142	Depth from (m):	4.00
Hole Number:	BH1001	Depth to (m):	5.00
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to coarse sandy fine to medium gravelly silty CLAY		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



Test Report:

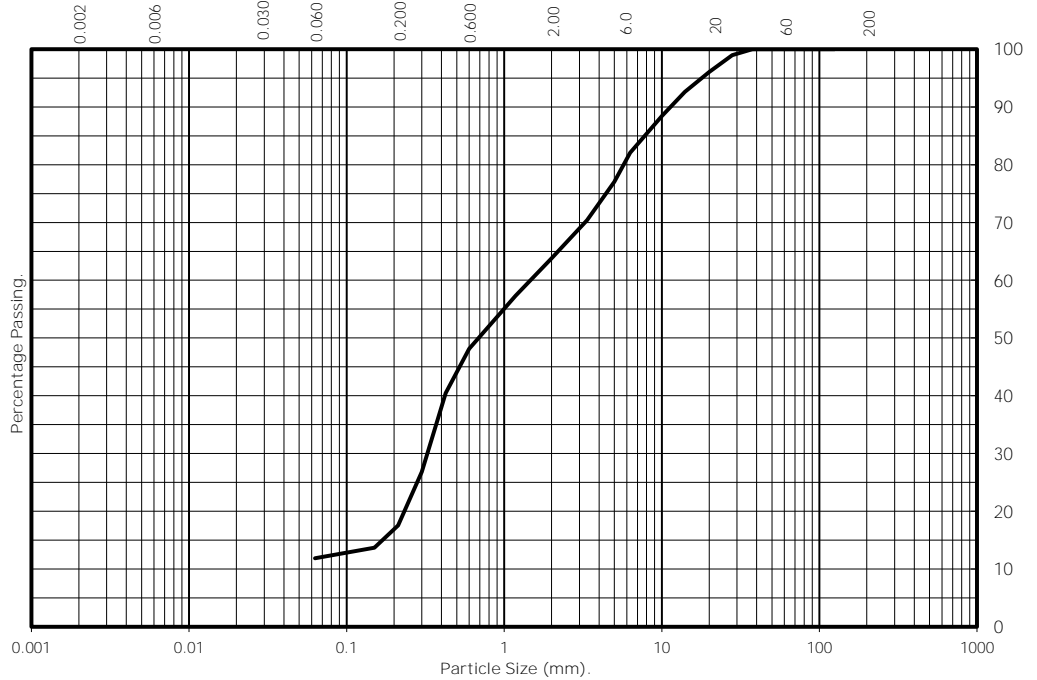
Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 5
 Contract Number: 34142 Depth from (m): 2.50
 Hole Number: BH1002 Depth to (m): 3.00
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to coarse gravelly fine to coarse SAND.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	99
20	96
14	93
10	88
6.3	82
5.0	77
3.35	70
2.00	64
1.18	57
0.60	48
0.425	40
0.300	27
0.212	18
0.150	14
0.063	12



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	12	52	36	0	Total Percentage

Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

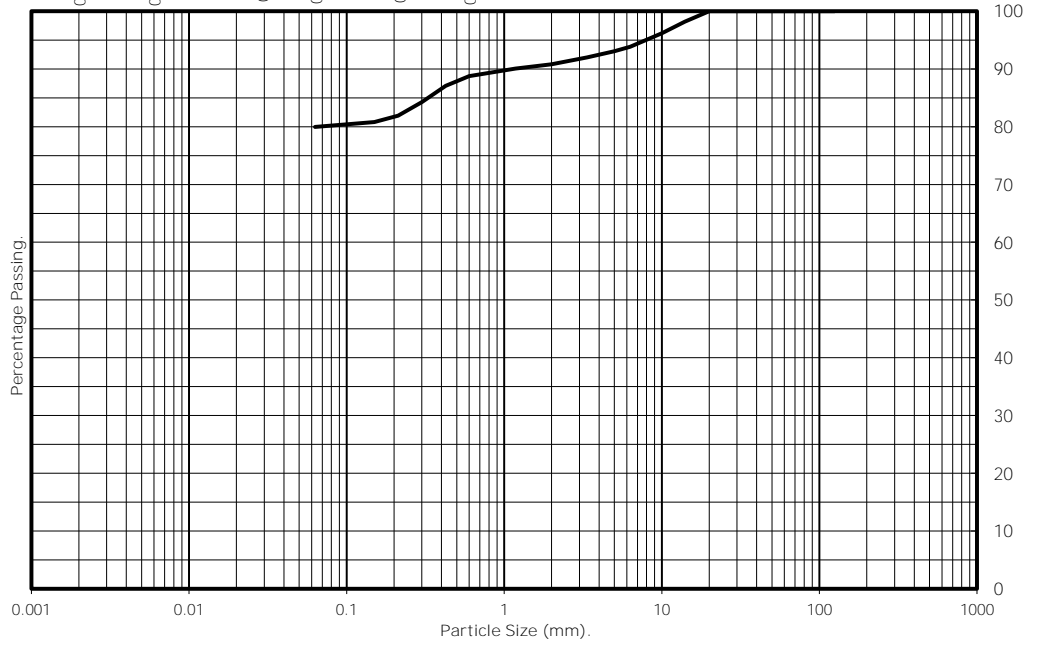
BS 1377 Part 2:1990.

Wet Sieve, Clause 9.2

Client ref:	UA008426-01	Sample Number:	6
Contract Number:	34142	Depth from (m):	3.30
Hole Number:	BH1002	Depth to (m):	3.70
		Sample Type:	B
Location:		Northstowe Phase 2	
Description:		Brown slightly fine to medium gravelly fine to coarse sandy silty CLAY.	

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	98
10	96
6.3	94
5.0	93
3.35	92
2.00	91
1.18	90
0.60	89
0.425	87
0.300	84
0.212	82
0.150	81
0.063	80



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	80	11	9	0	Total Percentage

Remarks:
- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

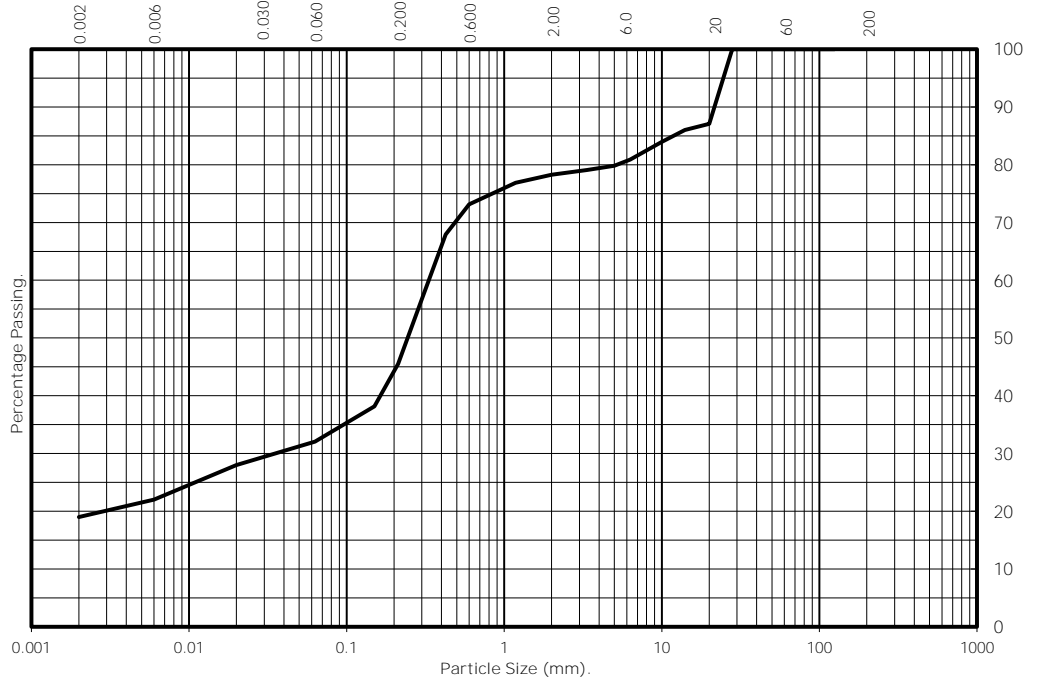
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	6
Contract Number:	34142	Depth from (m):	0.10
Hole Number:	BH1003	Depth to (m):	0.30
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown silty clayey fine to medium gravelly fine to coarse SAND.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	87
14	86
10	84
6.3	81
5.0	80
3.35	79
2.00	78
1.18	77
0.60	73
0.425	68
0.300	57
0.212	45
0.150	38
0.063	32



Particle Diameter	% Passing
0.02	28
0.006	22
0.002	19

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
19	13	46	22	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

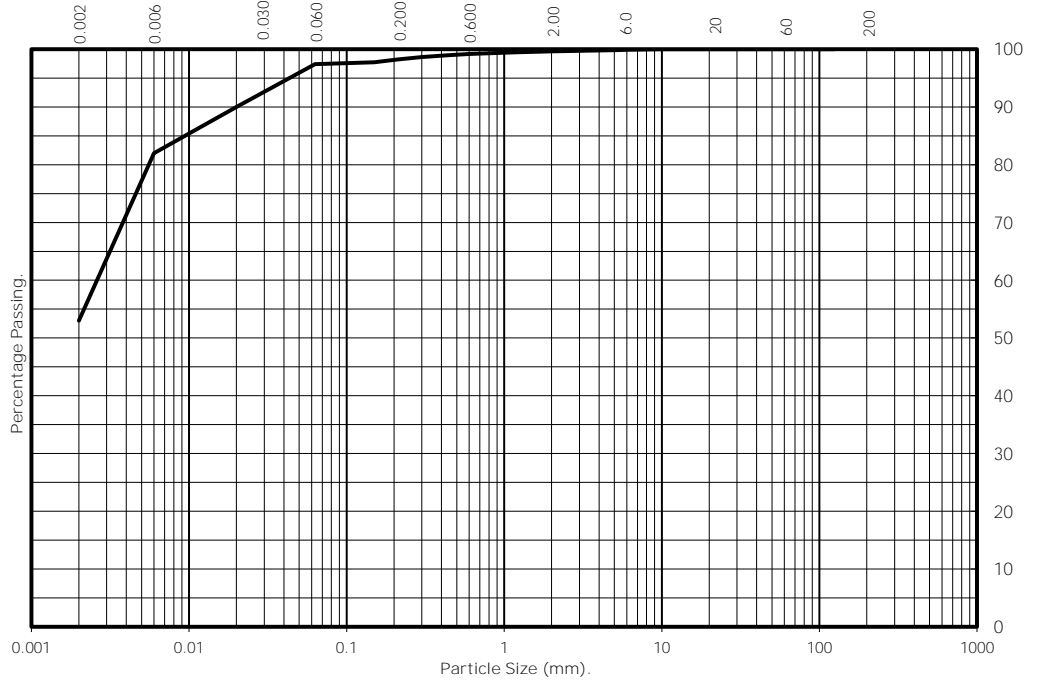
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	10
Contract Number:	34142	Depth from (m):	2.00
Hole Number:	BH1003	Depth to (m):	3.00
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to medium sandy silty CLAY.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	100
10	100
6.3	100
5.0	100
3.35	100
2.00	100
1.18	99
0.60	99
0.425	99
0.300	99
0.212	98
0.150	98
0.063	97



Particle Diameter	% Passing
0.02	90
0.006	82
0.002	53

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
53	44	3	0	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
Sean Penn (Administrative/Quality Assistant)

Date: 7.3.17



Test Report:

Particle Size Distribution Test

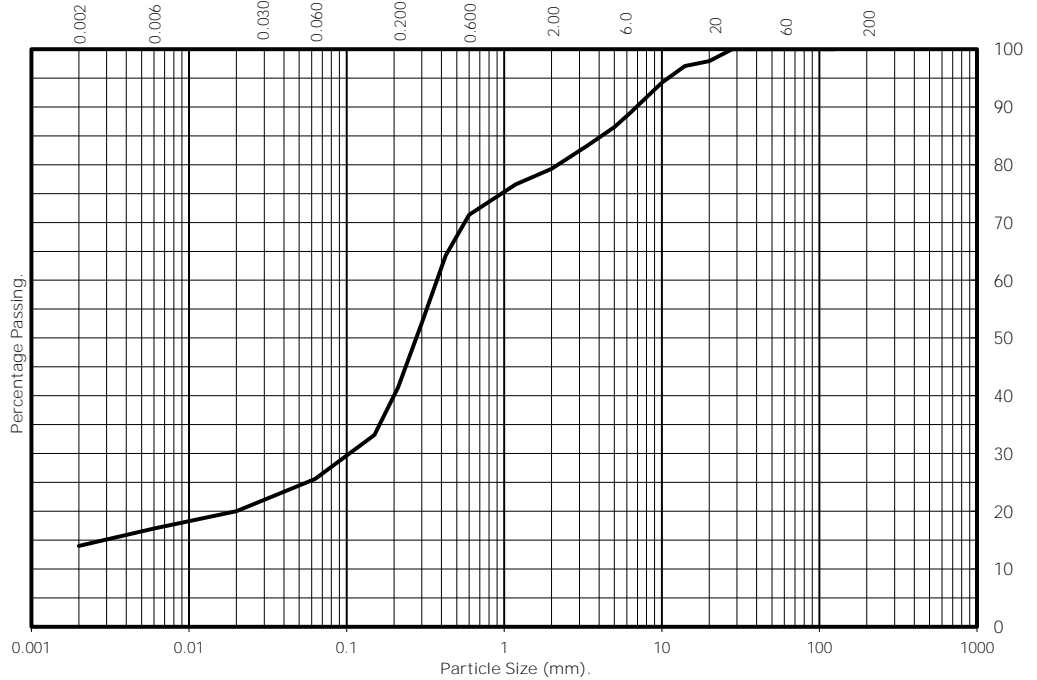
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	29
Contract Number:	34142	Depth from (m):	1.00
Hole Number:	BH1004	Depth to (m):	
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown silty clayey fine to medium gravelly fine to coarse SAND.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	98
14	97
10	94
6.3	89
5.0	87
3.35	83
2.00	79
1.18	77
0.60	71
0.425	64
0.300	53
0.212	41
0.150	33
0.063	26



Particle Diameter	% Passing
0.02	20
0.006	17
0.002	14

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
14	12	53	21	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.11

reg. 13



Test Report:

Particle Size Distribution Test

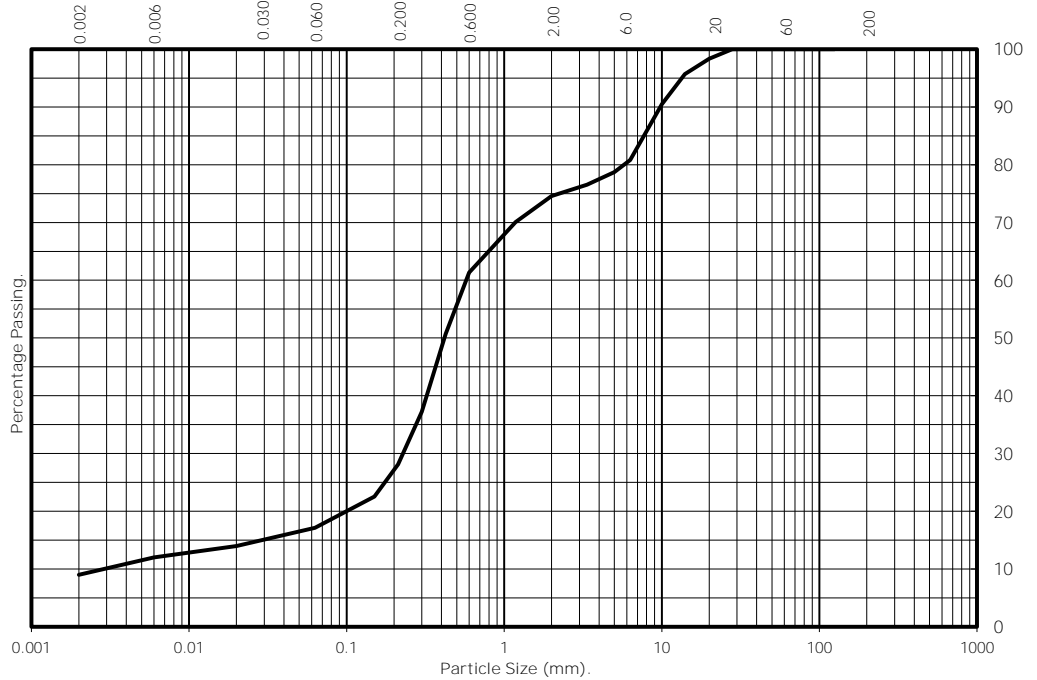
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	31
Contract Number:	34142	Depth from (m):	3.20
Hole Number:	BH1004	Depth to (m):	
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown silty clayey fine to medium gravelly fine to coarse SAND.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	98
14	96
10	90
6.3	81
5.0	79
3.35	77
2.00	75
1.18	70
0.60	61
0.425	51
0.300	37
0.212	28
0.150	23
0.063	17



Particle Diameter	% Passing
0.02	14
0.006	12
0.002	9

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
9	8	58	25	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



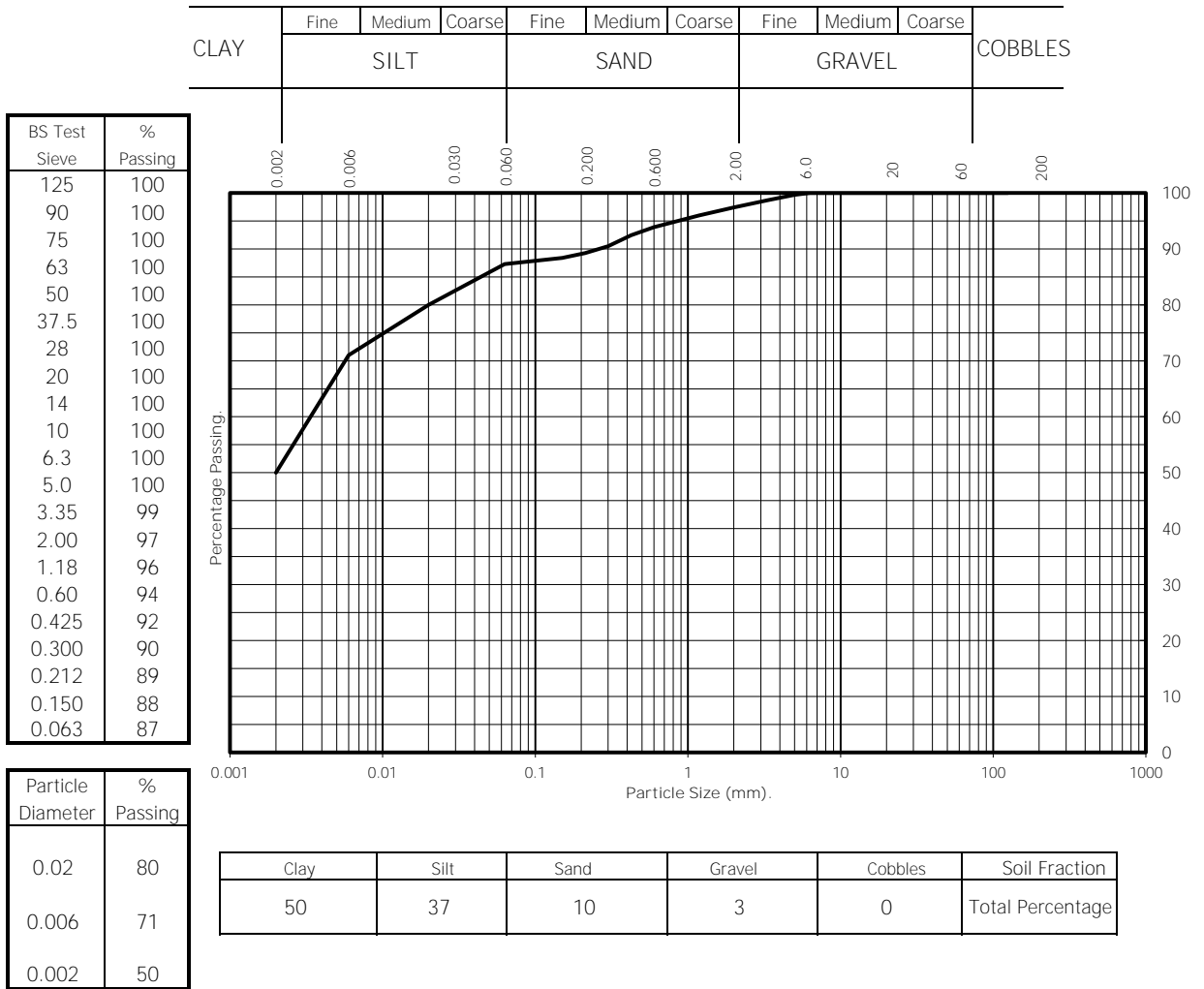
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	32
Contract Number:	34142	Depth from (m):	4.00
Hole Number:	BH1004	Depth to (m):	
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to medium gravelly fine to coarse sandy silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



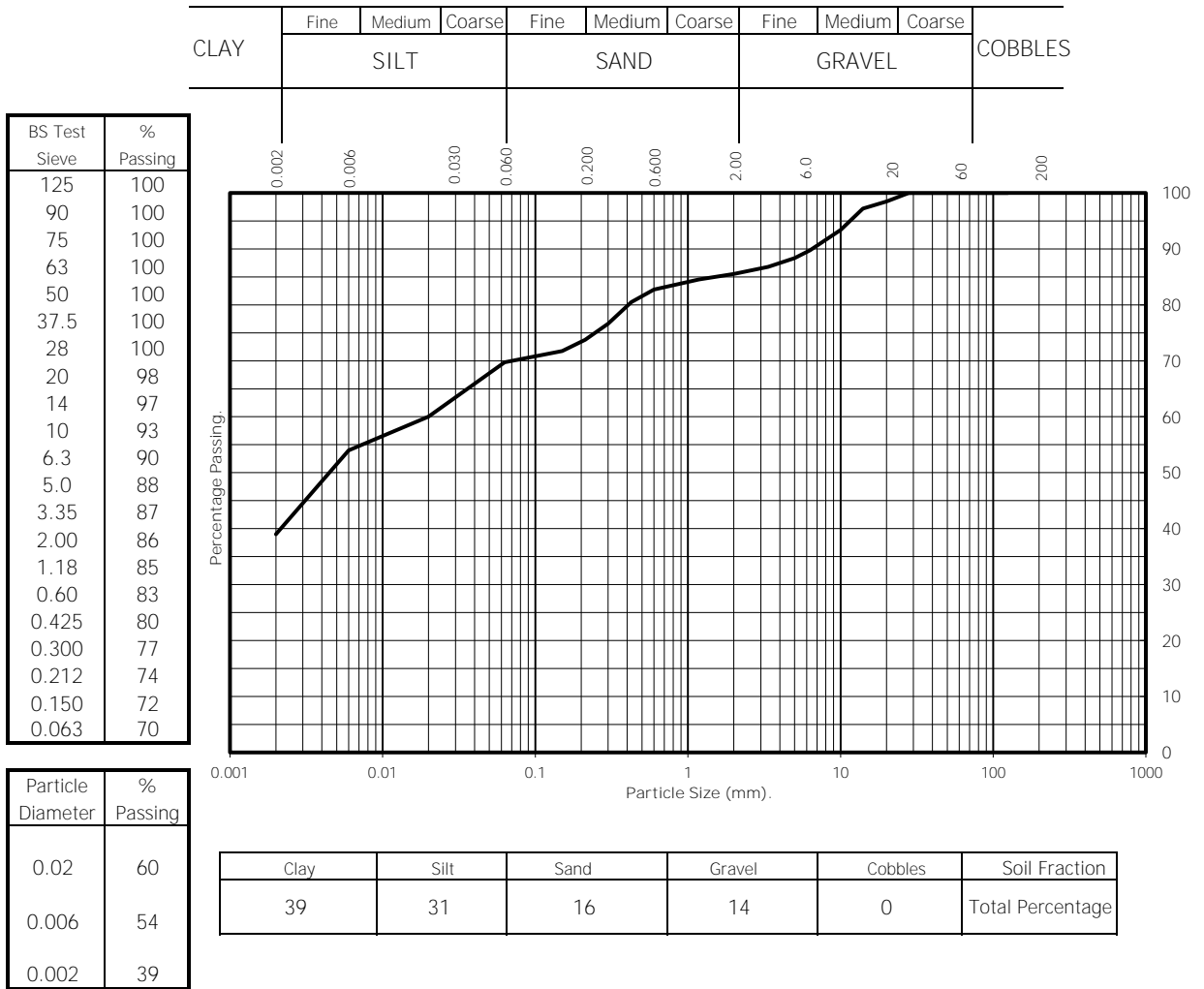
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	9
Contract Number:	34142	Depth from (m):	1.00
Hole Number:	BH1101	Depth to (m):	1.50
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown fine to coarse gravelly fine to coarse sandy silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



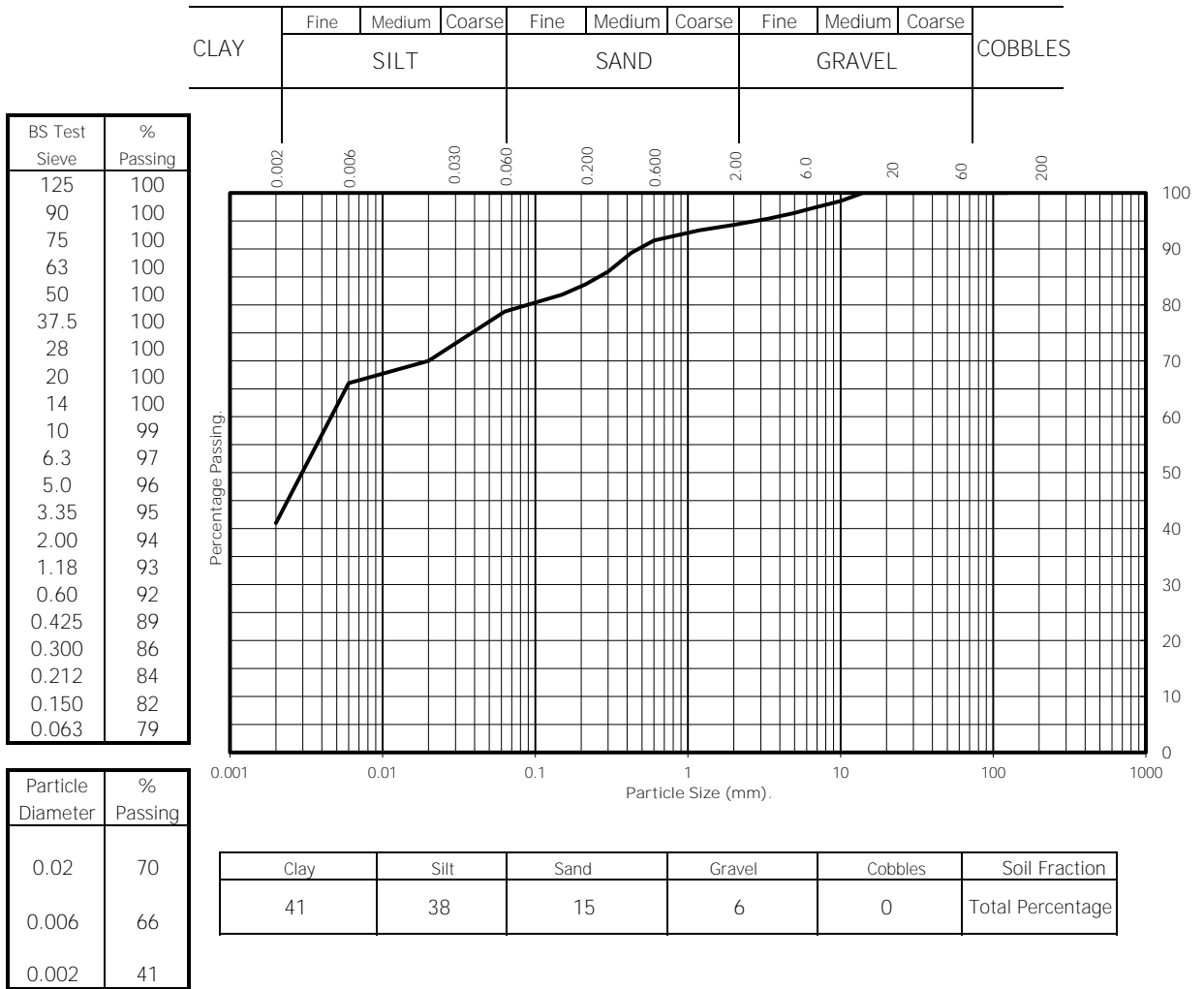
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	10
Contract Number:	34142	Depth from (m):	1.50
Hole Number:	BH1101	Depth to (m):	1.95
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to medium gravelly fine to coarse sandy silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



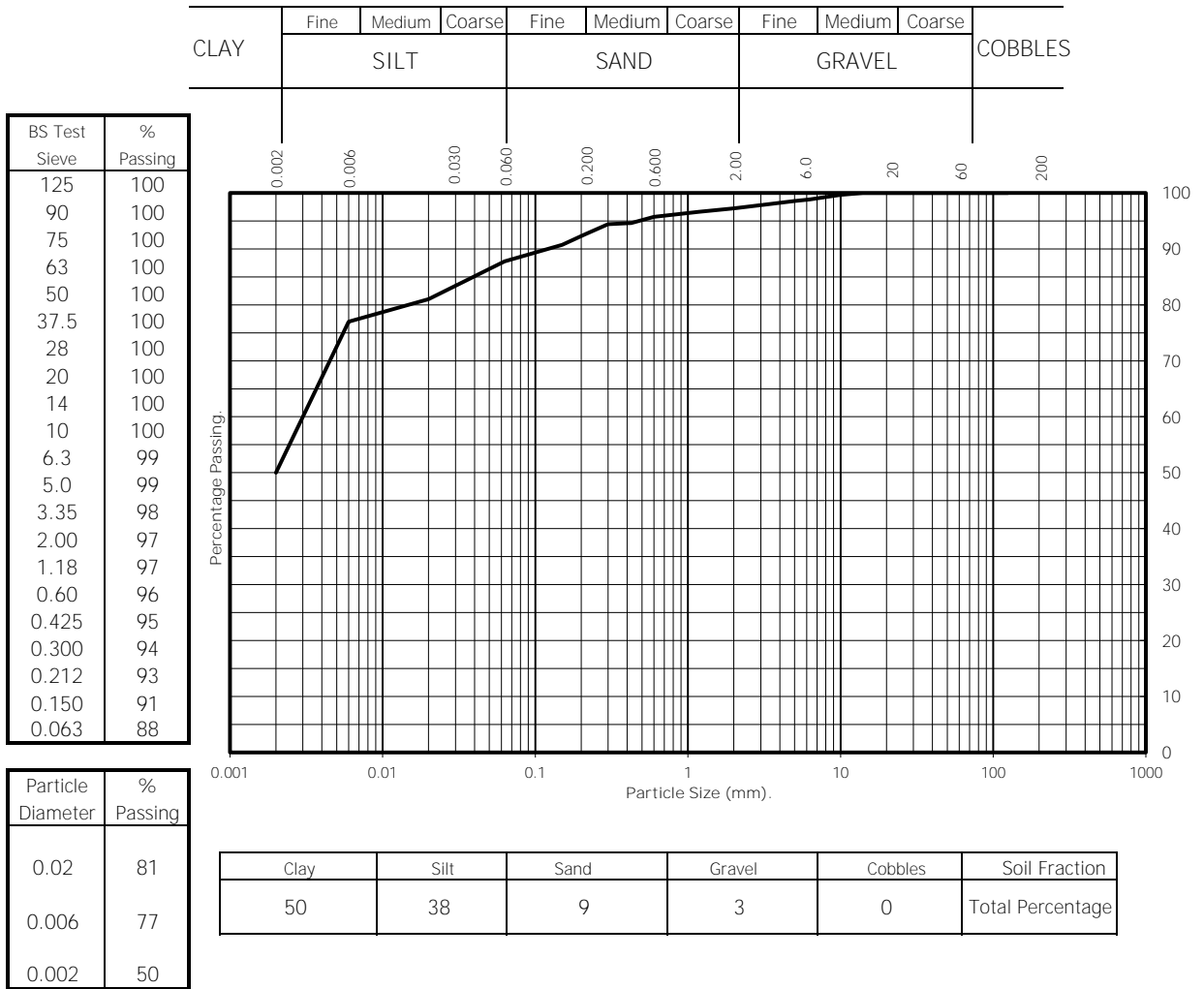
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	11
Contract Number:	34142	Depth from (m):	2.00
Hole Number:	BH1101	Depth to (m):	2.50
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to coarse sandy fine to medium gravelly silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



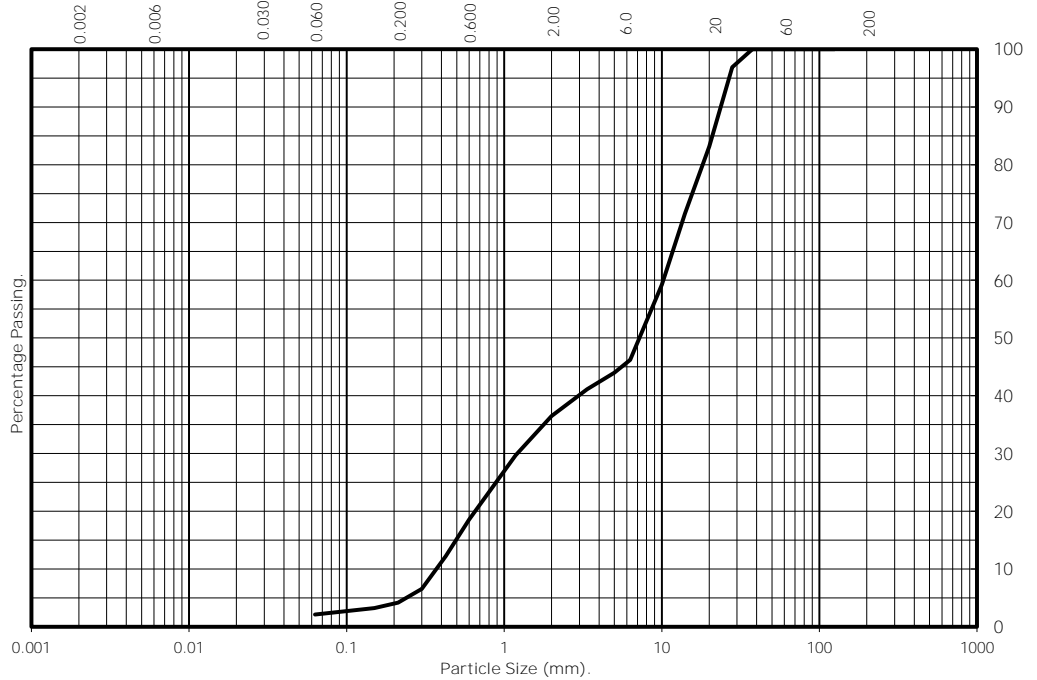
Test Report:

Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 18
 Contract Number: 34142 Depth from (m): 4.50
 Hole Number: BH1101 Depth to (m): 4.95
 Sample Type: B
 Location: Northstowe Phase 2
 Description: Brown slightly silty clayey fine to coarse sandy fine to coarse GRAVEL.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	97
20	83
14	71
10	59
6.3	46
5.0	44
3.35	41
2.00	36
1.18	30
0.60	19
0.425	12
0.300	7
0.212	4
0.150	3
0.063	2



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	2	34	64	0	Total Percentage

Remarks:
 # - not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
 reg. 13

Date: 7.3.11

reg. 13



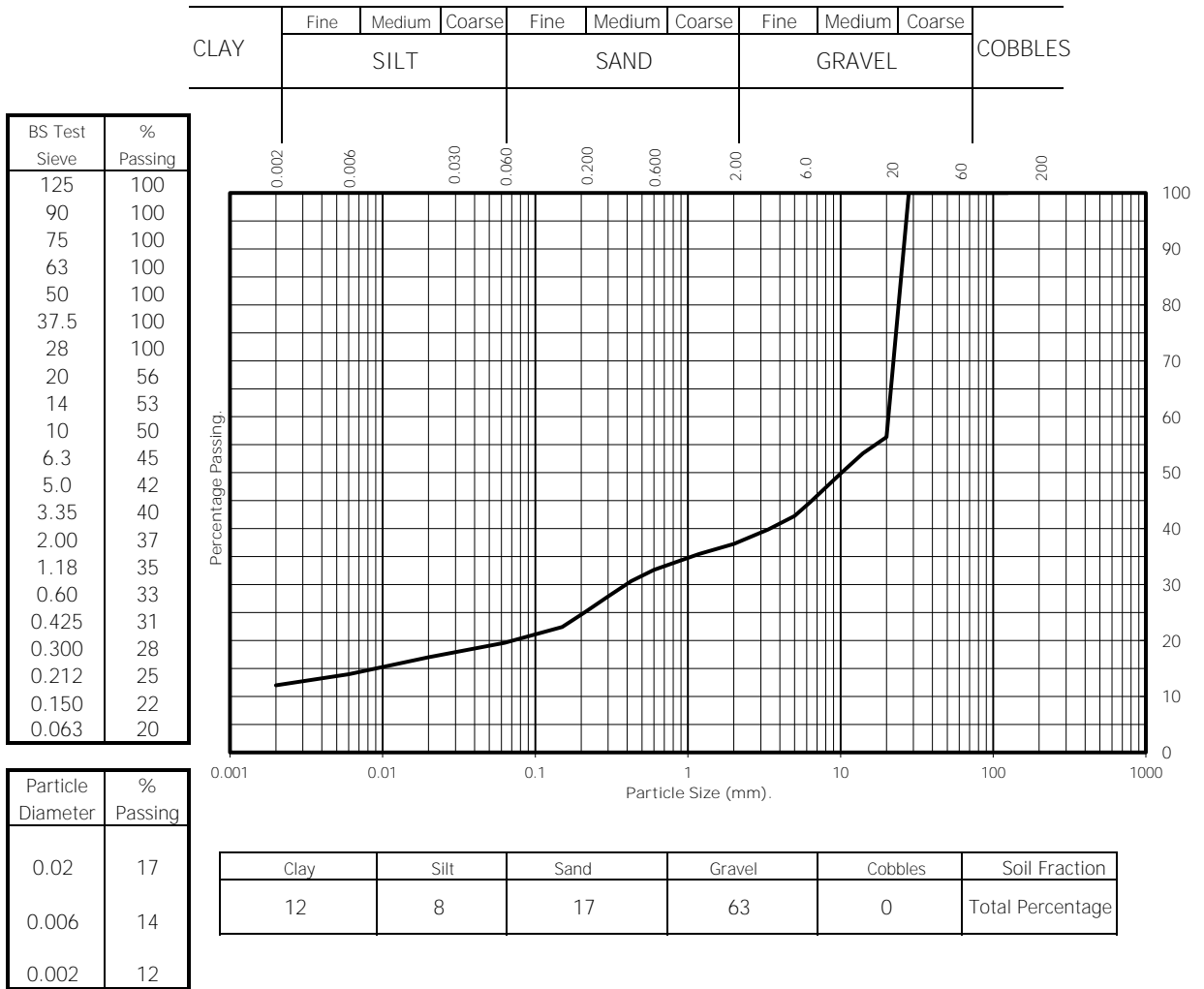
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	4
Contract Number:	34142	Depth from (m):	1.00
Hole Number:	BH1102	Depth to (m):	1.50
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly silty clayey fine to coarse sandy fine to coarse GRAVEL.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



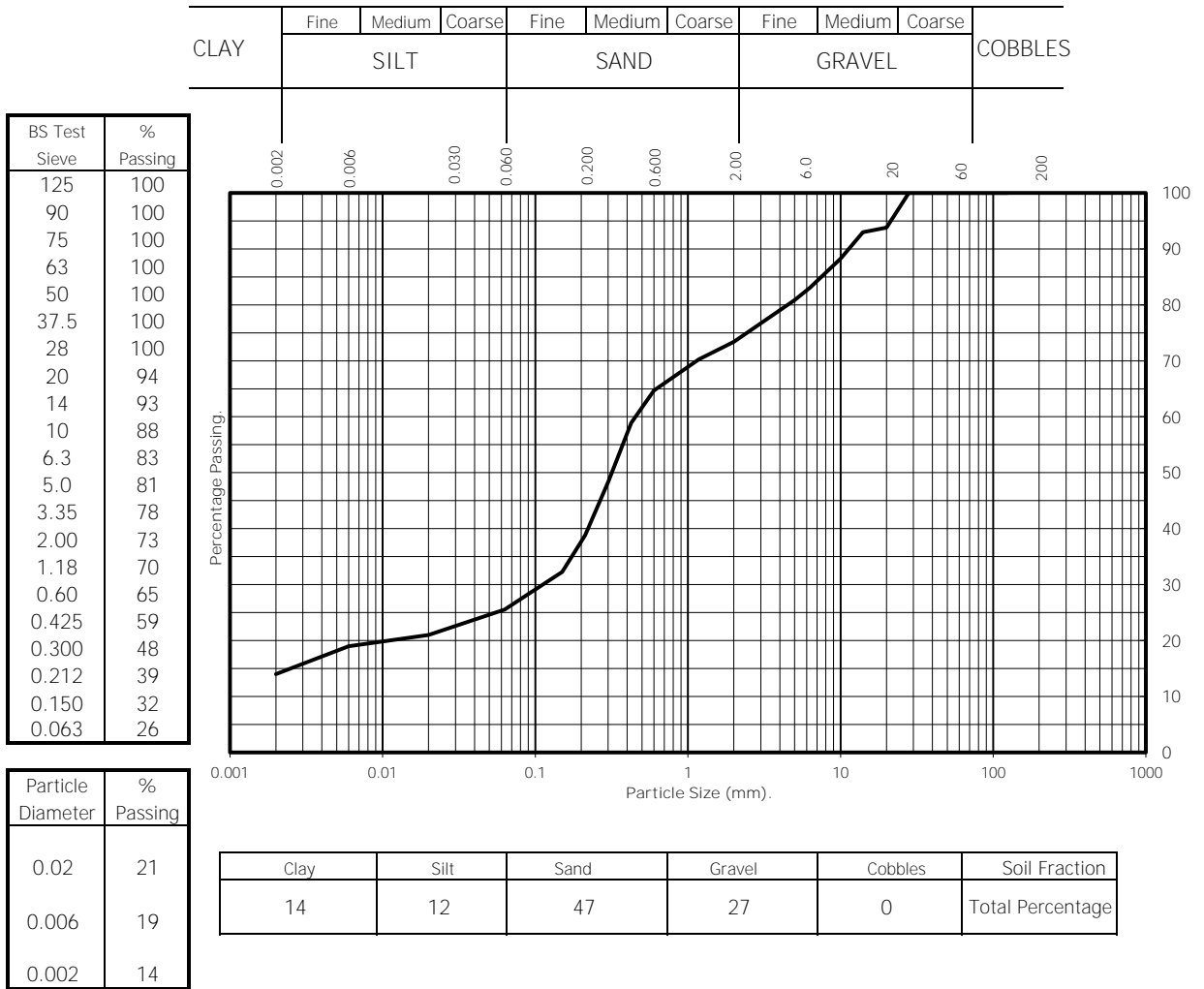
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	7
Contract Number:	34142	Depth from (m):	2.00
Hole Number:	BH1102	Depth to (m):	2.50
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown silty clayey fine to coarse gravelly fine to coarse SAND.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



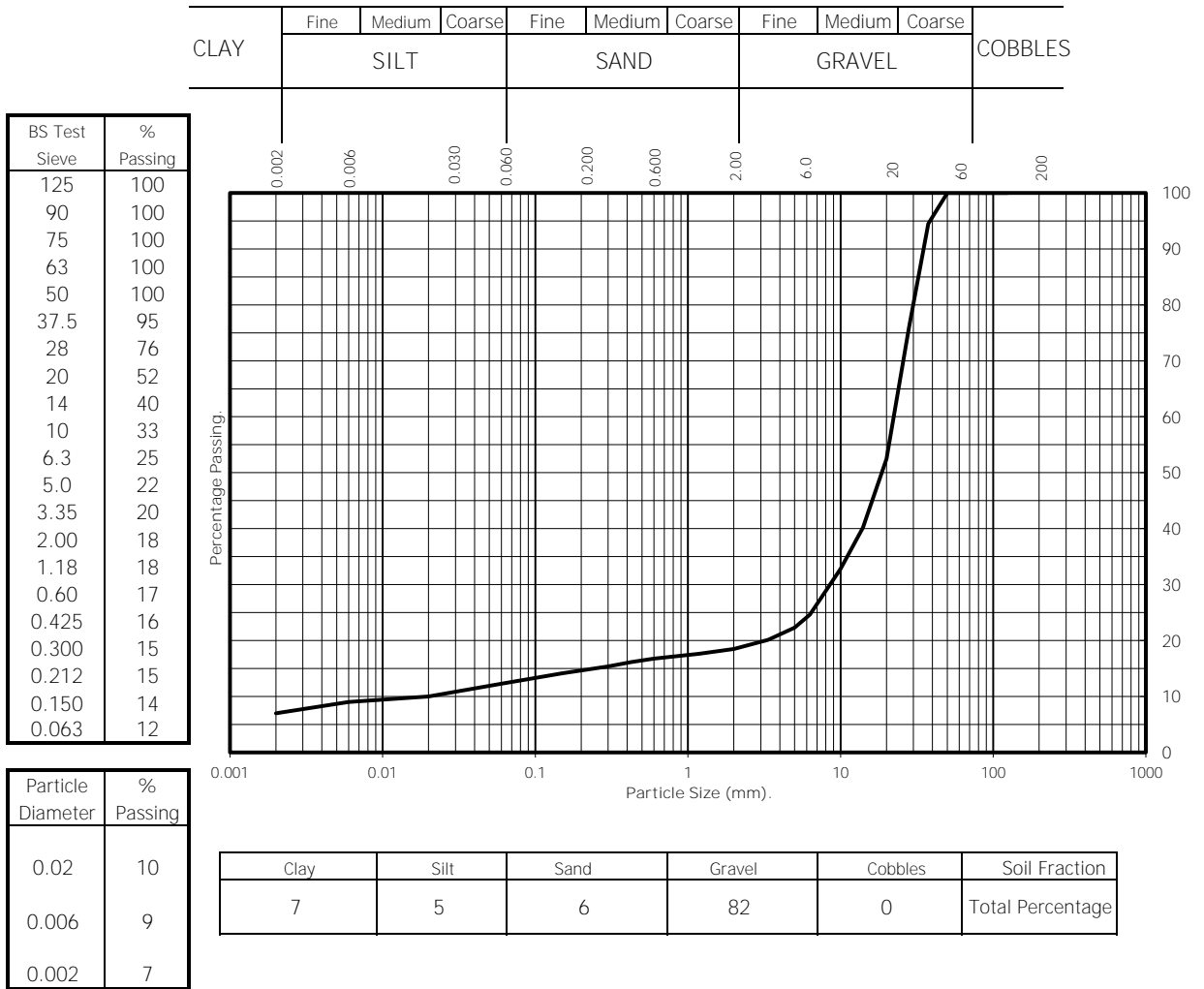
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	15
Contract Number:	34142	Depth from (m):	4.00
Hole Number:	BH1102	Depth to (m):	4.45
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly silty fine to coarse sandy clayey fine to coarse GRAVEL.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

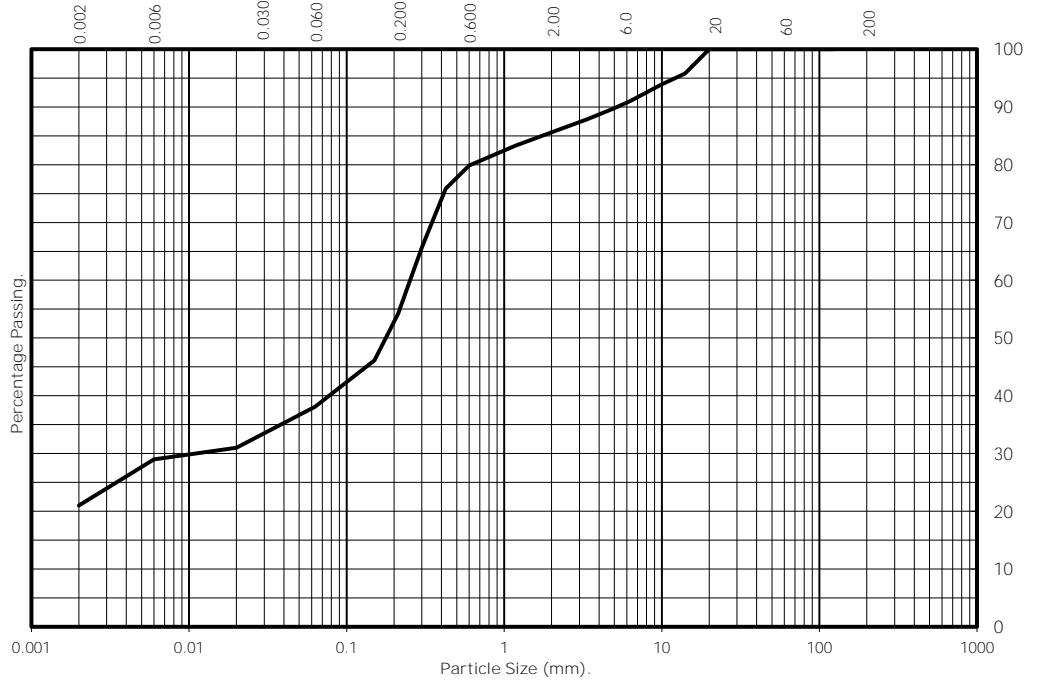
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	6
Contract Number:	34142	Depth from (m):	1.00
Hole Number:	BH1103	Depth to (m):	1.50
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown fine to medium gravelly silty clayey fine to coarse SAND.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	96
10	94
6.3	91
5.0	90
3.35	88
2.00	86
1.18	83
0.60	80
0.425	76
0.300	66
0.212	54
0.150	46
0.063	38



Particle Diameter	% Passing
0.02	31
0.006	29
0.002	21

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
21	17	48	14	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.11

reg. 13



Test Report:

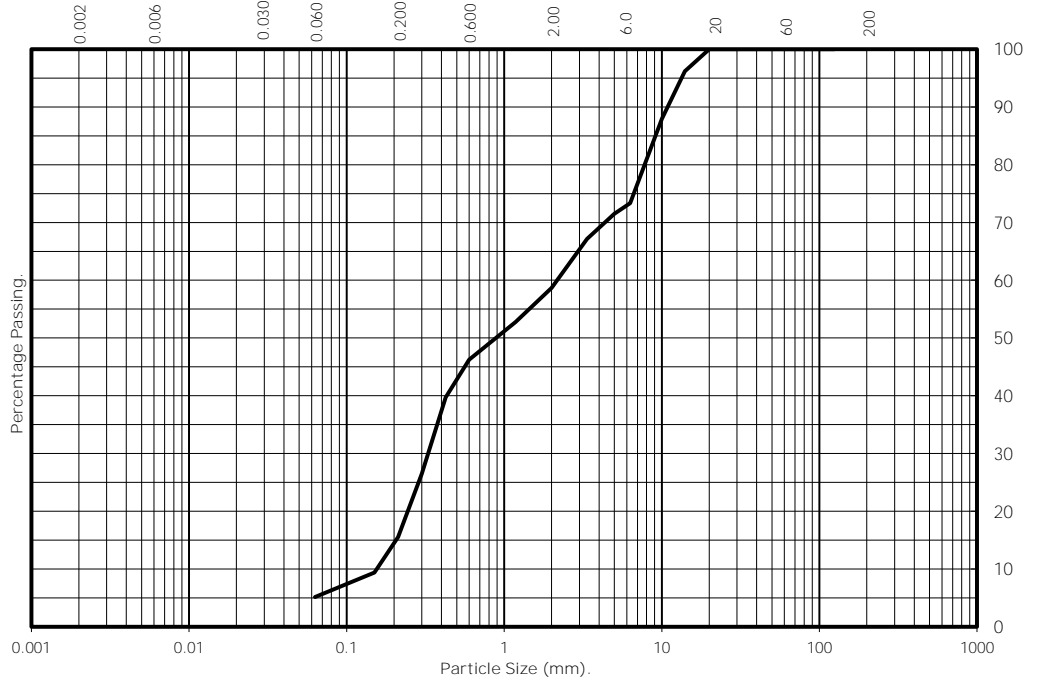
Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 9
 Contract Number: 34142 Depth from (m): 2.00
 Hole Number: BH1103 Depth to (m): 2.50
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to medium gravelly fine to coarse SAND.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	96
10	88
6.3	73
5.0	71
3.35	67
2.00	59
1.18	53
0.60	46
0.425	40
0.300	26
0.212	16
0.150	9
0.063	5



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	5	54	41	0	Total Percentage

Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



Test Report:

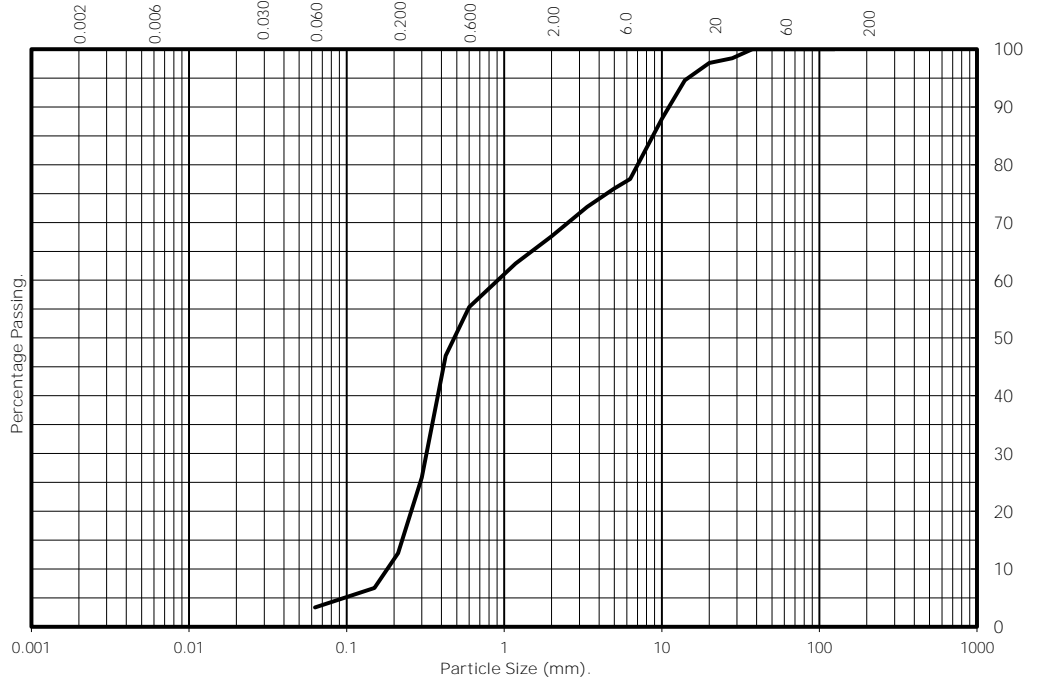
Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 11
 Contract Number: 34142 Depth from (m): 4.00
 Hole Number: BH1103 Depth to (m): 4.50
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to coarse gravelly fine to coarse SAND.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	98
20	98
14	95
10	88
6.3	78
5.0	76
3.35	73
2.00	68
1.18	63
0.60	55
0.425	47
0.300	26
0.212	13
0.150	7
0.063	3



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	3	65	32	0	Total Percentage

Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.11

reg. 13

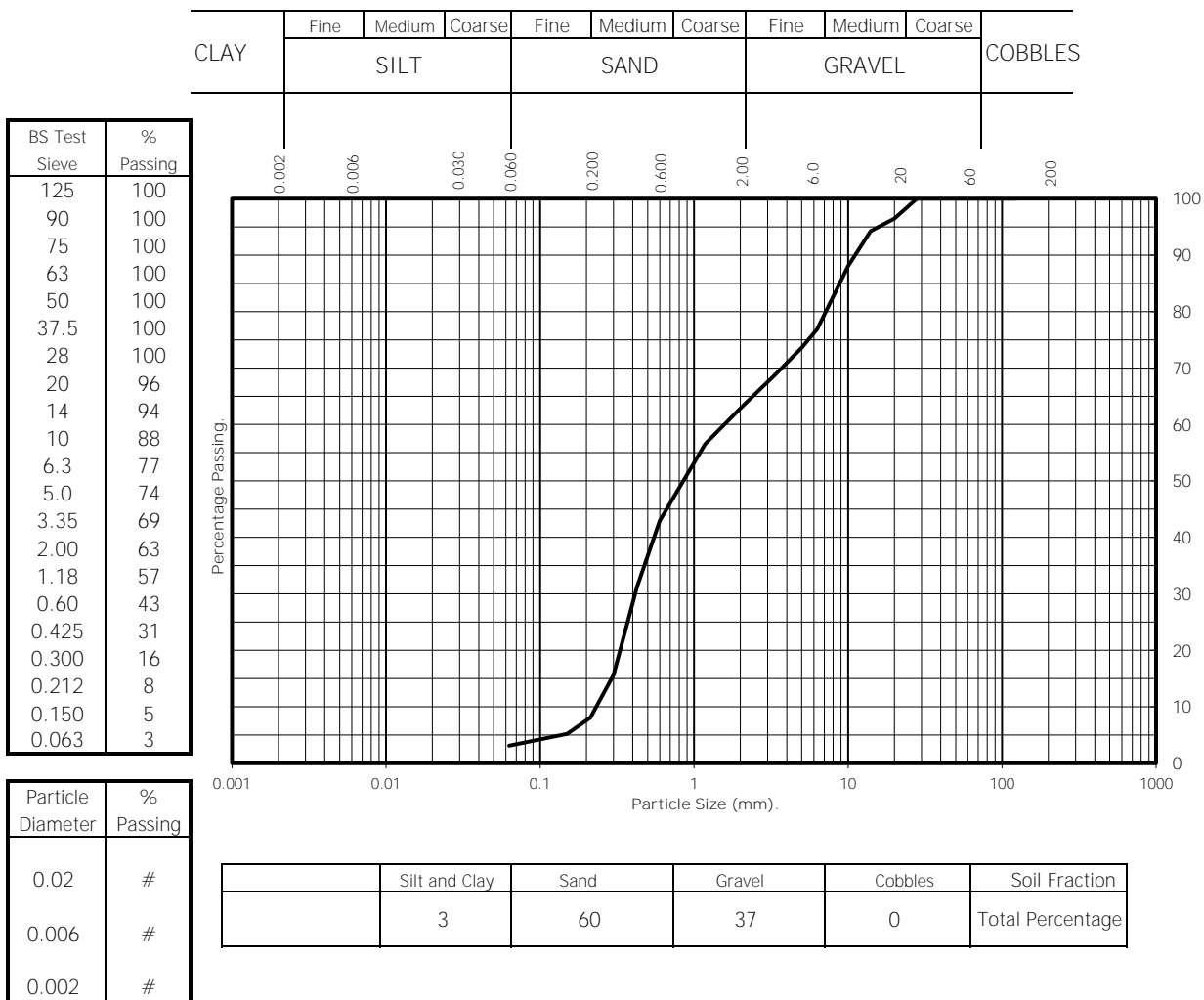


Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.
Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 14
Contract Number: 34142 Depth from (m): 6.00
Hole Number: BH1103 Depth to (m): 6.45
Sample Type: B
Location: Northstowe Phase 2
Description: Brown slightly silty clayey fine to coarse gravelly fine to coarse SAND.



Remarks:
- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 13.11

reg. 13



Test Report:

Particle Size Distribution Test

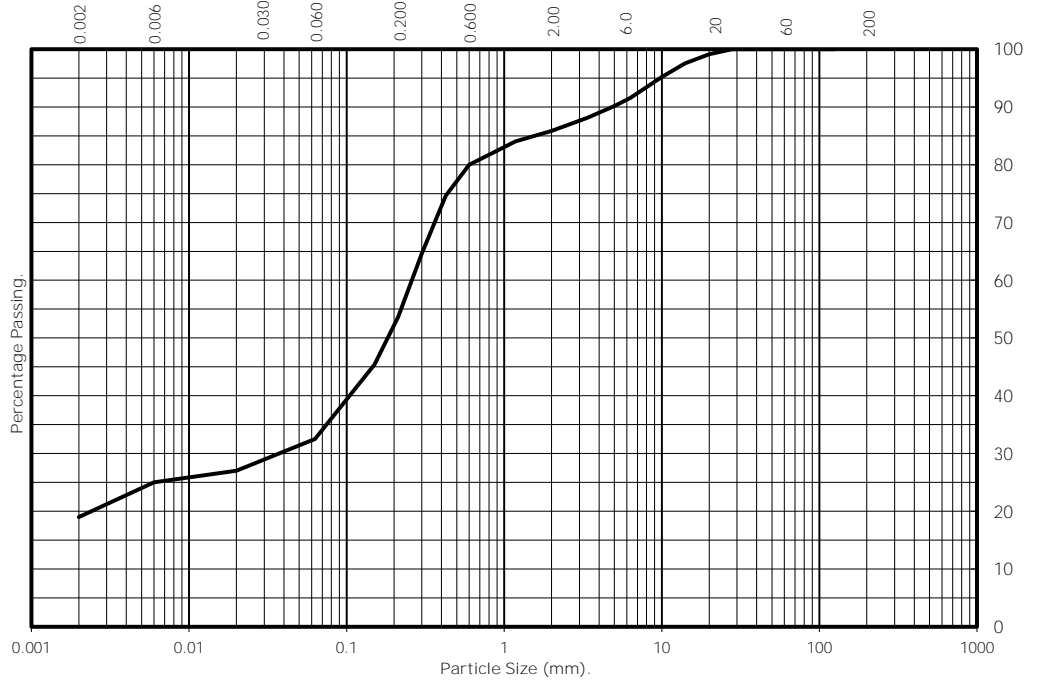
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	4
Contract Number:	34142	Depth from (m):	0.50
Hole Number:	BH1107	Depth to (m):	1.20
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown fine to medium gravelly silty clayey fine to coarse SAND.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	99
14	98
10	95
6.3	92
5.0	90
3.35	88
2.00	86
1.18	84
0.60	80
0.425	75
0.300	65
0.212	54
0.150	45
0.063	33



Particle Diameter	% Passing
0.02	27
0.006	25
0.002	19

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
19	14	53	14	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

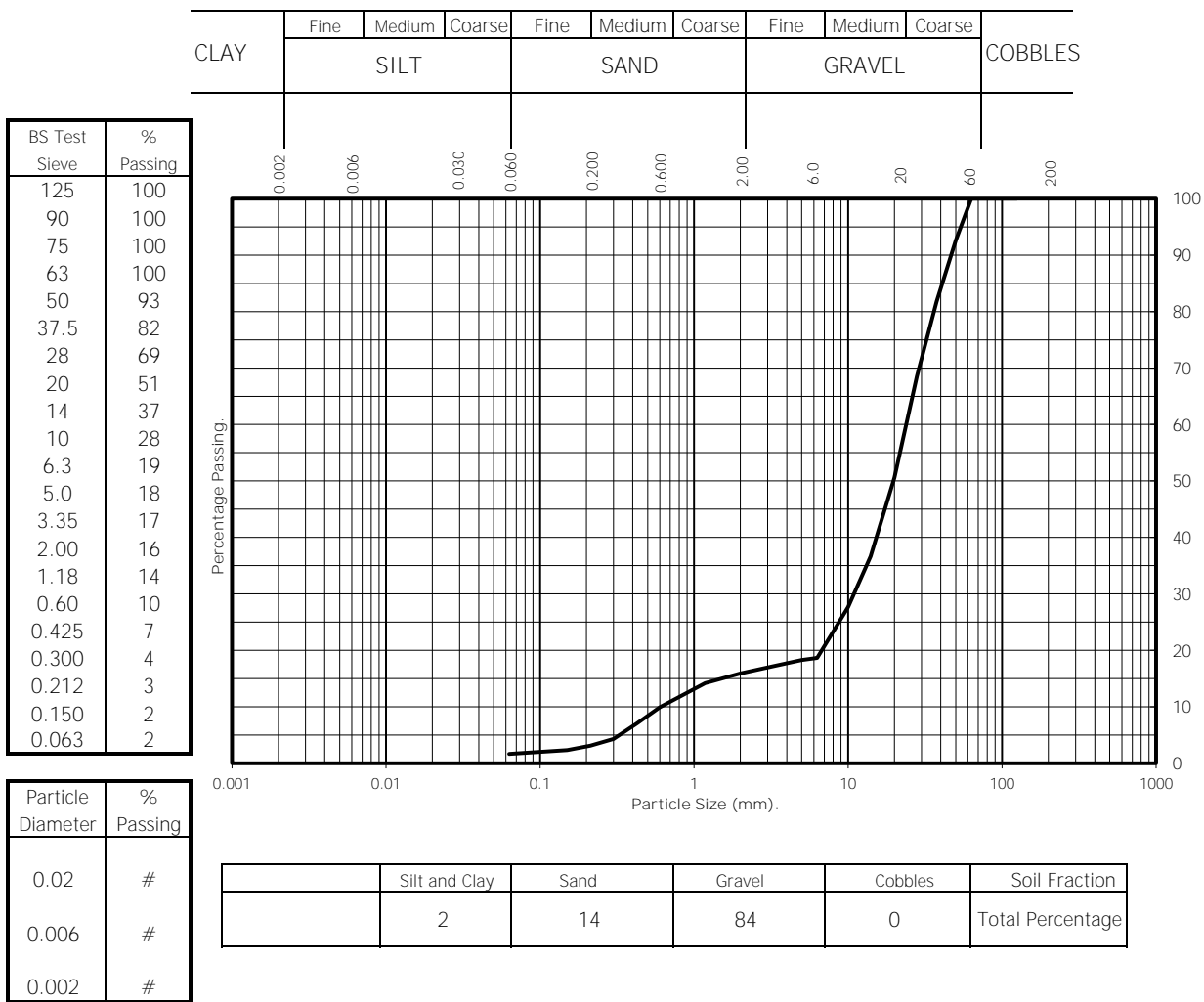
reg. 13



Test Report:

Particle Size Distribution Test
BS 1377 Part 2:1990.
Wet Sieve, Clause 9.2

Client ref:	UA008426-01	Sample Number:	6
Contract Number:	34142	Depth from (m):	1.90
Hole Number:	BH1107	Depth to (m):	2.50
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly silty clayey fine to coarse sandy fine to coarse GRAVEL.		



Remarks:
- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
reg. 13

Date: 7.3.17

reg. 13



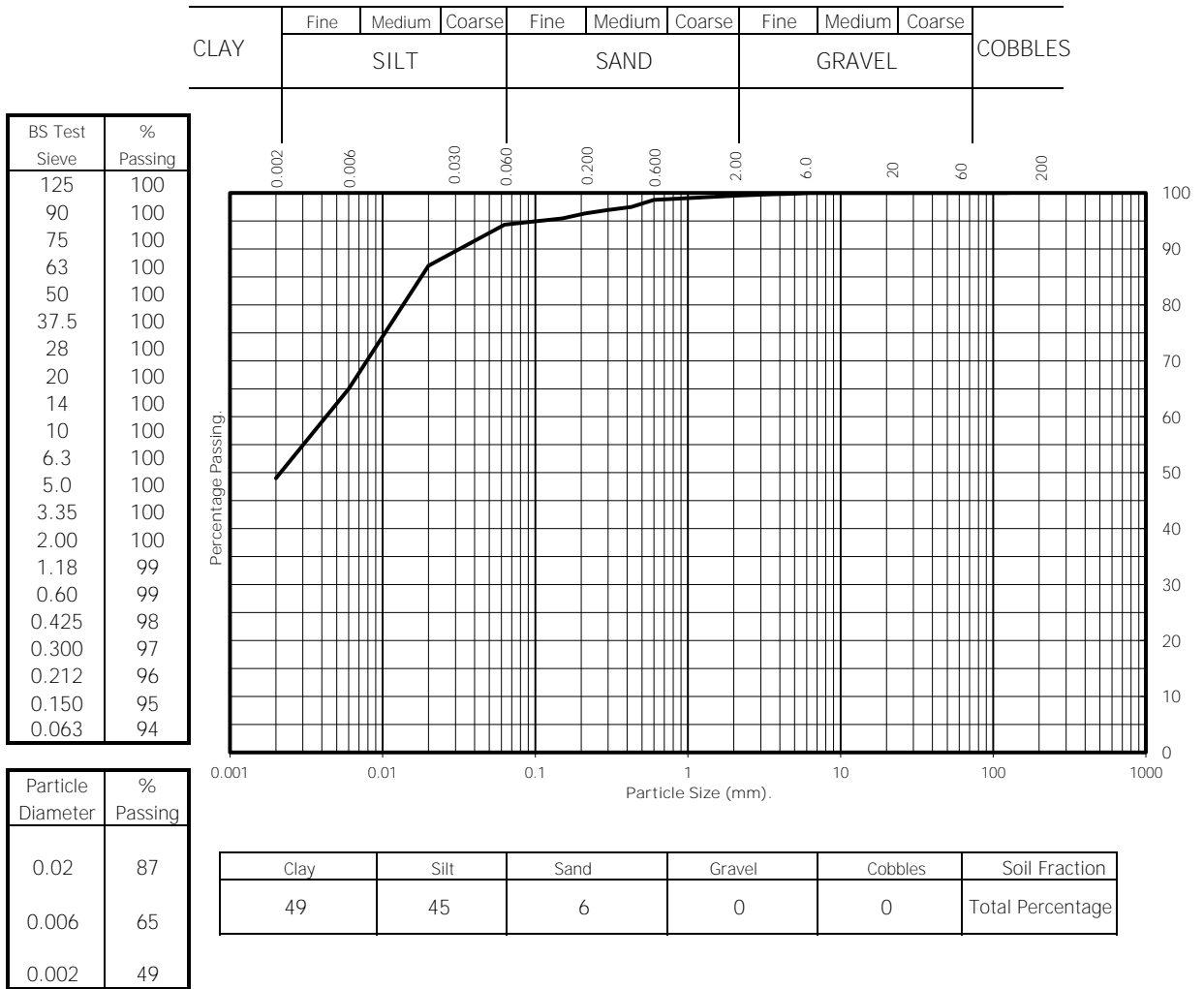
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	10
Contract Number:	34142	Depth from (m):	5.50
Hole Number:	BH1107	Depth to (m):	6.00
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to coarse sandy silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	4
Contract Number:	34142	Depth from (m):	1.50
Hole Number:	BH1108	Depth to (m):	1.95
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to coarse sandy fine to coarse gravelly silty CLAY.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	88
14	88
10	87
6.3	86
5.0	85
3.35	84
2.00	83
1.18	82
0.60	80
0.425	80
0.300	80
0.212	79
0.150	78
0.063	78



Particle Diameter	% Passing
0.02	71
0.006	65
0.002	42

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
42	36	5	17	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

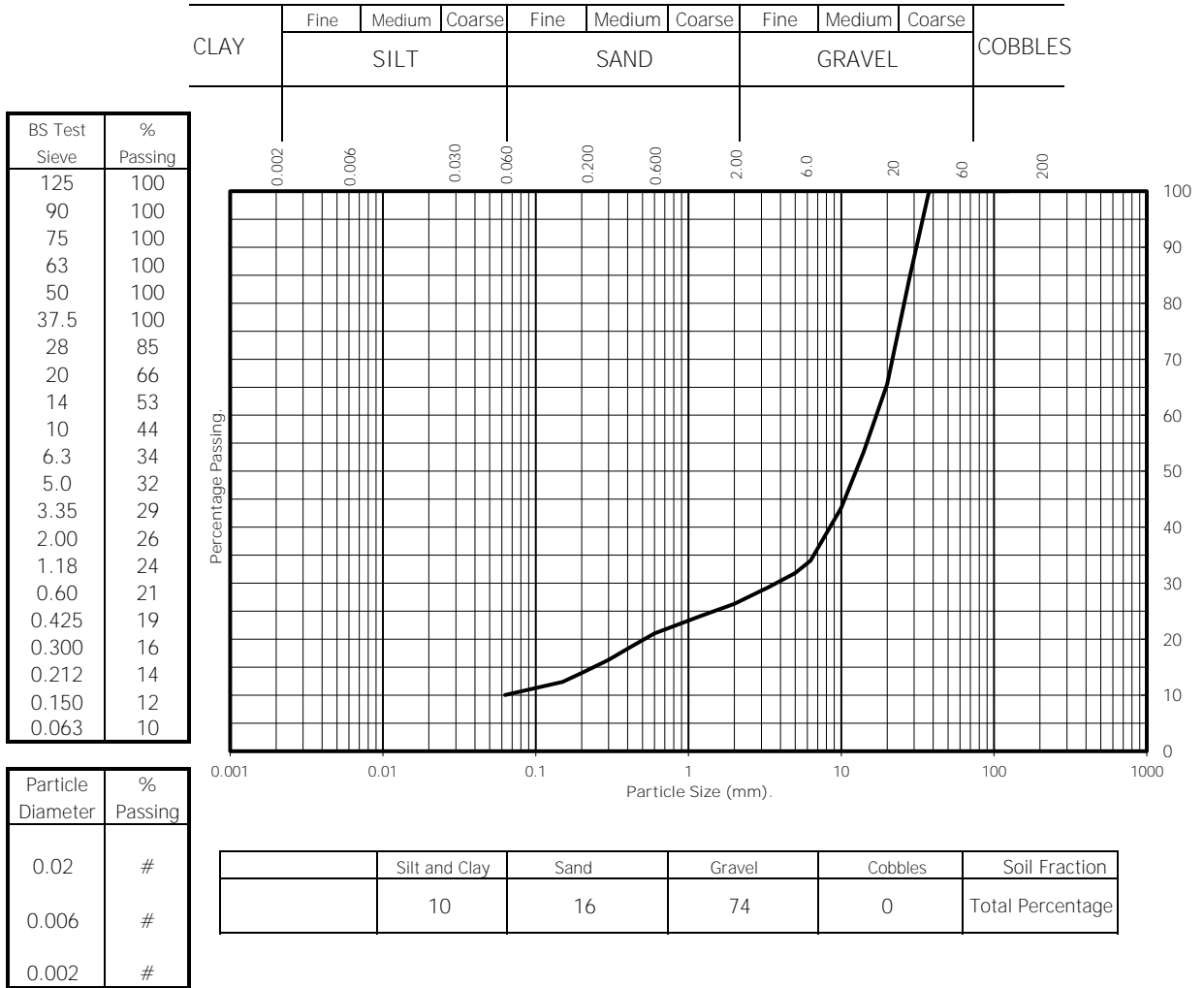
reg. 13



Test Report:

Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref:	UA008426-01	Sample Number:	9
Contract Number:	34142	Depth from (m):	5.00
Hole Number:	BH1108	Depth to (m):	5.50
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly silty clayey fine to coarse sandy fine to coarse GRAVEL.		



Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

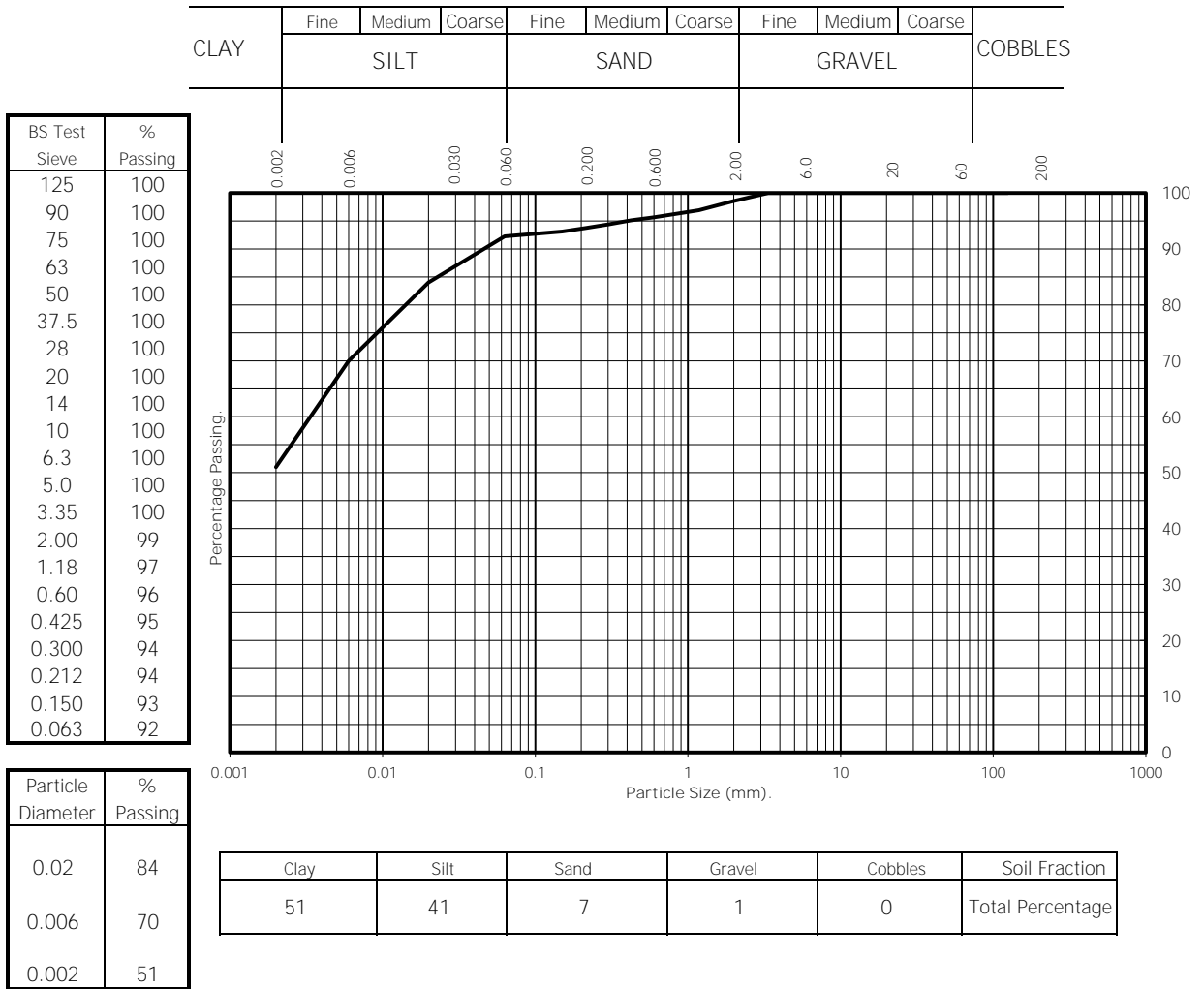
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: BH1109

Sample Number: 17
 Depth from (m): ##
 Depth to (m): ##
 Sample Type: B

Location: Northstowe Phase 2
 Description: Greyish brown slightly fine gravelly fine to coarse sandy silty CLAY



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13

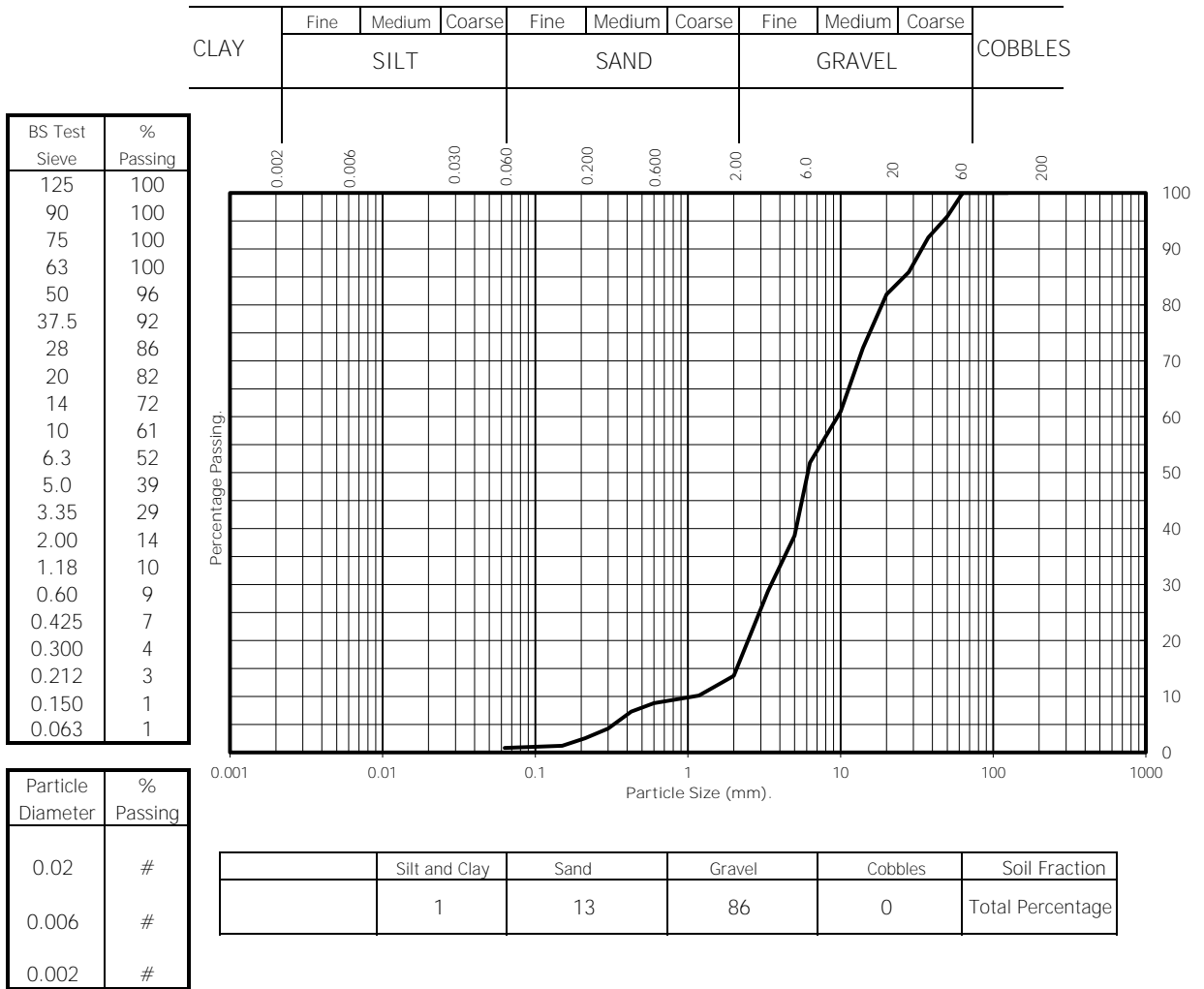


Test Report:

Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 10
 Contract Number: 34142 Depth from (m): 5.00
 Hole Number: BH1109 Depth to (m): 6.00
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown slightly silty fine to coarse sandy fine to coarse GRAVEL.



Remarks:
 # - not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
 reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

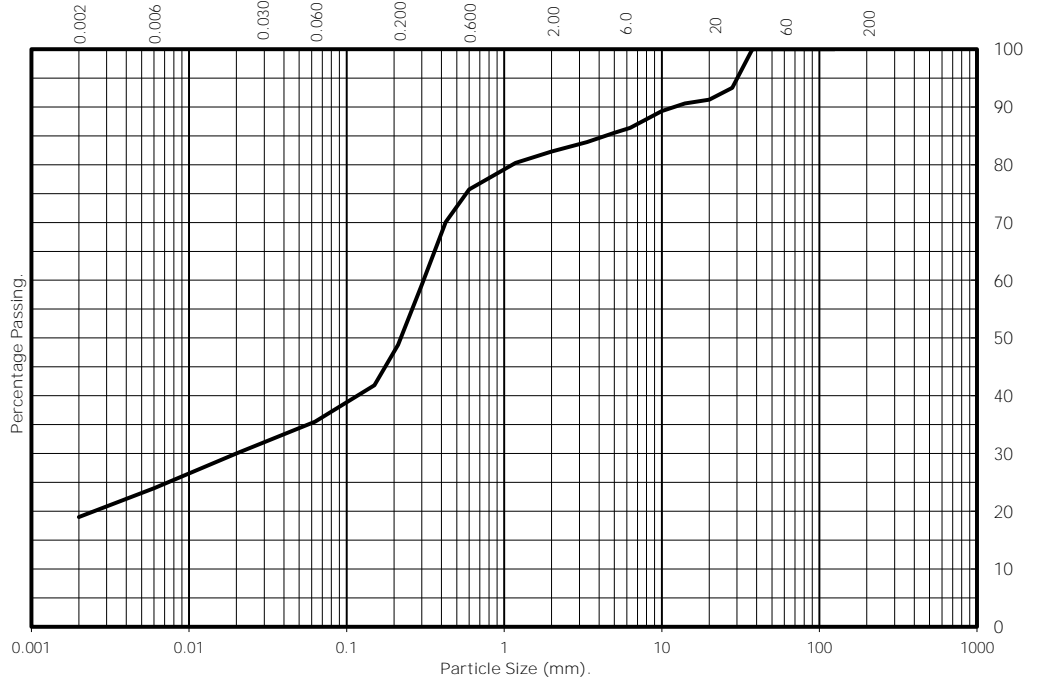
Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: BH1110

Sample Number:
 Depth from (m): 1.00
 Depth to (m): 1.50
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to coarse gravelly fine to coarse SAND.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	93
20	91
14	91
10	89
6.3	86
5.0	86
3.35	84
2.00	82
1.18	80
0.60	76
0.425	70
0.300	59
0.212	49
0.150	42
0.063	36



Particle Diameter	% Passing
0.02	30
0.006	24
0.002	19

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
19	17	46	18	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.11

reg. 13



Test Report:

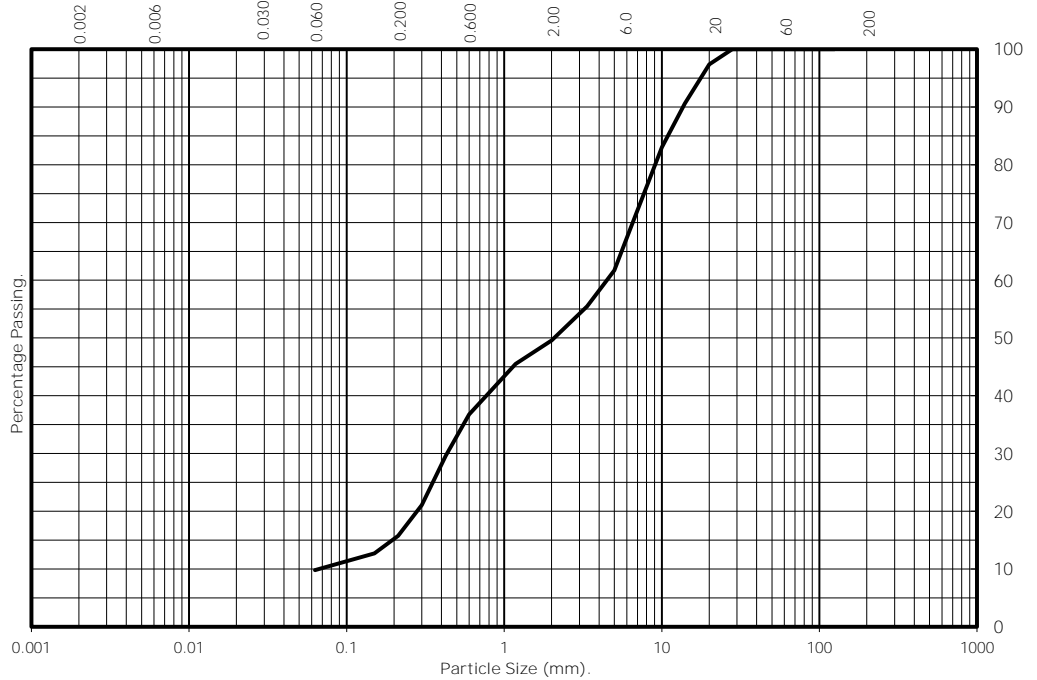
Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 7
 Contract Number: 34142 Depth from (m): 2.00
 Hole Number: BH1110 Depth to (m): 2.50
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to medium sandy fine to coarse GRAVEL.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	97
14	91
10	83
6.3	69
5.0	62
3.35	55
2.00	50
1.18	46
0.60	37
0.425	30
0.300	21
0.212	16
0.150	13
0.063	10



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	10	40	50	0	Total Percentage

Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.11

reg. 13

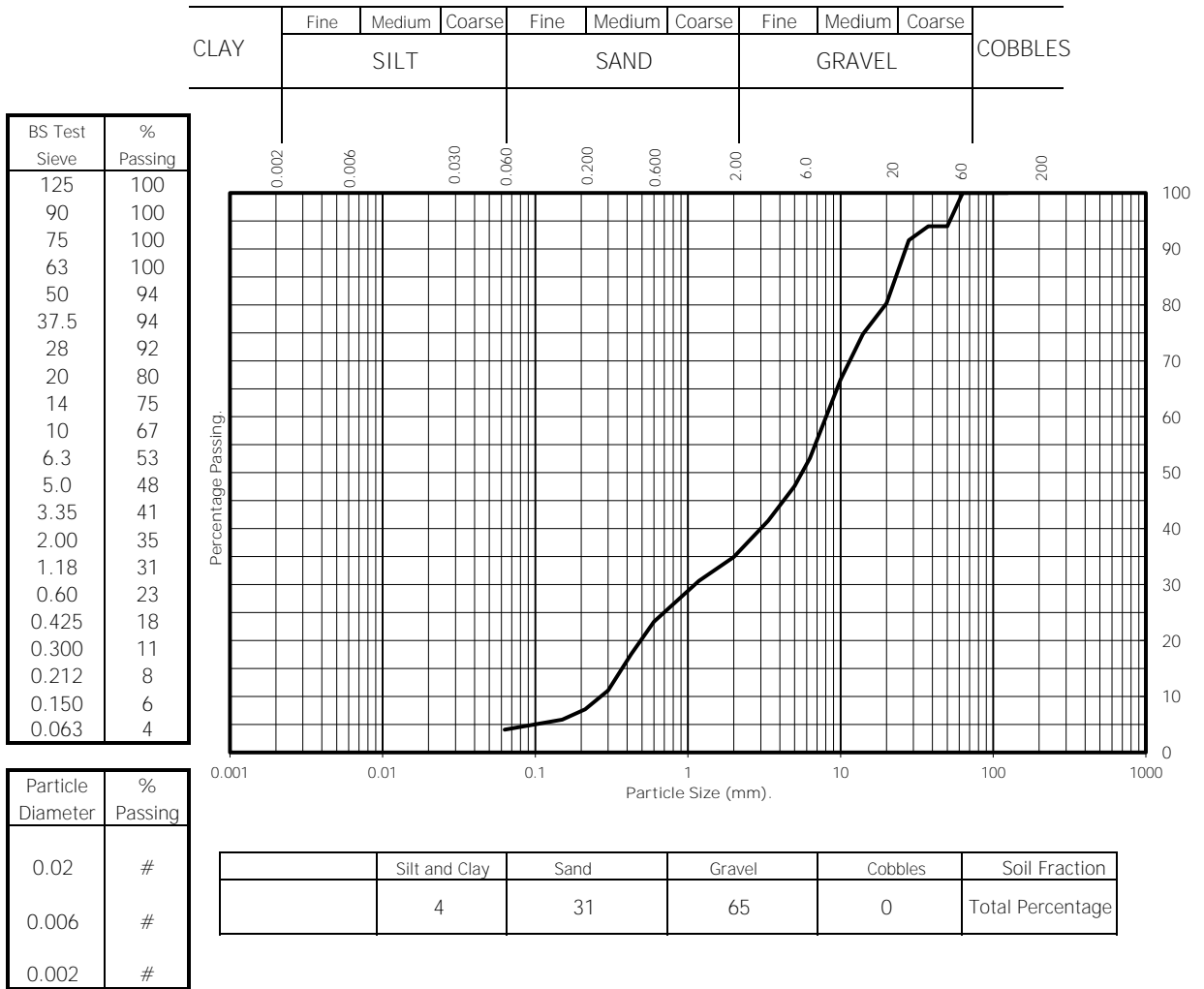


Test Report:

Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 11
 Contract Number: 34142 Depth from (m): 3.50
 Hole Number: BH1110 Depth to (m): 4.00
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown slightly silty clayey fine to coarse sandy fine to coarse GRAVEL.



Remarks:
 # - not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.11

reg. 13

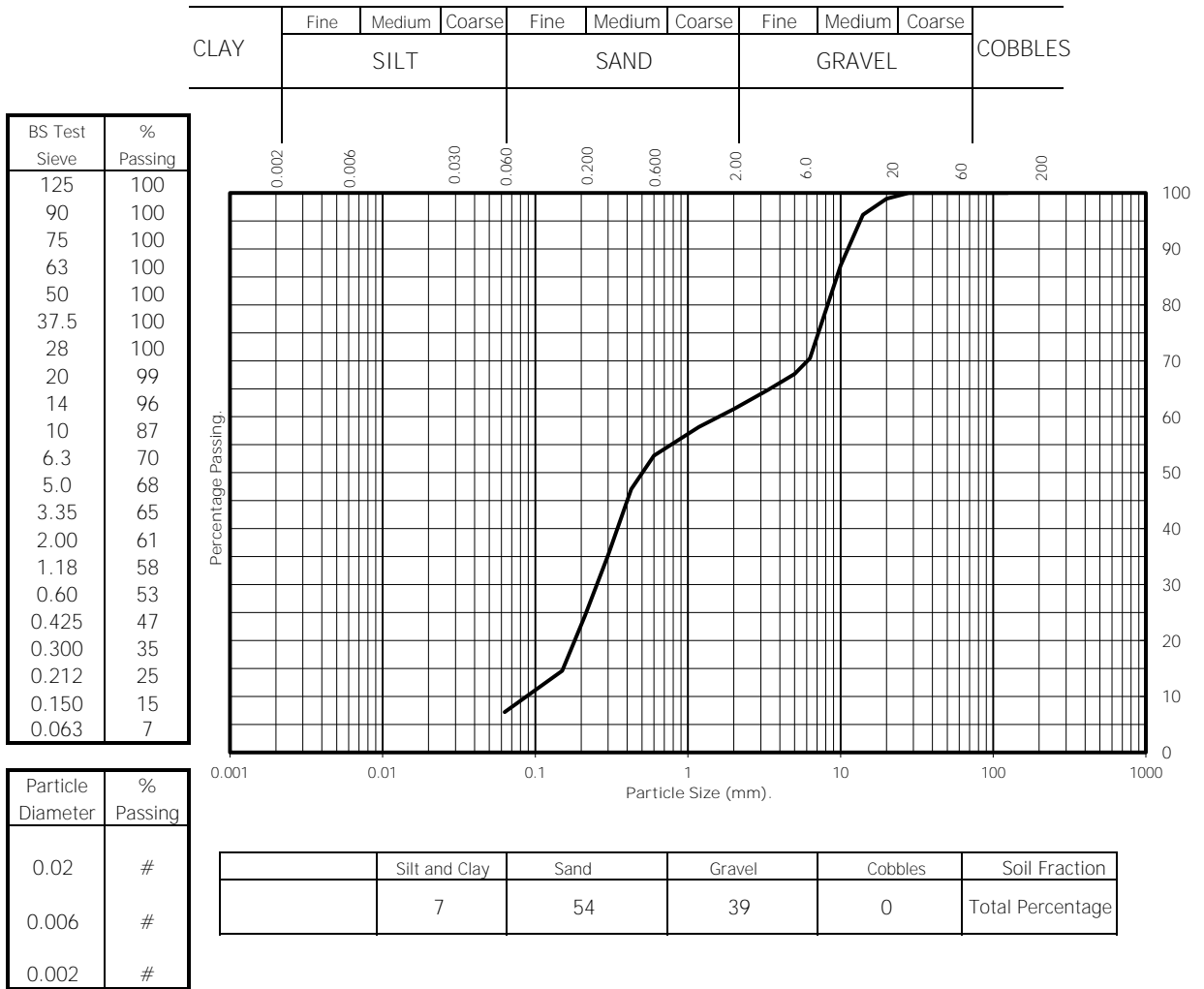


Test Report:

Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 5
 Contract Number: 34142 Depth from (m): 3.00
 Hole Number: BH1112 Depth to (m): 3.45
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown slightly silty clayey fine to medium gravelly fine to coarse GRAVEL.



Remarks:
 # - not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
 reg. 13

Date: 13.11

reg. 13



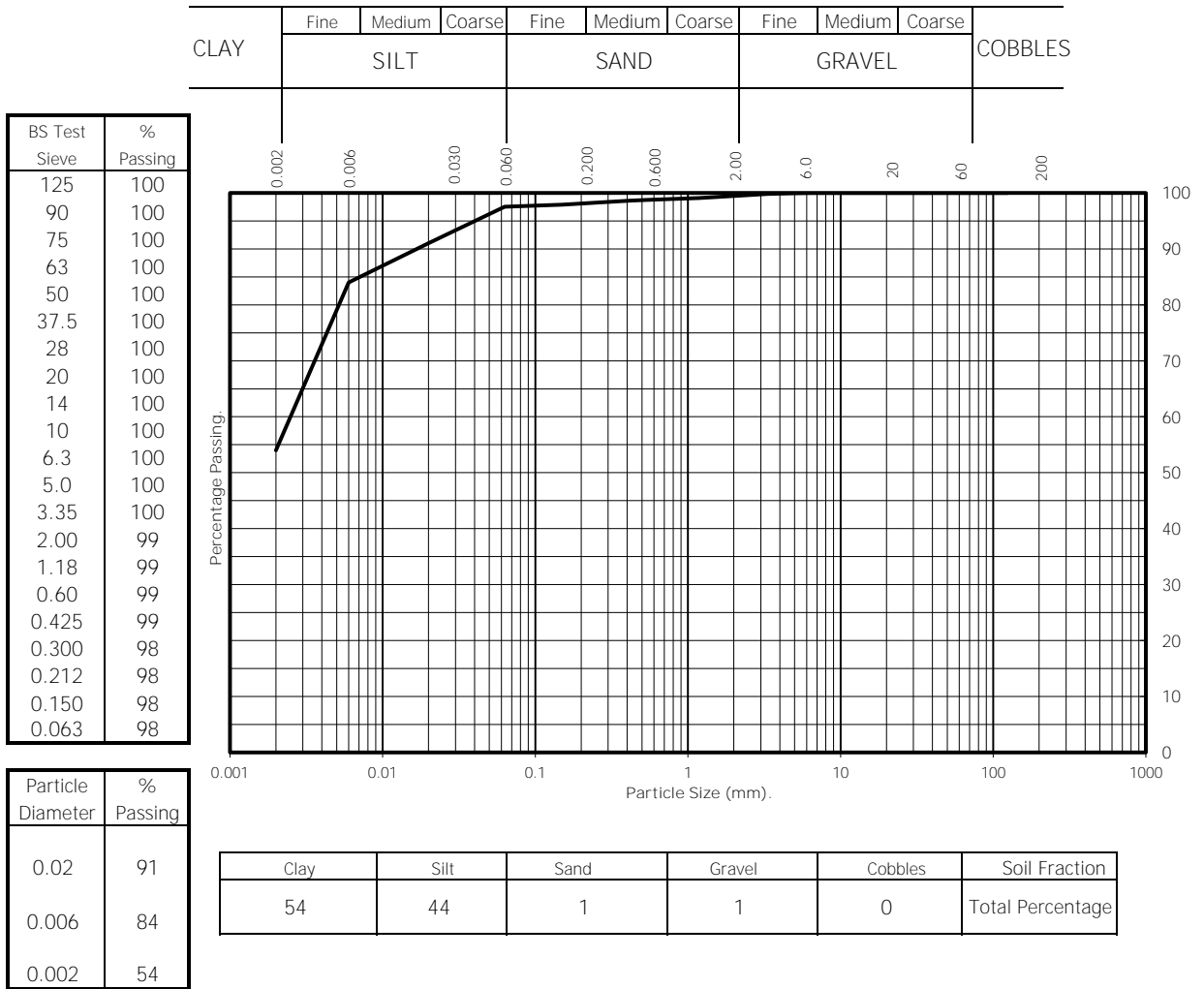
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	15
Contract Number:	34142	Depth from (m):	3.50
Hole Number:	BH1203	Depth to (m):	4.00
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Greyish brown slightly fine to coarse sandy fine gravelly silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13



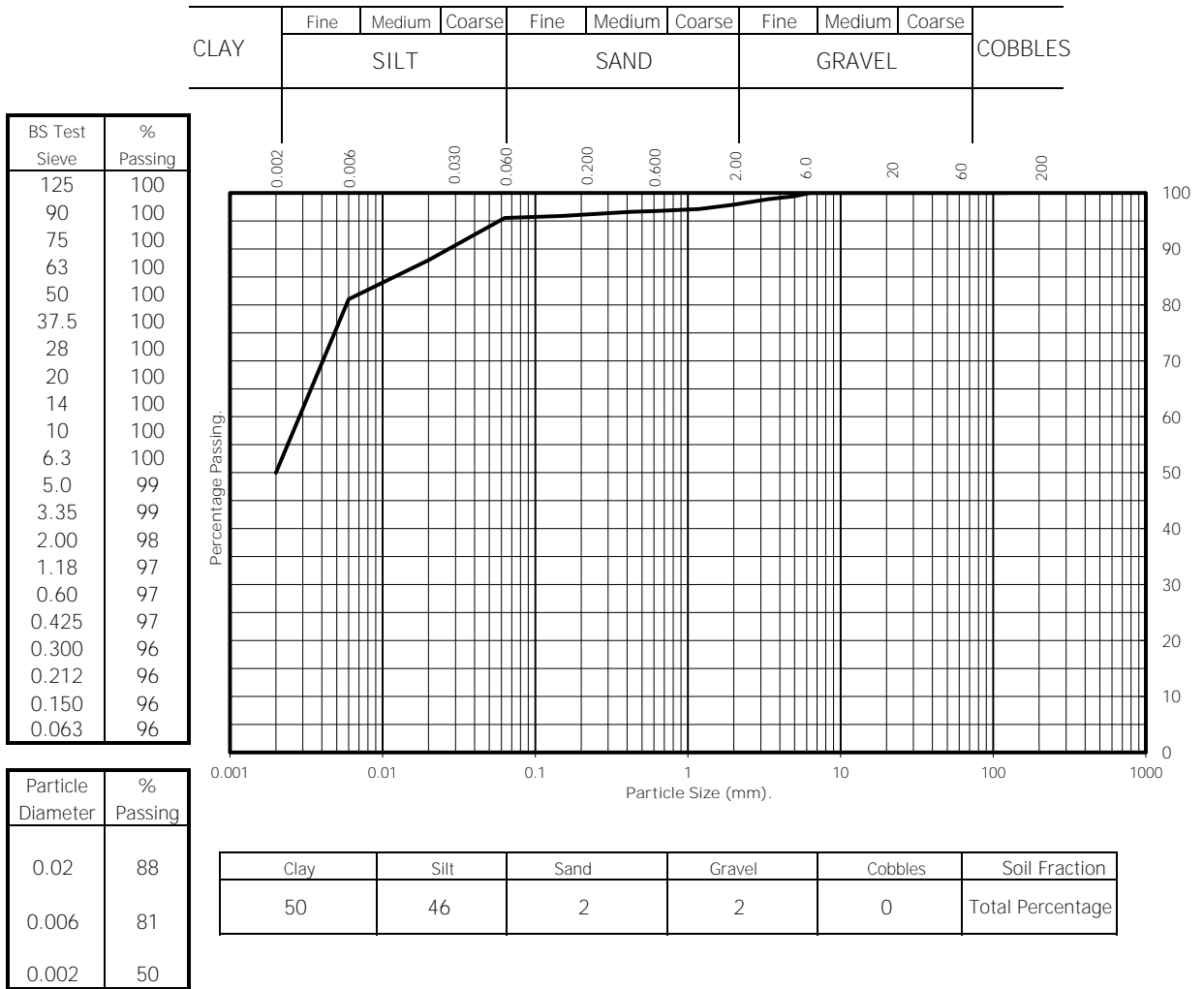
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	4
Contract Number:	34142	Depth from (m):	2.00
Hole Number:	BH1204	Depth to (m):	3.00
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Greyish brown slightly fine to coarse sandy fine gravelly silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 7.3.17

reg. 13

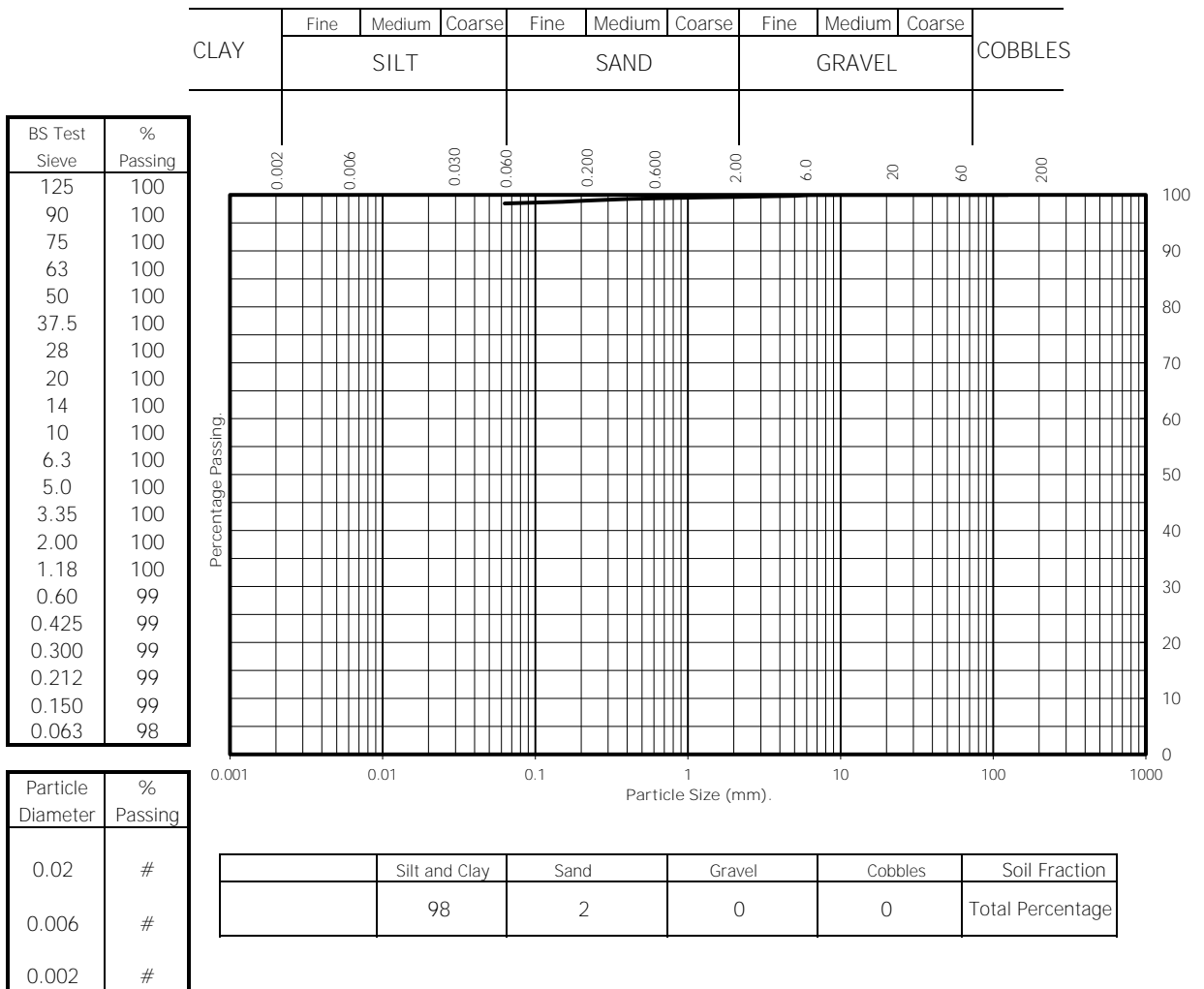


Test Report:

Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 8
 Contract Number: 34142 Depth from (m): 1.40
 Hole Number: BH1206 Depth to (m):
 Sample Type: B

Location: Northstowe Phase 2
 Description: Greyish brown slightly fine to coarse sandy silty CLAY.



Remarks:
 # - not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
 reg. 13

Date: 7.3.17

reg. 13



Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

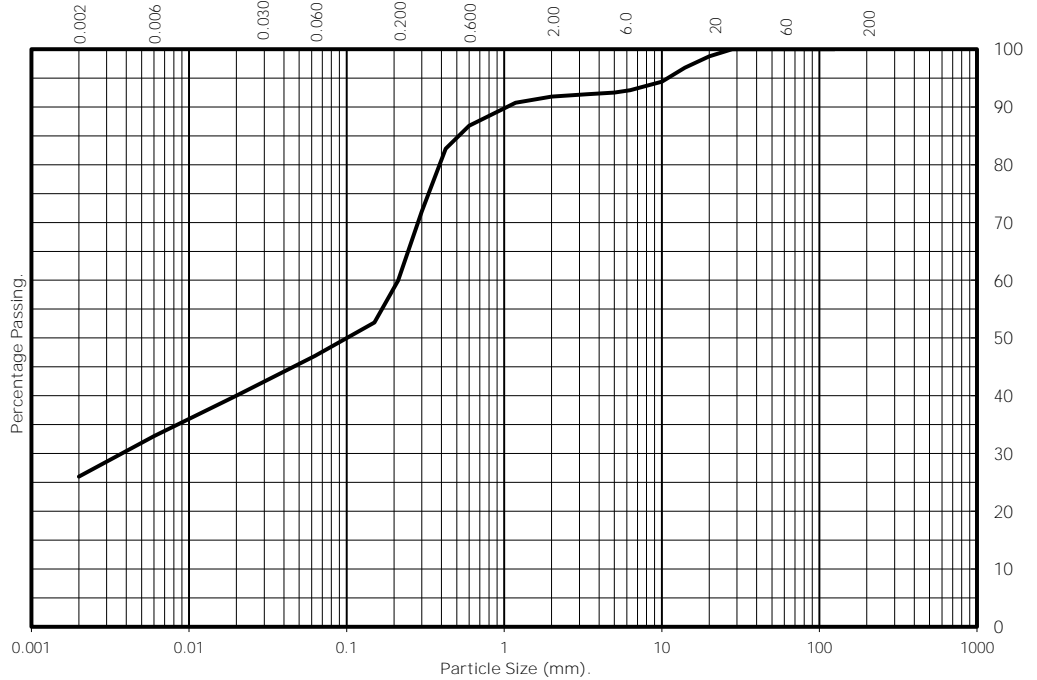
Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: TP608

Sample Number: 1
 Depth from (m): 0.10
 Depth to (m): N/A
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown fine to medium gravelly fine to coarse sandy silty CLAY.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	99
14	97
10	94
6.3	93
5.0	93
3.35	92
2.00	92
1.18	91
0.60	87
0.425	83
0.300	72
0.212	60
0.150	53
0.063	47



Particle Diameter	% Passing
0.02	40
0.006	33
0.002	26

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
26	21	45	8	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



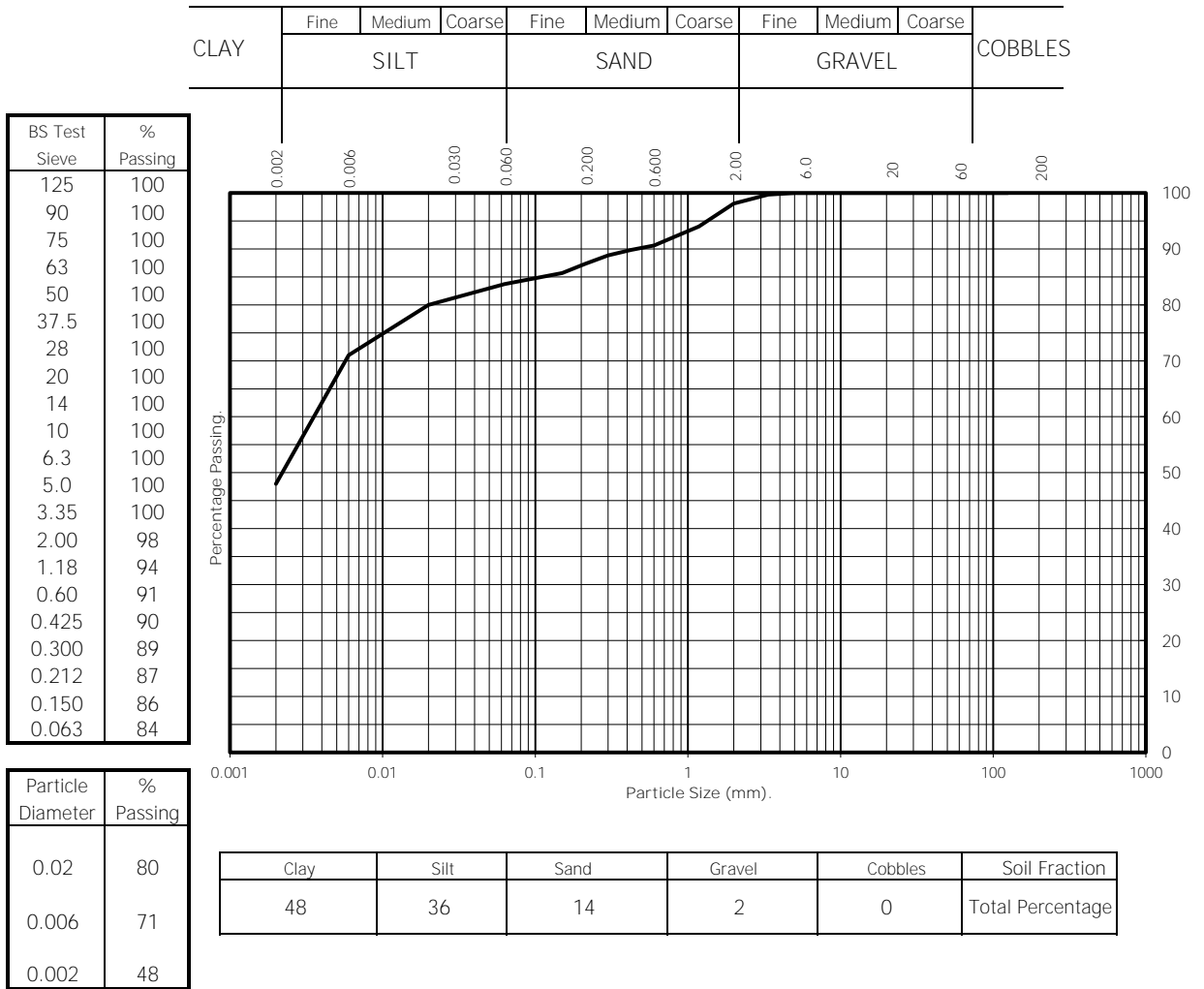
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	8
Contract Number:	34142	Depth from (m):	1.50
Hole Number:	TP612	Depth to (m):	1.80
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown fine gravelly fine to coarse sandy silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

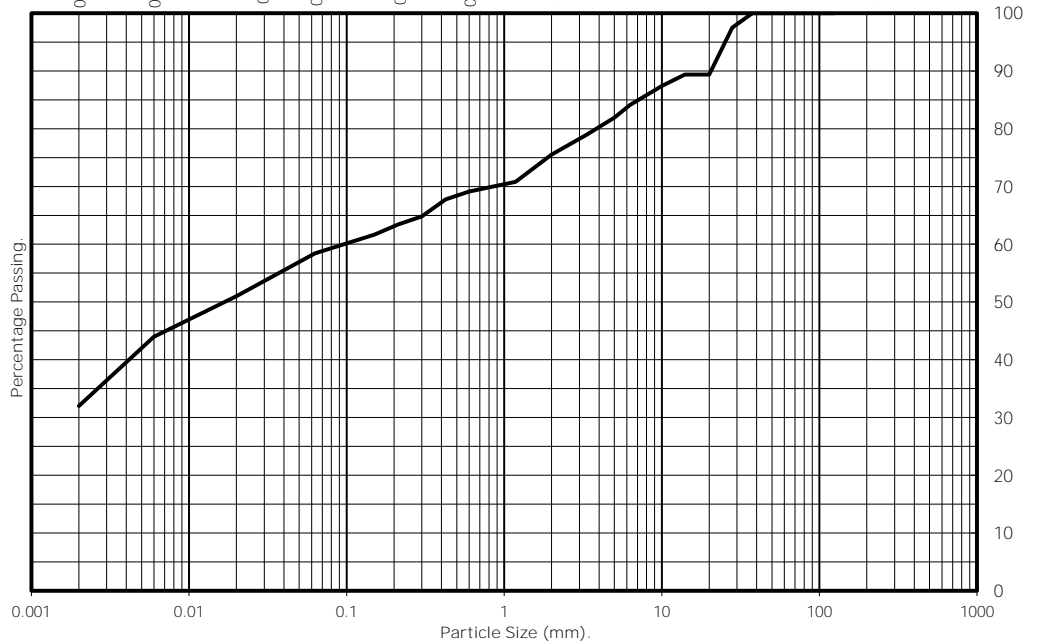
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	7
Contract Number:	34142	Depth from (m):	1.00
Hole Number:	TP629	Depth to (m):	N/A
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown fine to coarse sandy gravelly silty CLAY.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	97
20	89
14	89
10	87
6.3	84
5.0	82
3.35	79
2.00	76
1.18	71
0.60	69
0.425	68
0.300	65
0.212	63
0.150	62
0.063	58



Particle Diameter	% Passing
0.02	51
0.006	44
0.002	32

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
32	26	18	24	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

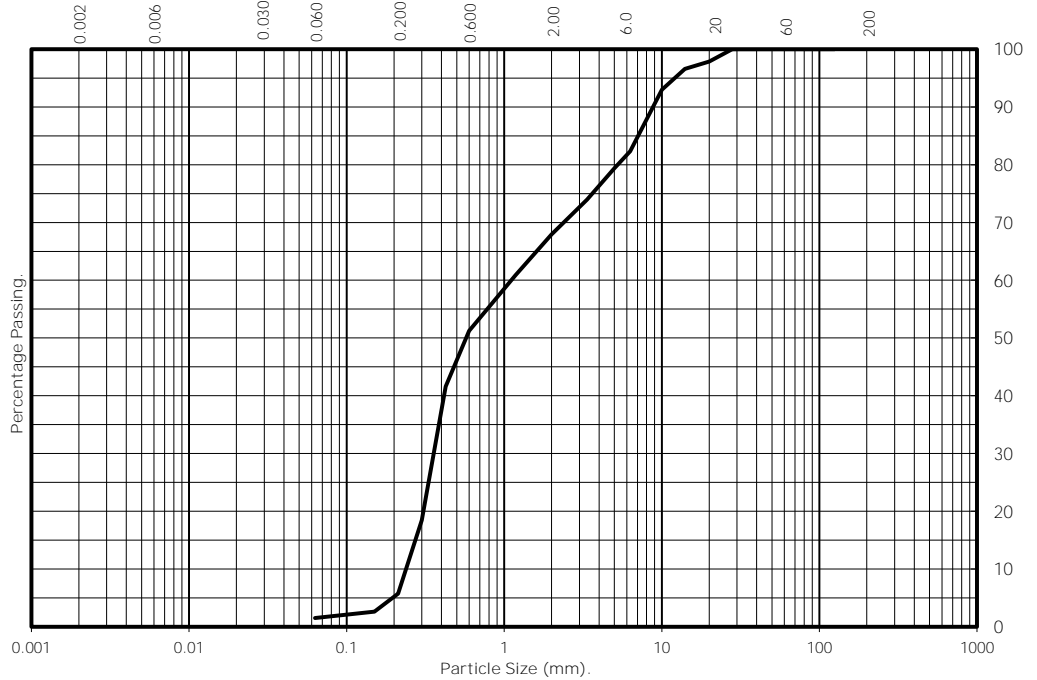
Particle Size Distribution Test
 BS 1377 Part 2:1990.
 Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 8
 Contract Number: 34142 Depth from (m): 1.30
 Hole Number: TP924 Depth to (m): 2.00
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to coarse gravelly SAND.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	98
14	97
10	93
6.3	82
5.0	79
3.35	74
2.00	68
1.18	61
0.60	51
0.425	42
0.300	18
0.212	6
0.150	3
0.063	2



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	2	66	32	0	Total Percentage

Remarks:
 # - not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
 reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

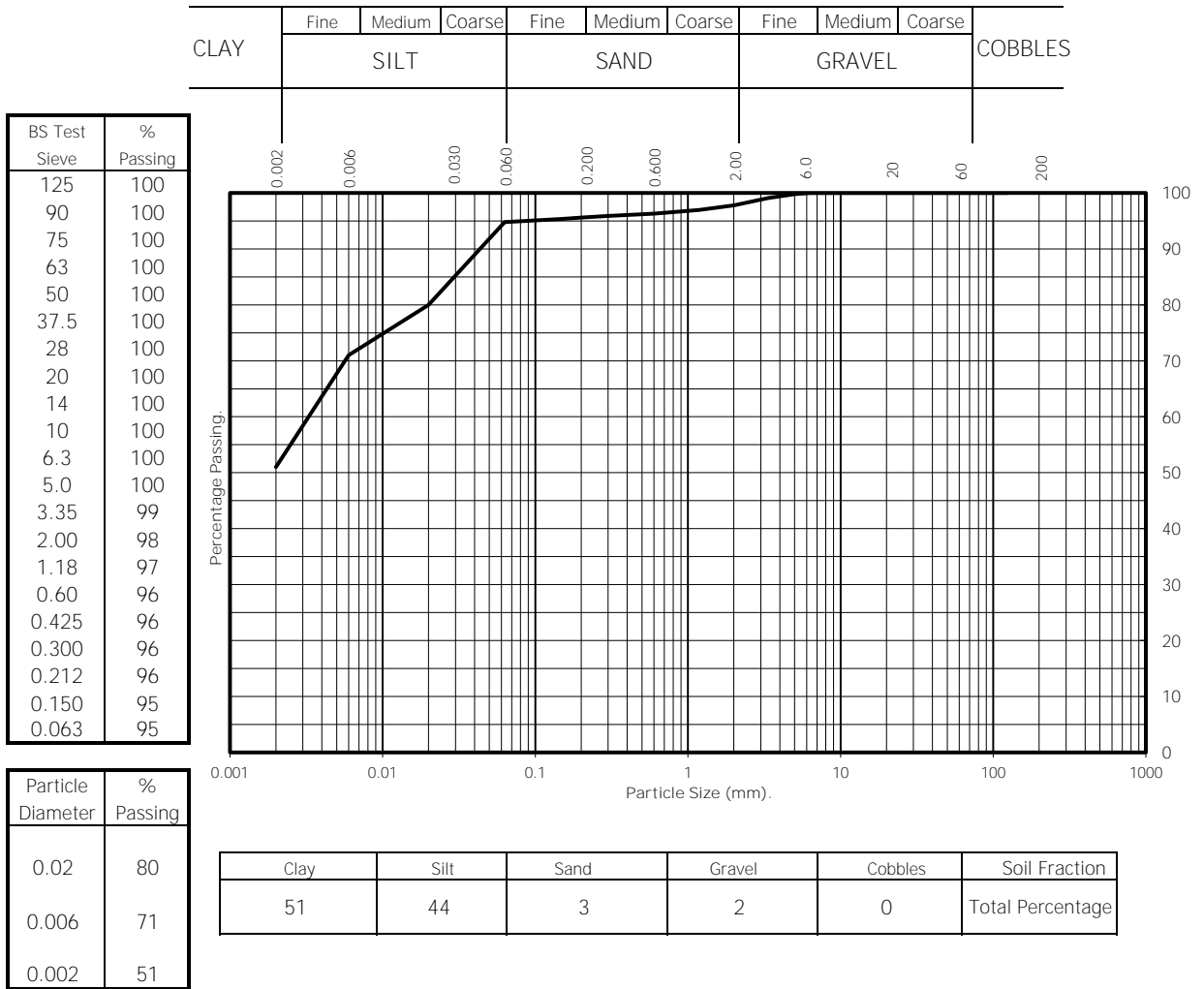
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: TP925

Sample Number: 11
 Depth from (m): 1.90
 Depth to (m): 2.70
 Sample Type: B

Location: Northstowe Phase 2
 Description: Greyish brown slightly fine gravelly fine to coarse sandy silty CLAY.



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



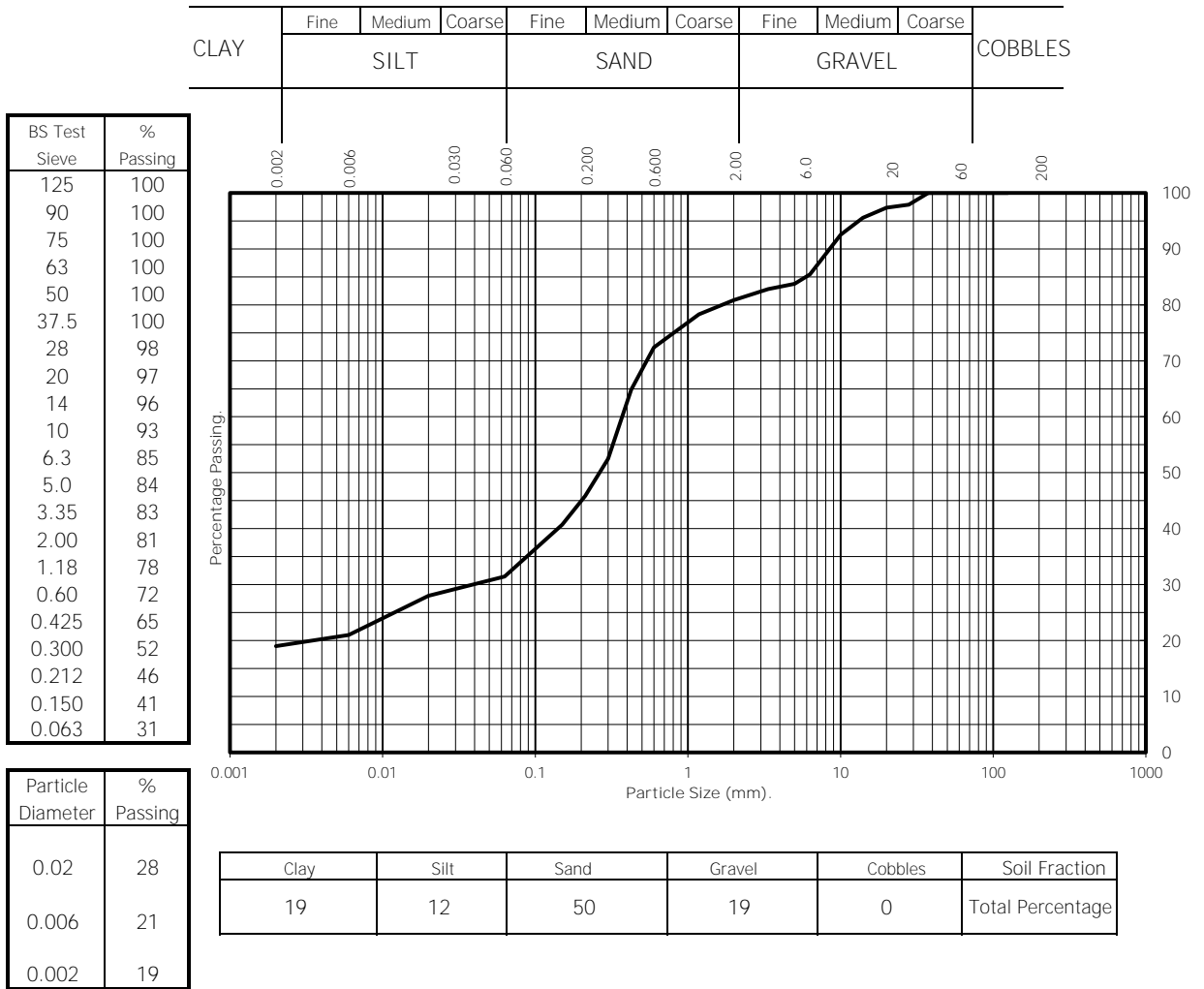
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	10
Contract Number:	34142	Depth from (m):	1.00
Hole Number:	TP927	Depth to (m):	1.80
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown silty clayey fine to coarse gravelly SAND.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

BS 1377 Part 2: 1990.
Wet Sieve, Clause 9.2

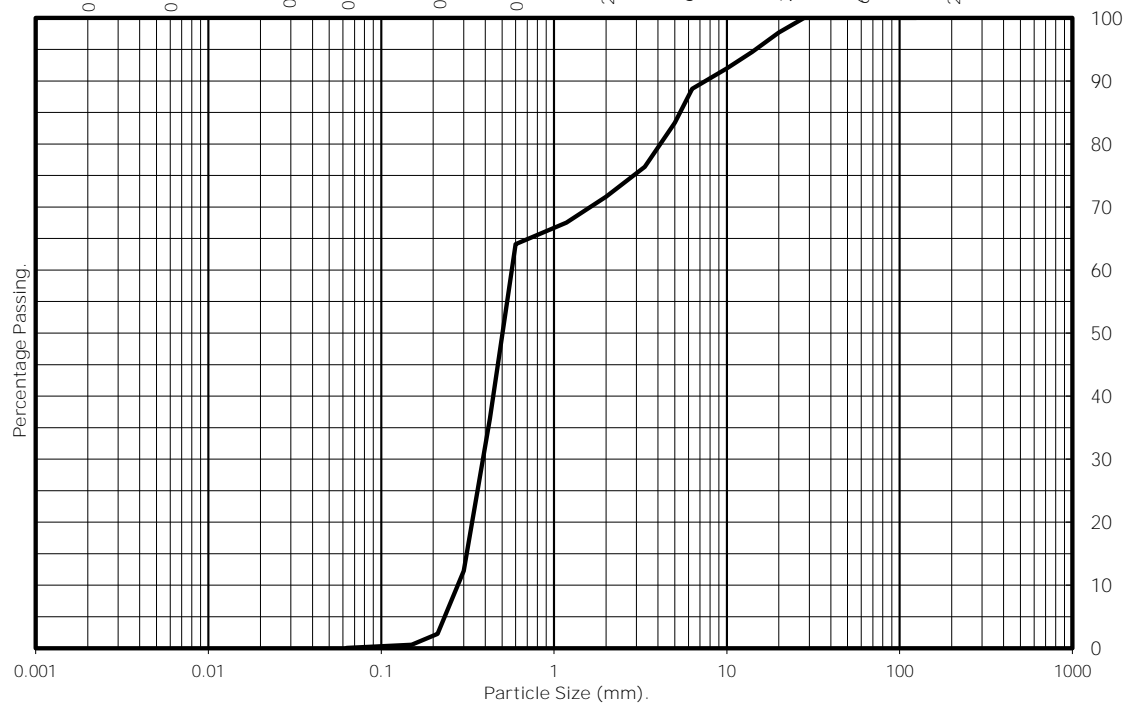
Client ref: UA008426-01
Contract Number: 34142
Hole Number: TP1203

Sample Number: 9
Depth from (m): 1.50
Depth to (m):
Sample Type: B

Location: Northstowe Phase 2
Description: Orangish brown fine to coarse gravelly SAND

	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	
CLAY	SILT			SAND			GRAVEL			COBBLES

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	98
14	95
10	92
6.3	89
5.0	83
3.35	76
2.00	72
1.18	68
0.60	64
0.425	36
0.300	12
0.212	2
0.150	1
0.063	0



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	0	72	28	0	Total Percentage

Remarks:

#- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date:

6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

BS 1377 Part 2: 1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

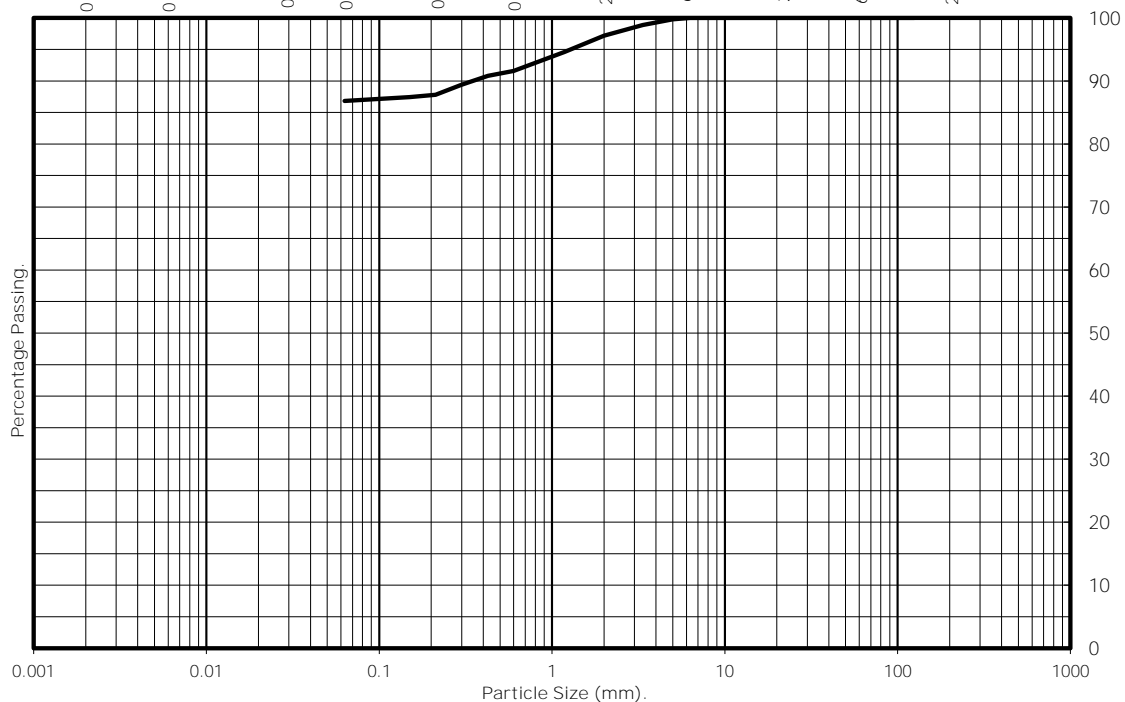
Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: TP1208

Sample Number: 10
 Depth from (m): 2.00
 Depth to (m):
 Sample Type: B

Location: Northstowe Phase 2
 Description: Greyish brown slightly fine gravelly fine to coarse sandy silty CLAY. (With chalk)

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	100
10	100
6.3	100
5.0	100
3.35	99
2.00	97
1.18	95
0.60	92
0.425	91
0.300	89
0.212	88
0.150	87
0.063	87



Particle Diameter	% Passing
0.02	73
0.006	62
0.002	49

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
49	38	10	3	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



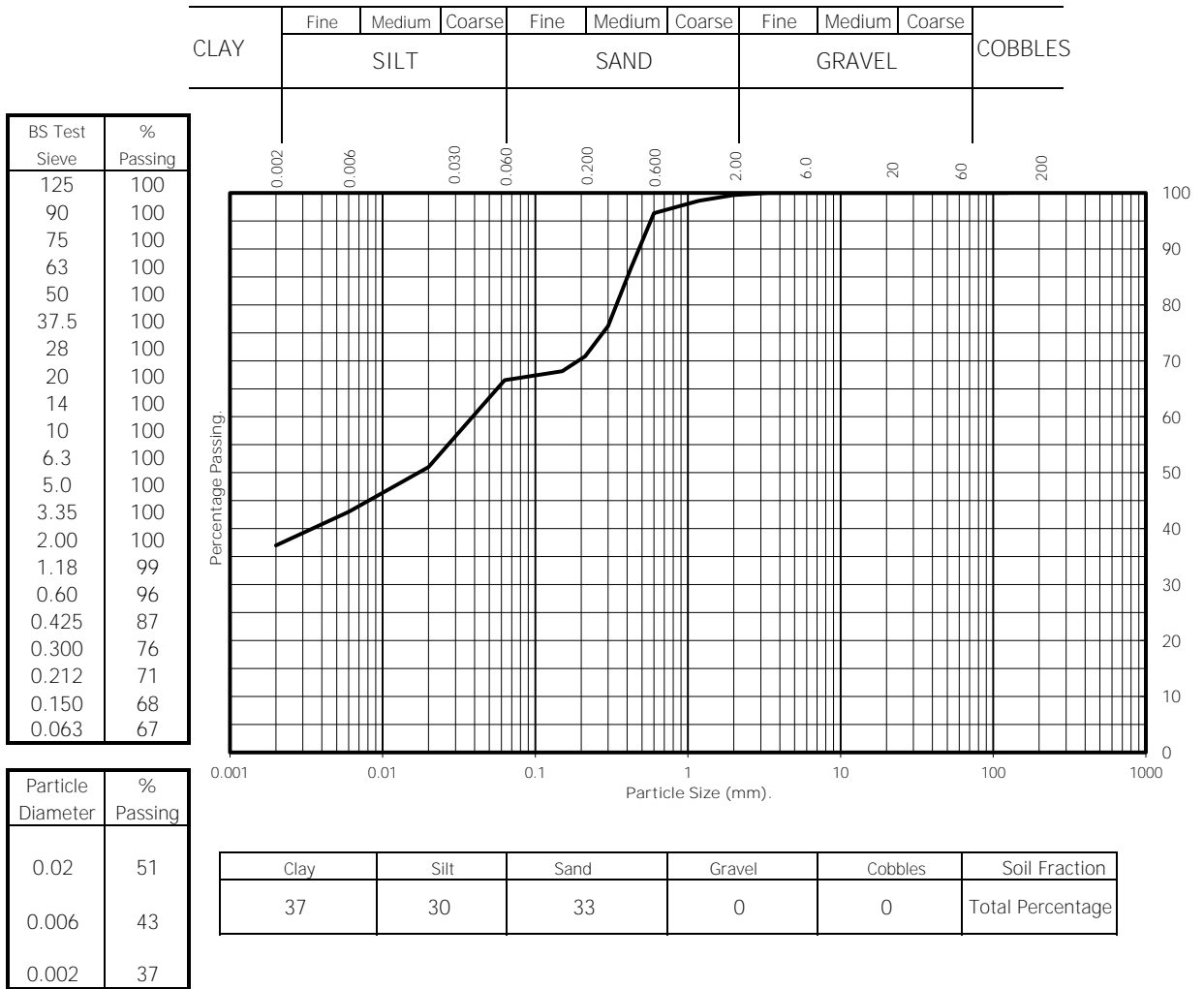
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	7
Contract Number:	34142	Depth from (m):	1.30
Hole Number:	TP1209	Depth to (m):	N/A
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Orangish brown fine to coarse gravelly SAND		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

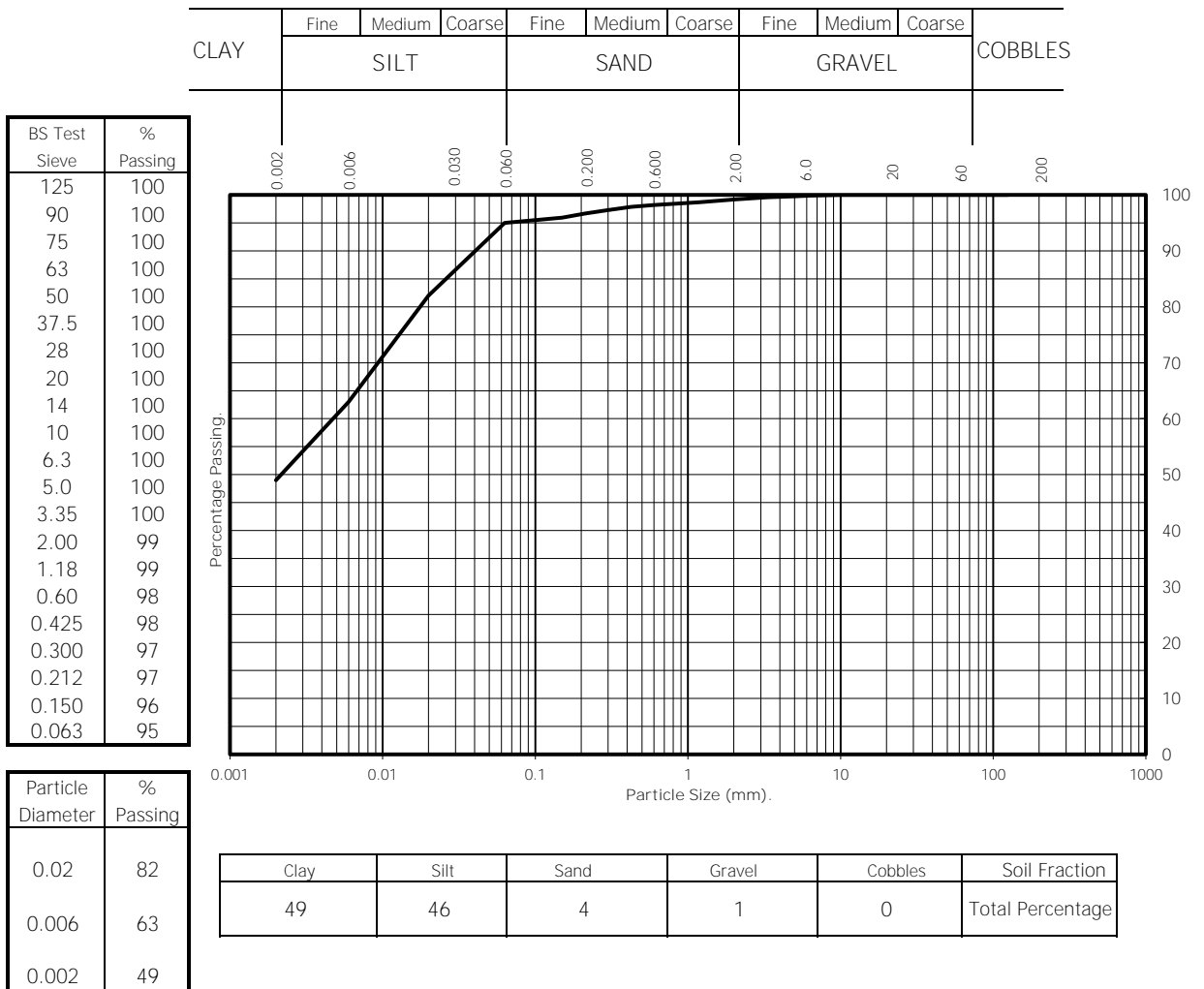
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: TP1216

Sample Number: 7
 Depth from (m): 1.50
 Depth to (m): N/A
 Sample Type: B

Location: Northstowe Phase 2
 Description: Greyish brown slightly fine gravelly fine to coarse sandy silty CLAY.



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

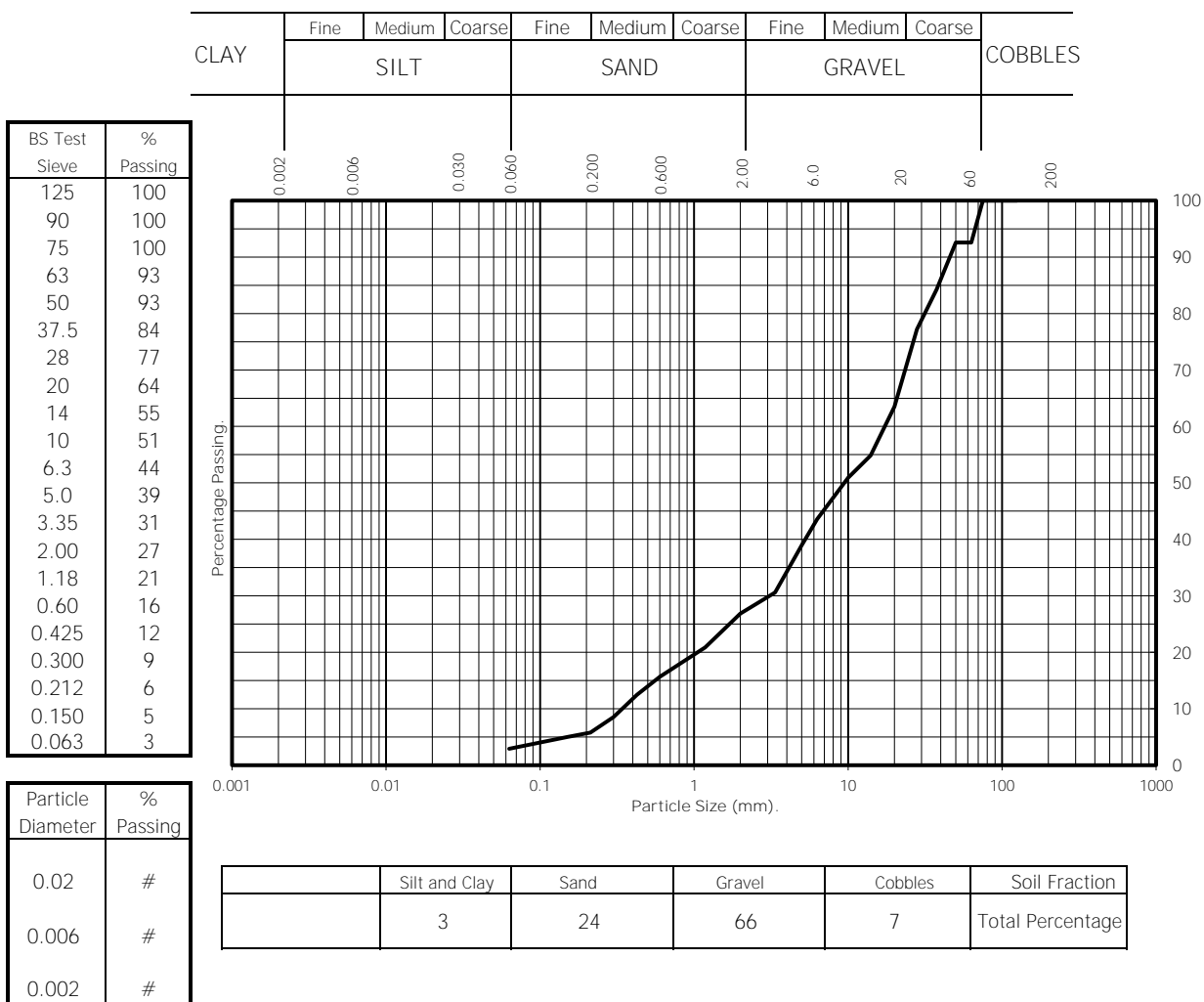
Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve, Clause 9.2

Client ref:	UA008426-01	Sample Number:	3
Contract Number:	34142	Depth from (m):	2.10
Hole Number:	TP1223	Depth to (m):	N/A
		Sample Type:	B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to coarse sandy GRAVEL with few cobbles.



Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

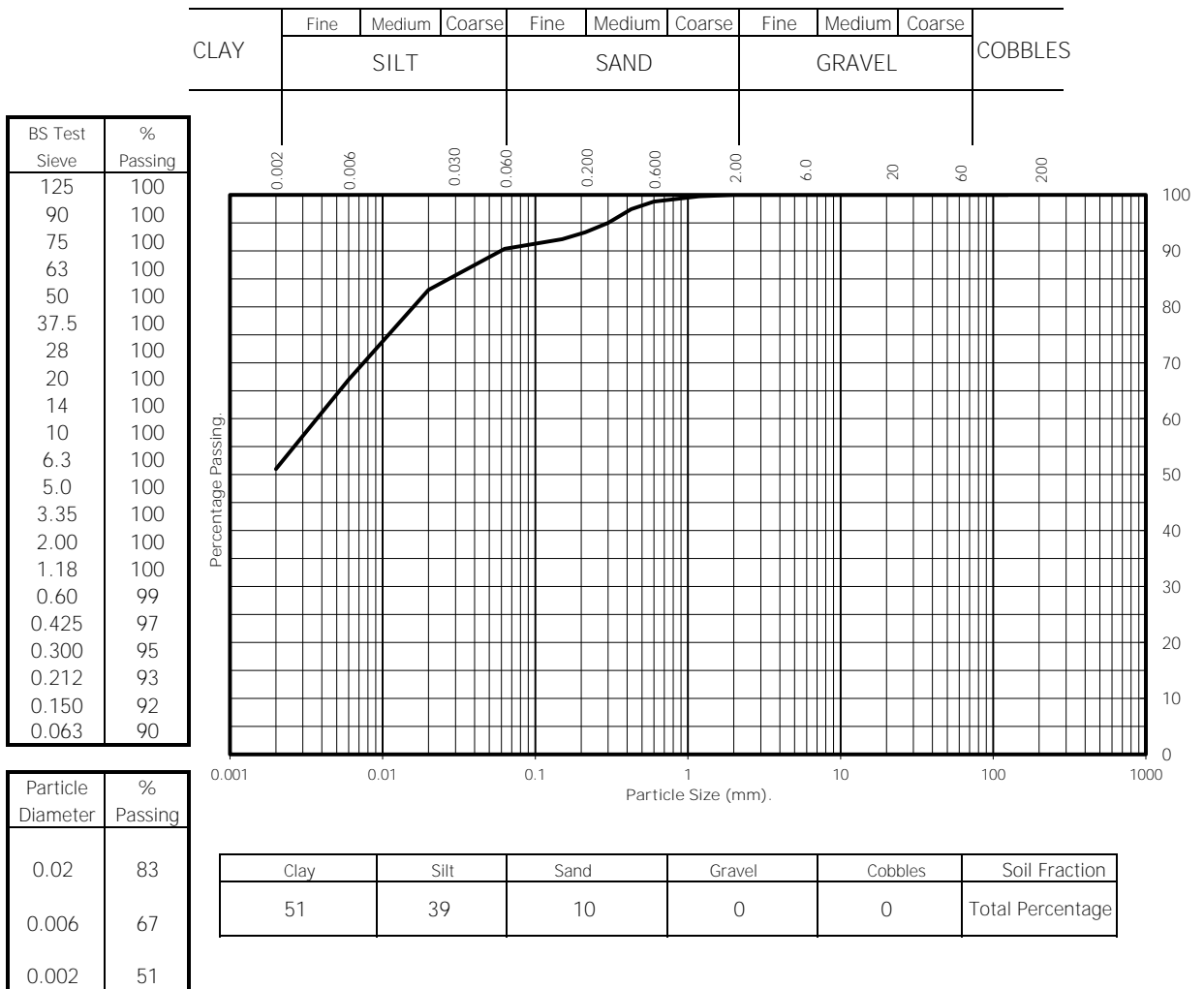
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: TP1224

Sample Number: 13
 Depth from (m): 2.10
 Depth to (m): 2.20
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown fine to coarse sandy silty CLAY.



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13

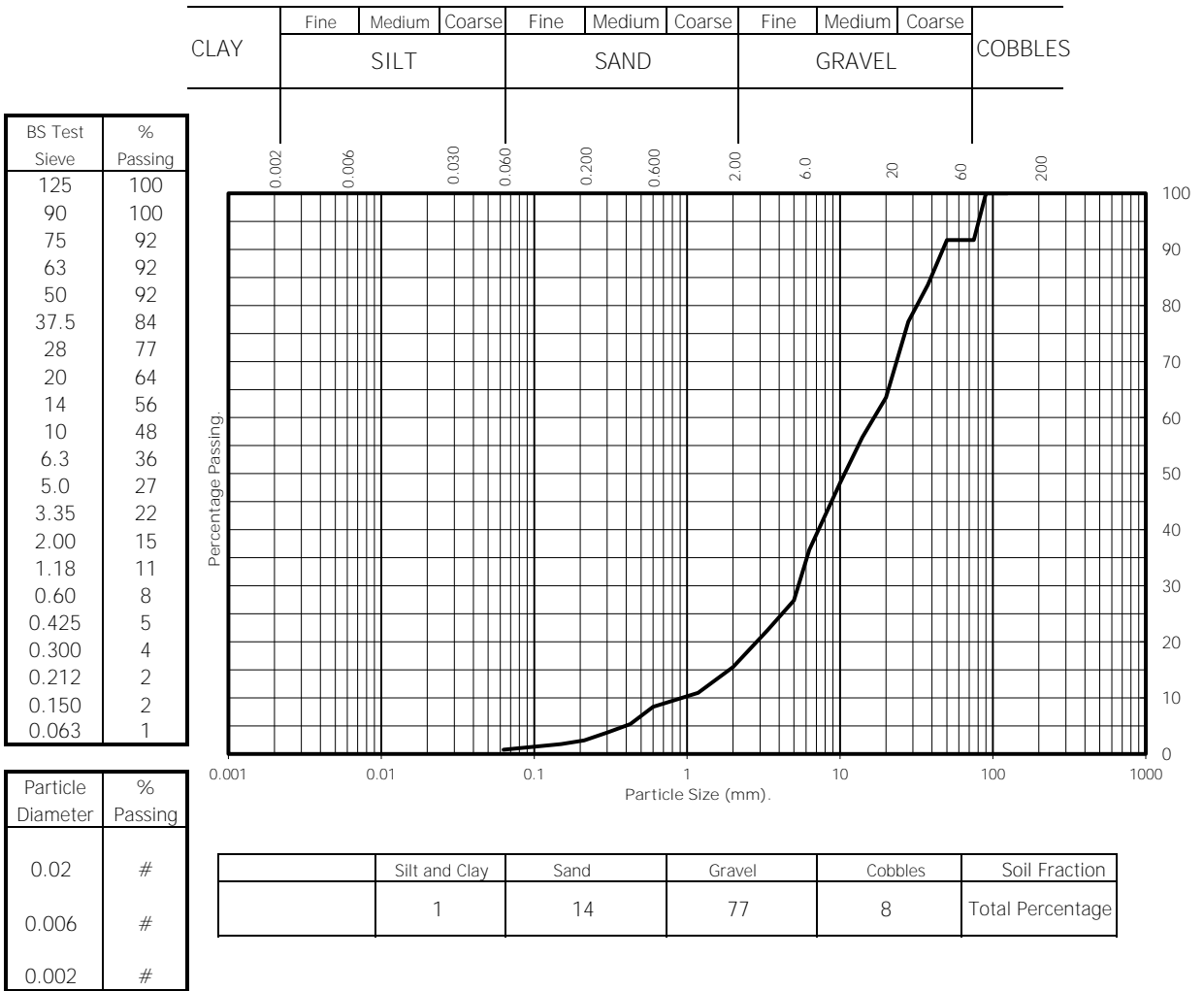


Test Report:

Particle Size Distribution Test
BS 1377 Part 2:1990.
Wet Sieve, Clause 9.2

Client ref: UA008426-01 Sample Number: 6
Contract Number: 34142 Depth from (m): 1.80
Hole Number: TPSA1004 Depth to (m): 2.20
Sample Type: B

Location: Northstowe Phase 2
Description: Brown slightly silty fine to coarse sandy GRAVEL with few cobbles.



Remarks:
- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve, Clause 9.2

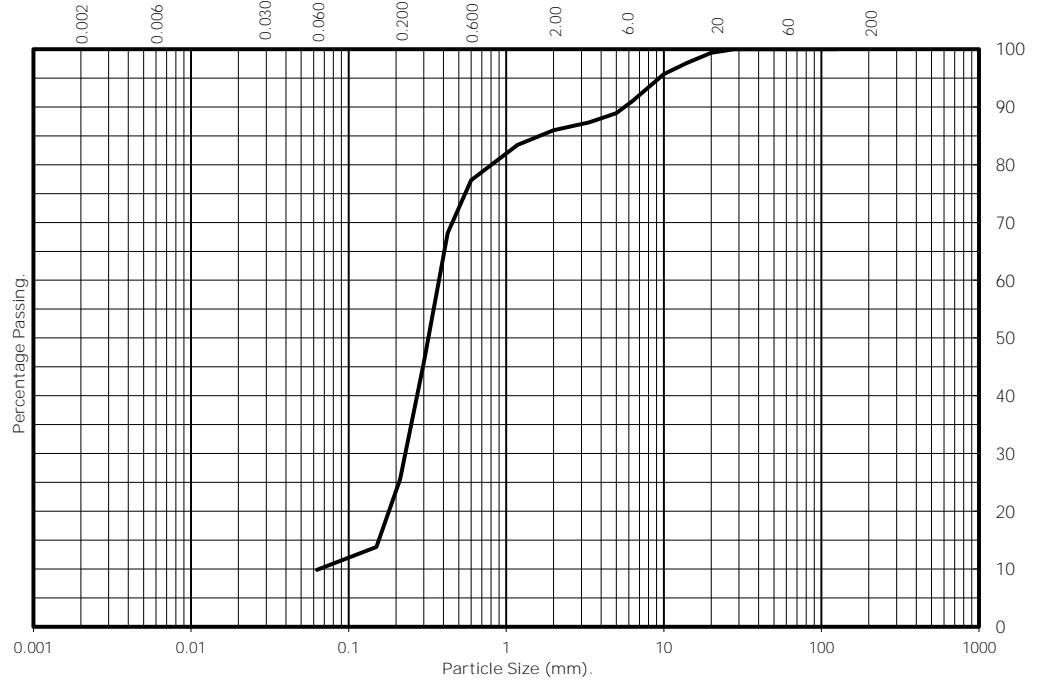
Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: TPSA616

Sample Number: 7
 Depth from (m): 1.20
 Depth to (m): 1.40
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to coarse gravelly SAND.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	99
14	98
10	96
6.3	91
5.0	89
3.35	87
2.00	86
1.18	83
0.60	77
0.425	68
0.300	46
0.212	26
0.150	14
0.063	10



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	10	76	14	0	Total Percentage

Remarks:

- not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



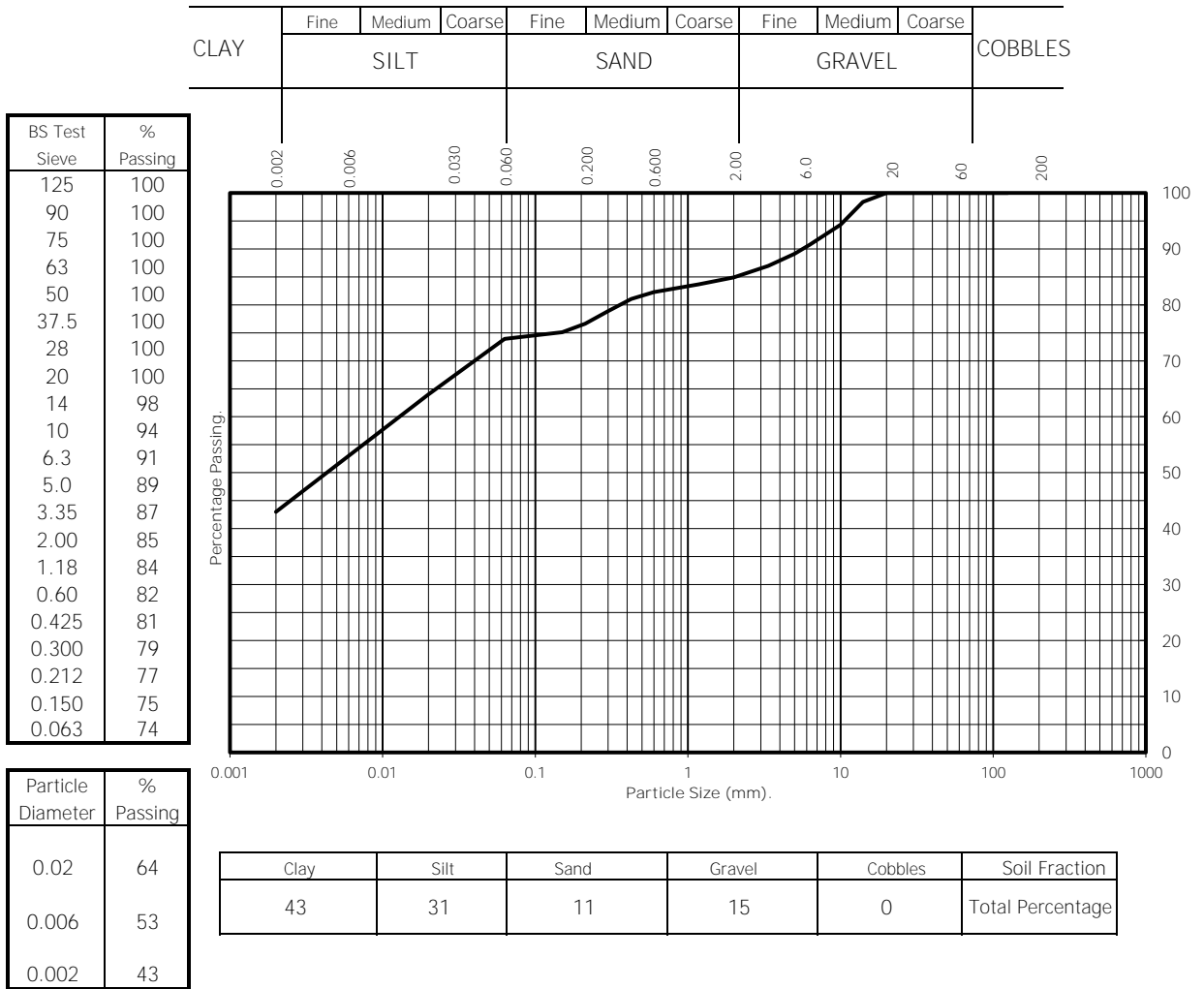
Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	7
Contract Number:	34142	Depth from (m):	0.90
Hole Number:	TPSA618	Depth to (m):	1.20
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown fine to coarse sandy fine to coarse gravelly silty CLAY.		



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

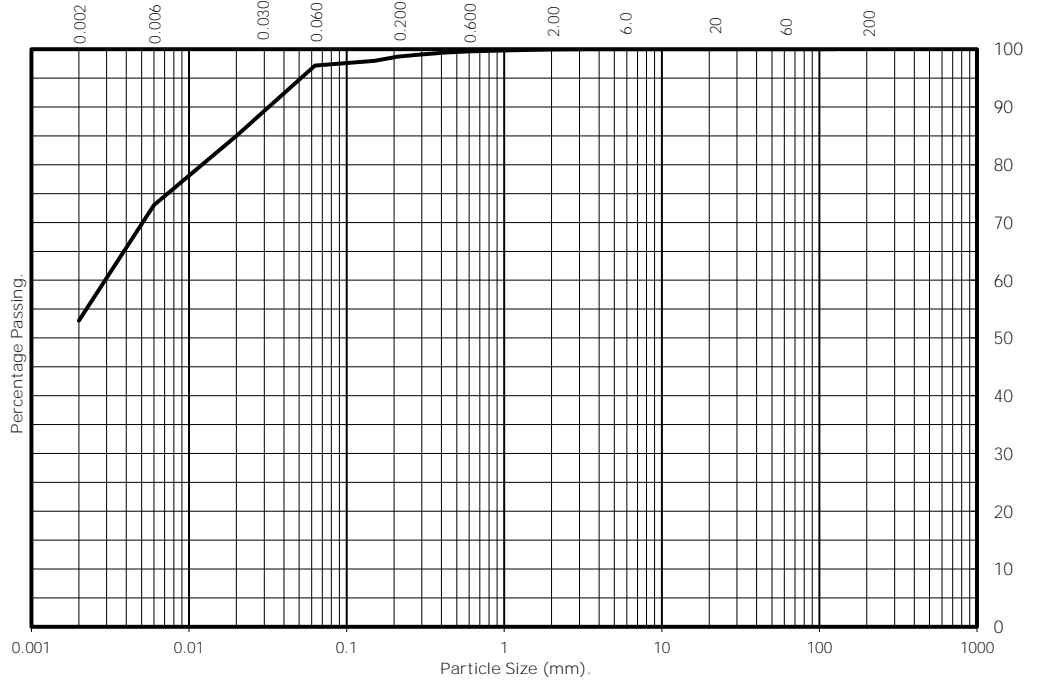
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	12
Contract Number:	34142	Depth from (m):	2.00
Hole Number:	WS608	Depth to (m):	2.80
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to medium sandy silty CLAY.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	100
10	100
6.3	100
5.0	100
3.35	100
2.00	100
1.18	100
0.60	100
0.425	99
0.300	99
0.212	99
0.150	98
0.063	97



Particle Diameter	% Passing
0.02	85
0.006	73
0.002	53

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
53	44	3	0	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

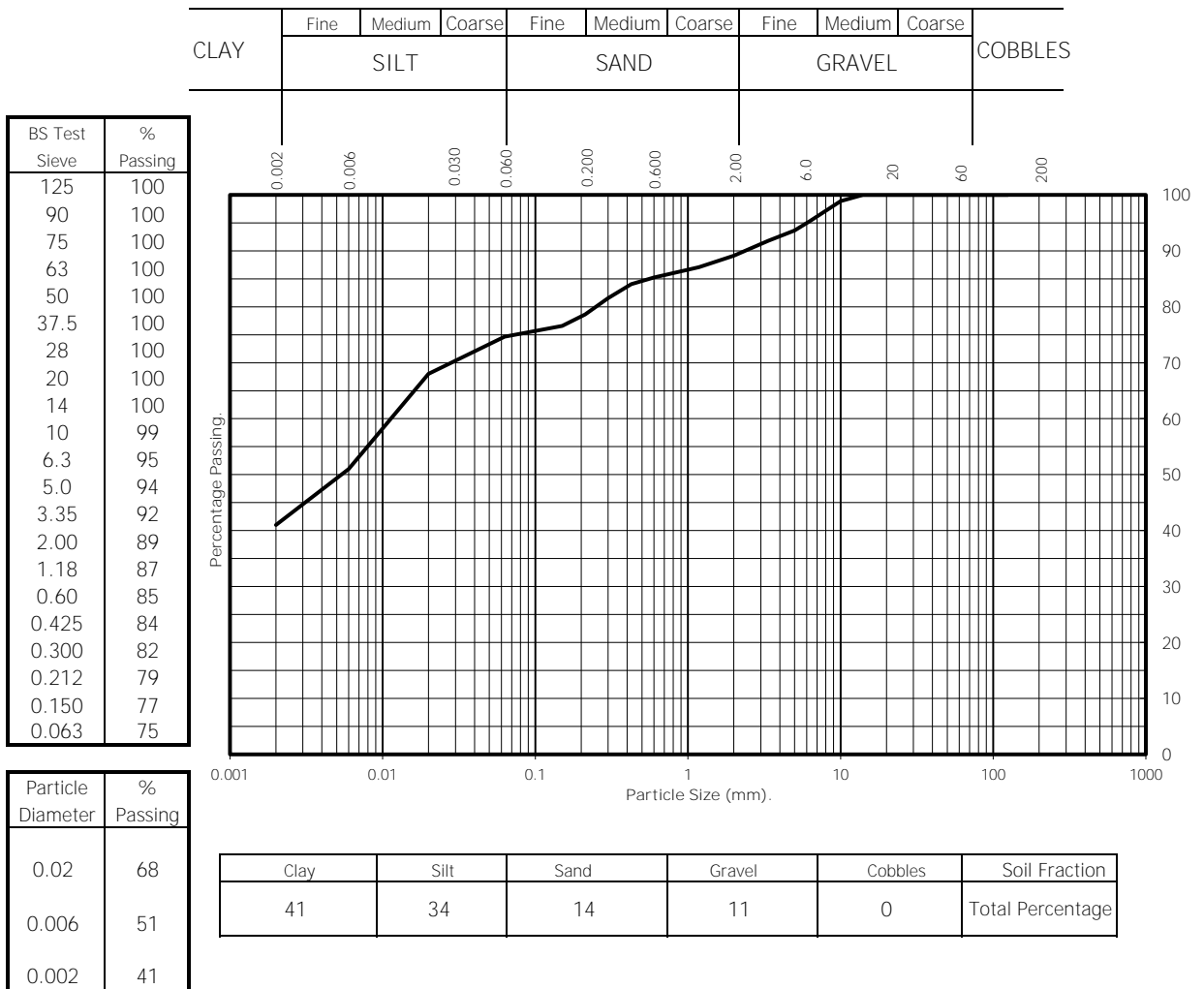
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref: UA008426-01
 Contract Number: 34142
 Hole Number: WS621

Sample Number: 4
 Depth from (m): 0.50
 Depth to (m): 1.20
 Sample Type: B

Location: Northstowe Phase 2
 Description: Brown fine to medium gravelly fine to coarse sandy silty CLAY.



Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

BS 1377 Part 2:1990.

Wet Sieve, Clause 9.2

Client ref:	UA008426-01	Sample Number:	6
Contract Number:	34142	Depth from (m):	1.20
Hole Number:	WS903	Depth to (m):	1.90
		Sample Type:	B

Location: Northstowe Phase 2
 Description: Brown silty clayey fine to coarse gravelly SAND.

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	98
20	95
14	94
10	89
6.3	78
5.0	76
3.35	71
2.00	63
1.18	57
0.60	47
0.425	37
0.300	22
0.212	13
0.150	9
0.063	6



Particle Diameter	% Passing
0.02	#
0.006	#
0.002	#

	Silt and Clay	Sand	Gravel	Cobbles	Soil Fraction
	6	57	37	0	Total Percentage

Remarks:
 # - not determined

For and behalf of GEO Site & Testing Services Ltd

Authorised By:
 reg. 13

Date: 6.3.17

reg. 13



Test Report:

Particle Size Distribution Test

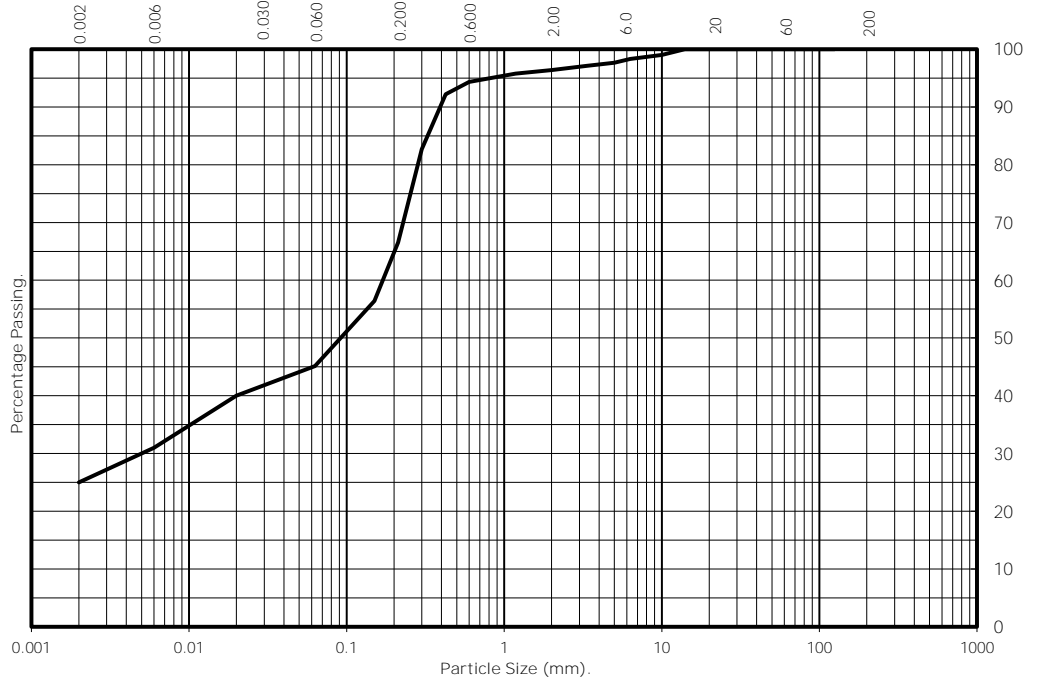
BS 1377 Part 2:1990.

Wet Sieve & Pipette Analysis, Clause 9.2 & 9.4

Client ref:	UA008426-01	Sample Number:	6
Contract Number:	34142	Depth from (m):	1.65
Hole Number:	WS1102	Depth to (m):	2.00
		Sample Type:	B
Location:	Northstowe Phase 2		
Description:	Brown slightly fine to medium sandy silty clayey fine to coarse SAND.		

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			

BS Test Sieve	% Passing
125	100
90	100
75	100
63	100
50	100
37.5	100
28	100
20	100
14	100
10	99
6.3	98
5.0	98
3.35	97
2.00	96
1.18	96
0.60	94
0.425	92
0.300	83
0.212	67
0.150	56
0.063	45



Particle Diameter	% Passing
0.02	40
0.006	31
0.002	25

Clay	Silt	Sand	Gravel	Cobbles	Soil Fraction
25	20	51	4	0	Total Percentage

Remarks:

Cl 9.4.8 - Sample has not been pretreated

For and behalf of GEO Site & Testing Services Ltd

Authorised By:

reg. 13

Date: 6.3.17

reg. 13





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01554 784041
Web: www.geo.uk.com

Certificate of Analysis

Date: 28/02/2017

Client: Arcadis

Our Reference: 34142

Client Reference: UA008426-01

Contract Title: Northstowe Phase 2

Description: (Total Samples) 38

Date Received:

Date Started: 23/02/2017

Date Completed: 28/02/2017

Test Procedures: (BRE BR 279)

Notes:

Solid samples will be disposed 1 month and liquids 2 weeks
after the date of issue of this test certificate

Approved By:

Authorised Signatories:

reg. 13

Contract No: 34142
 Client Ref: UA008426-01
 Location: Northstowe Phase 2
 Date: 28/02/2017

Summary of Chemical Analysis

(BRE BR 279)

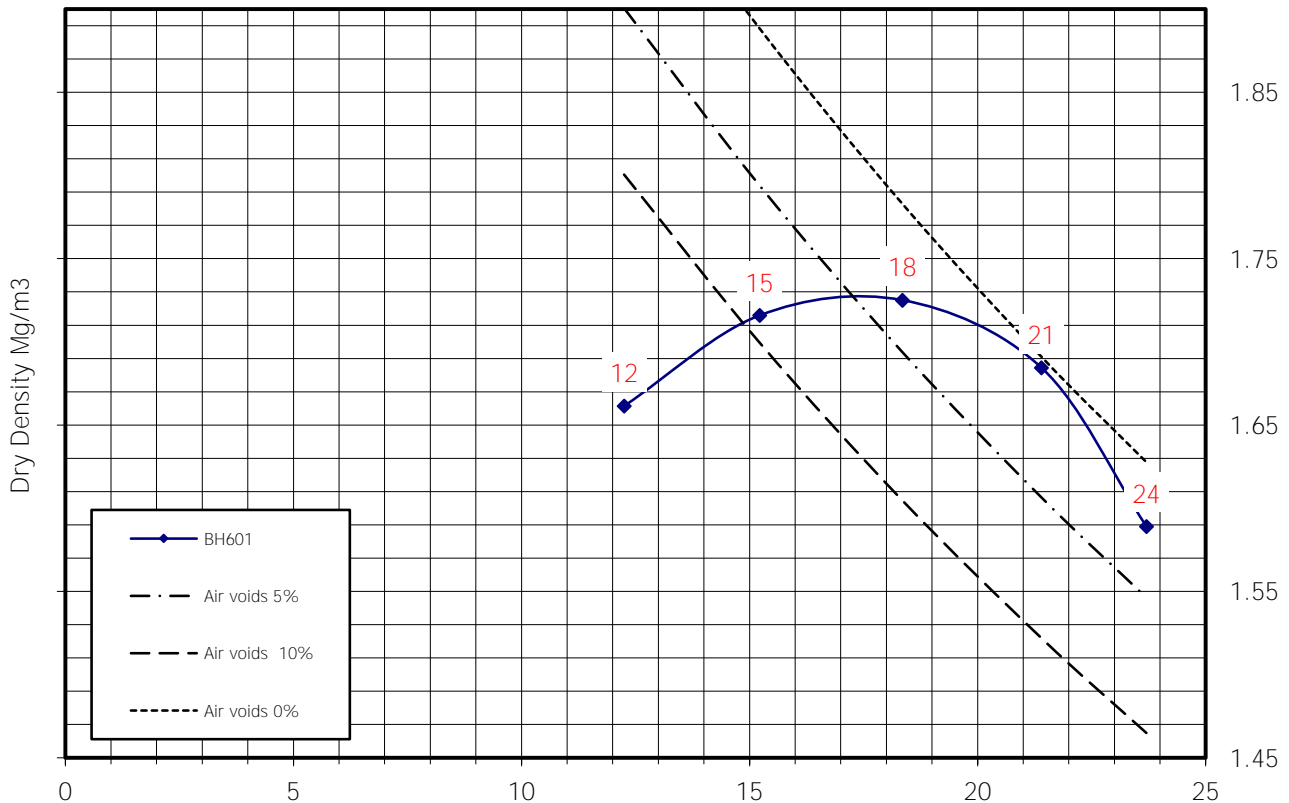
Hole Number	Sample Number	Sample Type	Depth m	Sulphate Content as SO ₄		Ground-water g/l BR 279	Chloride Content		pH Value @ 25°C BR 279	Total Sulphur % S BR 279	Magnesium g/l BR 279	Nitrate NO ₃ mg/l BR 279
				Acid Soluble Sulphate as % SO ₄ BR 279	Aqueous Extract Sulphate as g/l SO ₄ BR 279		Semi Quantative Test Strip mg Cl/l BR 279	Quantative g/l BR 279				
BH1001		B	5.5-6.5	0.15	0.02		NCP		7.11	0.06	<1	<10
BH1001		B	7.0-8.0	0.17	0.02				7.31	0.06		
BH1002		B	5.5-6.0	0.12	0.01				7.26	0.05		
BH1003		B	3.0-4.0	0.15	0.02		NCP		7.12	0.06	<1	10
BH1101		D	2.30	0.19	0.02		NCP		7.55	0.07	<1	10
BH1101		D	4.30		0.02							
BH1101		D	5.20	0.17	0.02				7.92	0.06		
BH1101		D	8.00	0.21	0.02		NCP		7.86	0.08	<1	10
BH1101		D	2.60	0.17	0.02		NCP		7.73	0.06	<1	10
BH1102		D	14.00	0.15	0.02		NCP		7.85	0.06	<1	10-25
BH110		D	0.10	0.19	0.02		NCP		8.23	0.07	<1	<10
BH110		D	0.20	0.21	0.02		NCP		8.06	0.08	<1	10
BH110		B	4-4.45	0.19	0.02				7.85	0.08		
BH201		D	5.50	0.19	0.02		NCP		7.52	0.07	<1	<10
BH201		D	10.50		0.01							
BH201		D	12.50	0.22	0.02				7.61	0.08		
BH202		D	3.50	0.21	0.03		NCP		7.35	0.08	<1	10-25
BH202		D	5.50	0.15	0.02				7.58	0.06		
BH204		D	4.00	0.14	0.01		NCP		7.25	0.05	<1	10
BH204		D	6.50	0.17	0.02		NCP		7.72	0.06	<1	10
BH205		D	4.5-4.95	0.21	0.03		NCP		7.25	0.08	<1	10
BH601		D	1.00	0.17	0.02		NCP		7.48	0.07	<1	10
BH601		D	1.20	0.19	0.02		NCP		7.34	0.07	<1	10-25
BH601		D	3.00	0.15	0.02		NCP		7.56	0.06	<1	10
BH601		D	5.00	0.14	0.02		NCP		7.50	0.05	<1	<10
BH601		D	7.00	0.19	0.02		NCP		7.68	0.07	<1	10
BH602		D	1.2-1.7	0.19	0.02				7.85	0.07		
BH602		B	1.80	0.22	0.02				7.15	0.08		
BH602		D	3.00	0.19	0.02		NCP		7.25	0.07	<1	<10
BH602		D	4.00	0.24	0.03		NCP		7.60	0.09	<1	10
BH602		D	5.00	0.22	0.02				7.22	0.08		
BH604		D	3.50	0.19	0.02				7.62	0.07		
BH605		D	1.2-1.65	0.14	0.01		NCP		7.45	0.05	<1	10
BH605		D	2.00	0.17	0.02				7.82	0.07		
BH606		D	2.50	0.19	0.02		NCP		7.77	0.07	<1	<10
BH607		D	2.50	0.17	0.02		NCP		7.96	0.06	<1	<10
BH608		D	4.5-4.95	0.21	0.03		NCP		8.11	0.08	<1	10
TP1207		D	0.5-0.9	0.19	0.02		NCP		8.00	0.07	<1	10-25

NCP - No Chloride present

Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 3
 Depth (m): 1.00 - 2.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	12	15	18	21.4	23.7
Bulk Density (Mg/m ³):	1.86	1.98	2.04	2.04	1.97
Dry Density (Mg/m ³):	1.66	1.72	1.73	1.68	1.59

Initial Moisture Content: 24 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.73 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 18 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

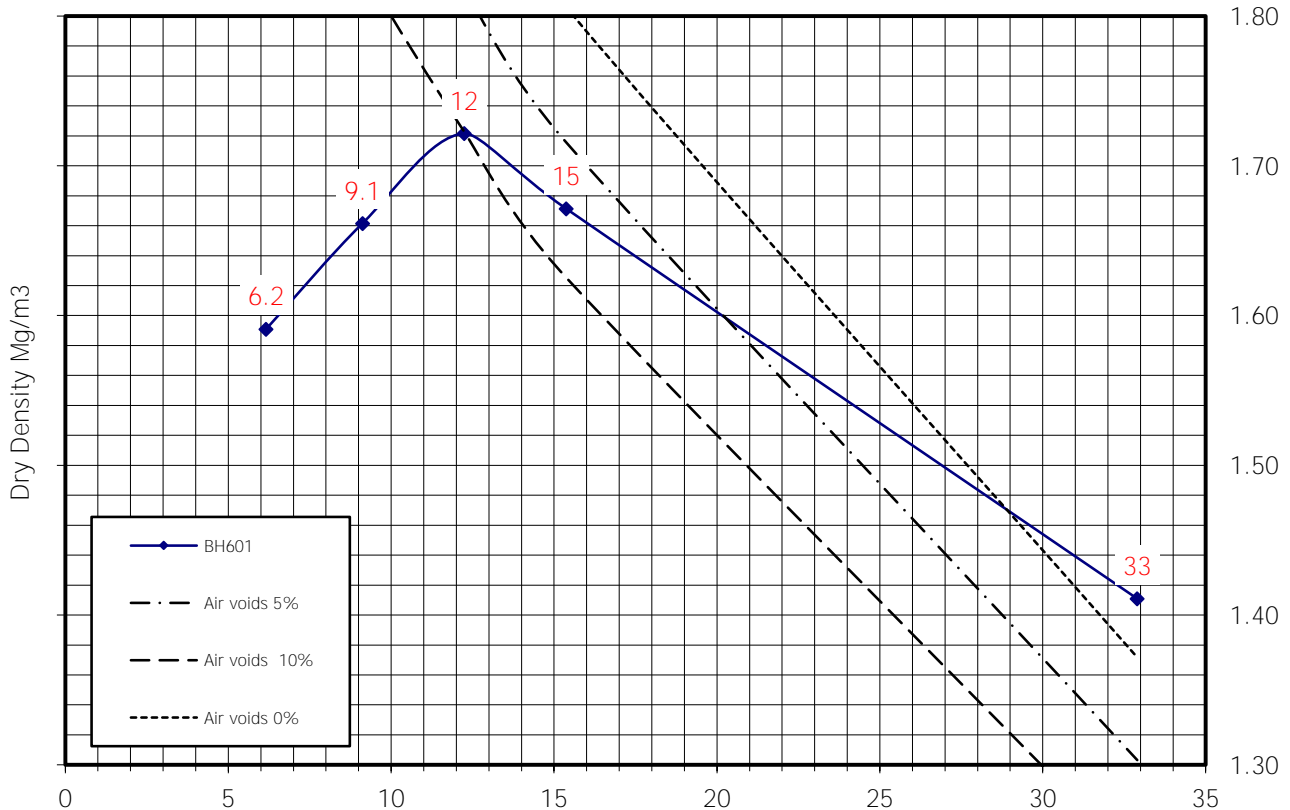
24.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 6
 Depth (m): 3.80 - 4.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.2	9.1	12	15.4	32.9
Bulk Density (Mg/m ³):	1.69	1.81	1.93	1.93	1.88
Dry Density (Mg/m ³):	1.59	1.66	1.72	1.67	1.41

Initial Moisture Content: 33 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.5 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.72 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 12 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

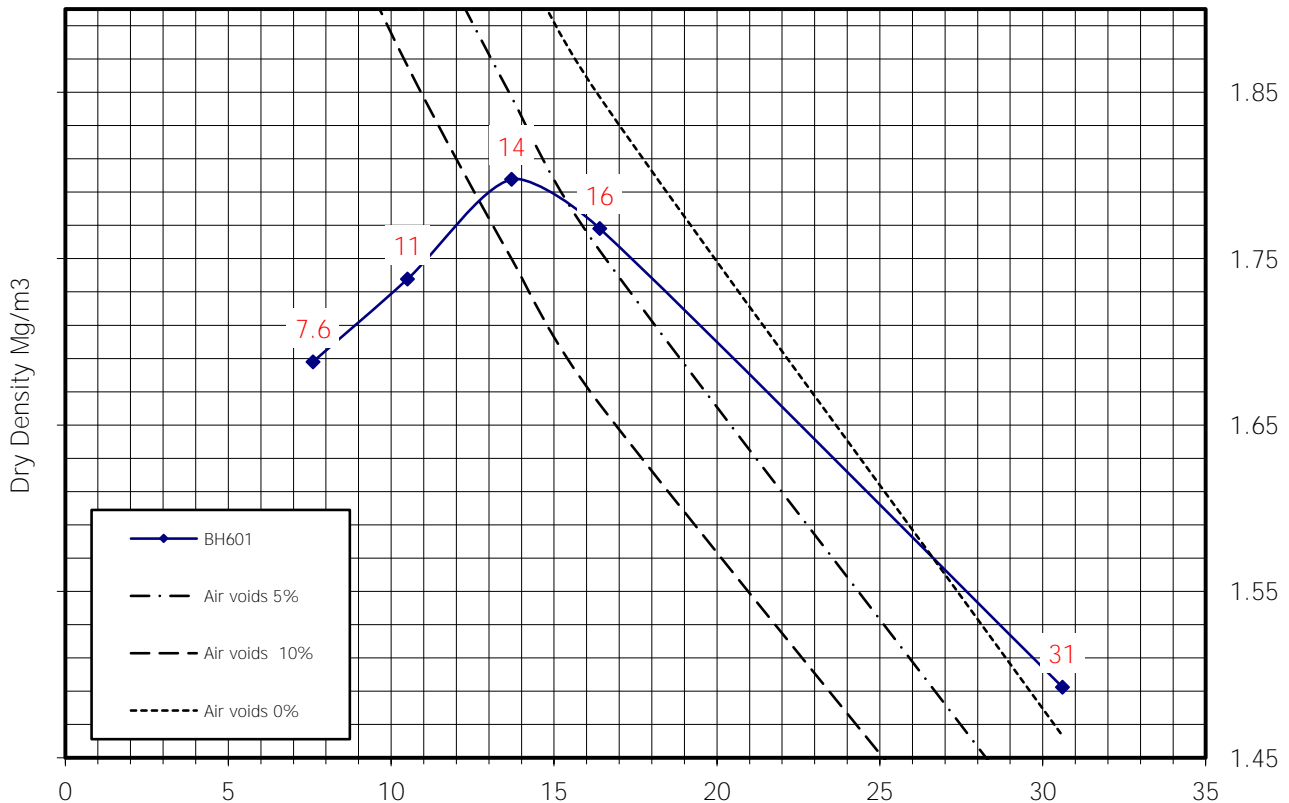
27.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 7
 Depth (m): 4.50 - 5.50
 Sample Type: B



	Moisture Content %				
	1	2	3	4	5
Compaction Point:	1	2	3	4	5
Moisture Content:	7.6	11	14	16.4	30.6
Bulk Density (Mg/m ³):	1.82	1.92	2.04	2.06	1.95
Dry Density (Mg/m ³):	1.69	1.74	1.80	1.77	1.49

Initial Moisture Content: 31 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.80 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

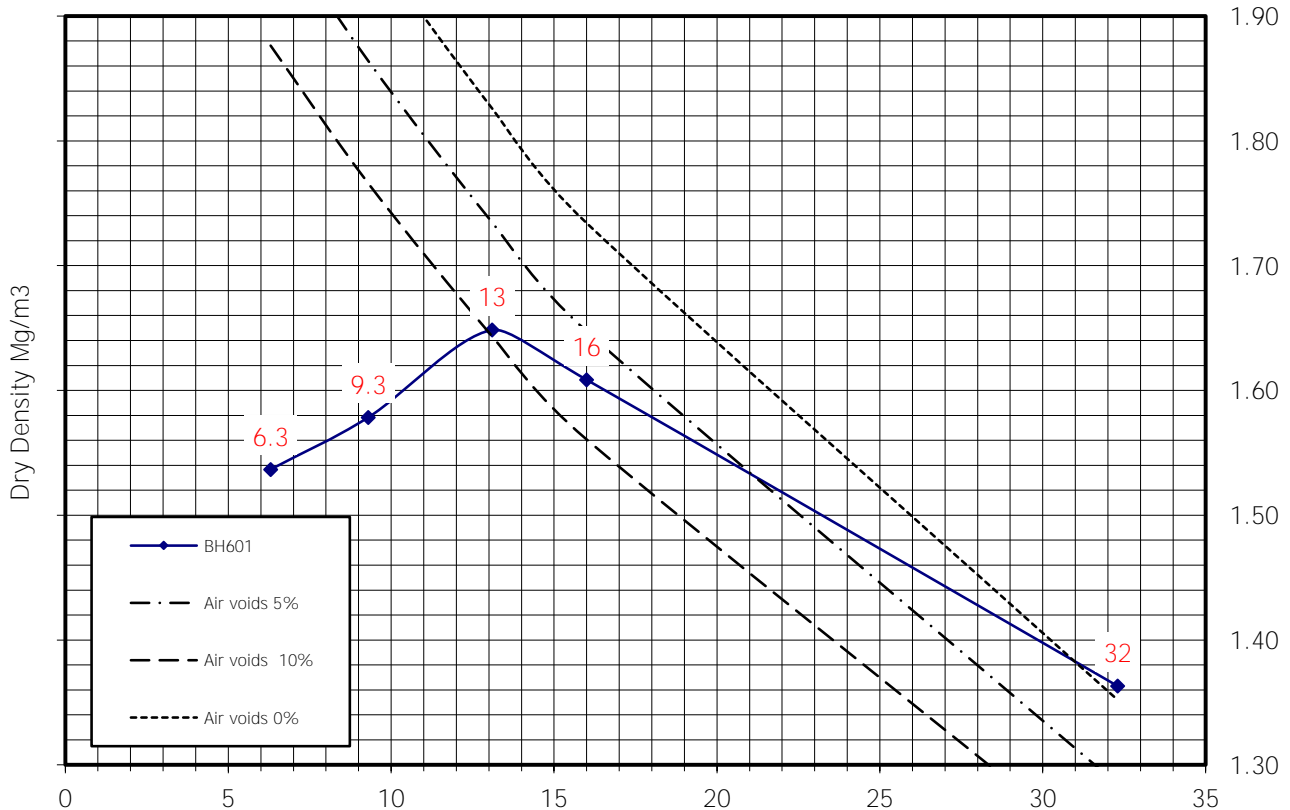
24.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 9
 Depth (m): 6.50 - 7.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.3	9.3	13	16.0	32.3
Bulk Density (Mg/m ³):	1.63	1.73	1.86	1.87	1.80
Dry Density (Mg/m ³):	1.54	1.58	1.65	1.61	1.36

Initial Moisture Content:	32	Method of Compaction:	2.5kg Rammer
Particle Density (Mg/m ³):	2.4 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0
Maximum Dry Density (Mg/m ³):	1.65	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	13	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

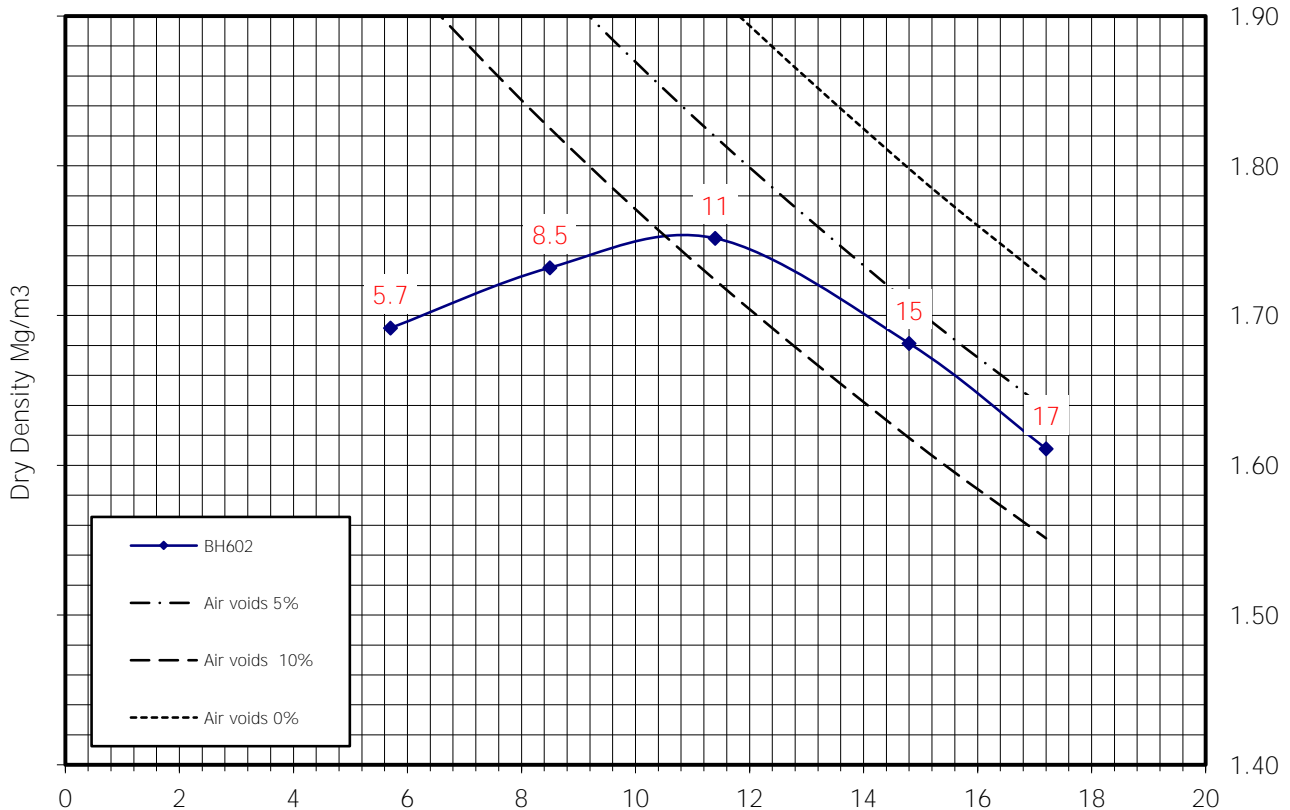
24.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 7
 Depth (m): 3.00 - 3.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	5.7	8.5	11	14.8	17.2
Bulk Density (Mg/m ³):	1.79	1.88	1.95	1.93	1.89
Dry Density (Mg/m ³):	1.69	1.73	1.75	1.68	1.61

Initial Moisture Content: 15 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.45 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.75 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 11 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

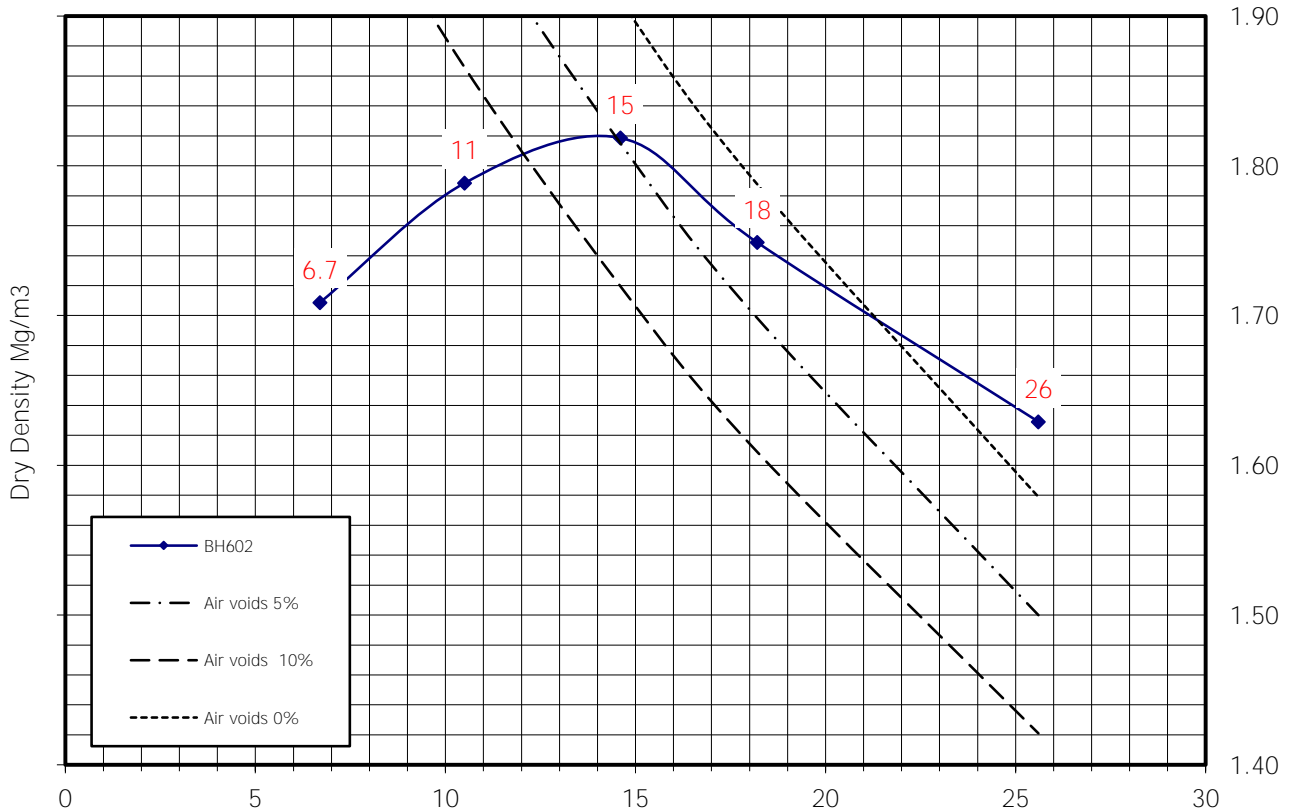
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 9
 Depth (m): 3.50 - 4.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.7	11	15	18.2	25.6
Bulk Density (Mg/m ³):	1.82	1.98	2.08	2.07	2.05
Dry Density (Mg/m ³):	1.71	1.79	1.82	1.75	1.63

Initial Moisture Content:	26	Method of Compaction:	2.5kg Rammer
Particle Density (Mg/m ³):	2.65 Assumed	Material Retained on 37.5 mm Test Sieve (%):	3.1
Maximum Dry Density (Mg/m ³):	1.82	Material Retained on 20.0 mm Test Sieve (%):	5.4
Optimum Moisture Content (%):	15	Sample Preparation Clause:	3.2.4.2

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

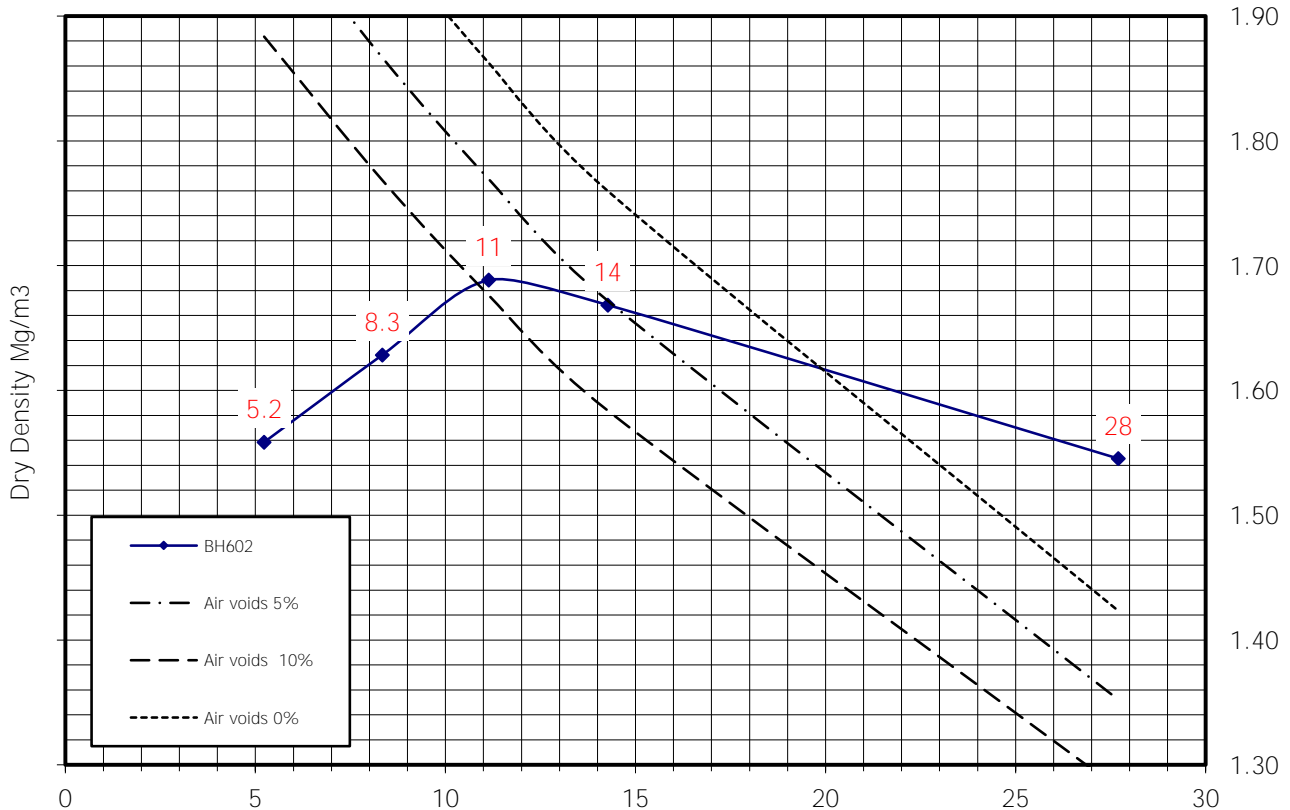
24.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 10
 Depth (m): 5.00 - 5.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	5.2	8.3	11	14.3	27.7
Bulk Density (Mg/m ³):	1.64	1.76	1.88	1.91	1.97
Dry Density (Mg/m ³):	1.56	1.63	1.69	1.67	1.55

Initial Moisture Content: 28 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.35 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.69 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 11 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

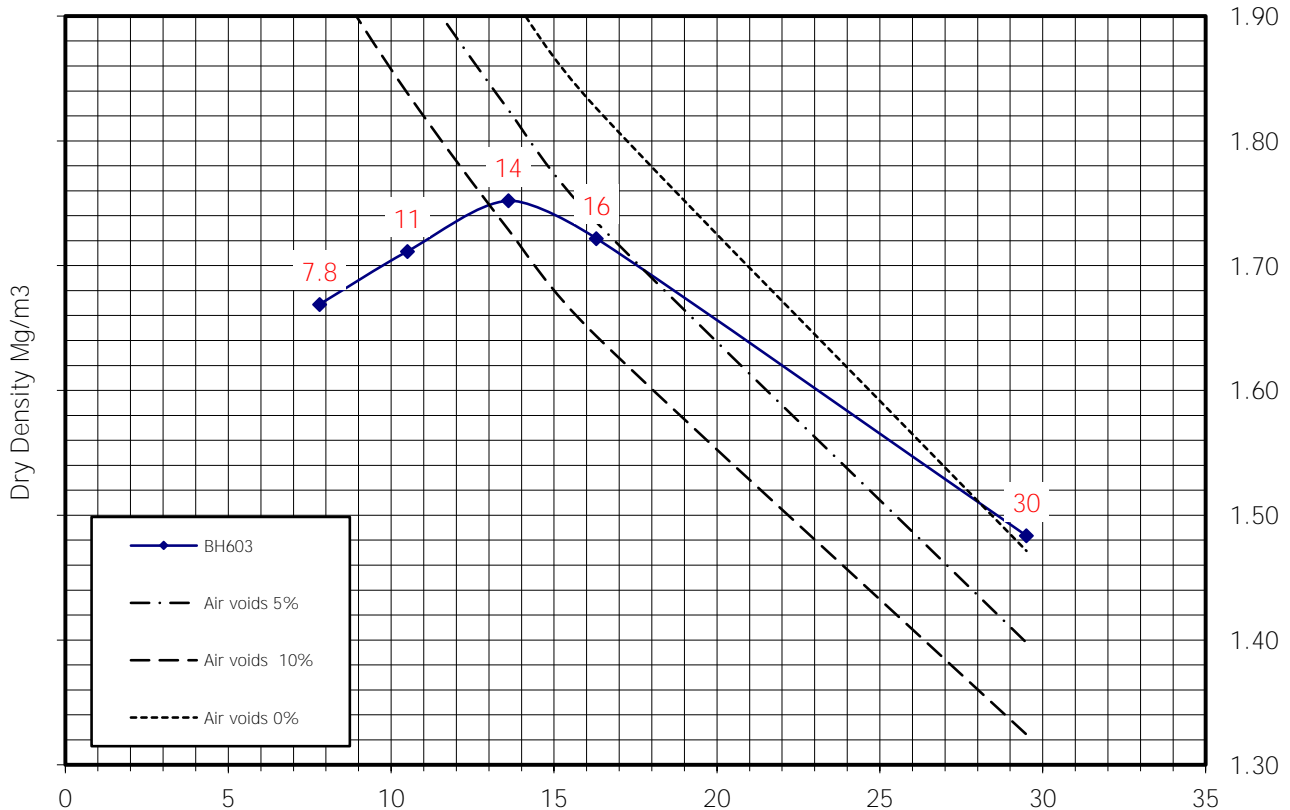
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 2
 Depth (m): 0.30 - 1.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	7.8	11	14	16.3	29.5
Bulk Density (Mg/m ³):	1.80	1.89	1.99	2.00	1.92
Dry Density (Mg/m ³):	1.67	1.71	1.75	1.72	1.48

Initial Moisture Content: 30 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.6 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.75 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

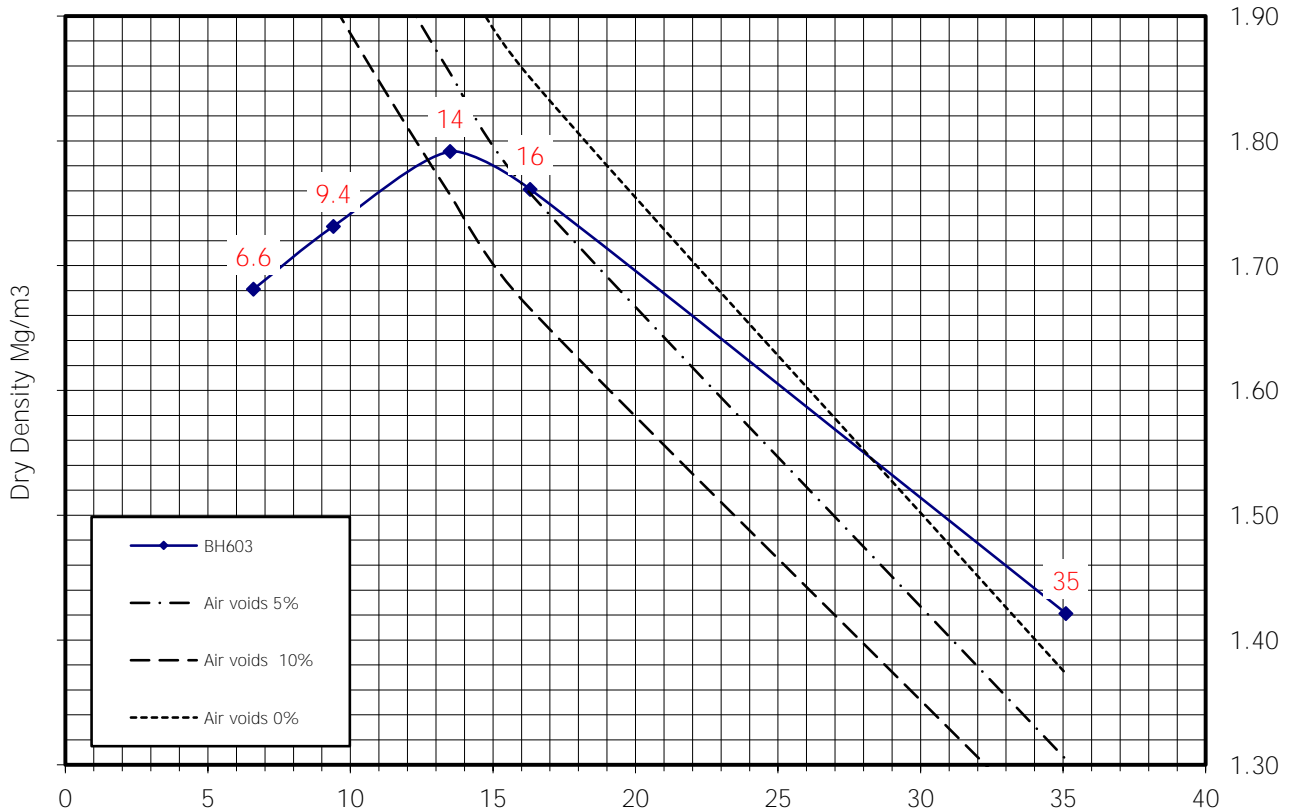
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 2
 Depth (m): 1.00 - 1.20
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.6	9.4	14	16.3	35.1
Bulk Density (Mg/m ³):	1.79	1.89	2.03	2.05	1.92
Dry Density (Mg/m ³):	1.68	1.73	1.79	1.76	1.42

Initial Moisture Content: 35 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.79 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

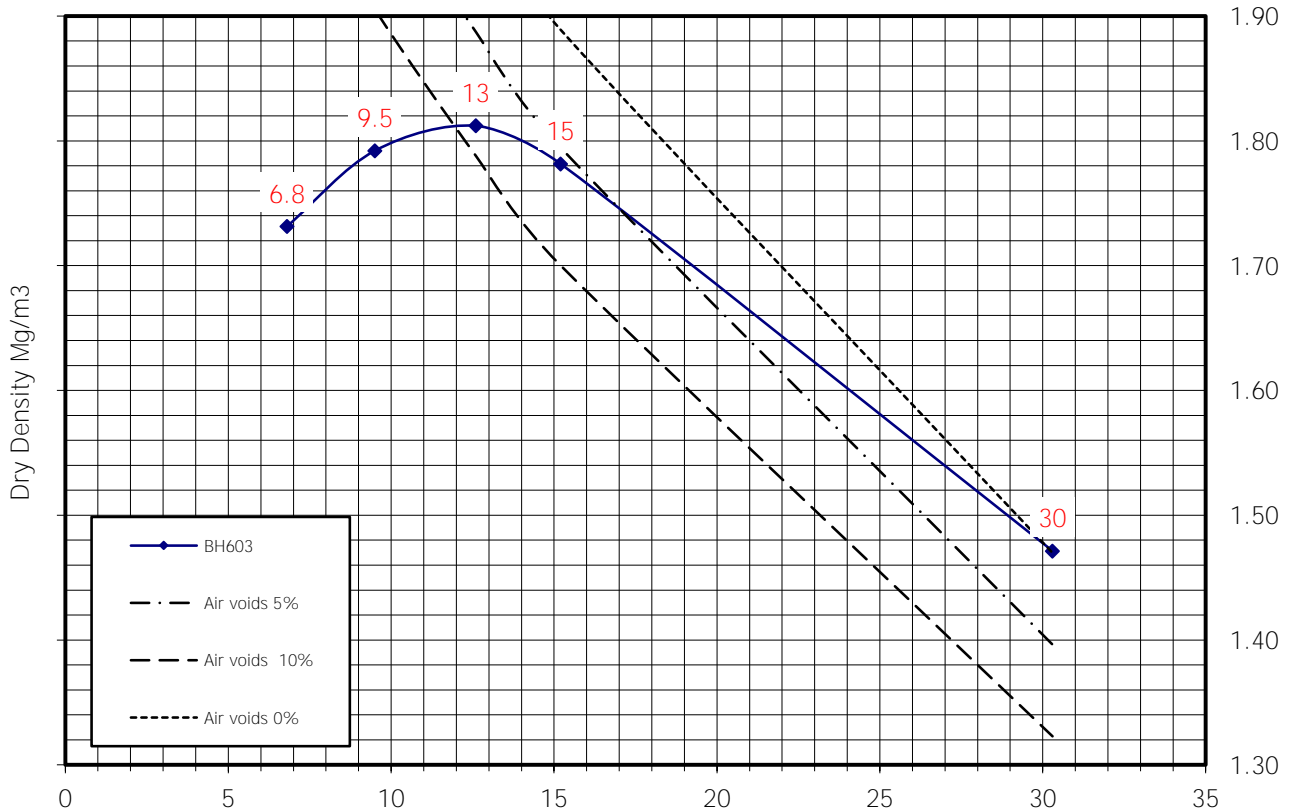
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 2
 Depth (m): 1.20 - 1.65
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.8	9.5	13	15.2	30.3
Bulk Density (Mg/m ³):	1.85	1.96	2.04	2.05	1.92
Dry Density (Mg/m ³):	1.73	1.79	1.81	1.78	1.47

Initial Moisture Content: 30 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.81 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 13 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

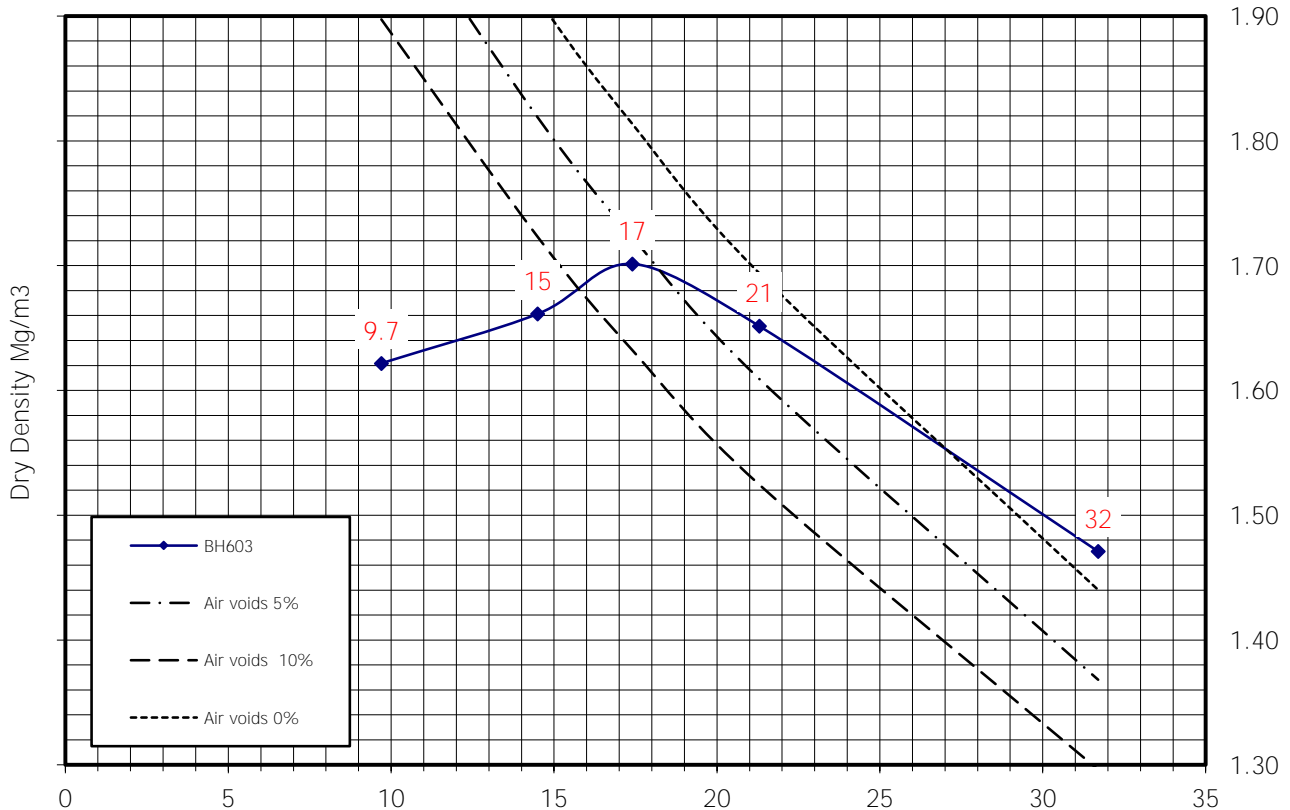
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 7
 Depth (m): 3.50 - 4.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	9.7	15	17	21.3	31.7
Bulk Density (Mg/m ³):	1.78	1.90	2.00	2.00	1.94
Dry Density (Mg/m ³):	1.62	1.66	1.70	1.65	1.47

Initial Moisture Content: 32 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.70 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 17 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

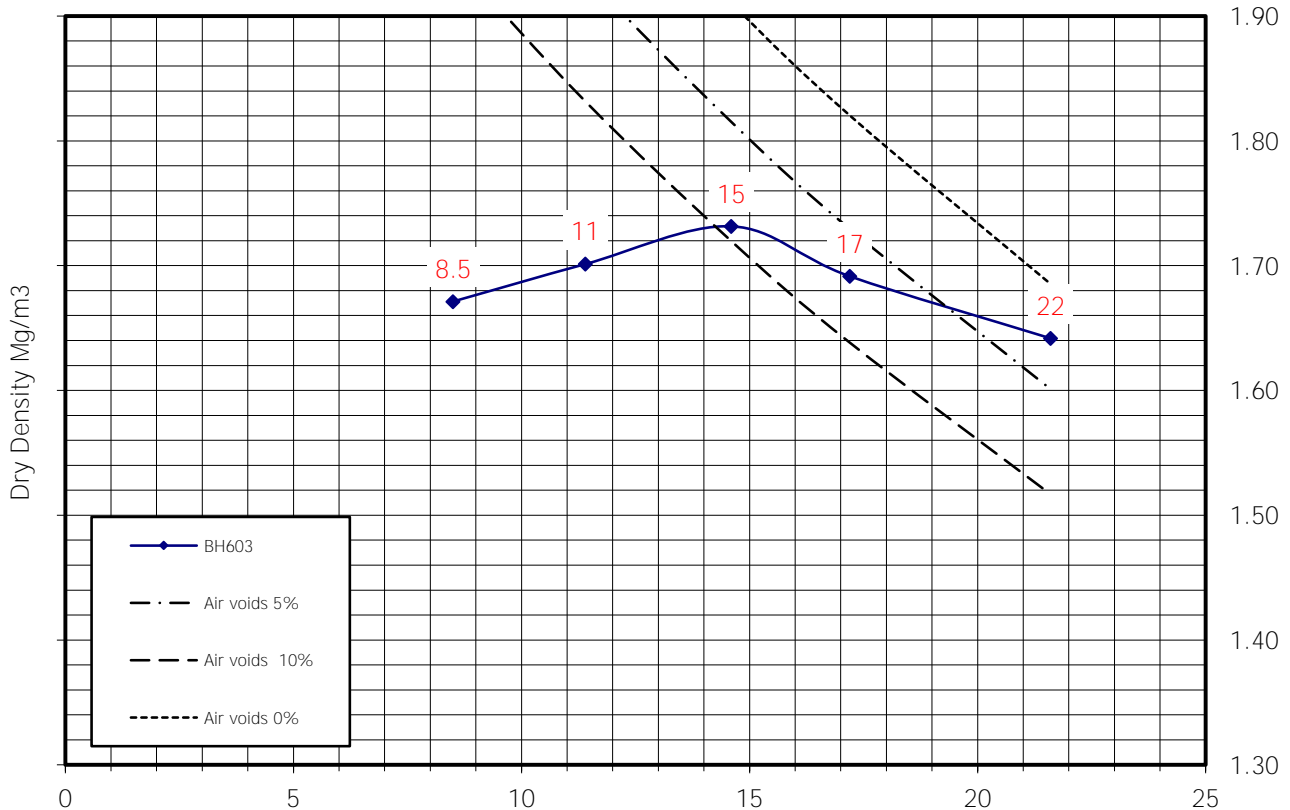
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 9
 Depth (m): 5.50 - 6.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	8.5	11	15	17.2	21.6
Bulk Density (Mg/m ³):	1.81	1.90	1.98	1.98	2.00
Dry Density (Mg/m ³):	1.67	1.70	1.73	1.69	1.64

Initial Moisture Content: 22 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.73 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

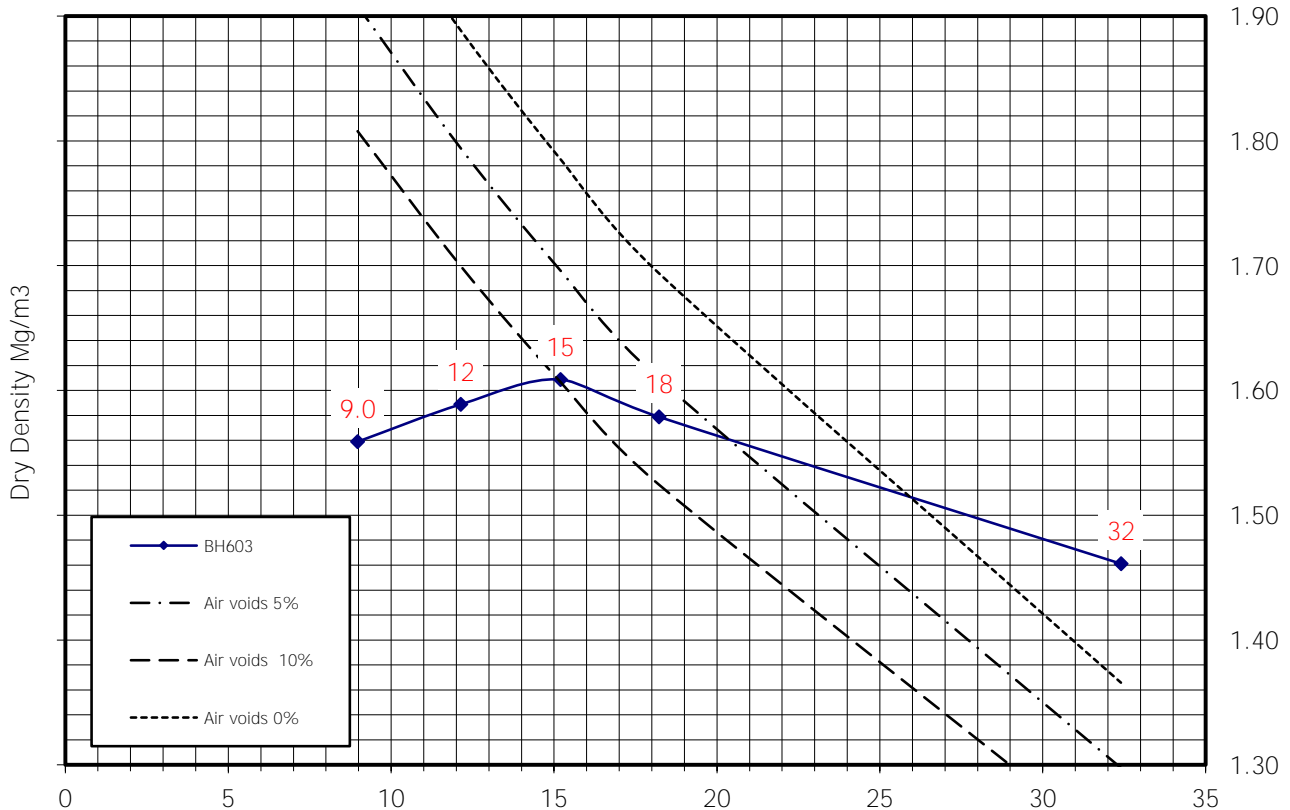
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 11
 Depth (m): 6.50 - 7.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	9.0	12	15	18.2	32.4
Bulk Density (Mg/m ³):	1.70	1.78	1.85	1.87	1.93
Dry Density (Mg/m ³):	1.56	1.59	1.61	1.58	1.46

Initial Moisture Content: 32 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.45 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.61 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

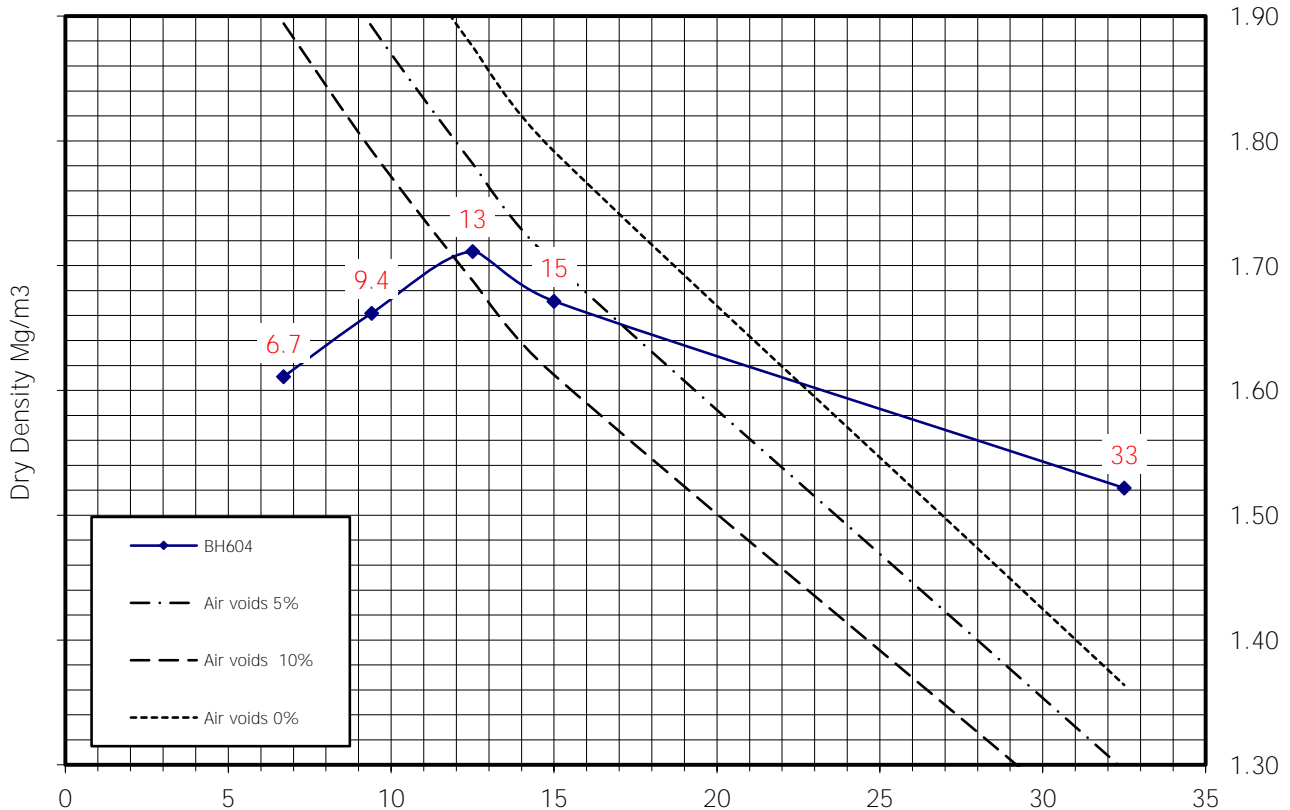
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 2
 Depth (m): 0.30 - 0.85
 Sample Type: B



	1	2	3	4	5
Compaction Point:	1	2	3	4	5
Moisture Content:	6.7	9.4	13	15.0	32.5
Bulk Density (Mg/m ³):	1.72	1.82	1.93	1.92	2.02
Dry Density (Mg/m ³):	1.61	1.66	1.71	1.67	1.52

Initial Moisture Content: 33 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.45 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.71 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 13 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

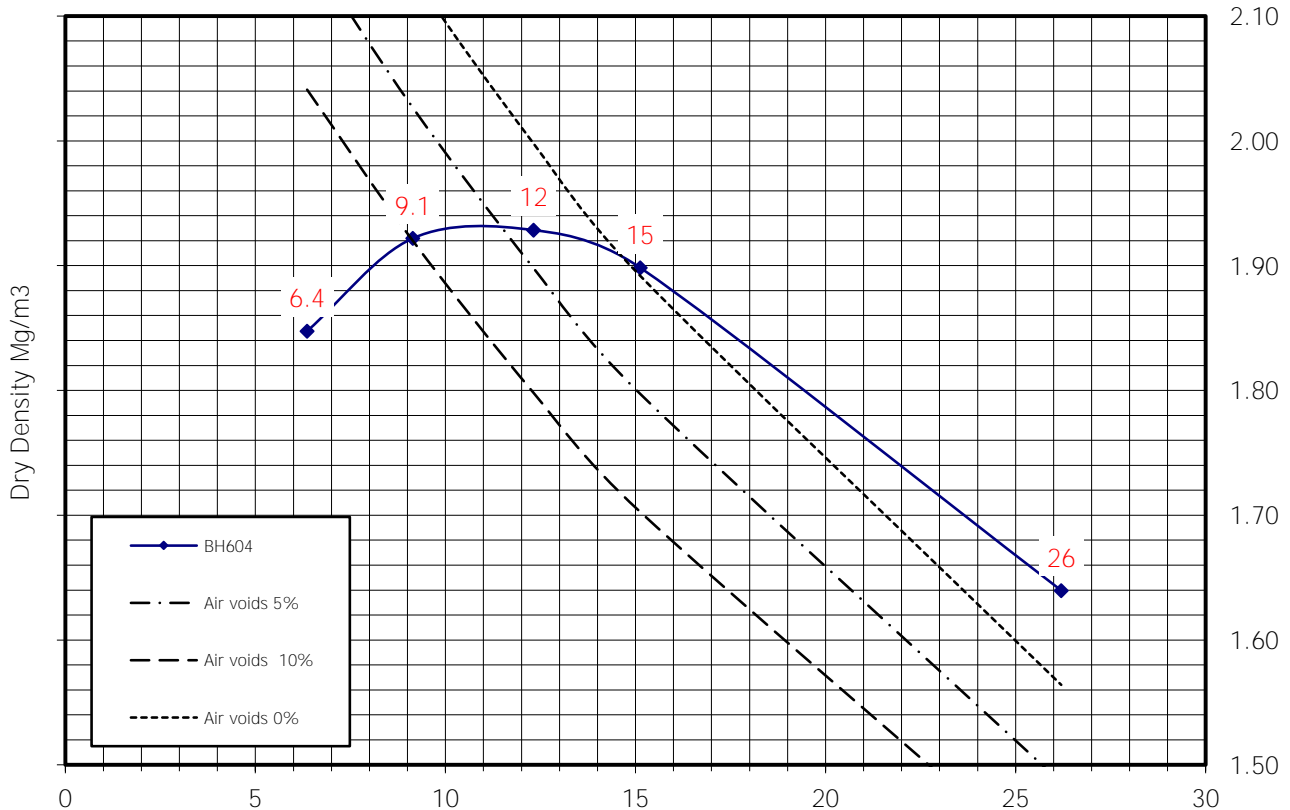
26.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 13
 Depth (m): 1.20 - 1.70
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.4	9.1	12	15.1	26.2
Bulk Density (Mg/m ³):	1.97	2.10	2.17	2.19	2.07
Dry Density (Mg/m ³):	1.85	1.92	1.93	1.90	1.64

Initial Moisture Content: 26 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.93 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 12 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

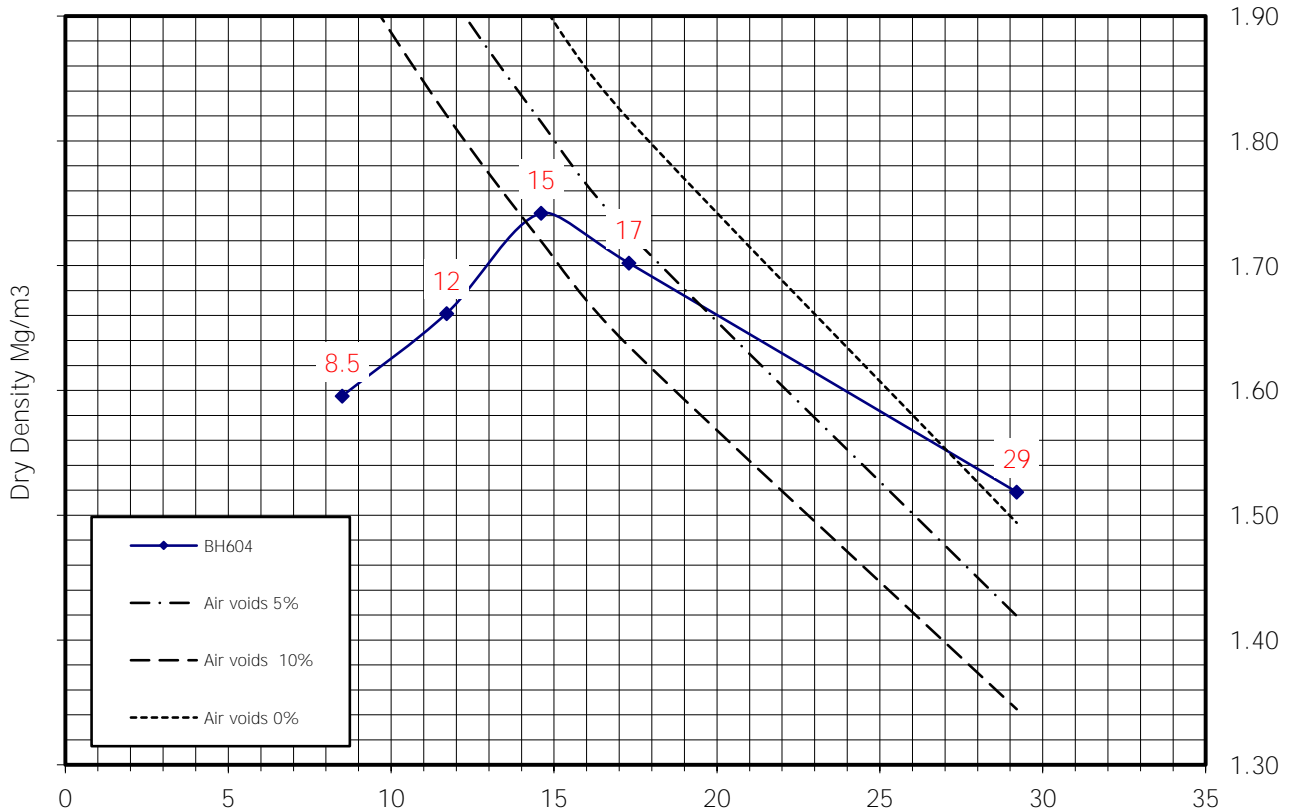
26.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 14
 Depth (m): 2.00 - 2.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	8.5	12	15	17.3	29.2
Bulk Density (Mg/m ³):	1.73	1.86	2.00	2.00	1.96
Dry Density (Mg/m ³):	1.60	1.66	1.74	1.70	1.52

Initial Moisture Content: 29 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0.3
 Maximum Dry Density (Mg/m³): 1.74 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

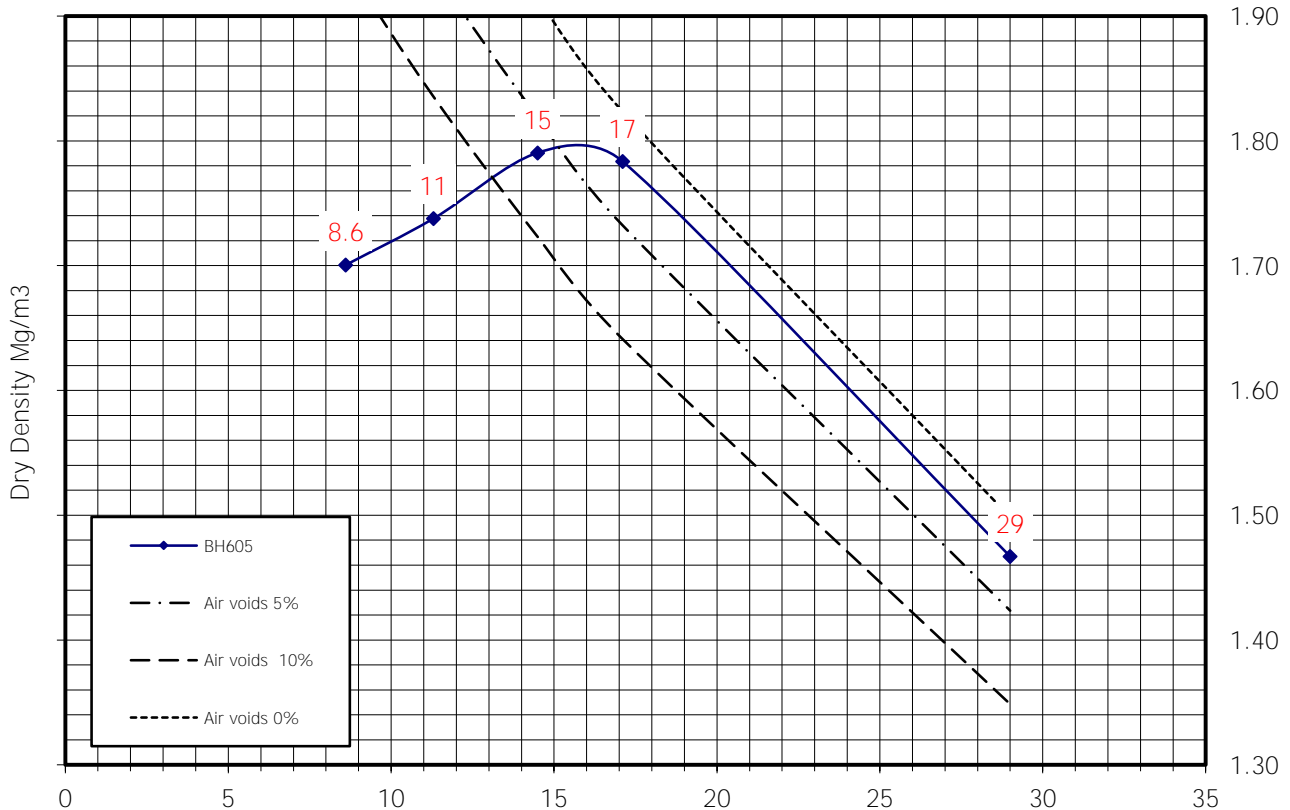
26.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 6
 Depth (m): 0.30 - 0.75
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	8.6	11	15	17.1	29.0
Bulk Density (Mg/m ³):	1.85	1.93	2.05	2.09	1.89
Dry Density (Mg/m ³):	1.70	1.74	1.79	1.78	1.47

Initial Moisture Content: 29 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.79 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

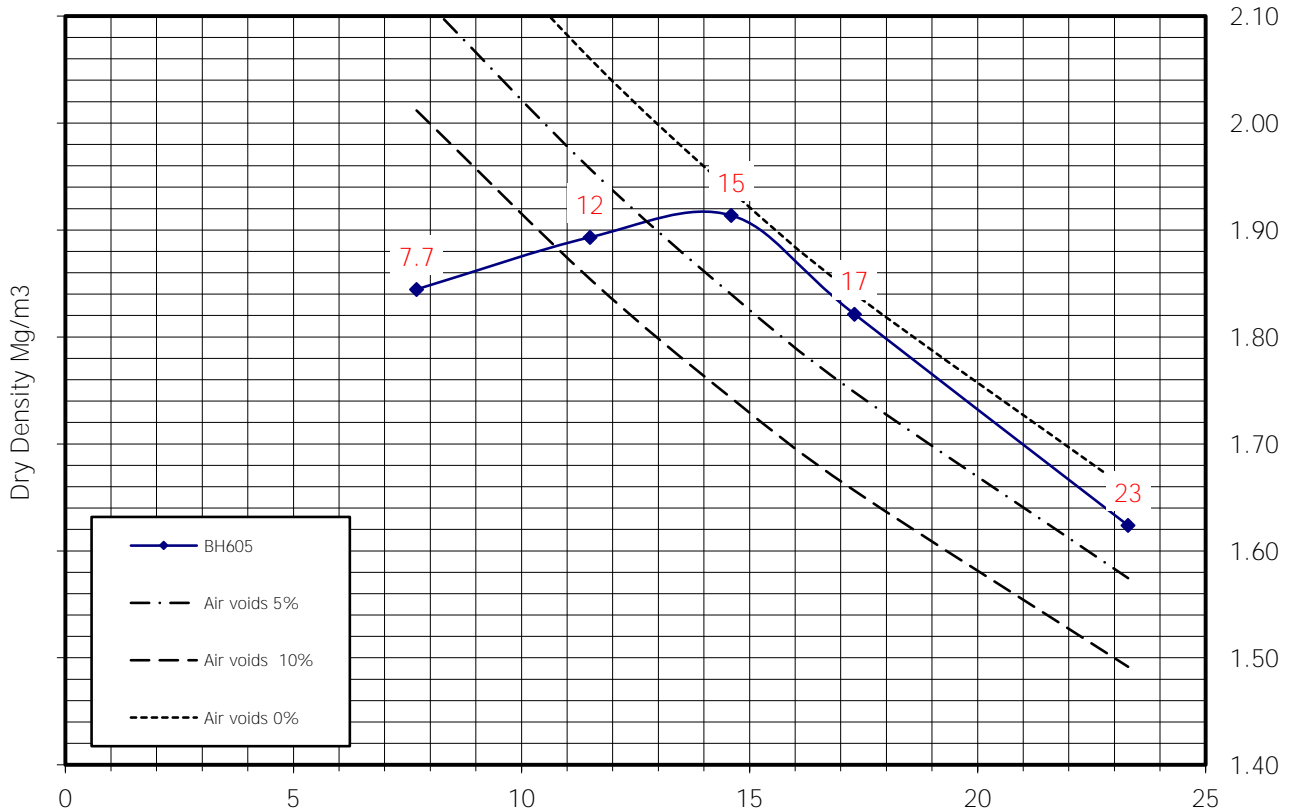
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 7
 Depth (m): 0.75 - 1.20
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	7.7	12	15	17.3	23.3
Bulk Density (Mg/m ³):	1.99	2.11	2.19	2.14	2.00
Dry Density (Mg/m ³):	1.84	1.89	1.91	1.82	1.62

Initial Moisture Content:	23	Method of Compaction:	2.5kg Rammer
Particle Density (Mg/m ³):	2.7 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0
Maximum Dry Density (Mg/m ³):	1.91	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	15	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

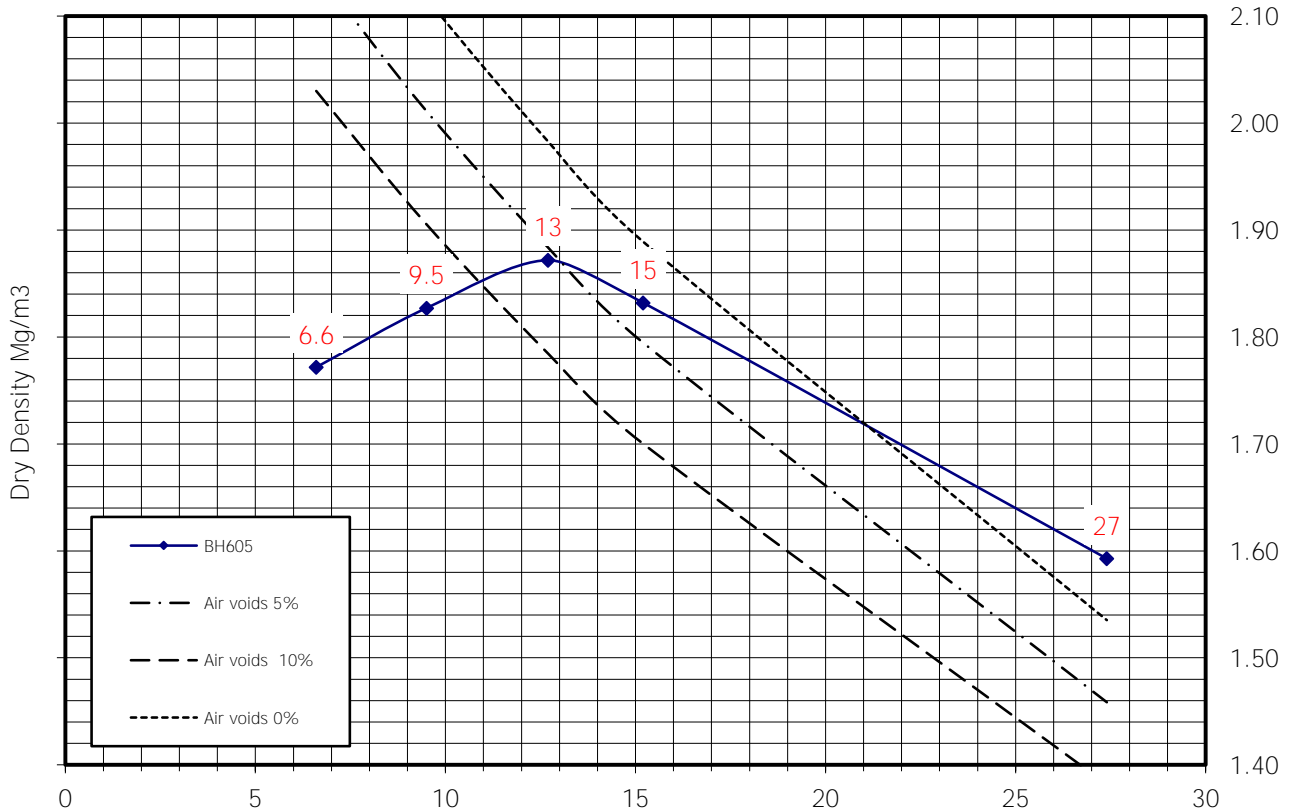
26.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 8
 Depth (m): 1.20 - 1.70
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.6	9.5	13	15.2	27.4
Bulk Density (Mg/m ³):	1.89	2.00	2.11	2.11	2.03
Dry Density (Mg/m ³):	1.77	1.83	1.87	1.83	1.59

Initial Moisture Content: 27 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 4
 Maximum Dry Density (Mg/m³): 1.87 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 13 Sample Preparation Clause: 3.2.4.2

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

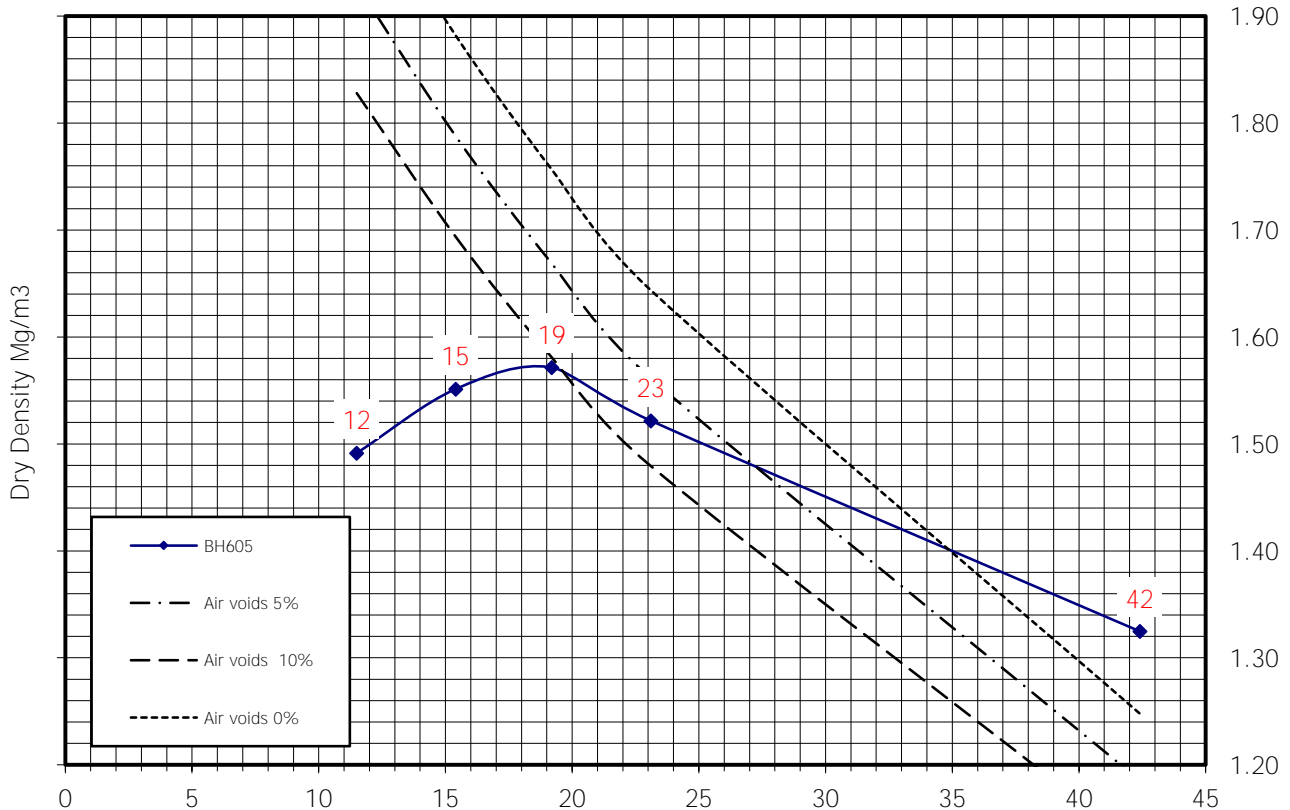
26.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 10
 Depth (m): 3.50 - 4.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	12	15	19	23.1	42.4
Bulk Density (Mg/m ³):	1.66	1.79	1.87	1.87	1.89
Dry Density (Mg/m ³):	1.49	1.55	1.57	1.52	1.32

Initial Moisture Content: 42 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.57 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 19 Sample Preparation Clause: 3.2.4.2

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

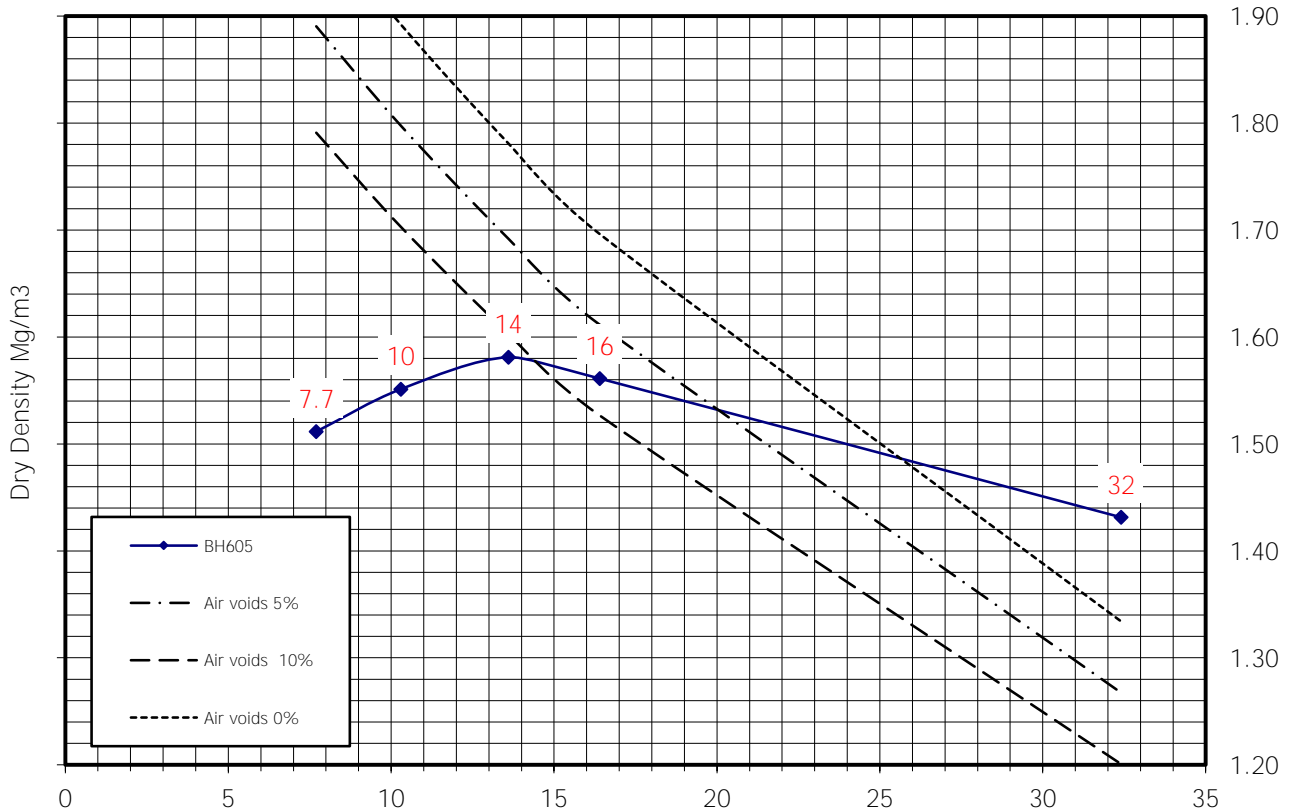
26.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 11
 Depth (m): 4.50 - 5.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	7.7	10	14	16.4	32.4
Bulk Density (Mg/m ³):	1.63	1.71	1.80	1.82	1.90
Dry Density (Mg/m ³):	1.51	1.55	1.58	1.56	1.43

Initial Moisture Content: 32 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.35 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.58 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

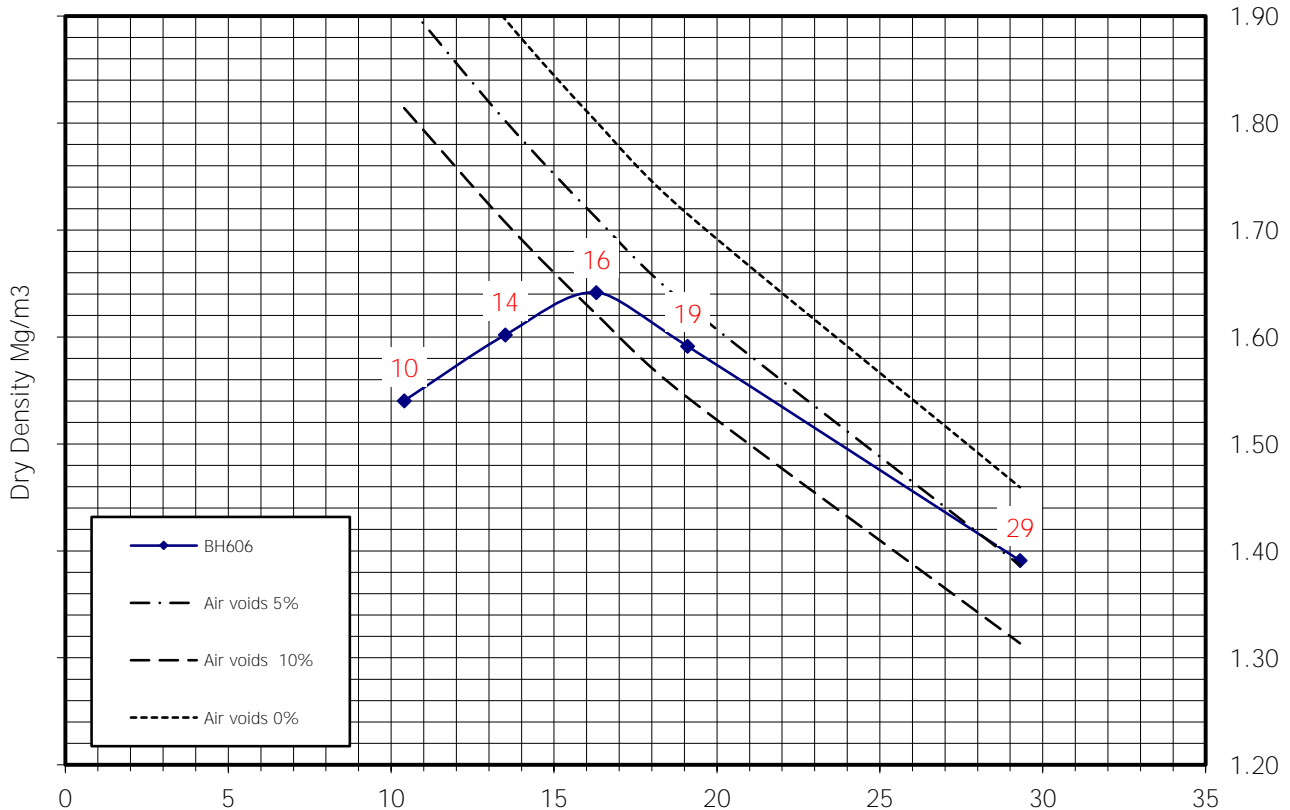
27.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH606
 Sample Number: 2
 Depth (m): 0.30 - 1.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	10	14	16	19.1	29.3
Bulk Density (Mg/m ³):	1.70	1.82	1.91	1.90	1.80
Dry Density (Mg/m ³):	1.54	1.60	1.64	1.59	1.39

Initial Moisture Content:	29	Method of Compaction:	4.5kg Rammer
Particle Density (Mg/m ³):	2.55 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0
Maximum Dry Density (Mg/m ³):	1.64	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	16	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

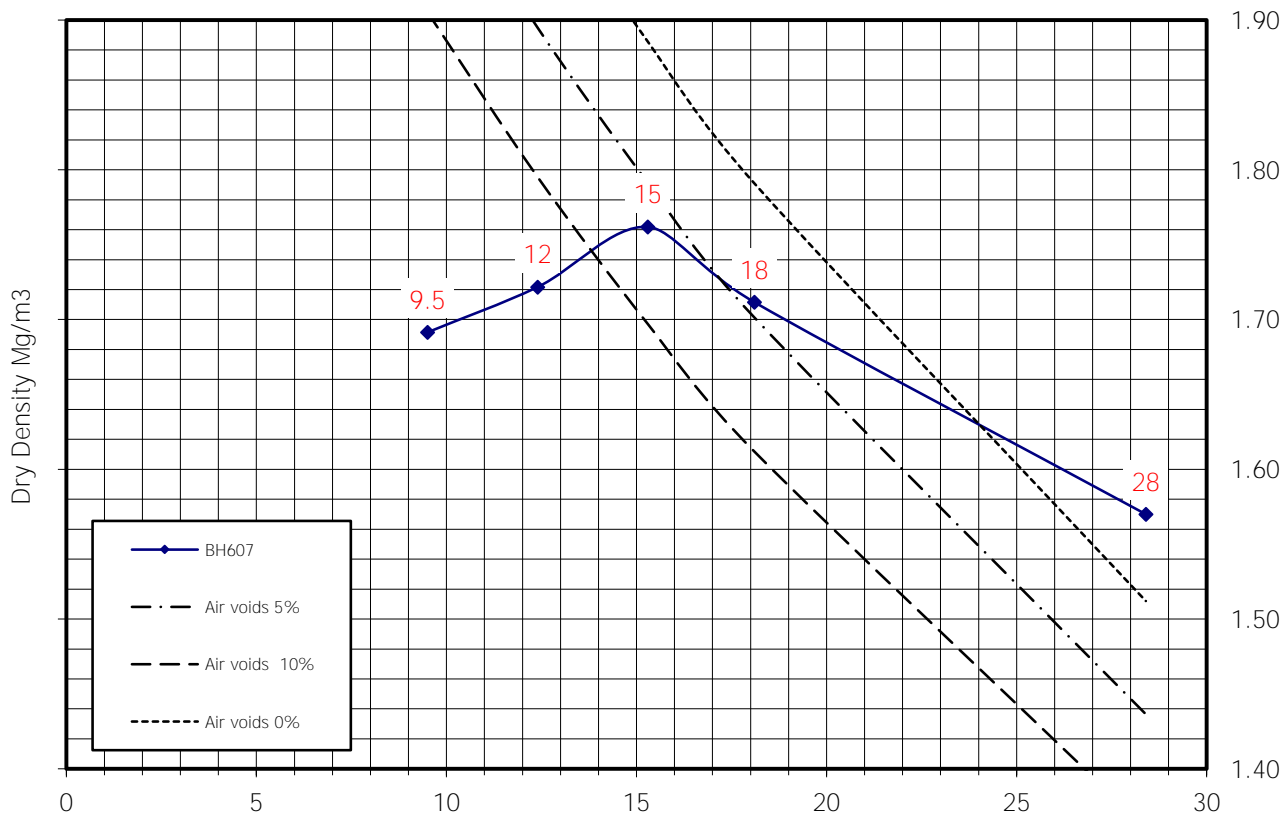
27.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH607
 Sample Number: 10
 Depth (m): 1.90 - 2.40
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	9.5	12	15	18.1	28.4
Bulk Density (Mg/m ³):	1.85	1.94	2.03	2.02	2.02
Dry Density (Mg/m ³):	1.69	1.72	1.76	1.71	1.57

Initial Moisture Content: 28 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.76 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



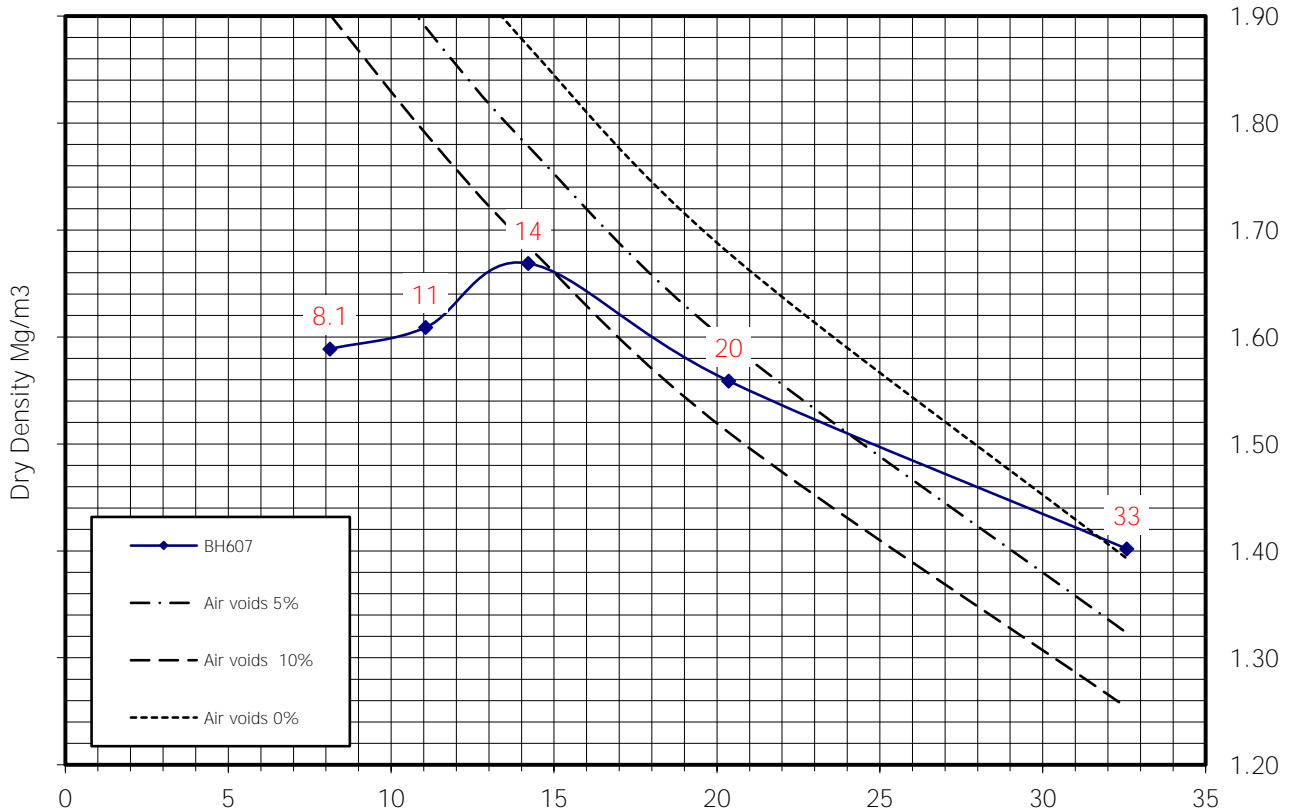
Date Approved: 21.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH607
 Sample Number: 12
 Depth (m): 4.50 - 5.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	8.1	11	14	20.4	32.6
Bulk Density (Mg/m ³):	1.72	1.79	1.91	1.88	1.86
Dry Density (Mg/m ³):	1.59	1.61	1.67	1.56	1.40

Initial Moisture Content: 33 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.55 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.67 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

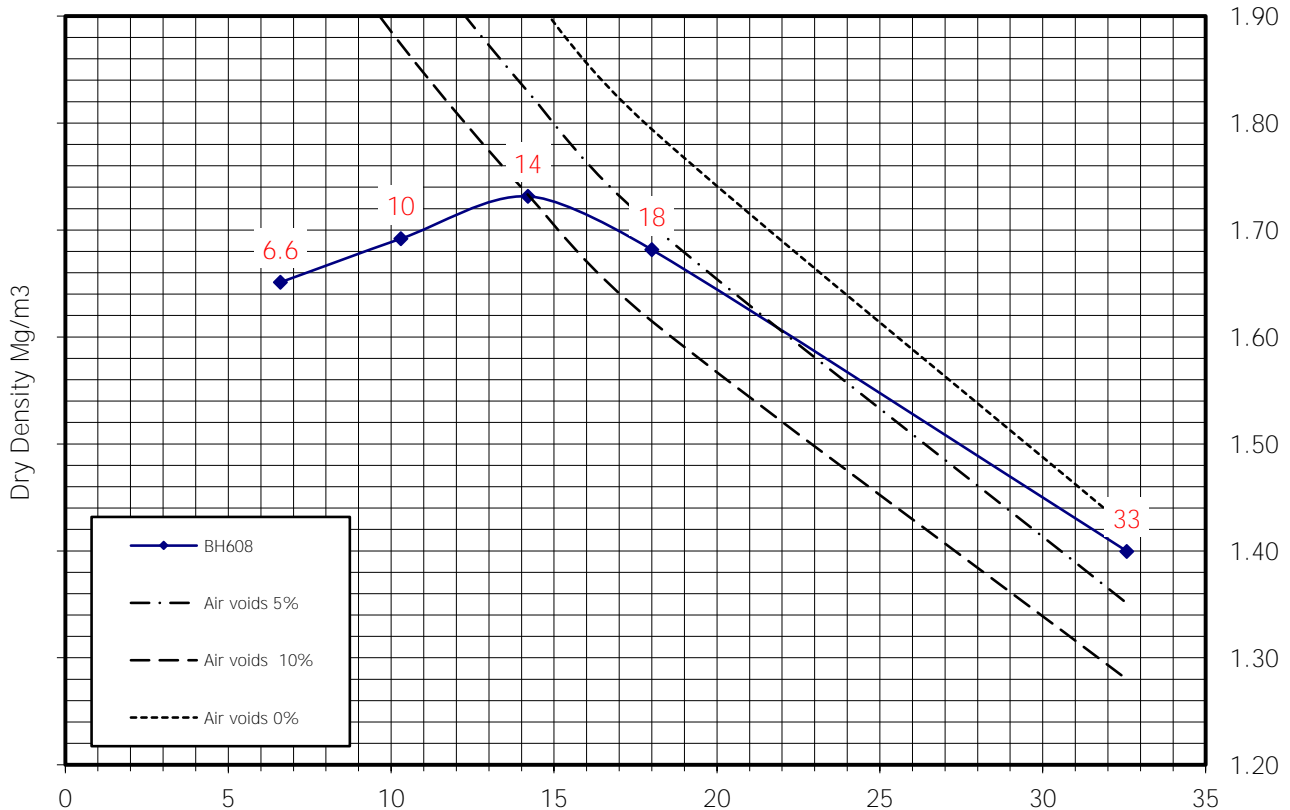
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH608
 Sample Number: 6
 Depth (m): 4.00 - 5.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.6	10	14	18.0	32.6
Bulk Density (Mg/m ³):	1.76	1.87	1.98	1.98	1.86
Dry Density (Mg/m ³):	1.65	1.69	1.73	1.68	1.40

Initial Moisture Content: 35 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.73 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

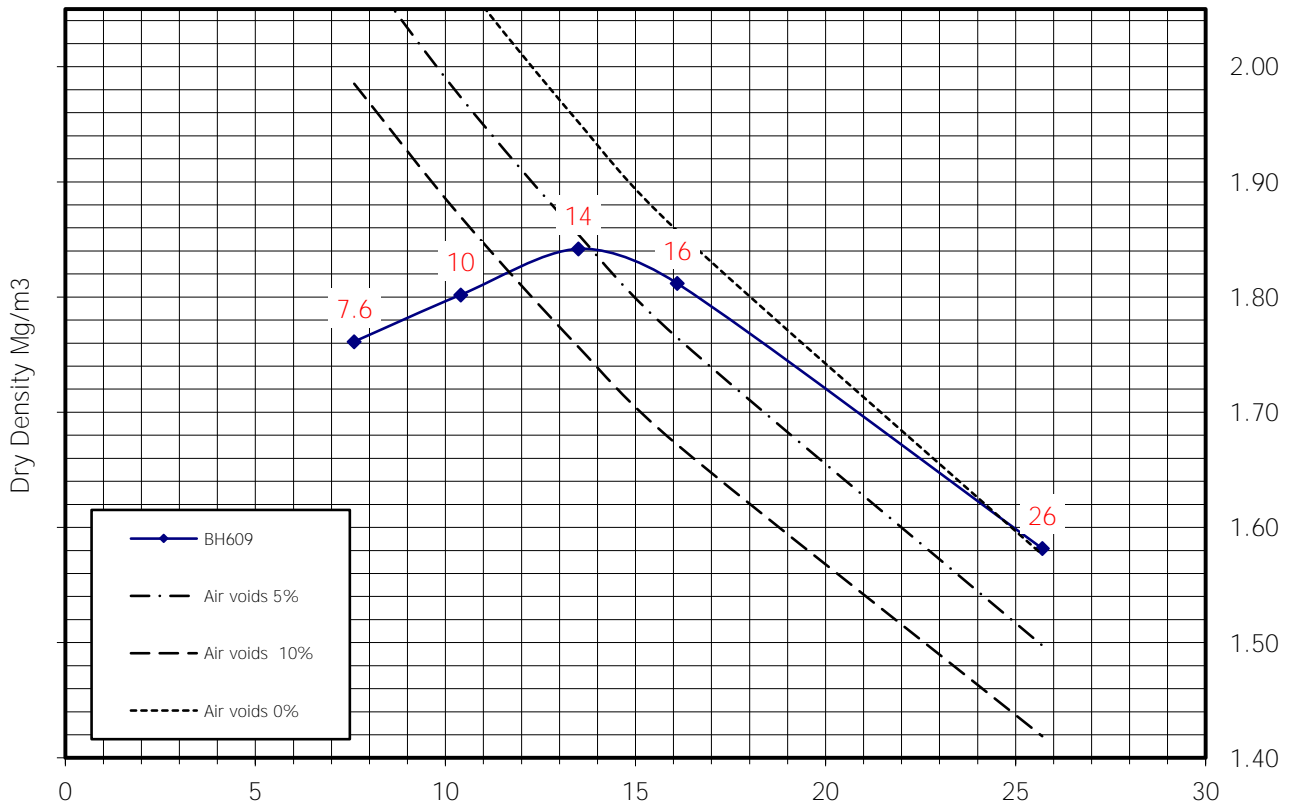
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH609
 Sample Number: 6
 Depth (m): 1.20 - 1.70
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	7.6	10	14	16.1	25.7
Bulk Density (Mg/m ³):	1.90	1.99	2.09	2.10	1.99
Dry Density (Mg/m ³):	1.76	1.80	1.84	1.81	1.58

Initial Moisture Content: 26 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.84 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



Date Approved:

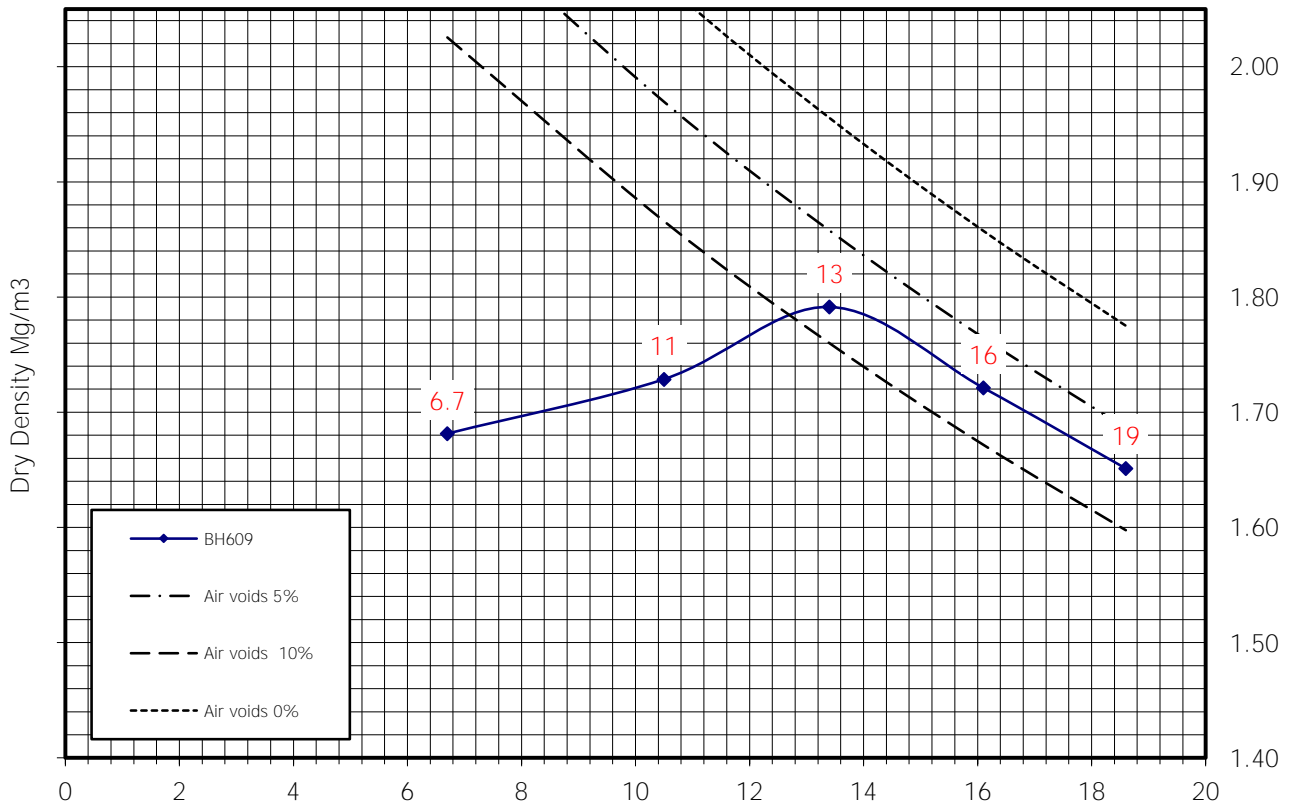
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH609
 Sample Number: 7
 Depth (m): 2.50 - 3.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.7	11	13	16.1	18.6
Bulk Density (Mg/m ³):	1.79	1.91	2.03	2.00	1.96
Dry Density (Mg/m ³):	1.68	1.73	1.79	1.72	1.65

Initial Moisture Content: 19 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.79 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 13 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

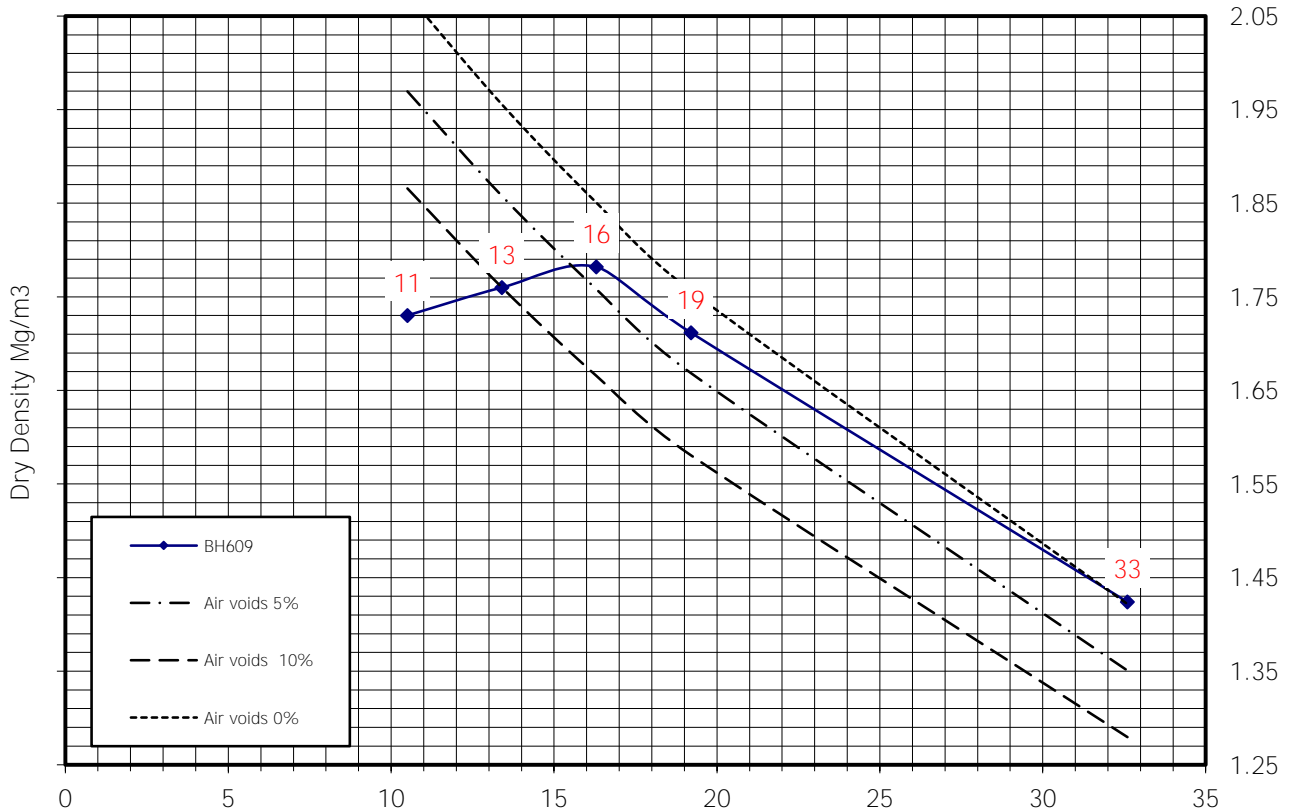
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH609
 Sample Number: 8
 Depth (m): 3.50 - 4.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	11	13	16	19.2	32.6
Bulk Density (Mg/m ³):	1.91	2.00	2.07	2.04	1.89
Dry Density (Mg/m ³):	1.73	1.76	1.78	1.71	1.42

Initial Moisture Content:	33	Method of Compaction:	4.5kg Rammer
Particle Density (Mg/m ³):	2.65 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0.3
Maximum Dry Density (Mg/m ³):	1.78	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	16	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

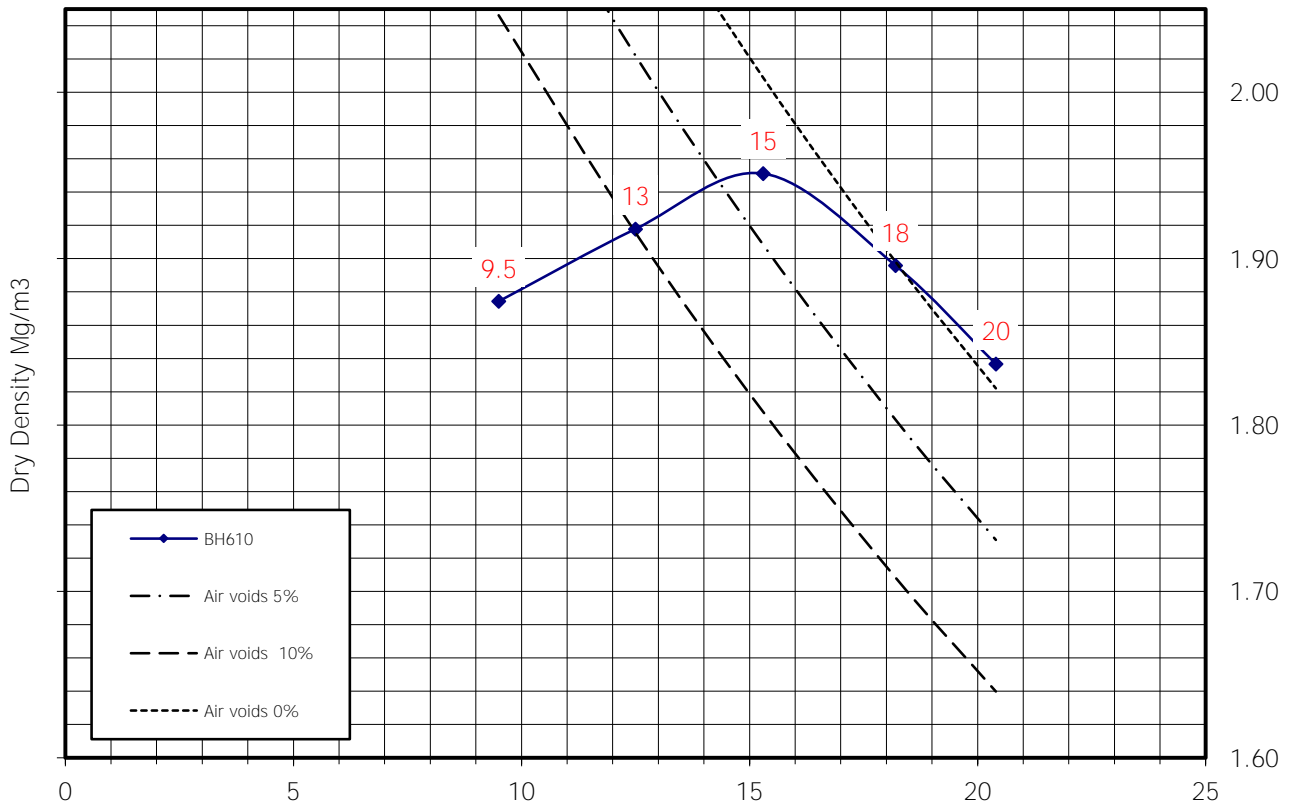
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH610
 Sample Number: 4
 Depth (m): 0.10 - 1.20
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	9.5	13	15	18.2	20.4
Bulk Density (Mg/m ³):	2.05	2.16	2.25	2.24	2.21
Dry Density (Mg/m ³):	1.87	1.92	1.95	1.90	1.84

Initial Moisture Content:	20	Method of Compaction:	4.5kg Rammer
Particle Density (Mg/m ³):	2.9 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0
Maximum Dry Density (Mg/m ³):	1.95	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	15	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

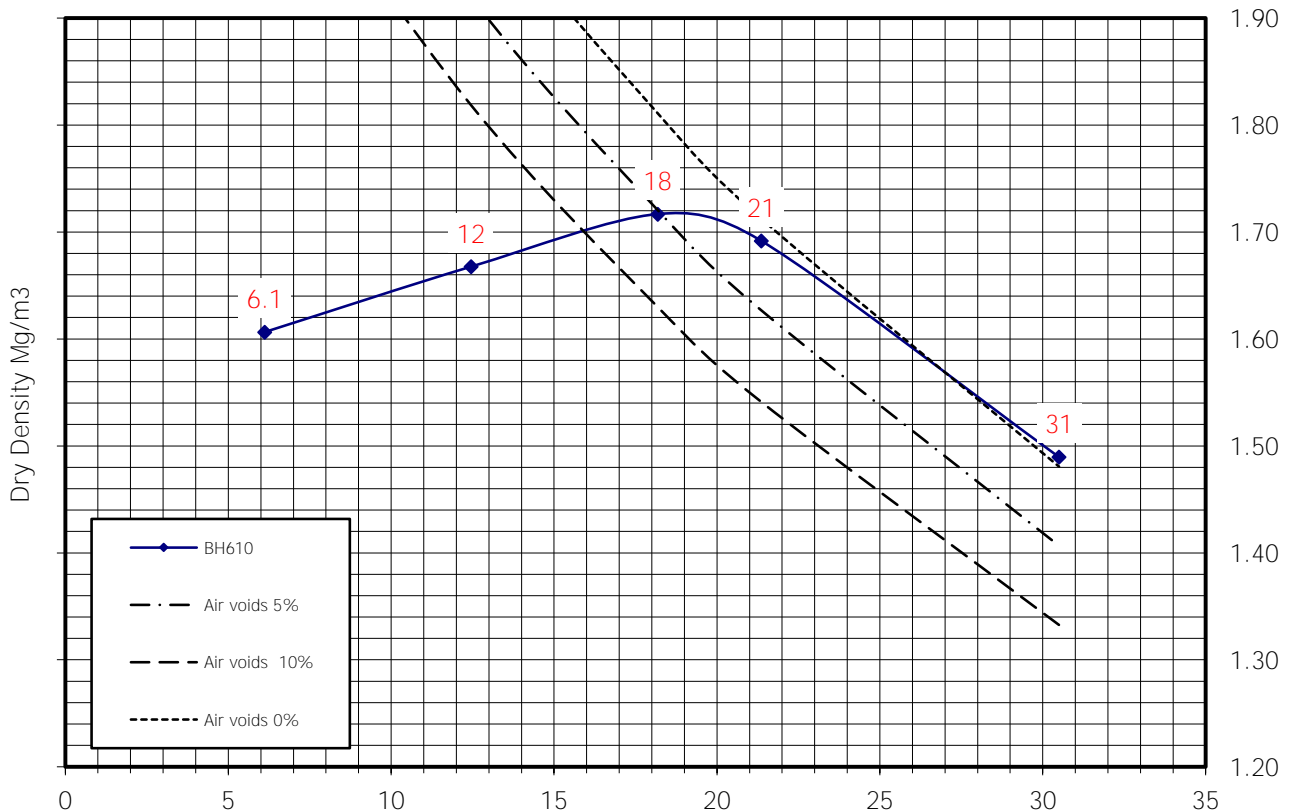
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH610
 Sample Number: 5
 Depth (m): 1.50 - 2.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.1	12	18	21.4	30.5
Bulk Density (Mg/m ³):	1.70	1.88	2.03	2.05	1.94
Dry Density (Mg/m ³):	1.61	1.67	1.72	1.69	1.49

Initial Moisture Content: 31 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.7 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.72 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 18 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

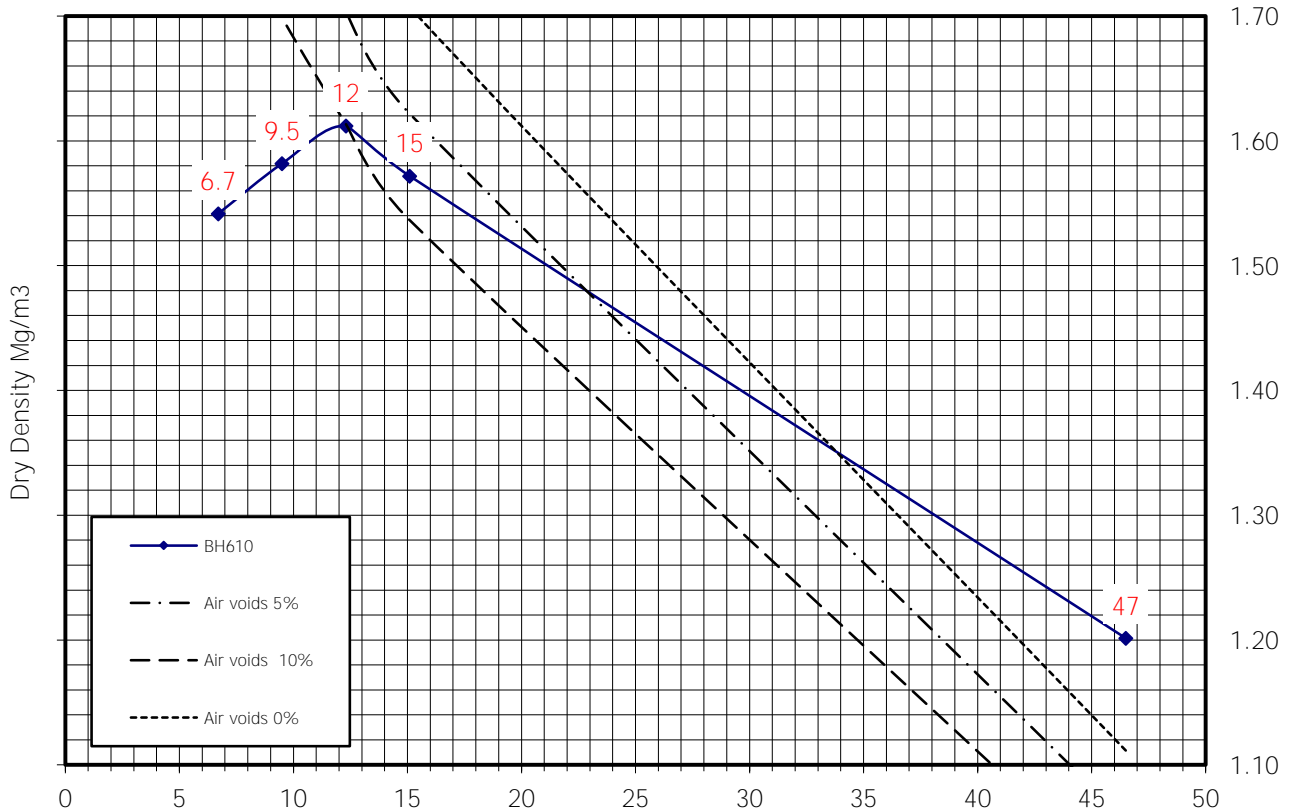
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH610
 Sample Number: 7
 Depth (m): 2.00 - 3.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.7	9.5	12	15.1	46.5
Bulk Density (Mg/m ³):	1.64	1.73	1.81	1.81	1.76
Dry Density (Mg/m ³):	1.54	1.58	1.61	1.57	1.20

Initial Moisture Content: 47 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.3 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.61 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 12 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

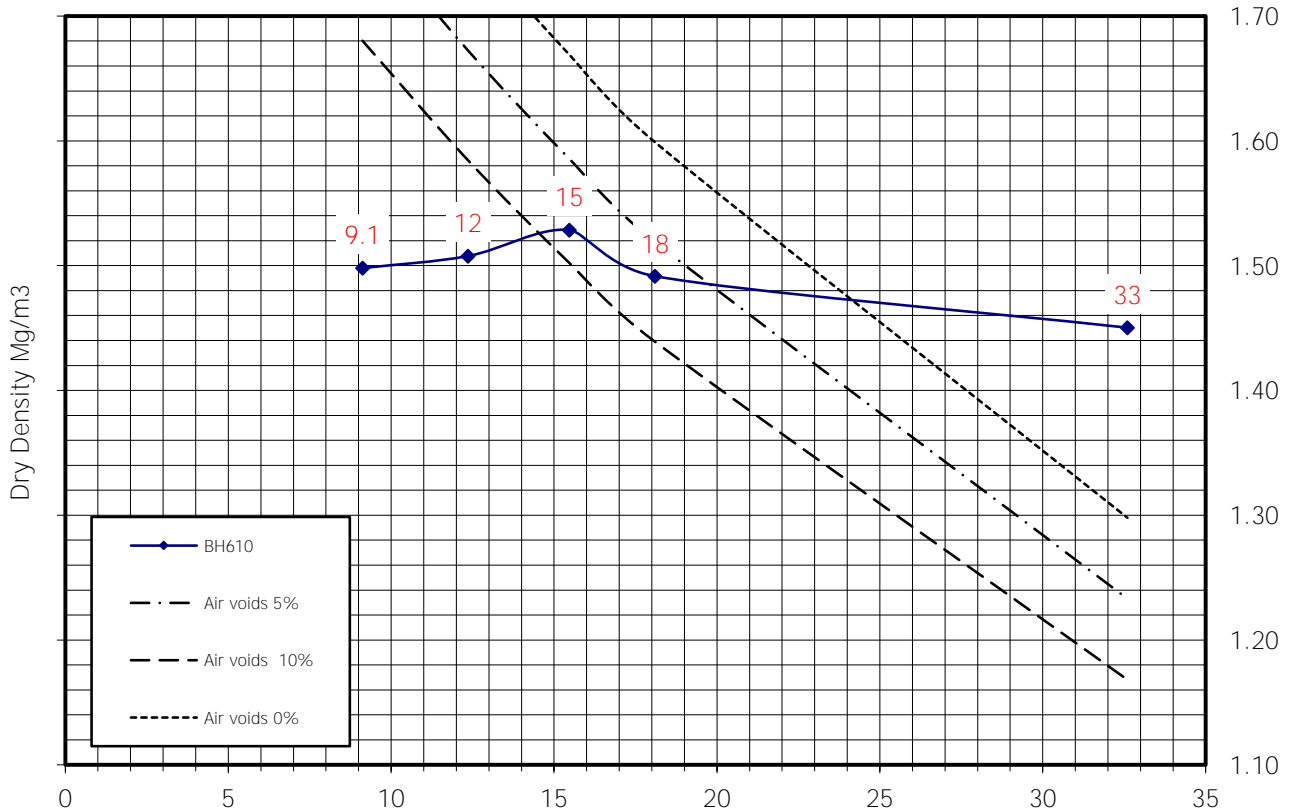
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH610
 Sample Number: 9
 Depth (m): 3.00 - 4.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	9.1	12	15	18.1	32.6
Bulk Density (Mg/m ³):	1.63	1.69	1.77	1.76	1.92
Dry Density (Mg/m ³):	1.50	1.51	1.53	1.49	1.45

Initial Moisture Content: 33 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.25 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.53 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

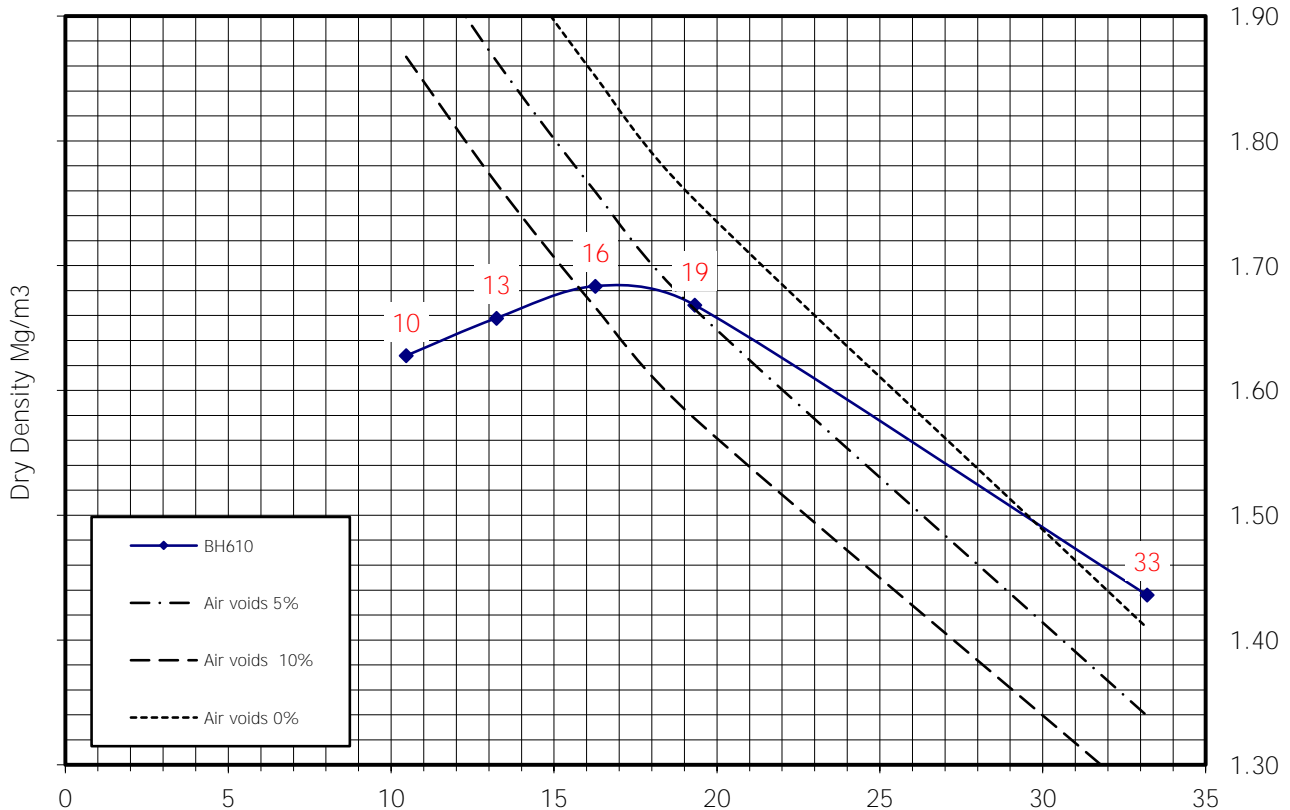
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH610
 Sample Number: 12
 Depth (m): 4.00 - 5.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	10	13	16	19.3	33.2
Bulk Density (Mg/m ³):	1.80	1.88	1.96	1.99	1.91
Dry Density (Mg/m ³):	1.63	1.66	1.68	1.67	1.44

Initial Moisture Content: 33 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.68 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 16 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

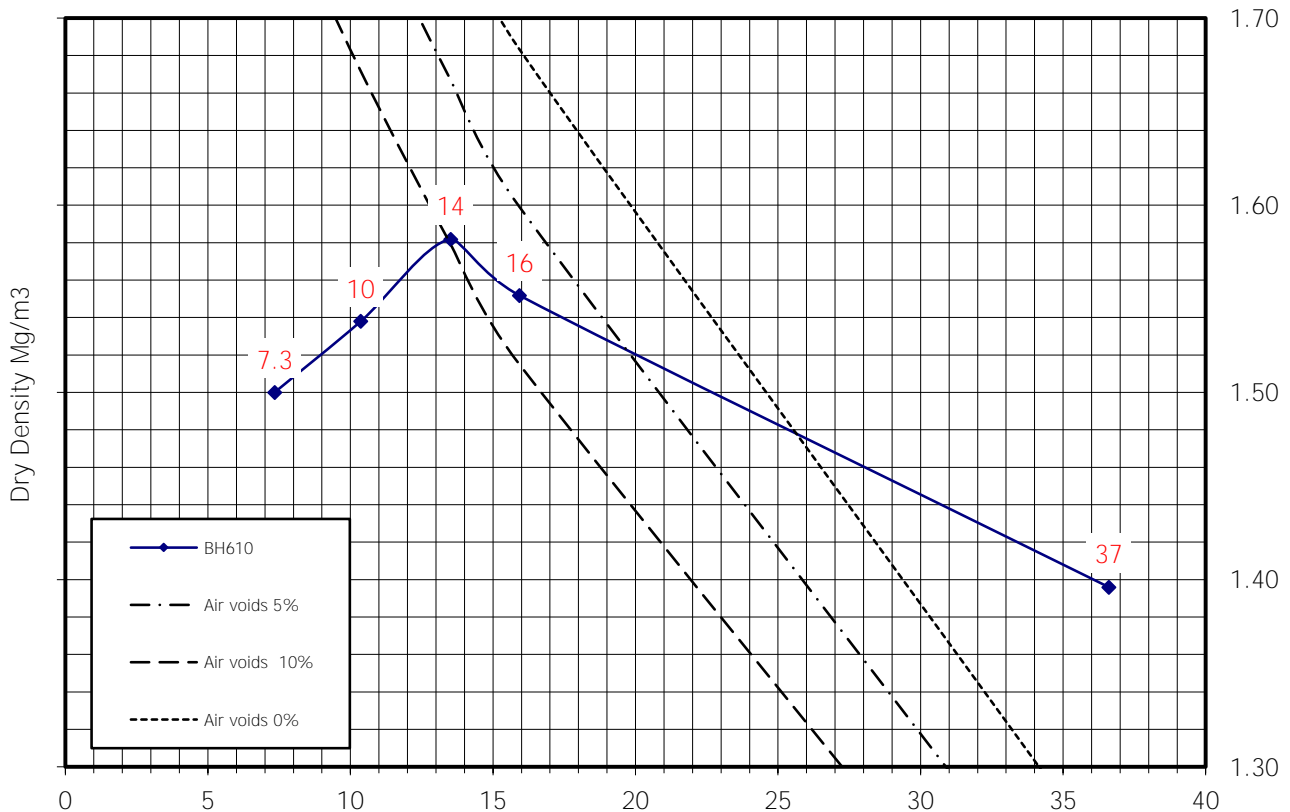
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH610
 Sample Number: 15
 Depth (m): 5.50 - 6.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	7.3	10	14	15.9	36.6
Bulk Density (Mg/m ³):	1.61	1.70	1.80	1.80	1.91
Dry Density (Mg/m ³):	1.50	1.54	1.58	1.55	1.40

Initial Moisture Content: 37 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.3 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.58 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 14 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

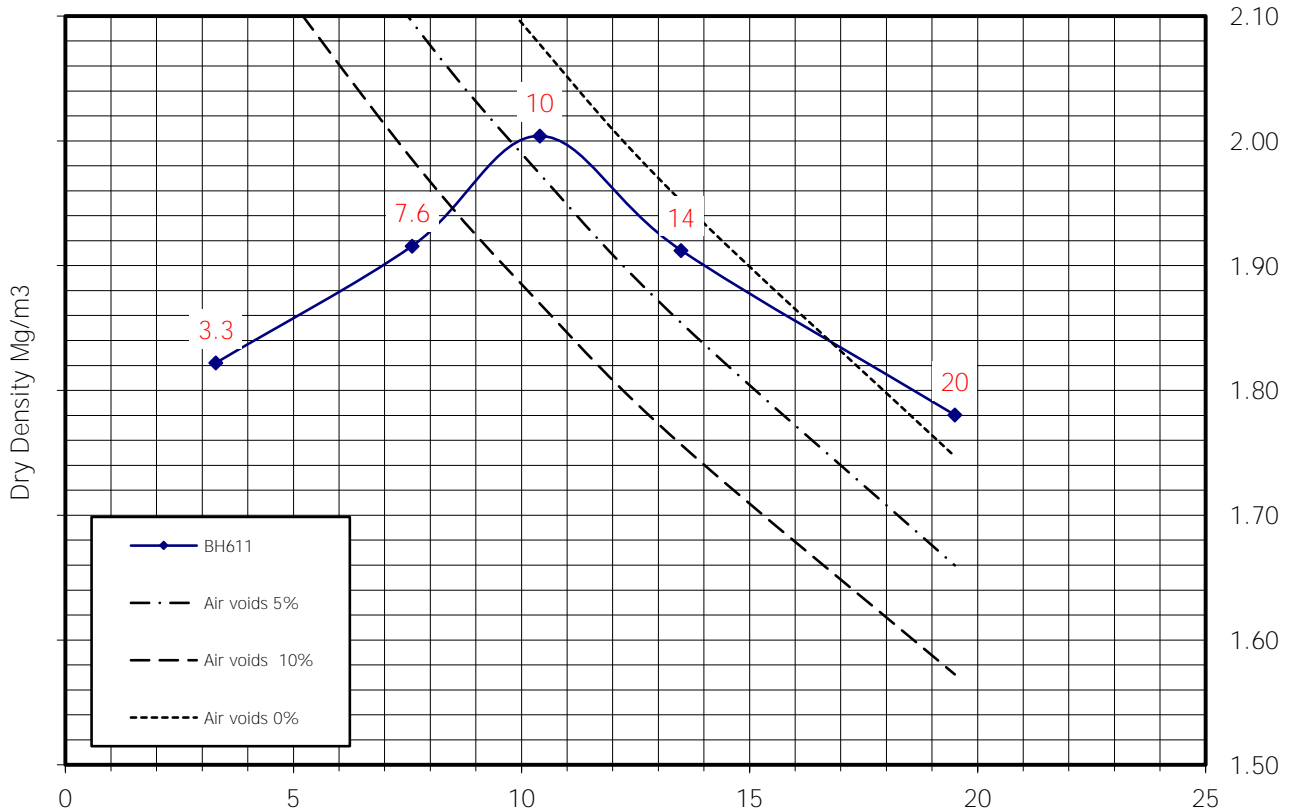
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH611
 Sample Number: 5
 Depth (m): 0.00 - 1.20
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	3.3	7.6	10	13.5	19.5
Bulk Density (Mg/m ³):	1.88	2.06	2.21	2.17	2.13
Dry Density (Mg/m ³):	1.82	1.92	2.00	1.91	1.78

Initial Moisture Content: 20 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 3.7
 Maximum Dry Density (Mg/m³): 2.00 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 10 Sample Preparation Clause: 3.2.4.2

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

21.3.17

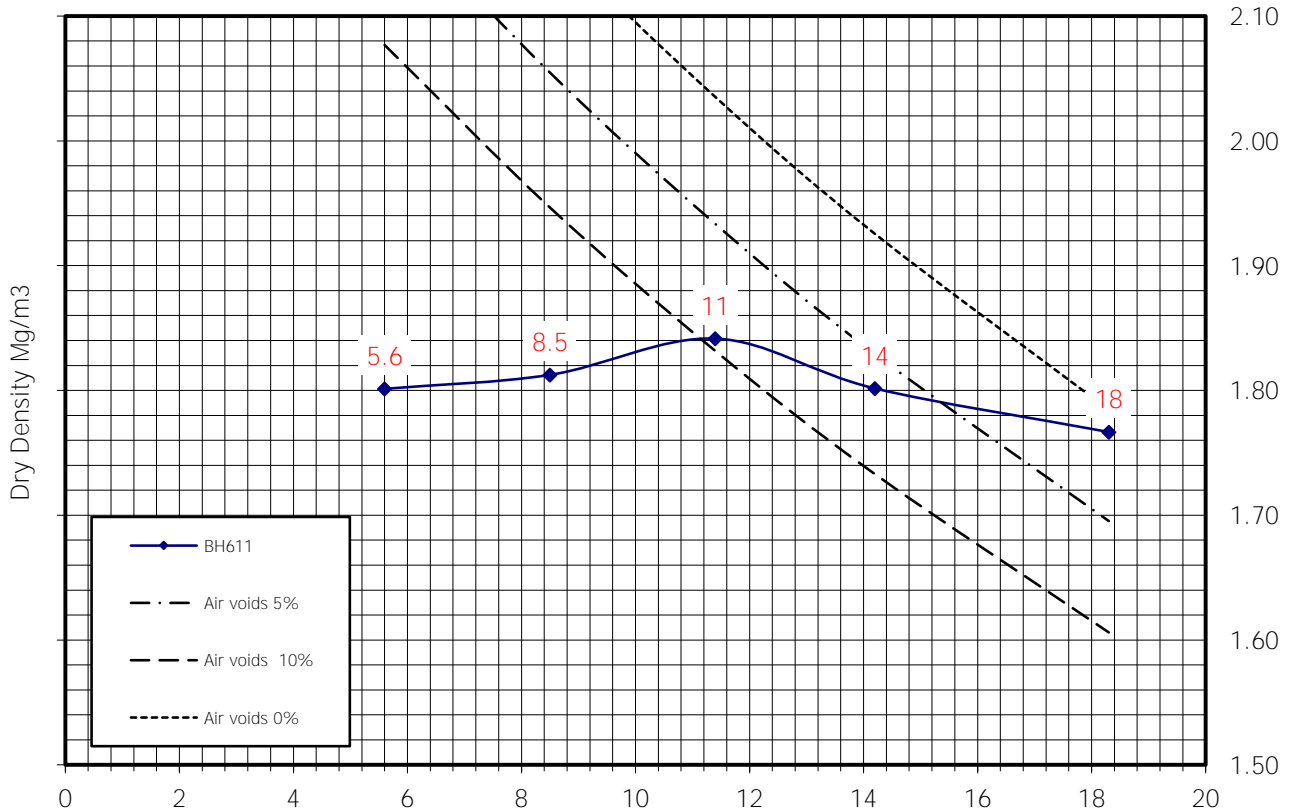


2788

Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH611
 Sample Number: 7
 Depth (m): 1.50 - 2.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	5.6	8.5	11	14.2	18.3
Bulk Density (Mg/m ³):	1.90	1.97	2.05	2.06	2.09
Dry Density (Mg/m ³):	1.80	1.81	1.84	1.80	1.77

Initial Moisture Content:	18	Method of Compaction:	2.5kg Rammer
Particle Density (Mg/m ³):	2.65 Assumed	Material Retained on 37.5 mm Test Sieve (%):	7.1
Maximum Dry Density (Mg/m ³):	1.84	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	11	Sample Preparation Clause:	3.2.4.2

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

27.3.17

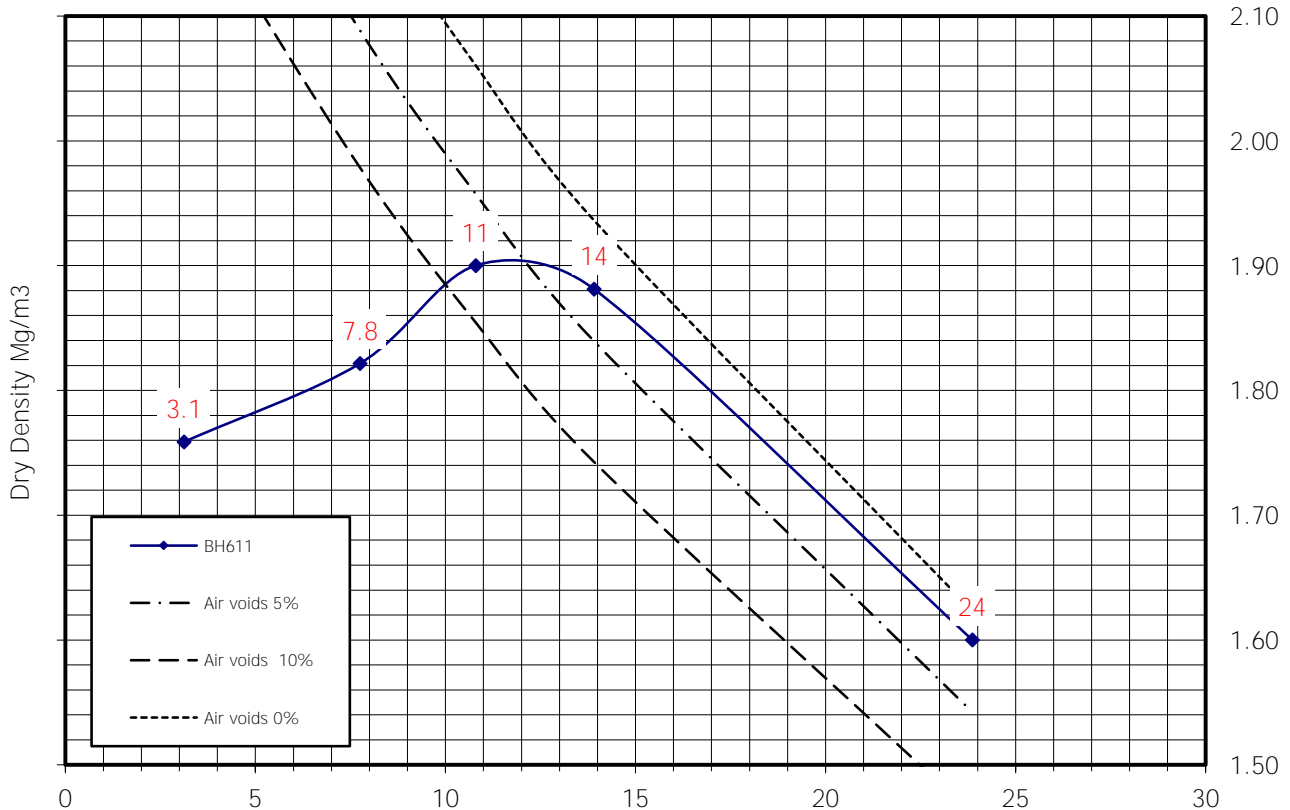


2788

Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH611
 Sample Number: 8
 Depth (m): 2.00 - 3.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	3.1	7.8	11	13.9	23.9
Bulk Density (Mg/m ³):	1.81	1.96	2.11	2.14	1.98
Dry Density (Mg/m ³):	1.76	1.82	1.90	1.88	1.60

Initial Moisture Content: 24 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.90 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 11 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

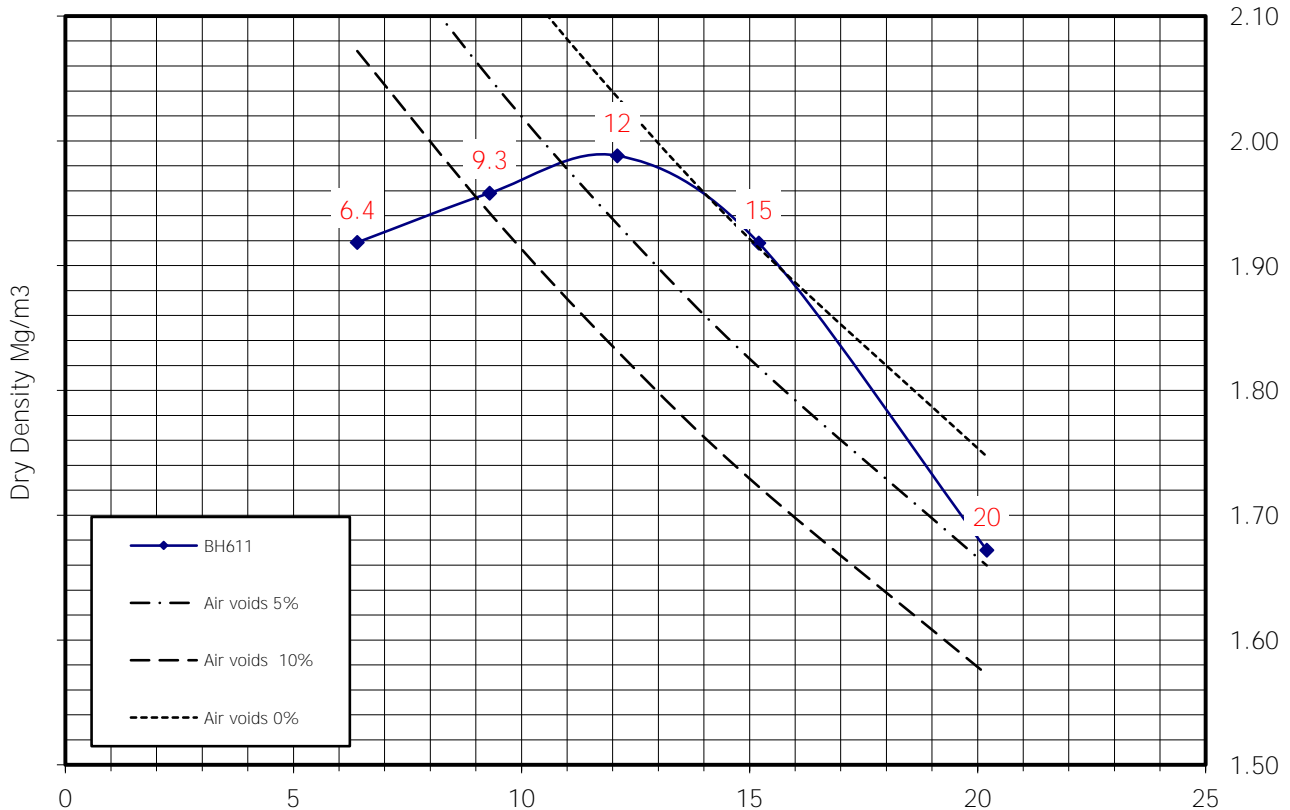
27.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH611
 Sample Number: 10
 Depth (m): 3.00 - 4.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.4	9.3	12	15.2	20.2
Bulk Density (Mg/m ³):	2.04	2.14	2.23	2.21	2.01
Dry Density (Mg/m ³):	1.92	1.96	1.99	1.92	1.67

Initial Moisture Content: 20 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.7 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.99 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 12 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

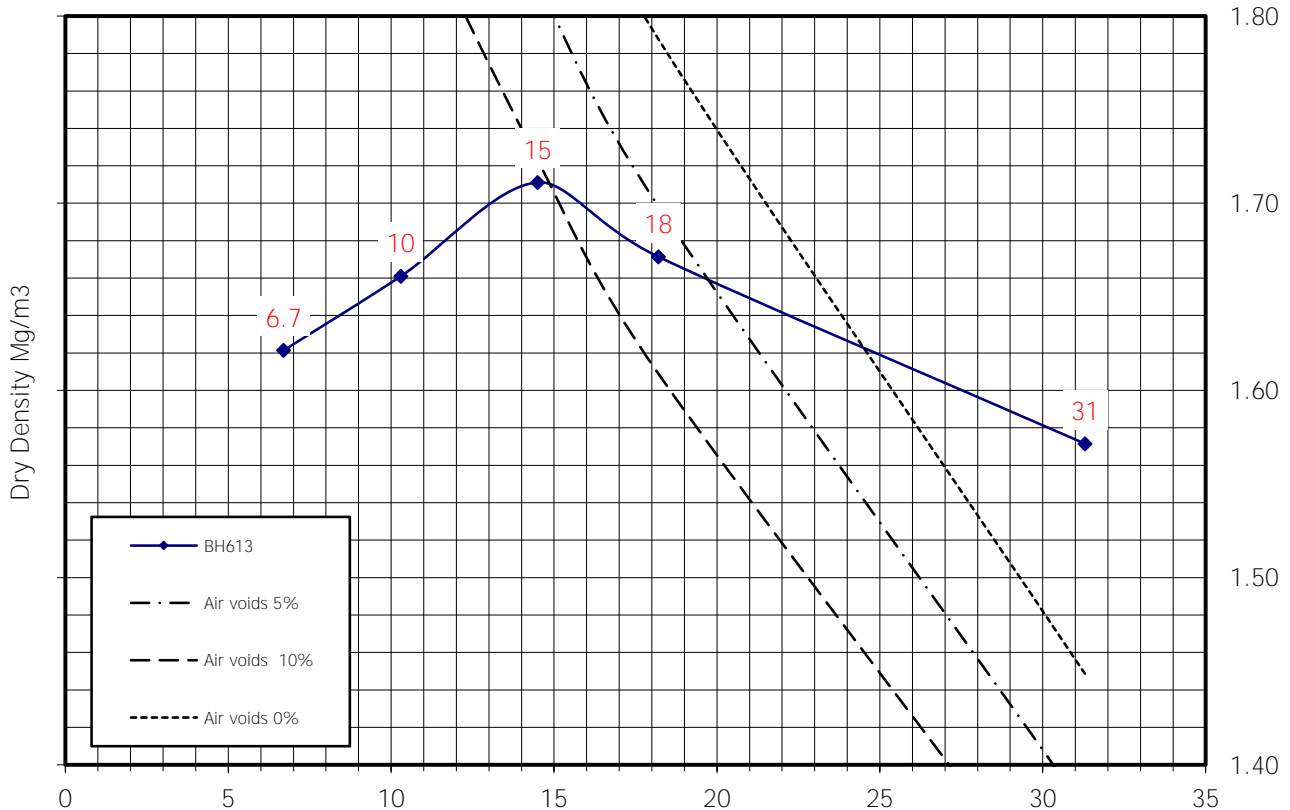
21.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 1
 Depth (m): 0.10 - 0.20
 Sample Type: B



	1	2	3	4	5
Compaction Point:	1	2	3	4	5
Moisture Content:	6.7	10	15	18.2	31.3
Bulk Density (Mg/m ³):	1.73	1.83	1.96	1.98	2.06
Dry Density (Mg/m ³):	1.62	1.66	1.71	1.67	1.57

Initial Moisture Content: 31 Method of Compaction: 4.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.71 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

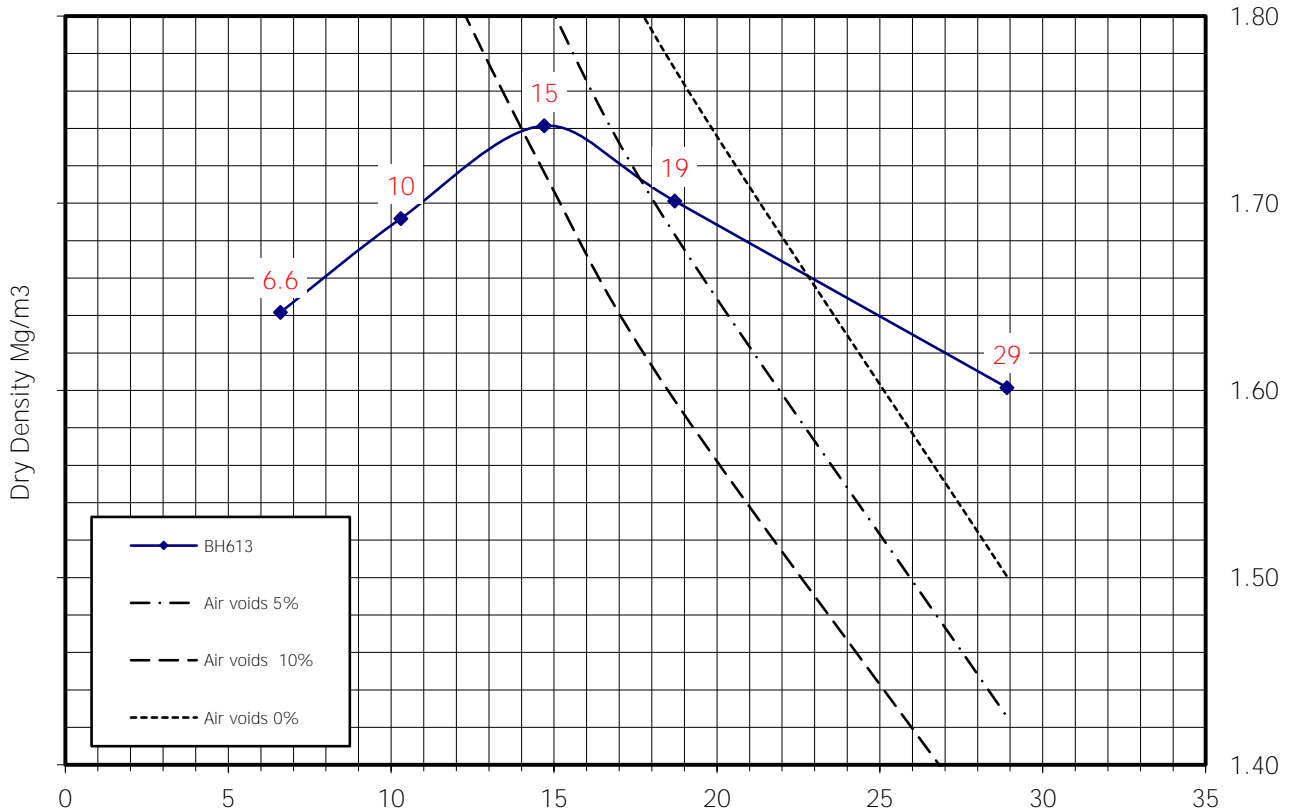
21.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 3
 Depth (m): 0.20 - 0.70
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.6	10	15	18.7	28.9
Bulk Density (Mg/m ³):	1.75	1.87	2.00	2.02	2.06
Dry Density (Mg/m ³):	1.64	1.69	1.74	1.70	1.60

Initial Moisture Content:	29	Method of Compaction:	4.5kg Rammer
Particle Density (Mg/m ³):	2.65 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0
Maximum Dry Density (Mg/m ³):	1.74	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	15	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

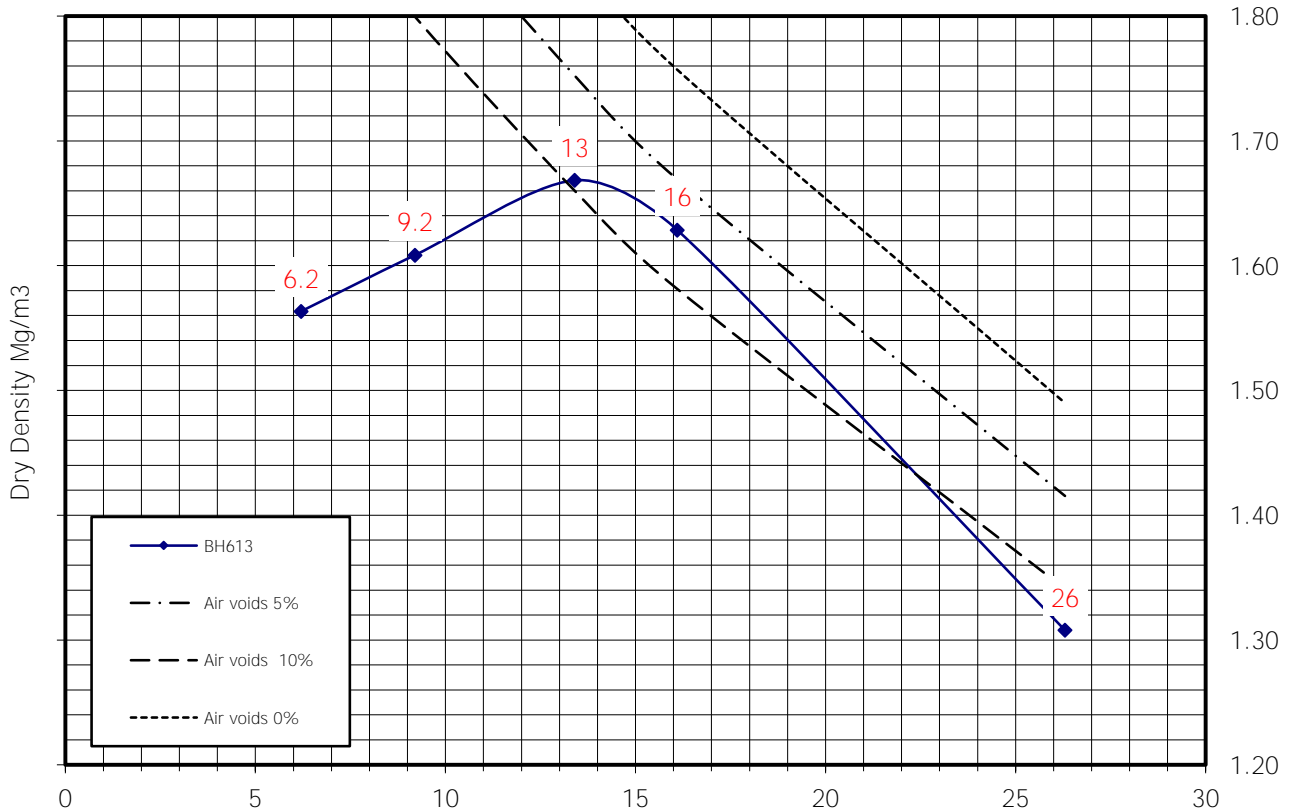
27.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 5
 Depth (m): 1.00 - 0.00
 Sample Type: B



	1	2	3	4	5
Compaction Point:	1	2	3	4	5
Moisture Content:	6.2	9.2	13	16.1	26.3
Bulk Density (Mg/m ³):	1.66	1.76	1.89	1.89	1.65
Dry Density (Mg/m ³):	1.56	1.61	1.67	1.63	1.31

Initial Moisture Content: 26 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.45 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.67 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 13 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

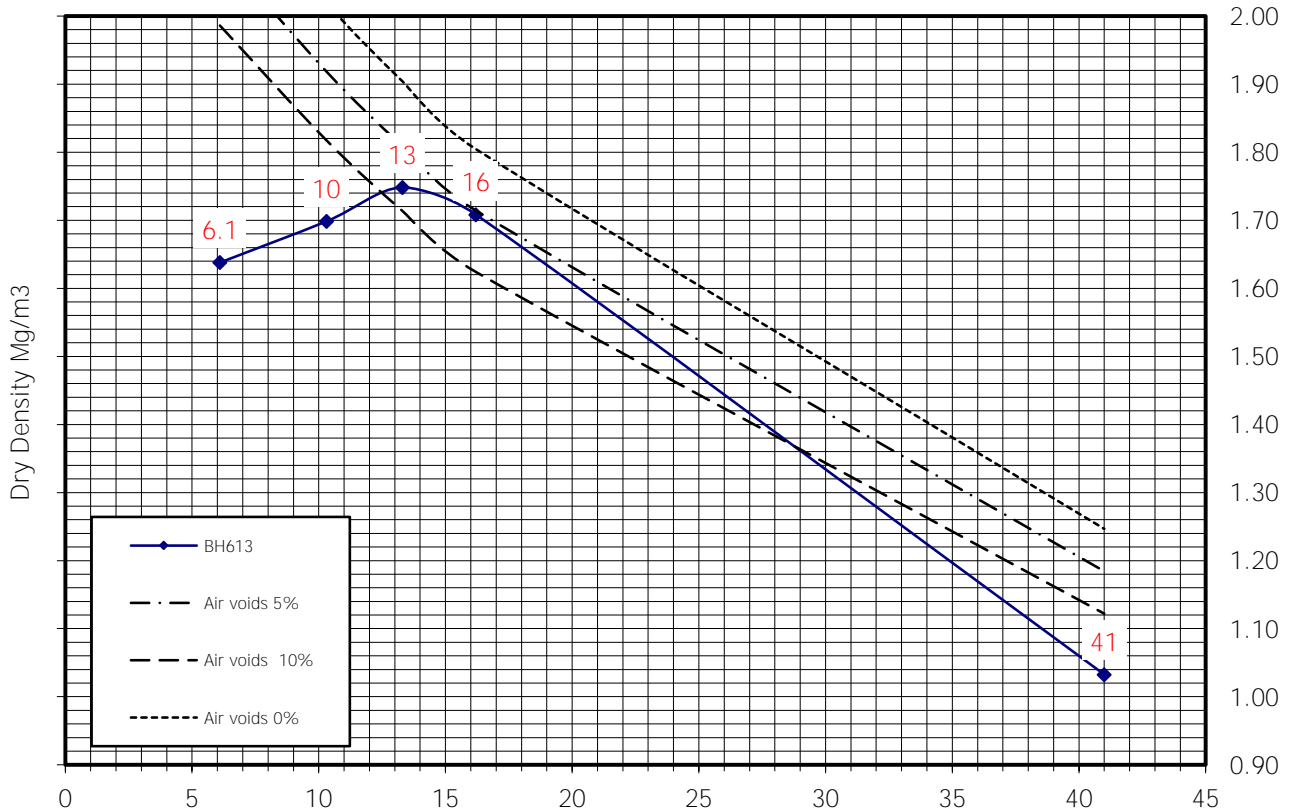
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 7
 Depth (m): 2.00 - 2.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.1	10	13	16.2	41.0
Bulk Density (Mg/m ³):	1.74	1.87	1.98	1.99	1.46
Dry Density (Mg/m ³):	1.64	1.70	1.75	1.71	1.03

Initial Moisture Content:	41	Method of Compaction:	2.5kg Rammer
Particle Density (Mg/m ³):	2.55 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0
Maximum Dry Density (Mg/m ³):	1.75	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	13	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

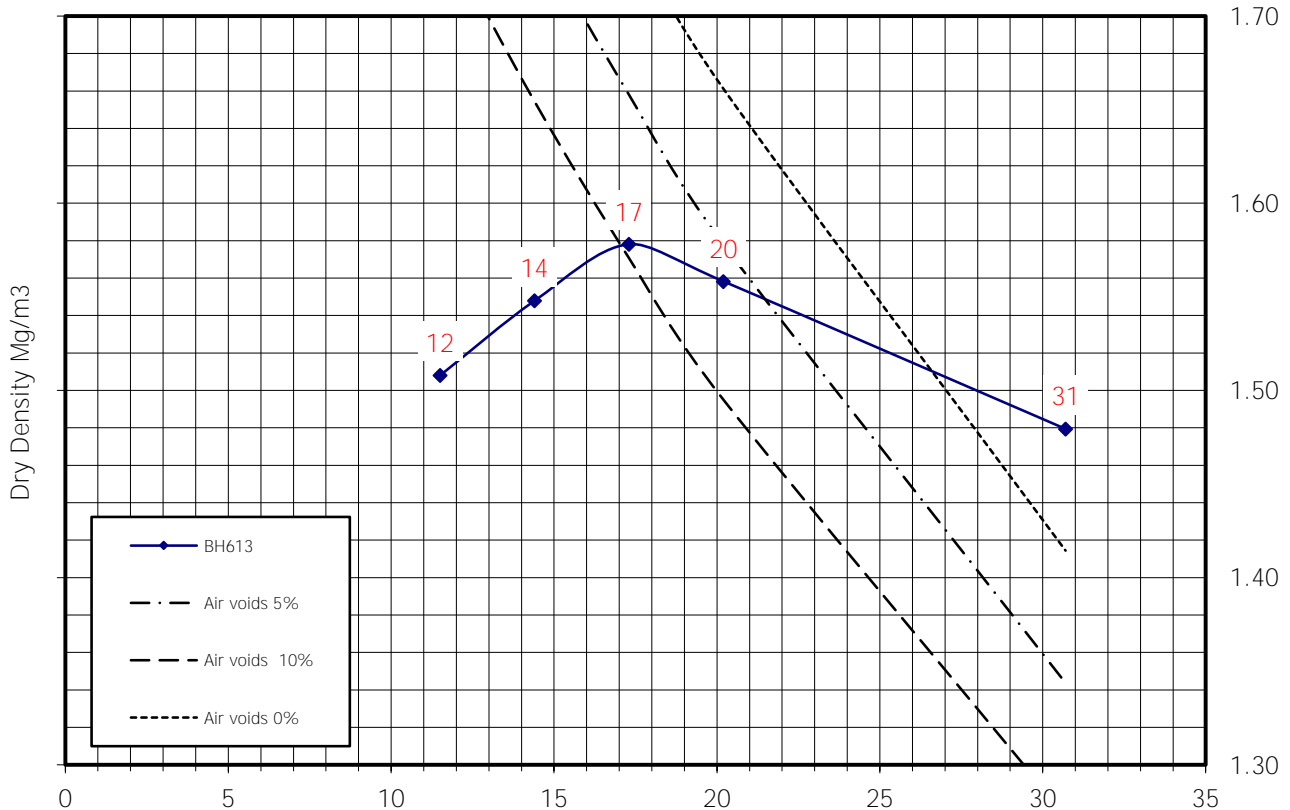
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 8
 Depth (m): 3.00 - 3.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	12	14	17	20.2	30.7
Bulk Density (Mg/m ³):	1.68	1.77	1.85	1.87	1.93
Dry Density (Mg/m ³):	1.51	1.55	1.58	1.56	1.48

Initial Moisture Content: 31 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.5 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.58 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 17 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:

reg. 13

Date Approved:

21.3.17



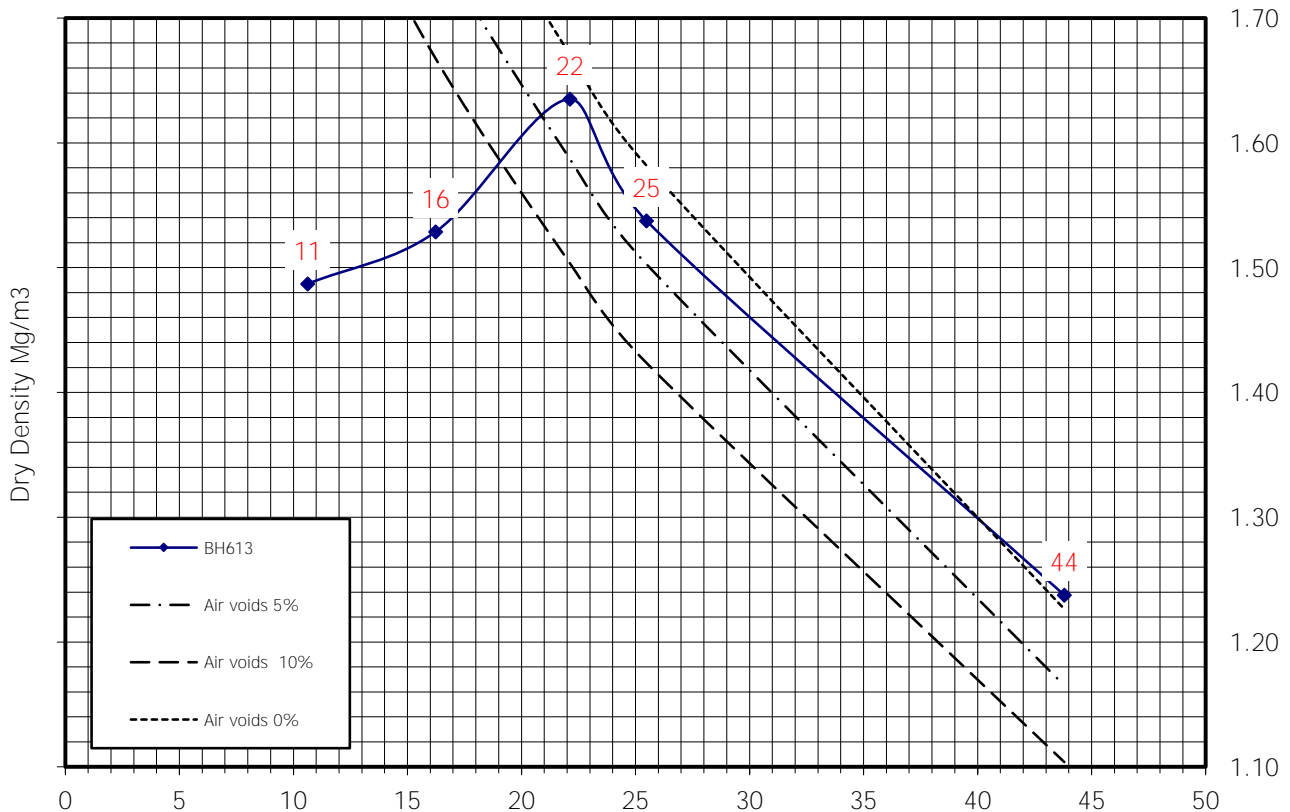
2788



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 9
 Depth (m): 4.00 - 4.50
 Sample Type: B



	1	2	3	4	5
Compaction Point:	1	2	3	4	5
Moisture Content:	11	16	22	25.5	43.8
Bulk Density (Mg/m ³):	1.65	1.78	2.00	1.93	1.78
Dry Density (Mg/m ³):	1.49	1.53	1.64	1.54	1.24

Initial Moisture Content:	44	Method of Compaction:	2.5kg Rammer
Particle Density (Mg/m ³):	2.65 Assumed	Material Retained on 37.5 mm Test Sieve (%):	0
Maximum Dry Density (Mg/m ³):	1.64	Material Retained on 20.0 mm Test Sieve (%):	0
Optimum Moisture Content (%):	22	Sample Preparation Clause:	3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

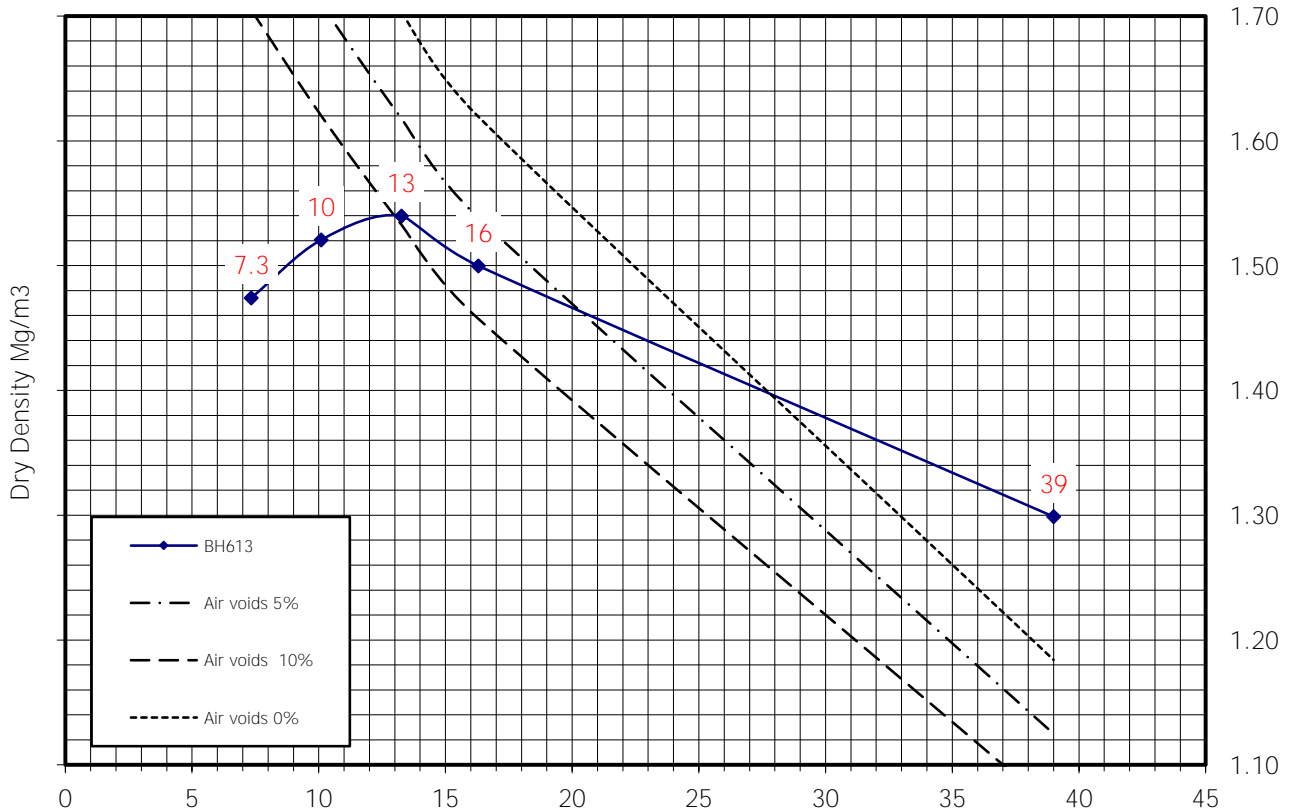
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Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 10
 Depth (m): 5.00 - 5.50
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	7.3	10	13	16.3	39.0
Bulk Density (Mg/m ³):	1.58	1.67	1.74	1.74	1.81
Dry Density (Mg/m ³):	1.47	1.52	1.54	1.50	1.30

Initial Moisture Content: 39 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.2 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 1.54 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 13 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

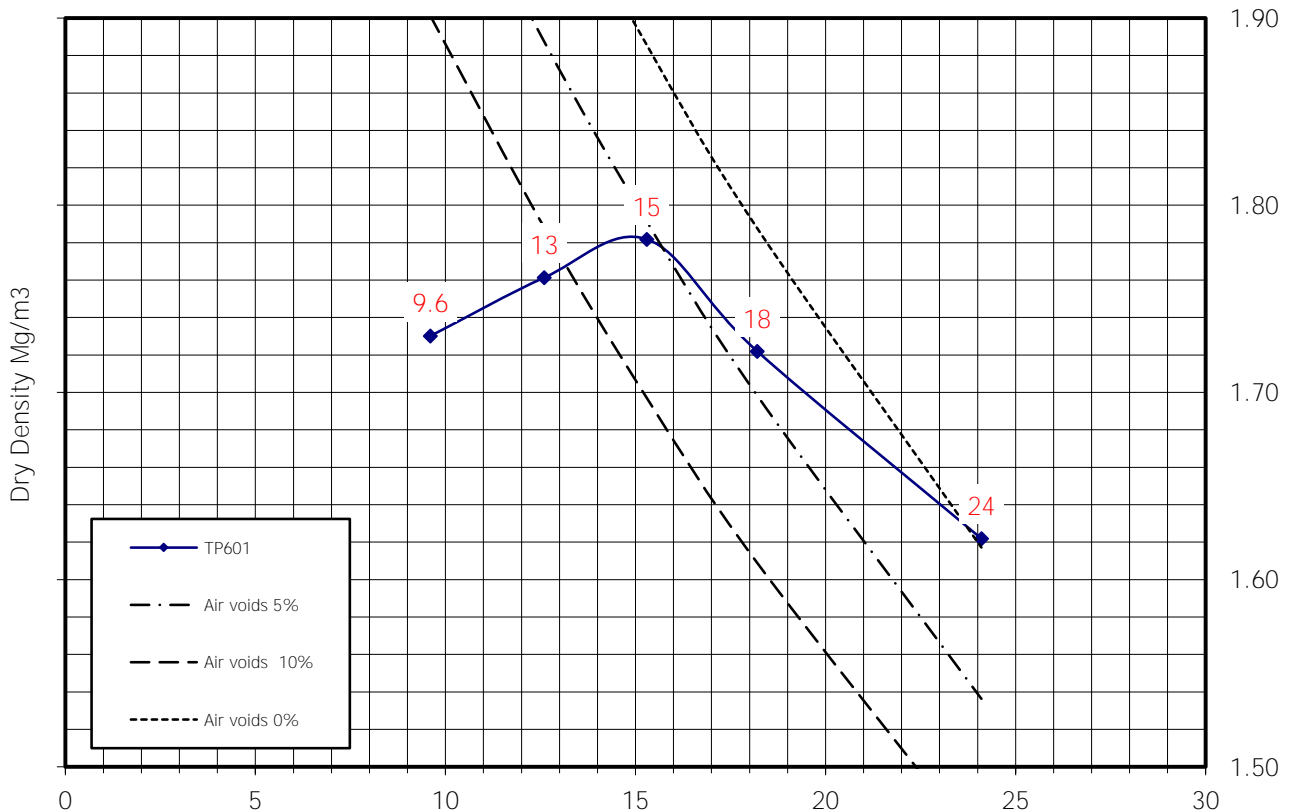
27.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP601
 Sample Number: 7
 Depth (m): 1.70 - 1.90
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	9.6	13	15	18.2	24.1
Bulk Density (Mg/m ³):	1.90	1.98	2.05	2.04	2.01
Dry Density (Mg/m ³):	1.73	1.76	1.78	1.72	1.62

Initial Moisture Content: 24 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.65 Assumed Material Retained on 37.5 mm Test Sieve (%): 8.8
 Maximum Dry Density (Mg/m³): 1.78 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.2

Remarks:

Checked By:

Approved By:



reg. 13

Date Approved:

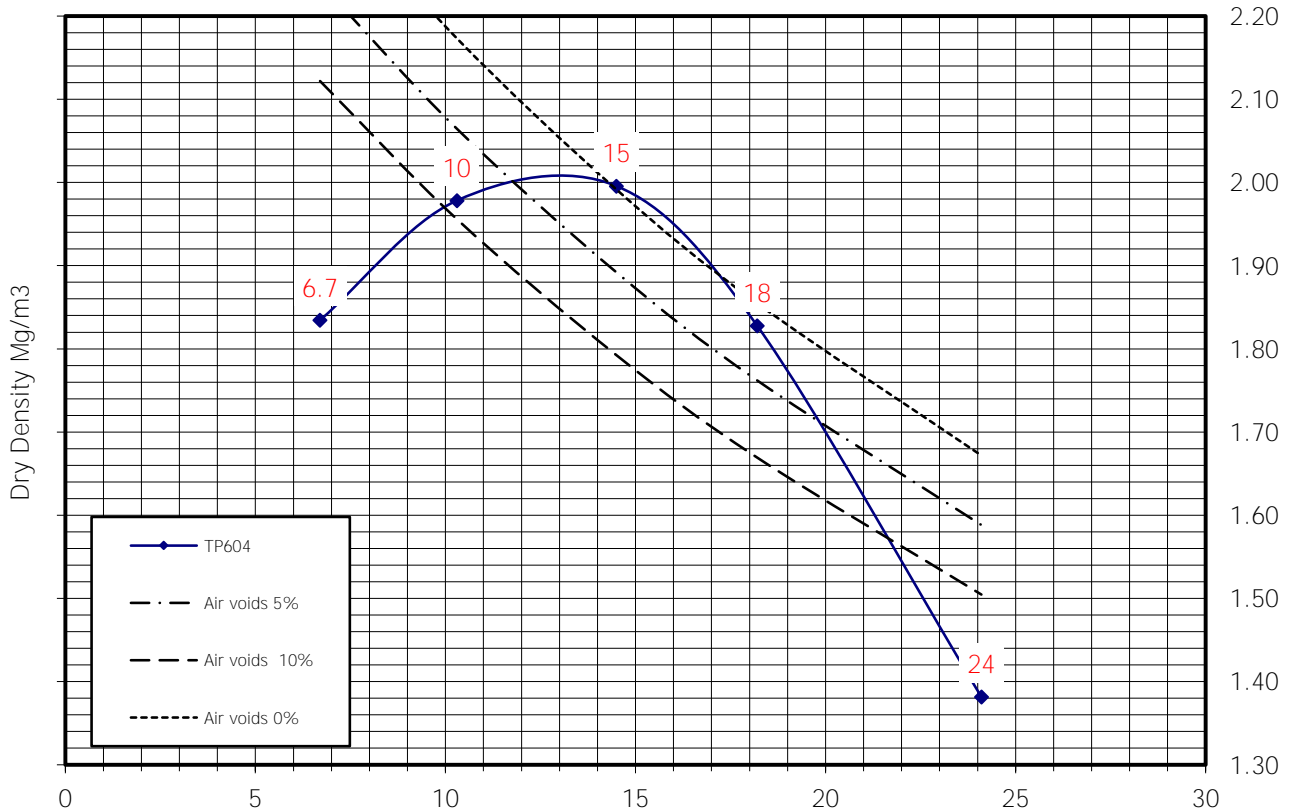
27.3.17



Dry Density/Moisture Content Relationship

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP604
 Sample Number: 11
 Depth (m): 2.80 - 3.00
 Sample Type: B



	Moisture Content %				
Compaction Point:	1	2	3	4	5
Moisture Content:	6.7	10	15	18.2	24.1
Bulk Density (Mg/m ³):	1.96	2.18	2.29	2.16	1.71
Dry Density (Mg/m ³):	1.83	1.98	2.00	1.83	1.38

Initial Moisture Content: 38 Method of Compaction: 2.5kg Rammer
 Particle Density (Mg/m³): 2.8 Assumed Material Retained on 37.5 mm Test Sieve (%): 0
 Maximum Dry Density (Mg/m³): 2.00 Material Retained on 20.0 mm Test Sieve (%): 0
 Optimum Moisture Content (%): 15 Sample Preparation Clause: 3.2.4.1

Remarks:

Checked By:

Approved By:



reg. 13

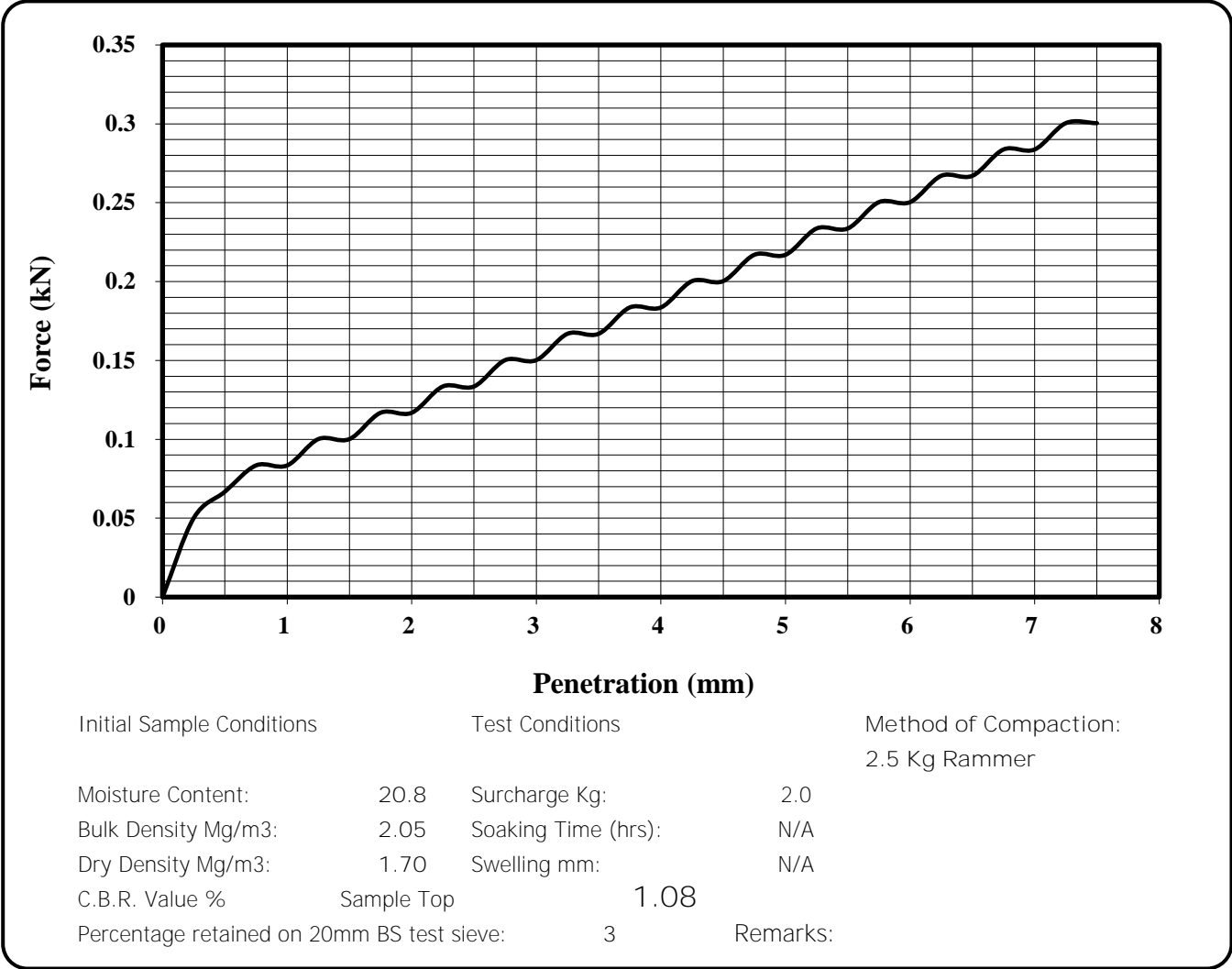
Date Approved:

27.3.17



Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: BH1101
 Sample Number: 9
 Depth (m): 1.00 - 1.50
 Description:



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Checked By

Approved By:

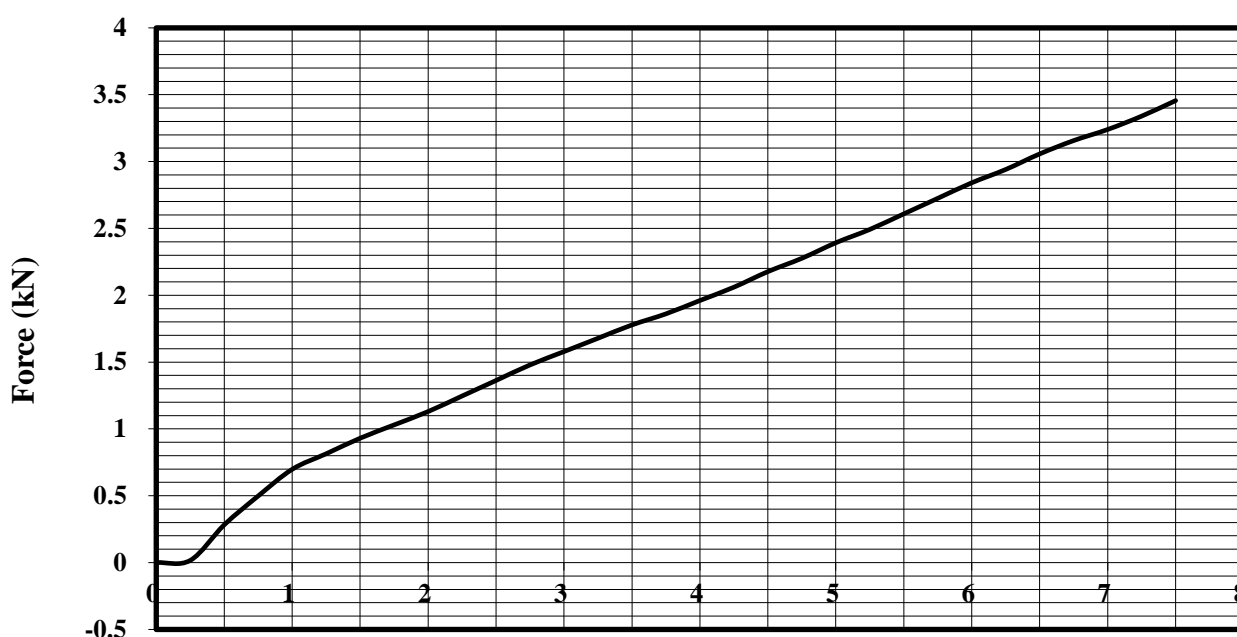
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: BH1103
 Sample Number: 9
 Depth (m): 2.00 - 2.50
 Description:



Penetration (mm)

Initial Sample Conditions	Test Conditions	Method of Compaction: 2.5 Kg Rammer
Moisture Content: 13.5	Surcharge Kg: 2.0	
Bulk Density Mg/m ³ : 2.05	Soaking Time (hrs): N/A	
Dry Density Mg/m ³ : 1.81	Swelling mm: N/A	
C.B.R. Value %	Sample Top	11.96
Percentage retained on 20mm BS test sieve:	0	Remarks:



reg. 13



Checked By

Approved By:

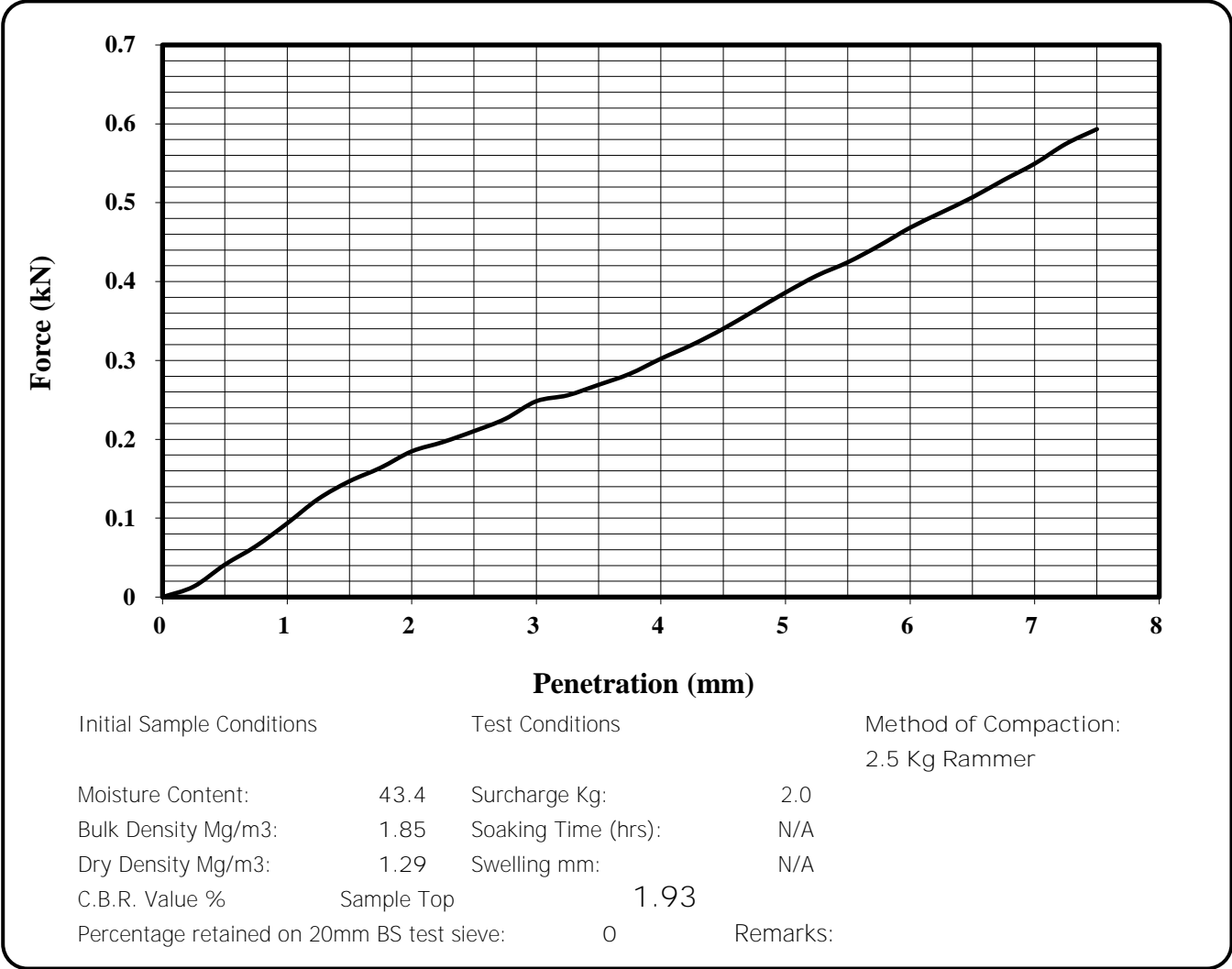
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP923
 Sample Number: 11
 Depth (m): 1.30 - 2.00
 Description: Brown slightly sandy silty CLAY



reg. 13



Checked By _____

Approved By: _____

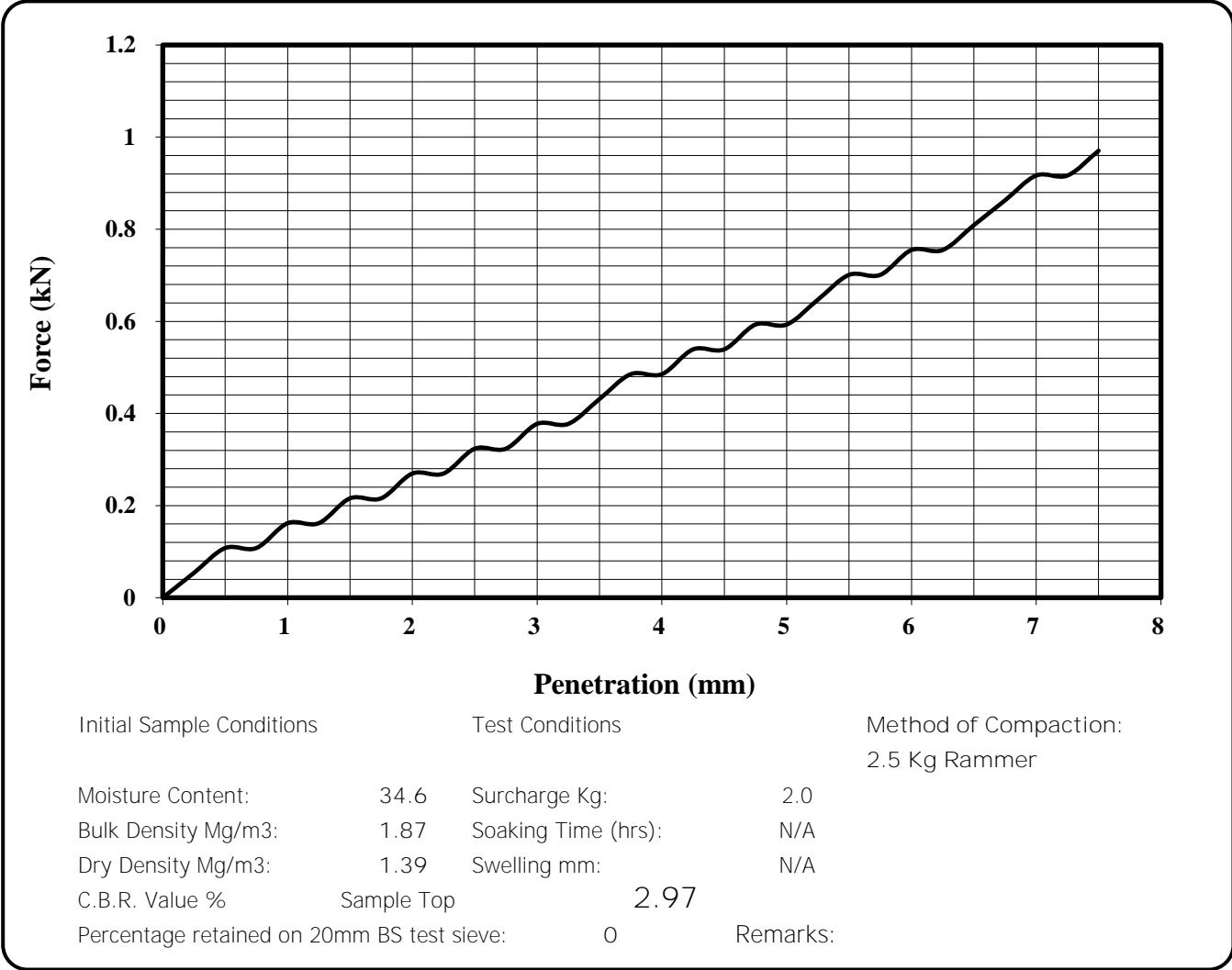
reg. 13 _____

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP932
 Sample Number: 12
 Depth (m): 2.50 - 3.00
 Description: Grey/brown silty CLAY



reg. 13



Checked By

Approved By:

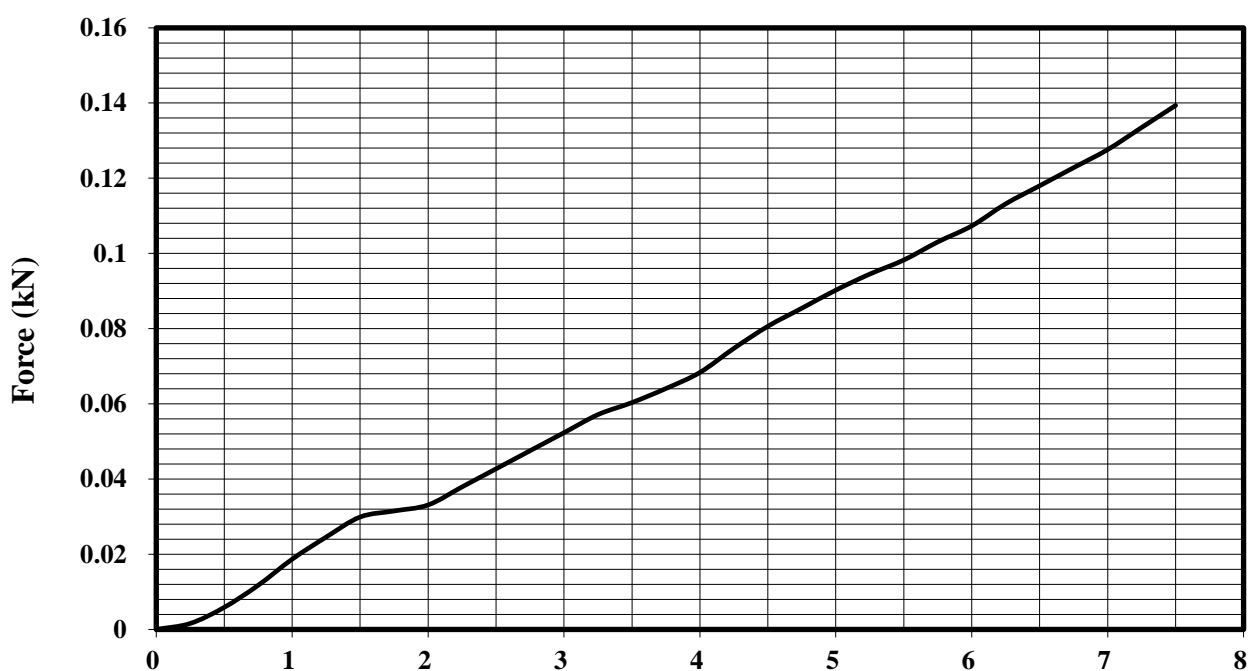
reg. 13

Date Approved:

20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1001
 Sample Number: 2
 Depth (m): 0.30 - 0.70
 Description: Brown fine to coarse gravelly SAND



Penetration (mm)

Initial Sample Conditions	Test Conditions	Method of Compaction:
Moisture Content: 17.2	Surcharge Kg: 2.0	2.5 Kg Rammer
Bulk Density Mg/m ³ : 2.21	Soaking Time (hrs): N/A	
Dry Density Mg/m ³ : 1.89	Swelling mm: N/A	
C.B.R. Value % Sample Top	0.45	
Percentage retained on 20mm BS test sieve: 7	Remarks:	



reg. 13



Checked By

Approved By:

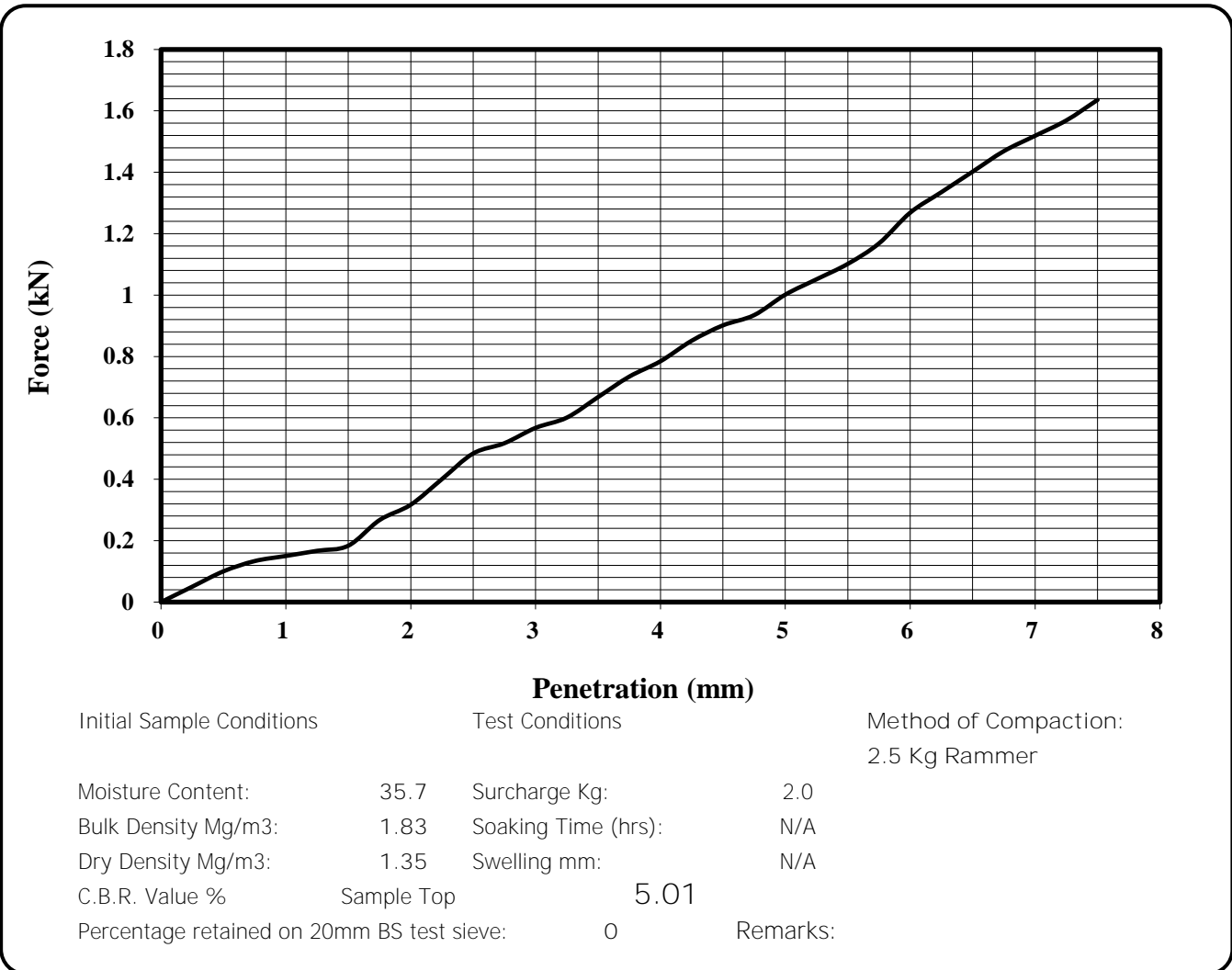
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1001
 Sample Number: 4
 Depth (m): 2.00 - 2.50
 Description: Brown/grey slightly sandy silty CLAY



reg. 13



Checked By

Approved By:

reg. 13

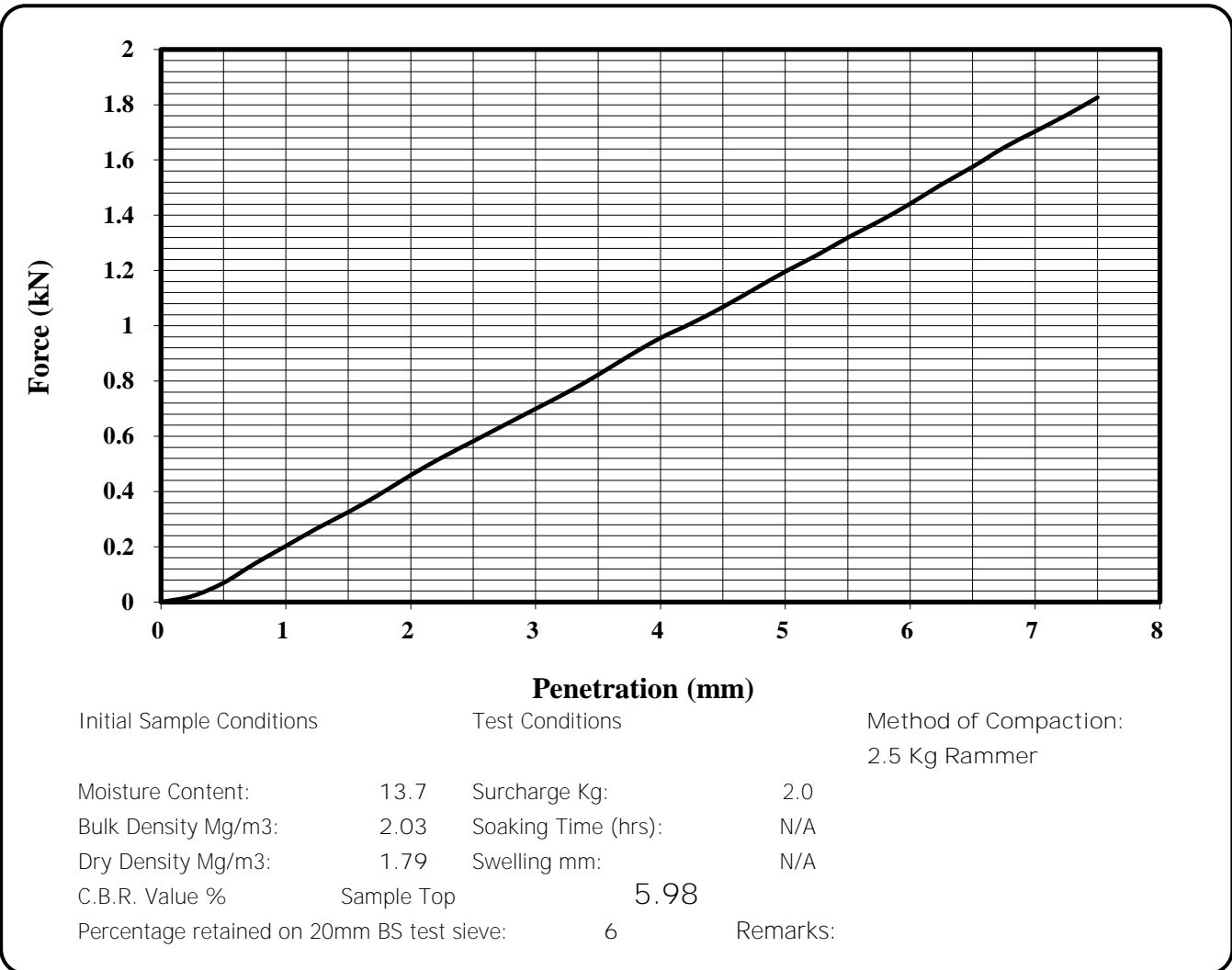
[Redacted Signature]

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1102
 Sample Number: 4
 Depth (m): 1.10 - 1.30
 Description: Brown fine to coarse gravelly SAND



reg. 13



Checked By

Approved By:

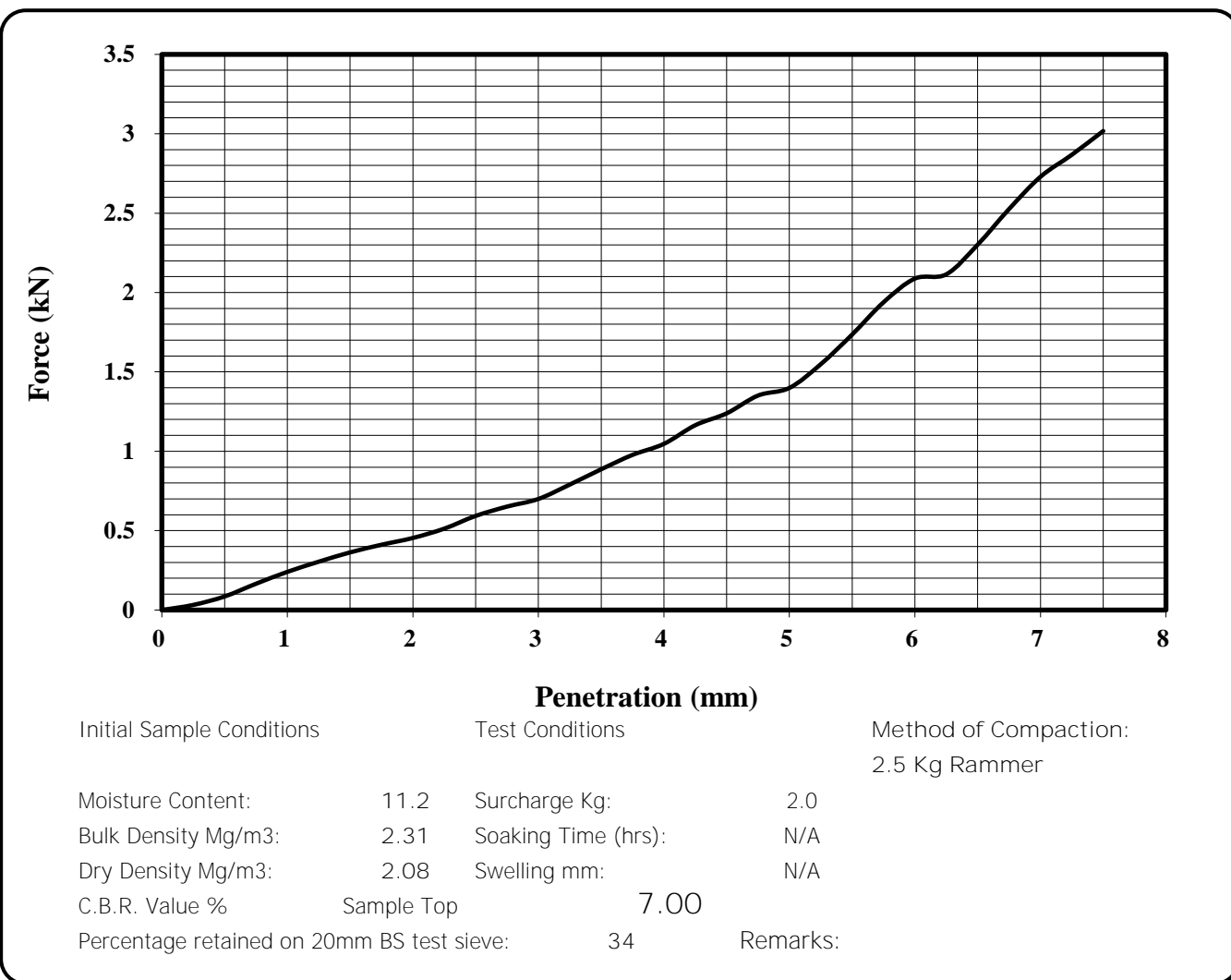
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP113
 Sample Number: 9
 Depth (m): 2.30 - 2.60
 Description: Brown clayey fine to coarse GRAVEL



Checked By
Sean Penn (Administrative/Quality Assistant)

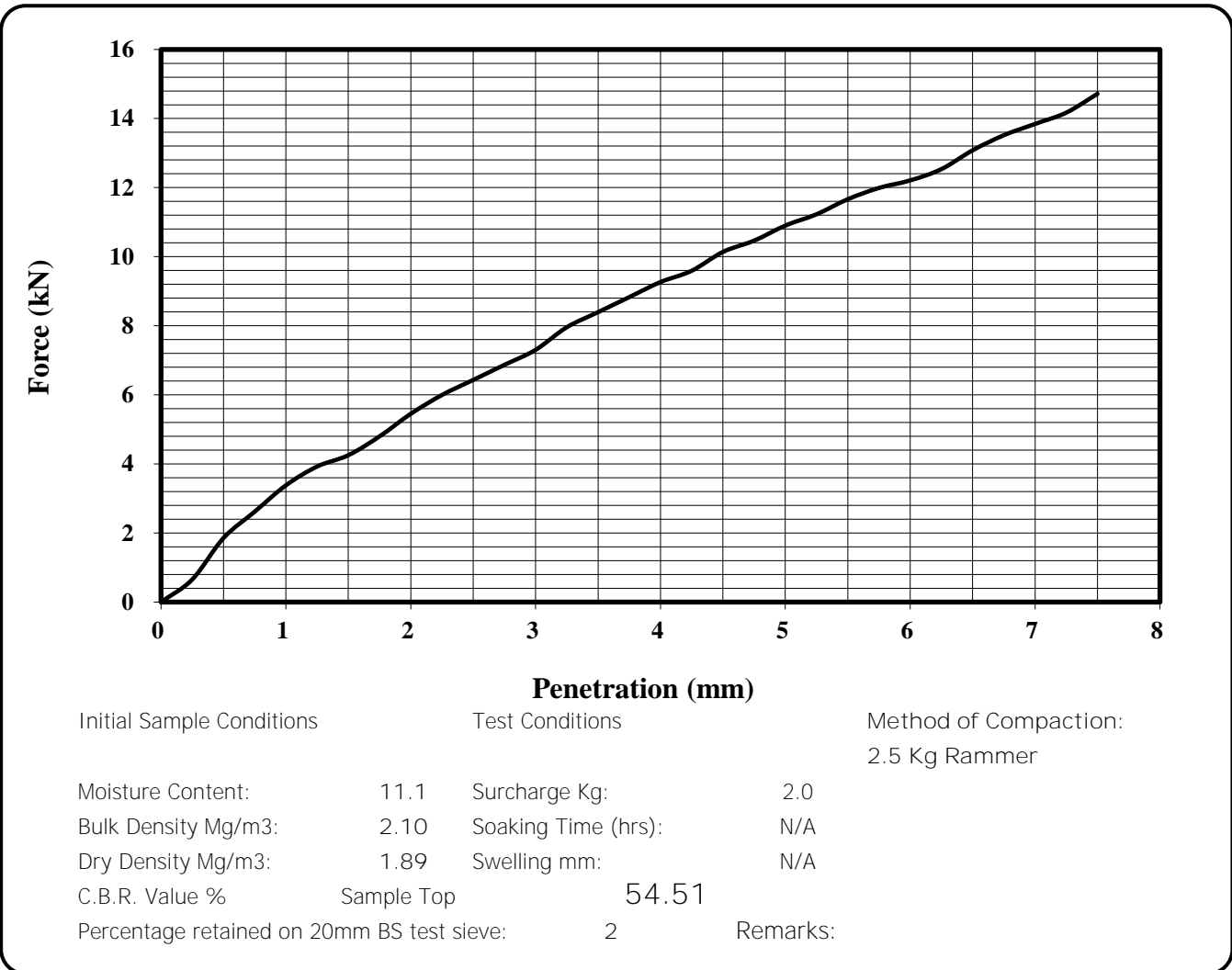


Approved By:
Paul Evans (Quality Manager)

Date Approved: 18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1203
 Sample Number: 9
 Depth (m): 1.50
 Description:



reg. 13



Checked By

Approved By:

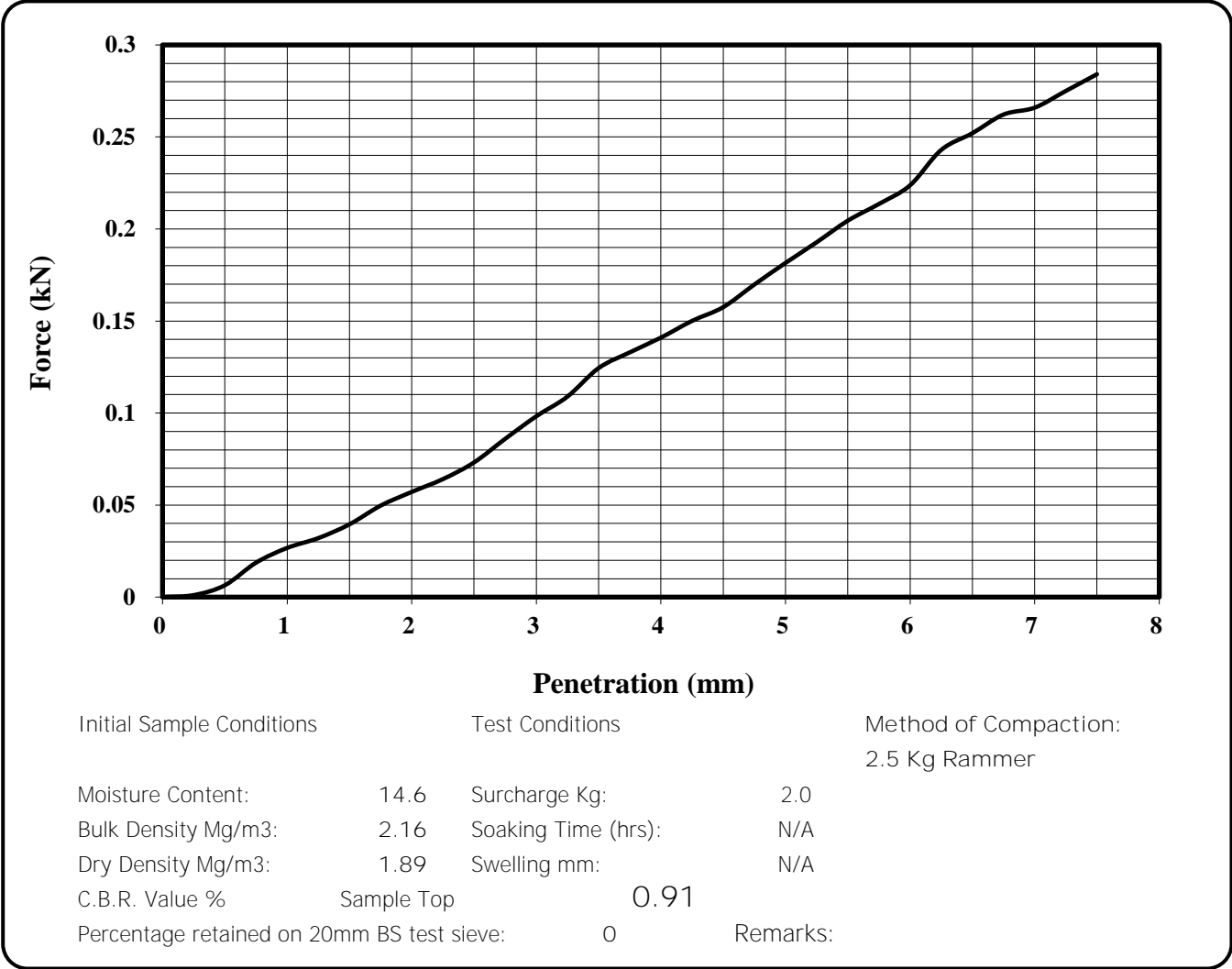
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1204
 Sample Number: 5
 Depth (m): 1.60 - 1.70
 Description: Brown fine gravelly silty very clayey SAND



reg. 13



Checked By

Approved By:

reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1203
 Sample Number: 7
 Depth (m): 2.30 - 2.70
 Description: Grey slightly sandy silty CLAY



Penetration (mm)

Initial Sample Conditions	Test Conditions	Method of Compaction:
Moisture Content: 29.9	Surcharge Kg: 2.0	2.5 Kg Rammer
Bulk Density Mg/m ³ : 2.00	Soaking Time (hrs): N/A	
Dry Density Mg/m ³ : 1.54	Swelling mm: N/A	
C.B.R. Value % Sample Top	4.67	
Percentage retained on 20mm BS test sieve:	0	Remarks:



reg. 13



Checked By

Approved By:

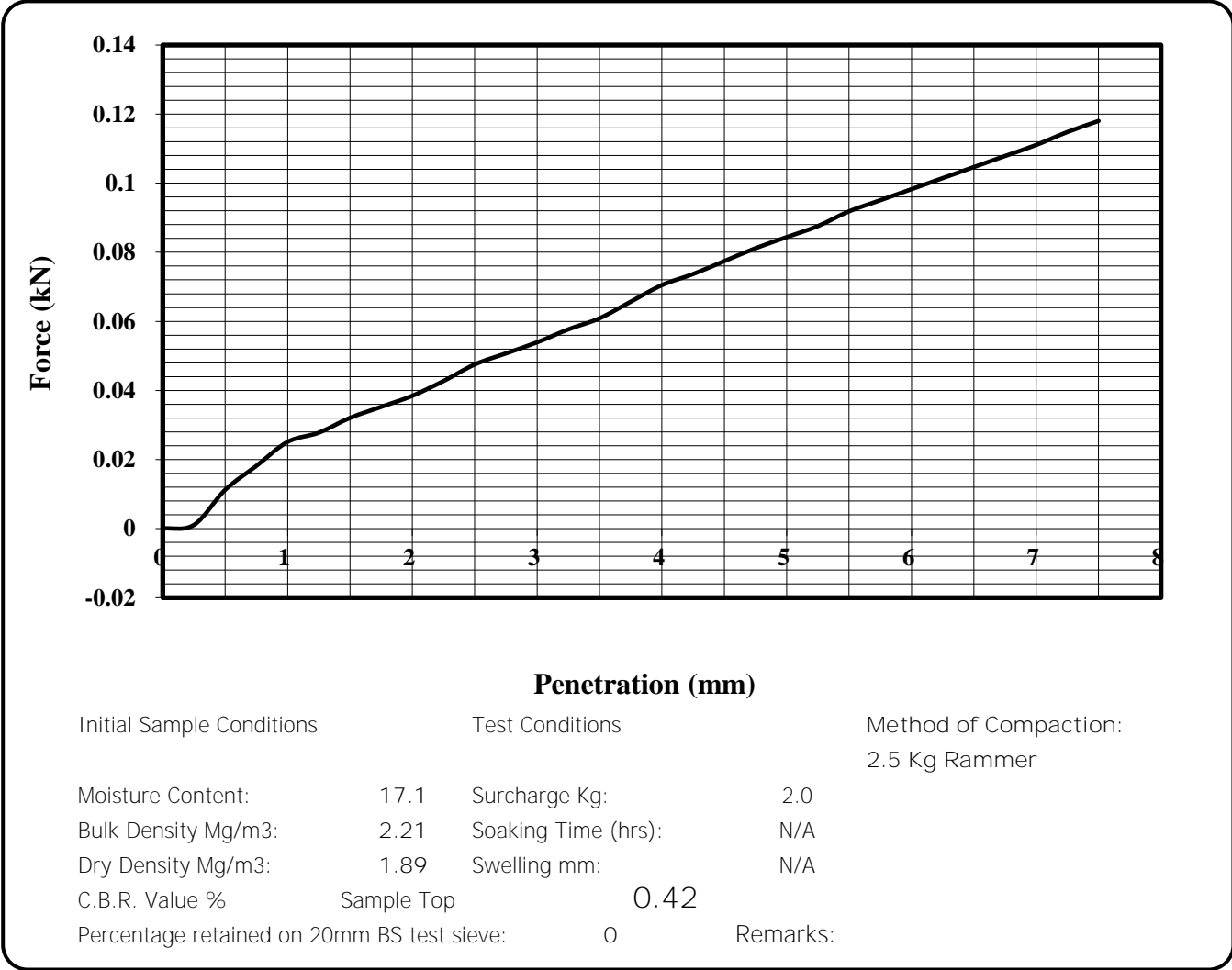
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1208
 Sample Number: 7
 Depth (m): 1.20
 Description: Brown fine to medium gravelly sandy CLAY



reg. 13



Checked By

Approved By:

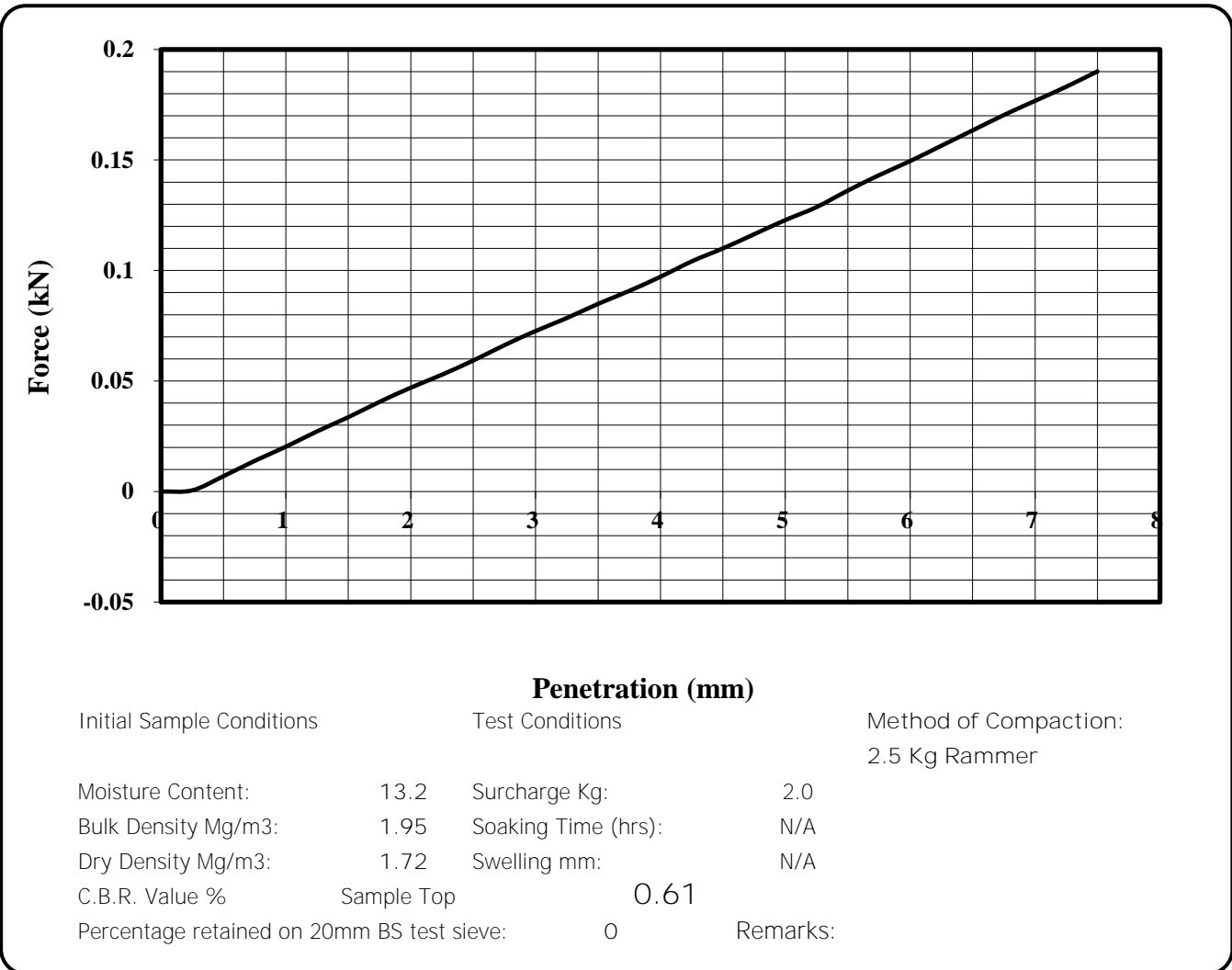
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1208
 Sample Number: 15
 Depth (m): 2.50
 Description: Brown fine gravelly silty sandy CLAY



Penetration (mm)

Initial Sample Conditions	Test Conditions	Method of Compaction:
Moisture Content: 13.2	Surcharge Kg: 2.0	2.5 Kg Rammer
Bulk Density Mg/m ³ : 1.95	Soaking Time (hrs): N/A	
Dry Density Mg/m ³ : 1.72	Swelling mm: N/A	
C.B.R. Value %	Sample Top	0.61
Percentage retained on 20mm BS test sieve:	0	Remarks:



reg. 13



Checked By

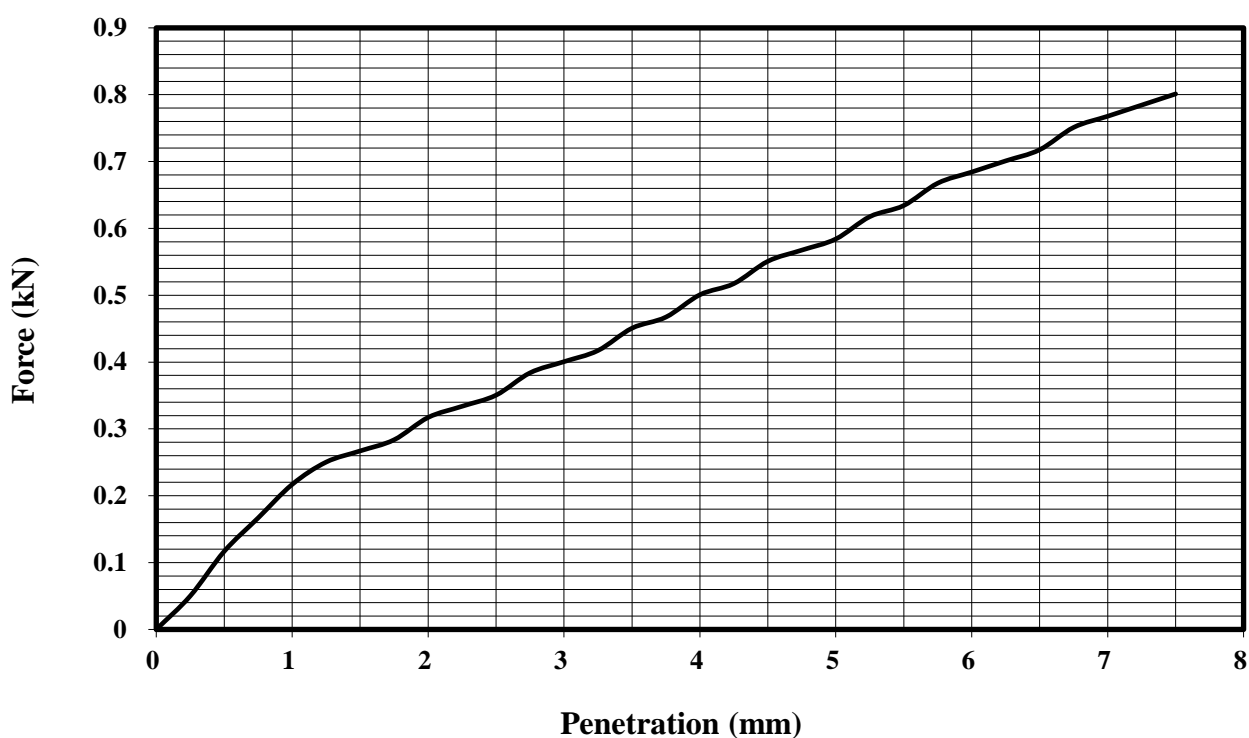
Approved By:

reg. 13

Date Approved: 18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1209
 Sample Number: 7
 Depth (m): 1.30
 Description:



Penetration (mm)

Initial Sample Conditions

Test Conditions

Method of Compaction:
2.5 Kg Rammer

Moisture Content:	33.6	Surcharge Kg:	2.0
Bulk Density Mg/m ³ :	1.98	Soaking Time (hrs):	N/A
Dry Density Mg/m ³ :	1.48	Swelling mm:	N/A
C.B.R. Value %	Sample Top	2.92	
Percentage retained on 20mm BS test sieve:	0	Remarks:	



reg. 13



Checked By

Approved By:

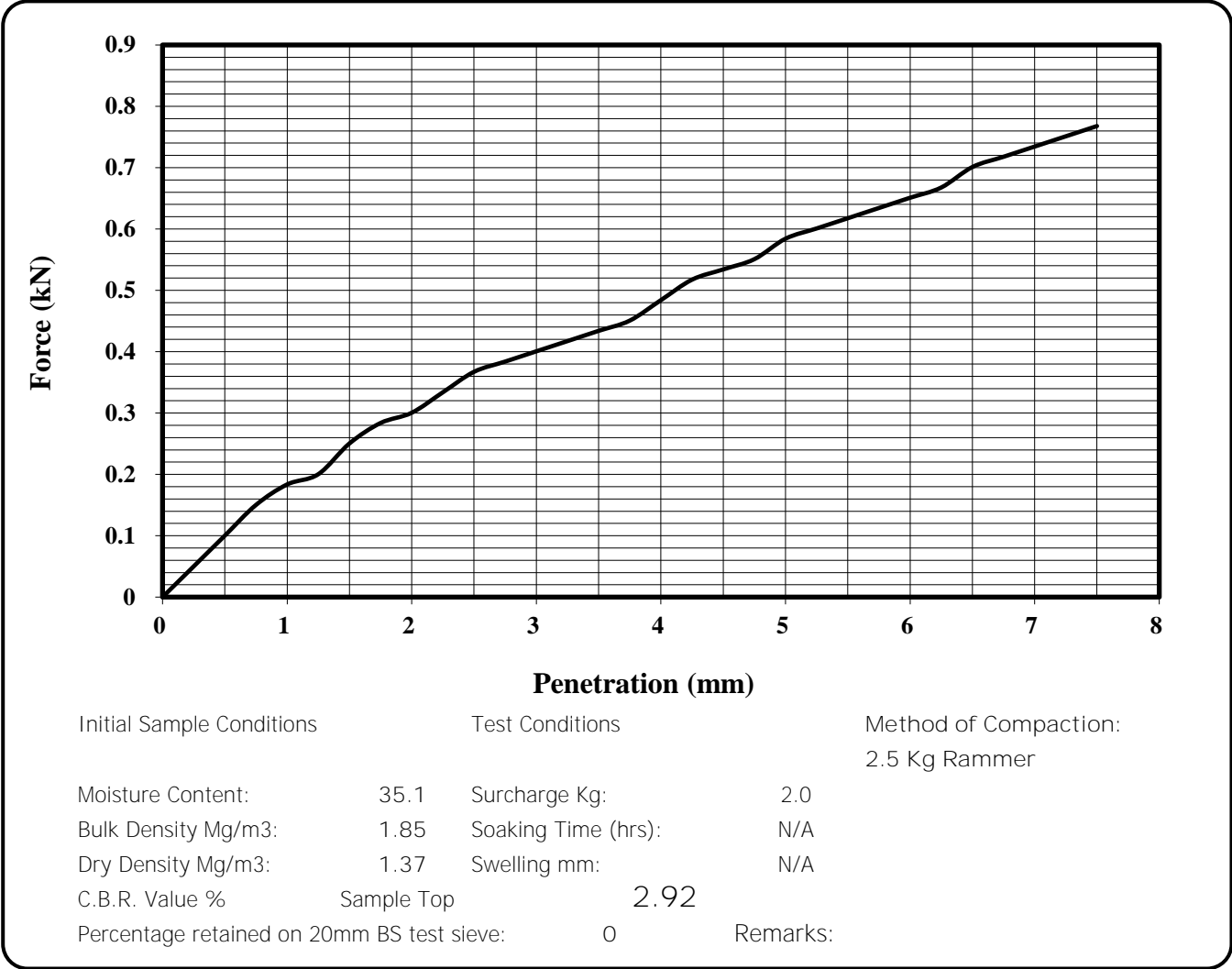
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1213
 Sample Number: 7
 Depth (m): 1.10
 Description: Grey/brown slightly sandy silty CLAY



reg. 13



Checked By

Approved By:

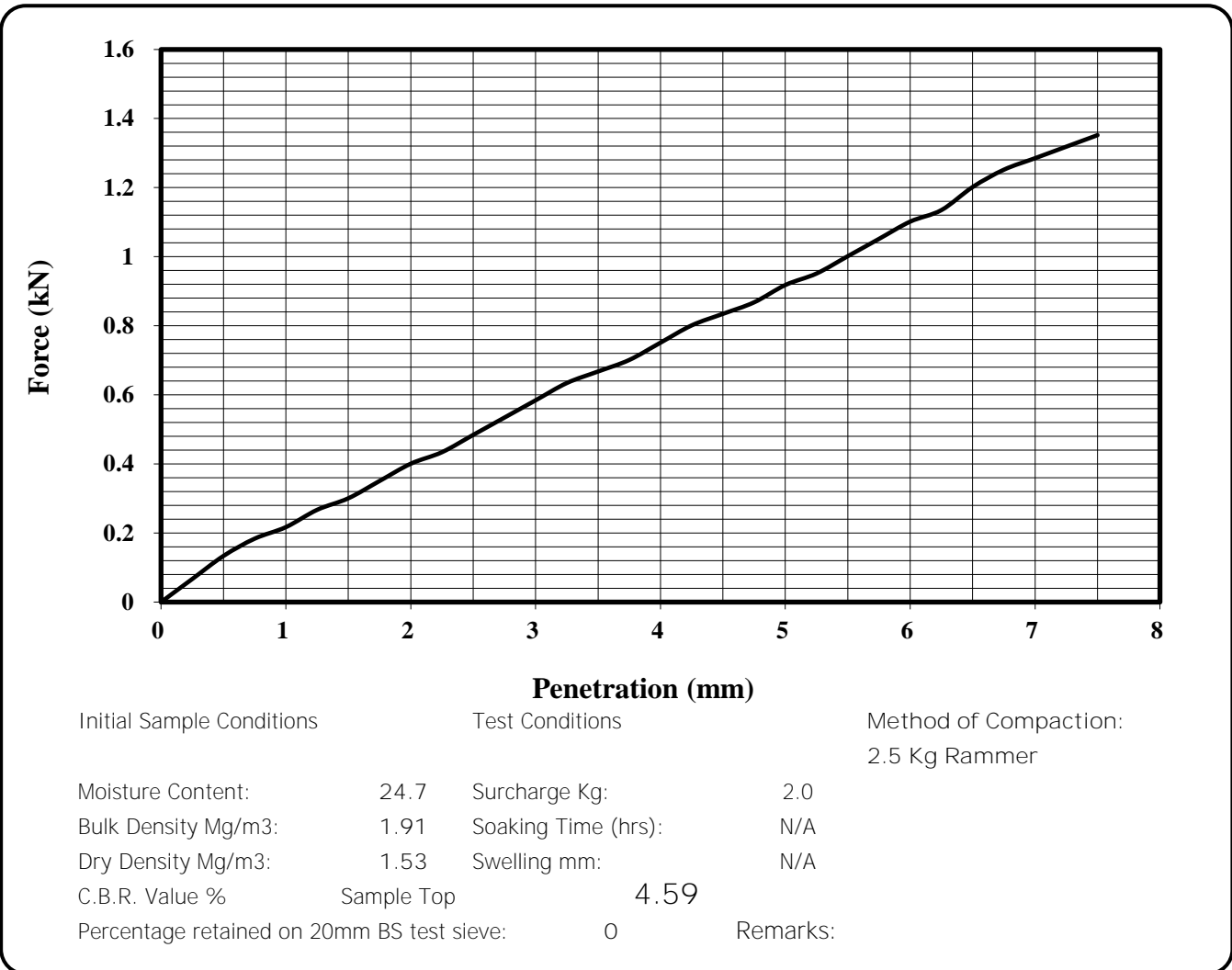
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1213
 Sample Number: 10
 Depth (m): 2.30
 Description: Grey/brown sandy silty CLAY



reg. 13



Checked By

Approved By:

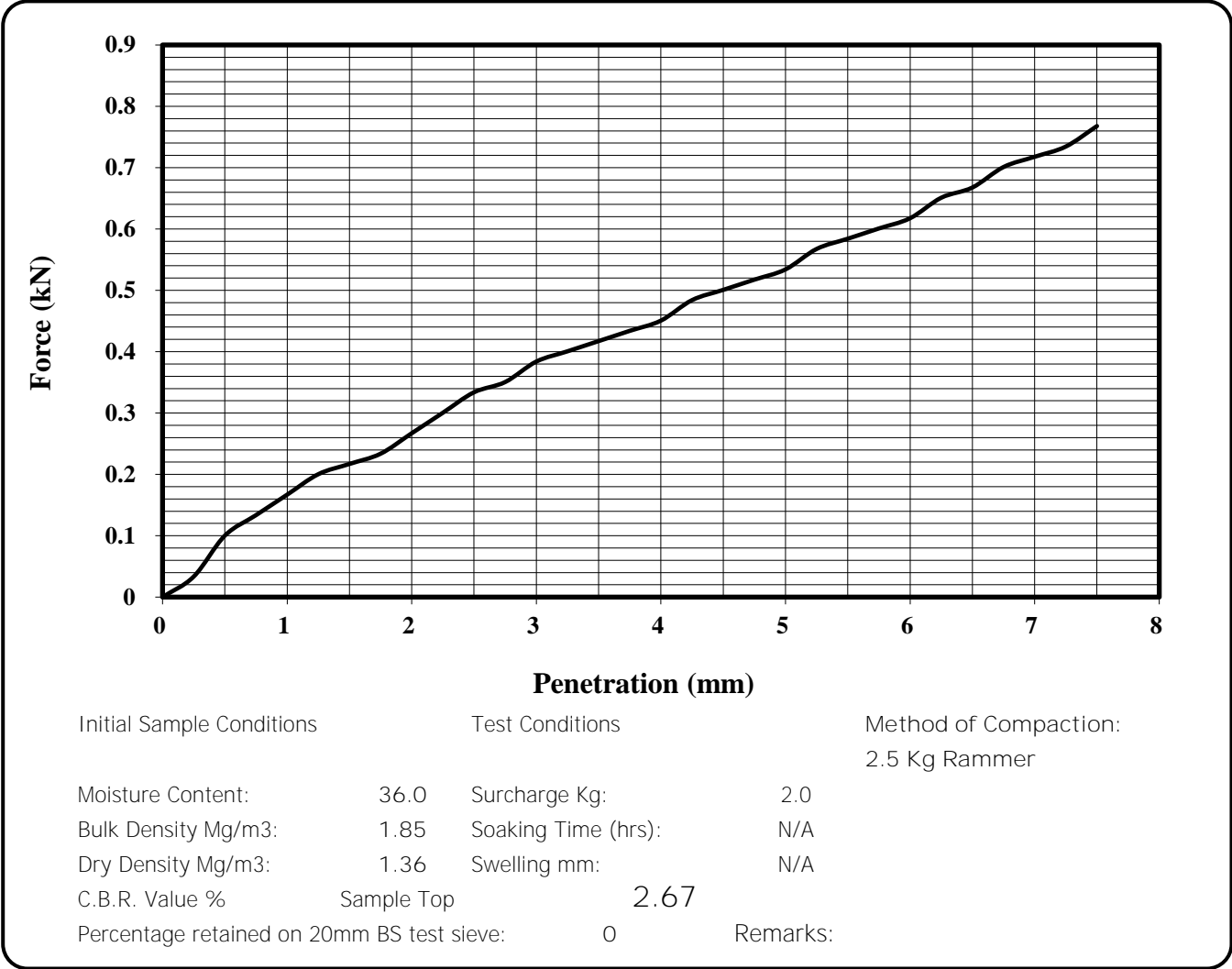
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1214
 Sample Number: 12
 Depth (m): 2.00
 Description: Brown slightly sandy silty CLAY



reg. 13



Checked By

Approved By:

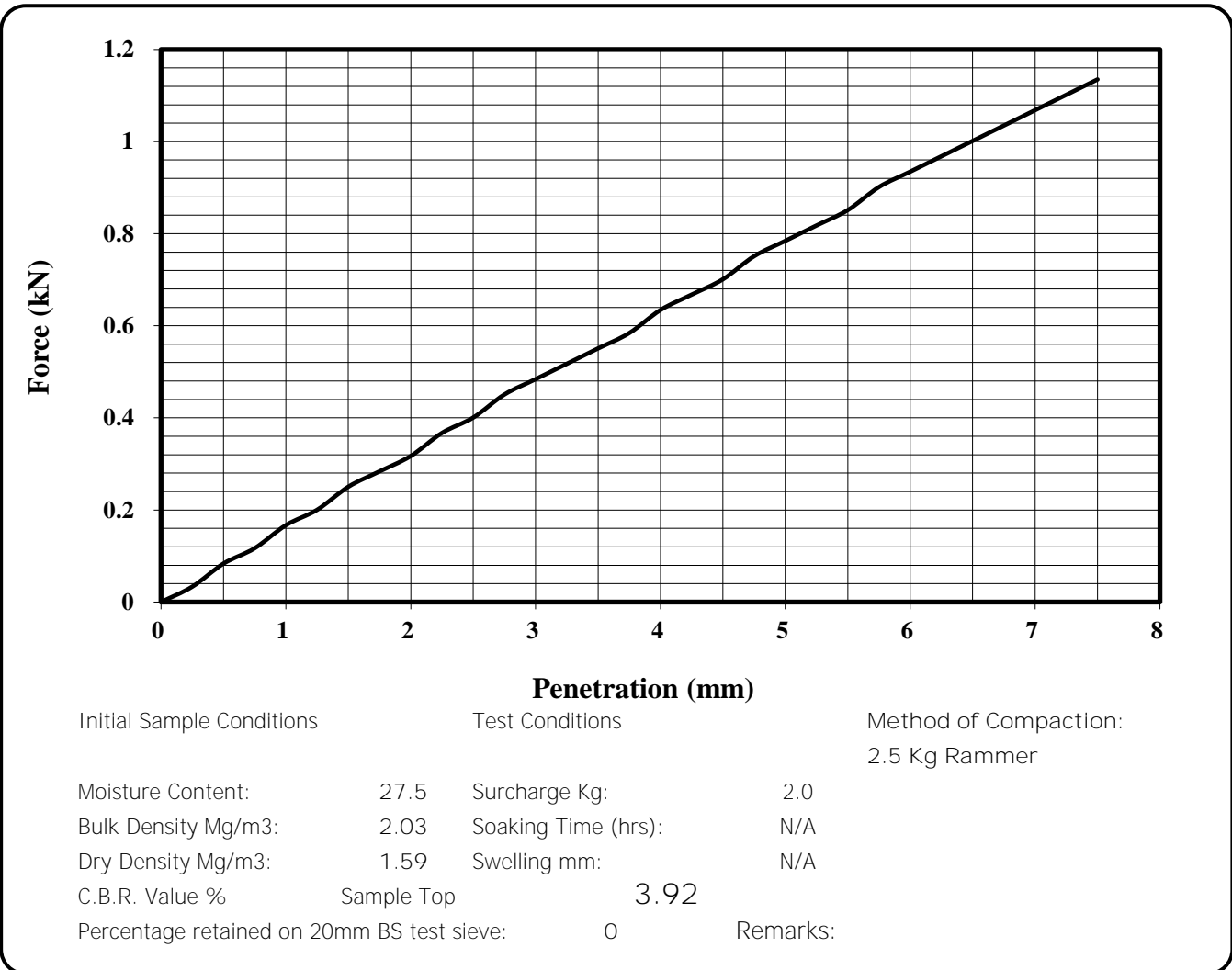
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1216
 Sample Number: 7
 Depth (m): 1.50
 Description:



reg. 13



Checked By

Approved By:

reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1217
 Sample Number: 7
 Depth (m): 1.60
 Description: Brown slightly sandy silty CLAY



Penetration (mm)

Initial Sample Conditions	Test Conditions	Method of Compaction:
Moisture Content: 30.3	Surcharge Kg: 2.0	2.5 Kg Rammer
Bulk Density Mg/m ³ : 1.93	Soaking Time (hrs): N/A	
Dry Density Mg/m ³ : 1.48	Swelling mm: N/A	
C.B.R. Value % Sample Top	2.59	
Percentage retained on 20mm BS test sieve:	0	Remarks:



reg. 13



Checked By

Approved By:

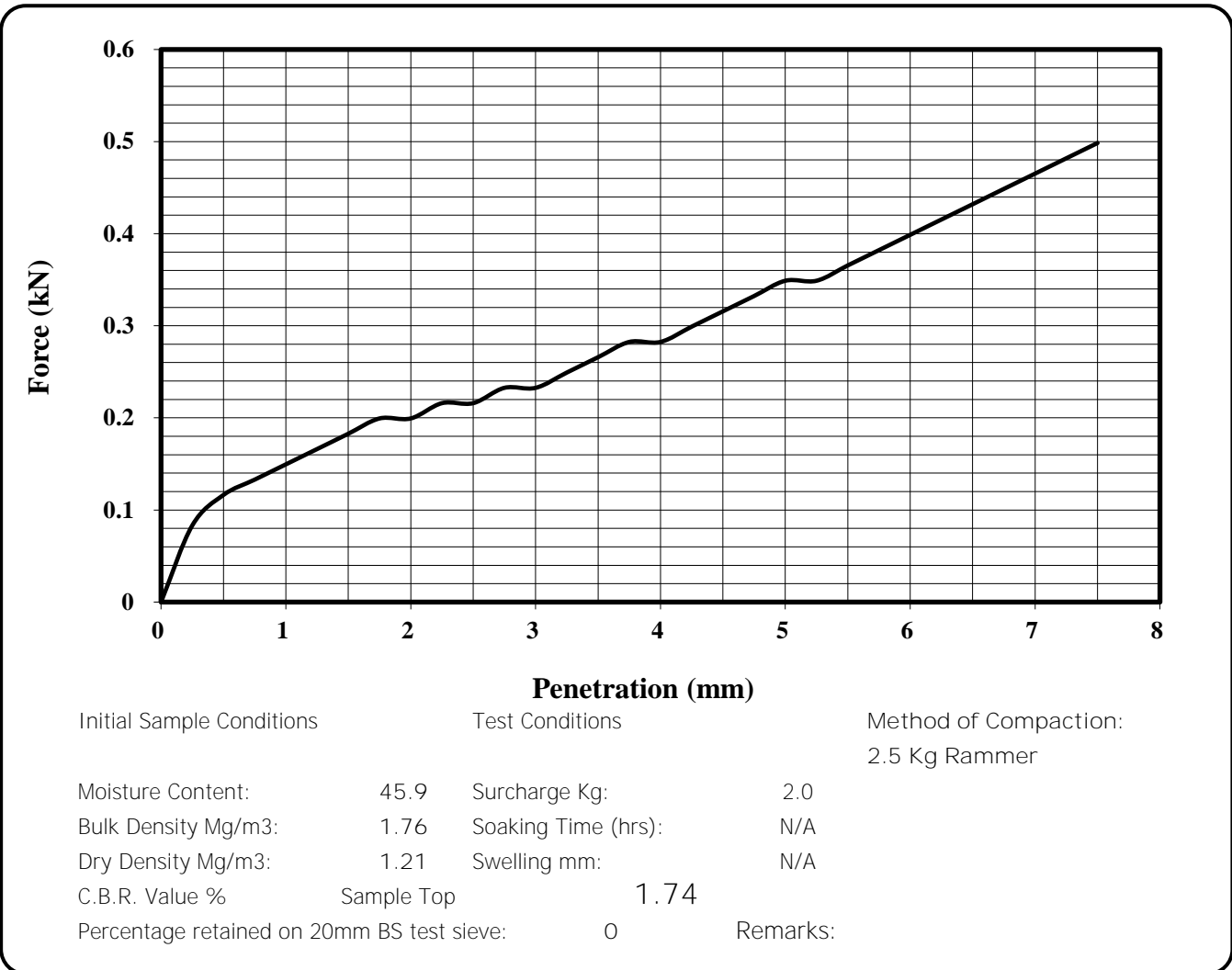
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1218
 Sample Number: 10
 Depth (m): 2.70
 Description: Grey/brown slightly fine gravelly silty CLAY



reg. 13



Checked By

Approved By:

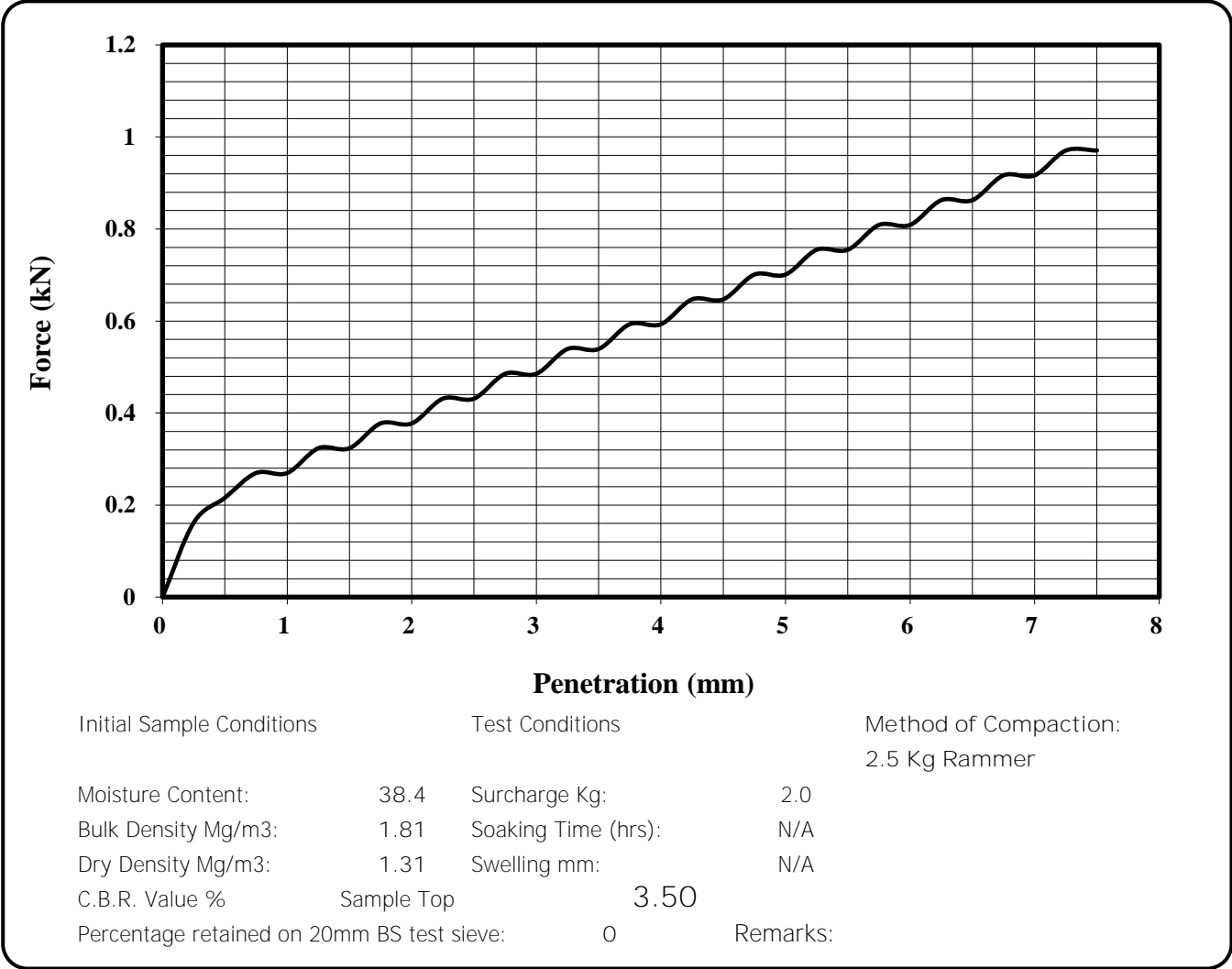
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1221
 Sample Number: 8
 Depth (m): 2.20 - 2.60
 Description: Brown/grey silty CLAY



reg. 13



Checked By

Approved By:

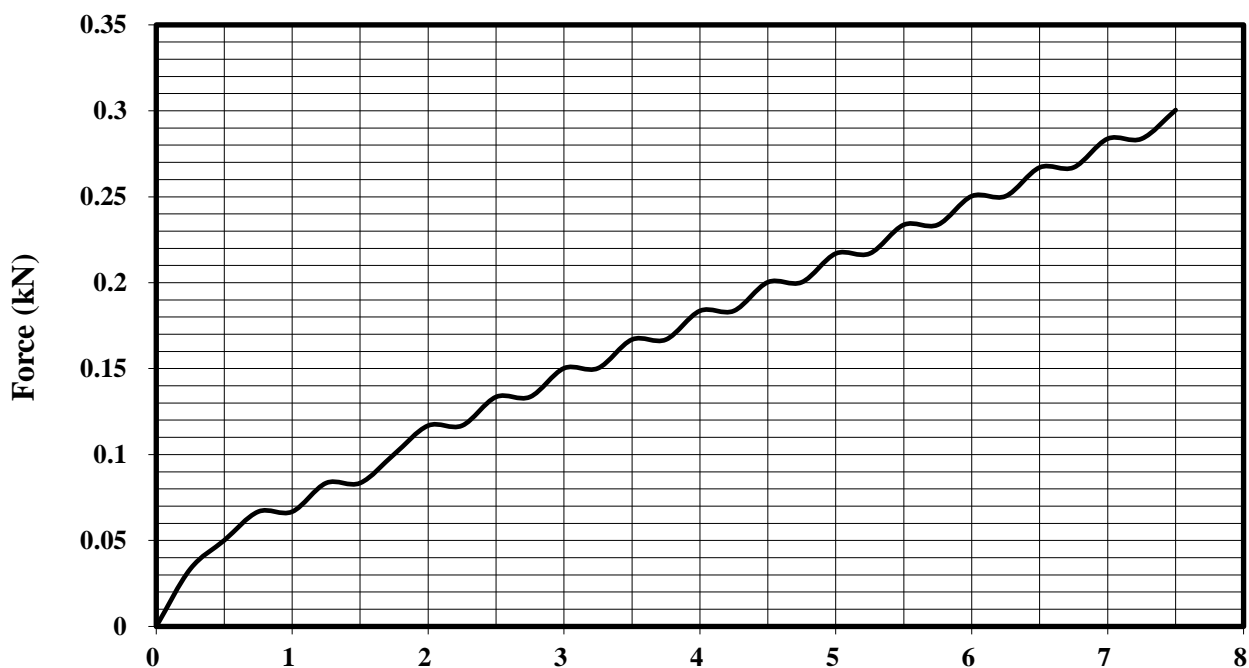
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1222
 Sample Number: 10
 Depth (m): 2.60 - 2.80
 Description: Dark grey silty CLAY



Penetration (mm)

Initial Sample Conditions

Test Conditions

Method of Compaction:
2.5 Kg Rammer

Moisture Content:	45.4	Surcharge Kg:	2.0
Bulk Density Mg/m ³ :	1.77	Soaking Time (hrs):	N/A
Dry Density Mg/m ³ :	1.22	Swelling mm:	N/A
C.B.R. Value %	Sample Top	1.08	
Percentage retained on 20mm BS test sieve:	0	Remarks:	



reg. 13



Checked By

Approved By:

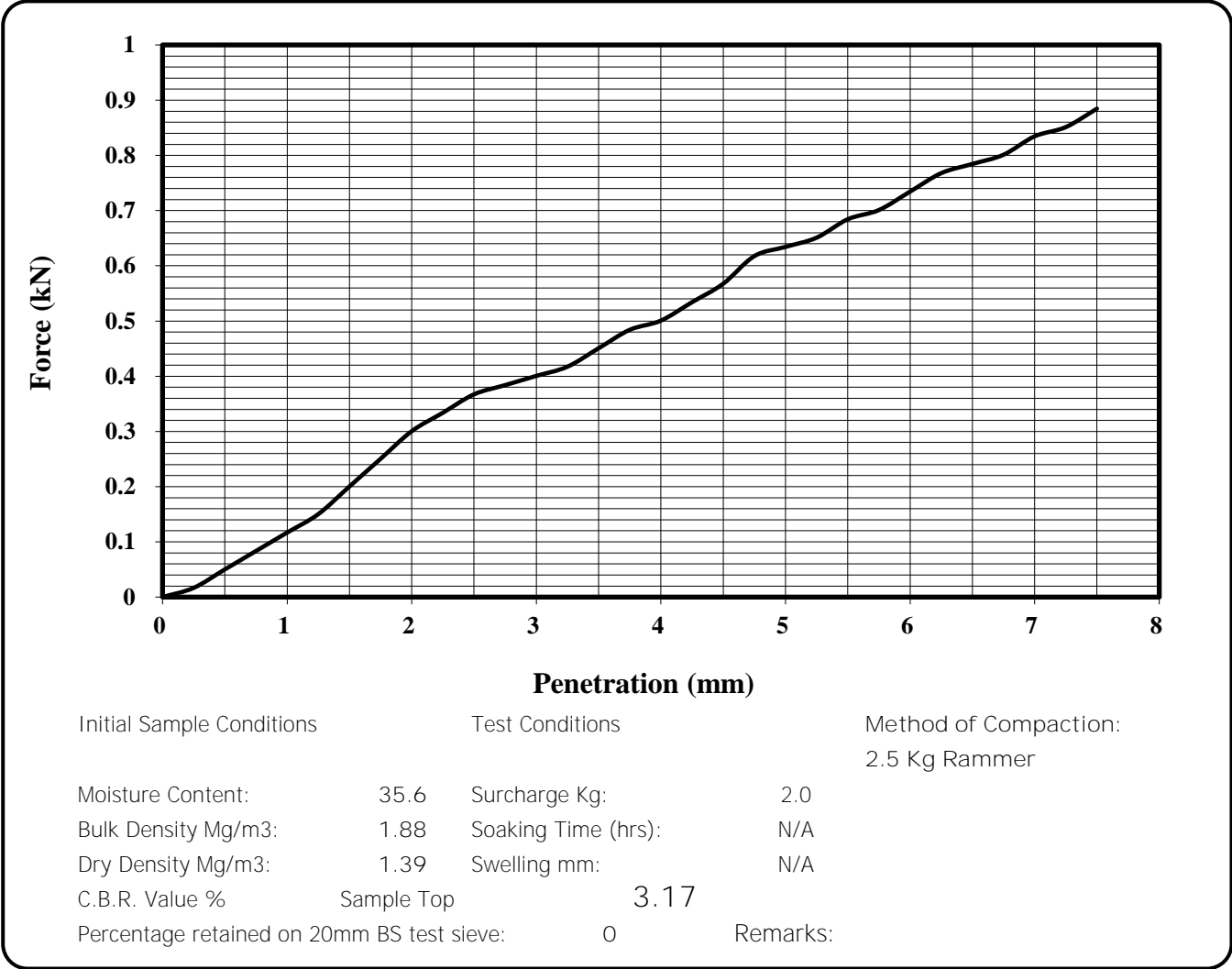
reg. 13

Date Approved:

18.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1223
 Sample Number: 10
 Depth (m): 1.70 - 1.80
 Description: Brown slightly sandy CLAY



reg. 13



Checked By

Approved By:

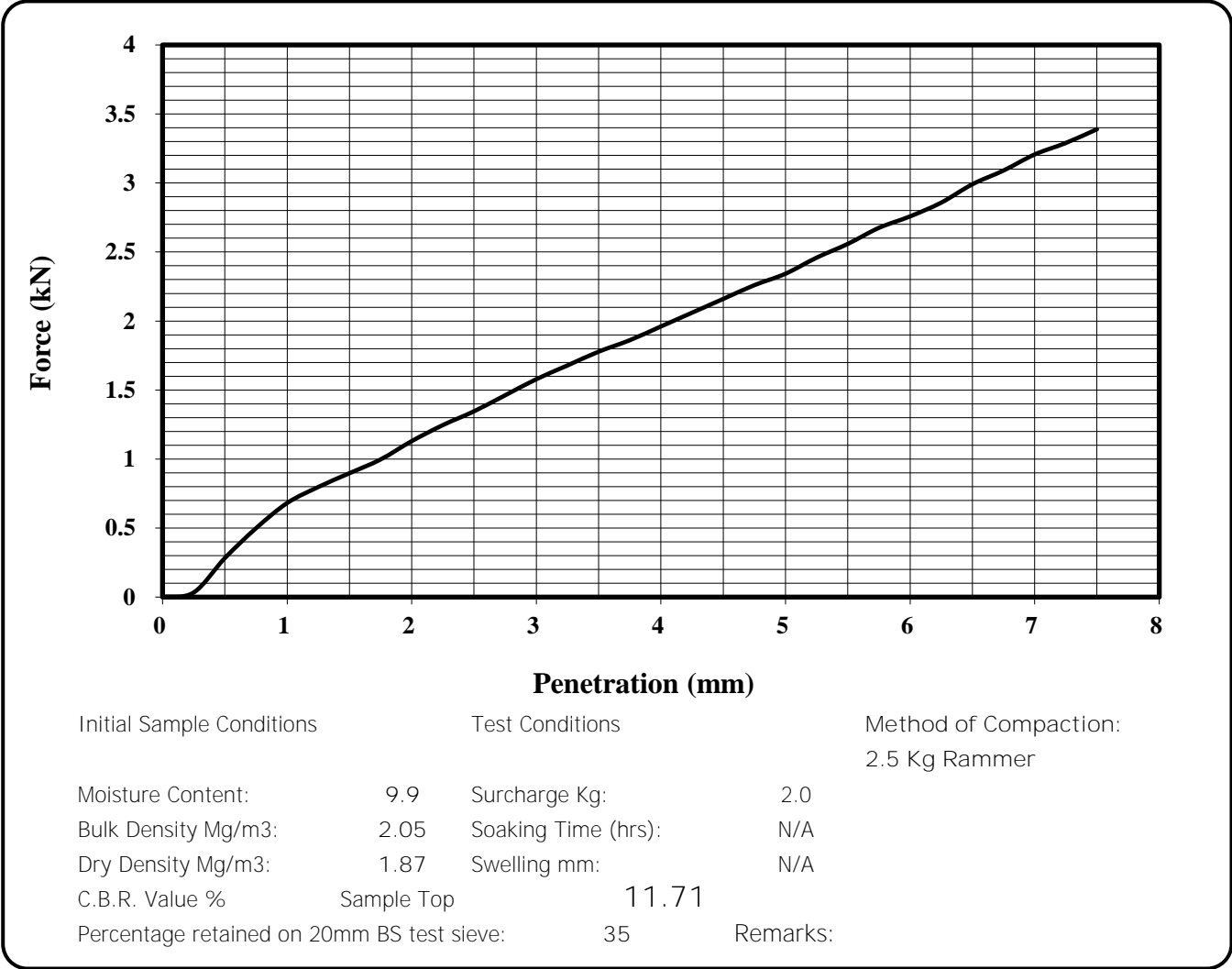
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1223
 Sample Number: 3
 Depth (m): 2.10
 Description:



reg. 13



Checked By

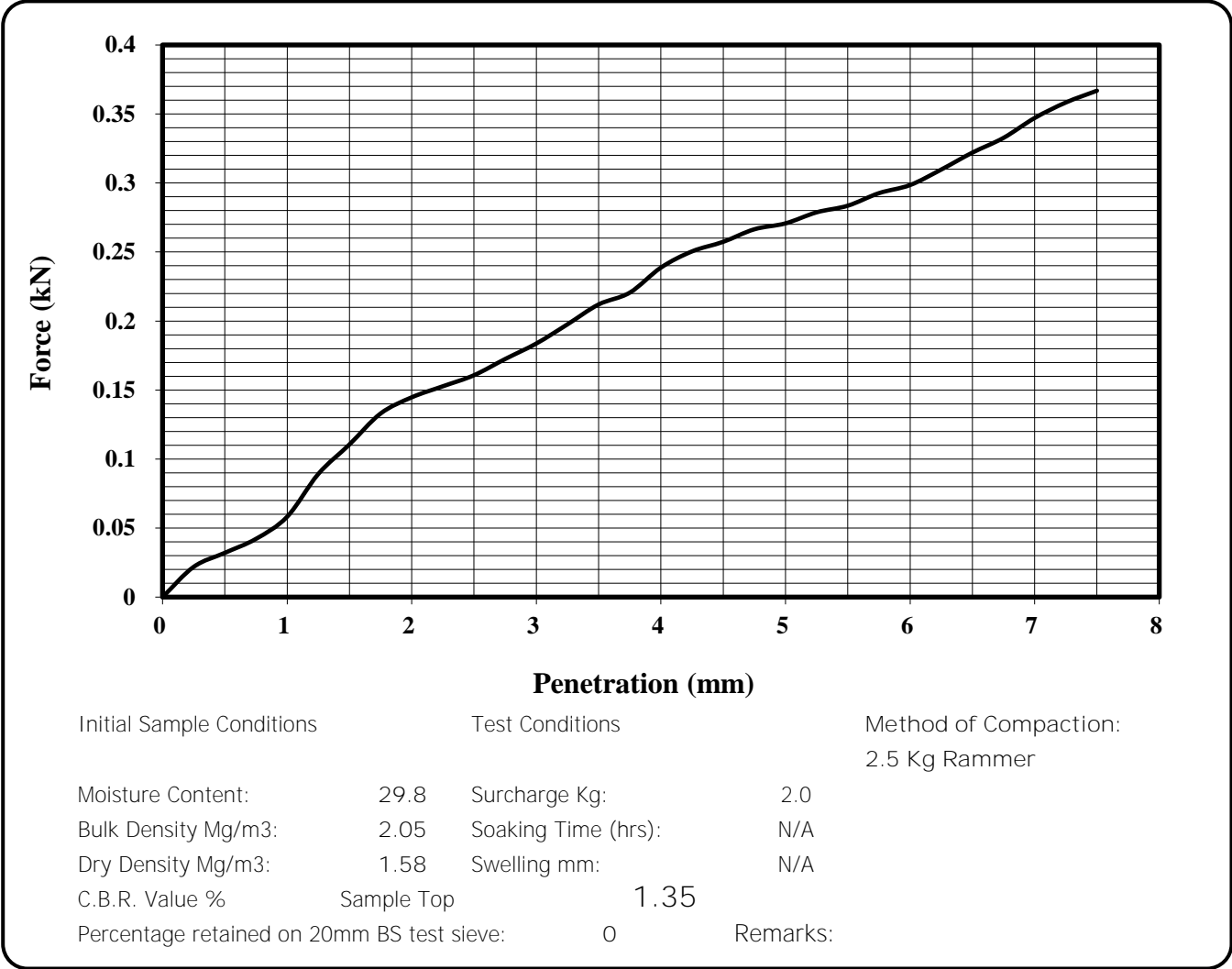
Approved By:

reg. 13

Date Approved: 20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1225
 Sample Number: 9
 Depth (m): 1.20 - 1.30
 Description: Brown slightly fine gravelly silty CLAY



reg. 13



Checked By

Approved By:

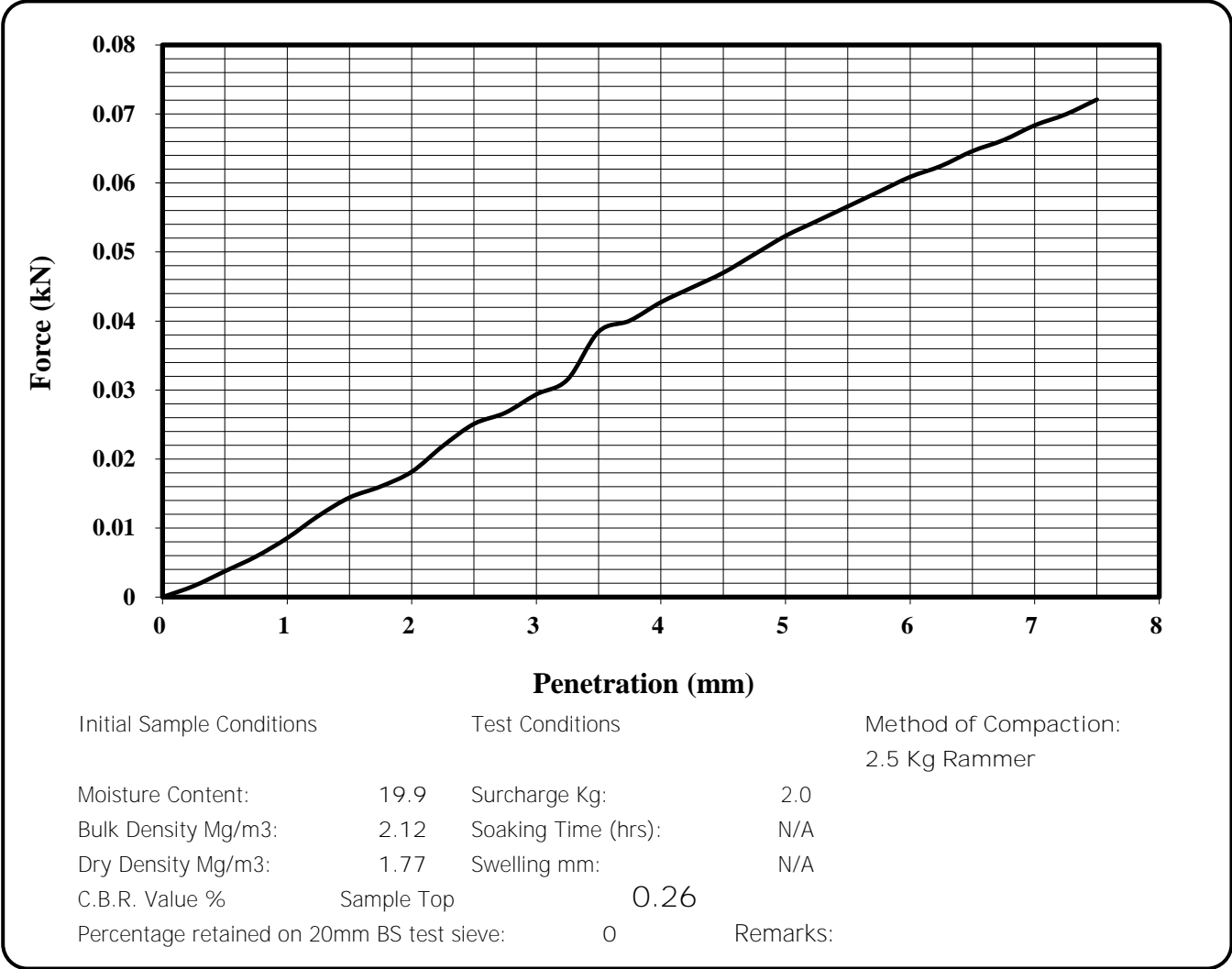
reg. 13

Date Approved:

20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1227
 Sample Number: 10
 Depth (m): 1.00 - 1.10
 Description: Brown fine to medium gravelly sandy silty CLAY



reg. 13



Checked By

Approved By:

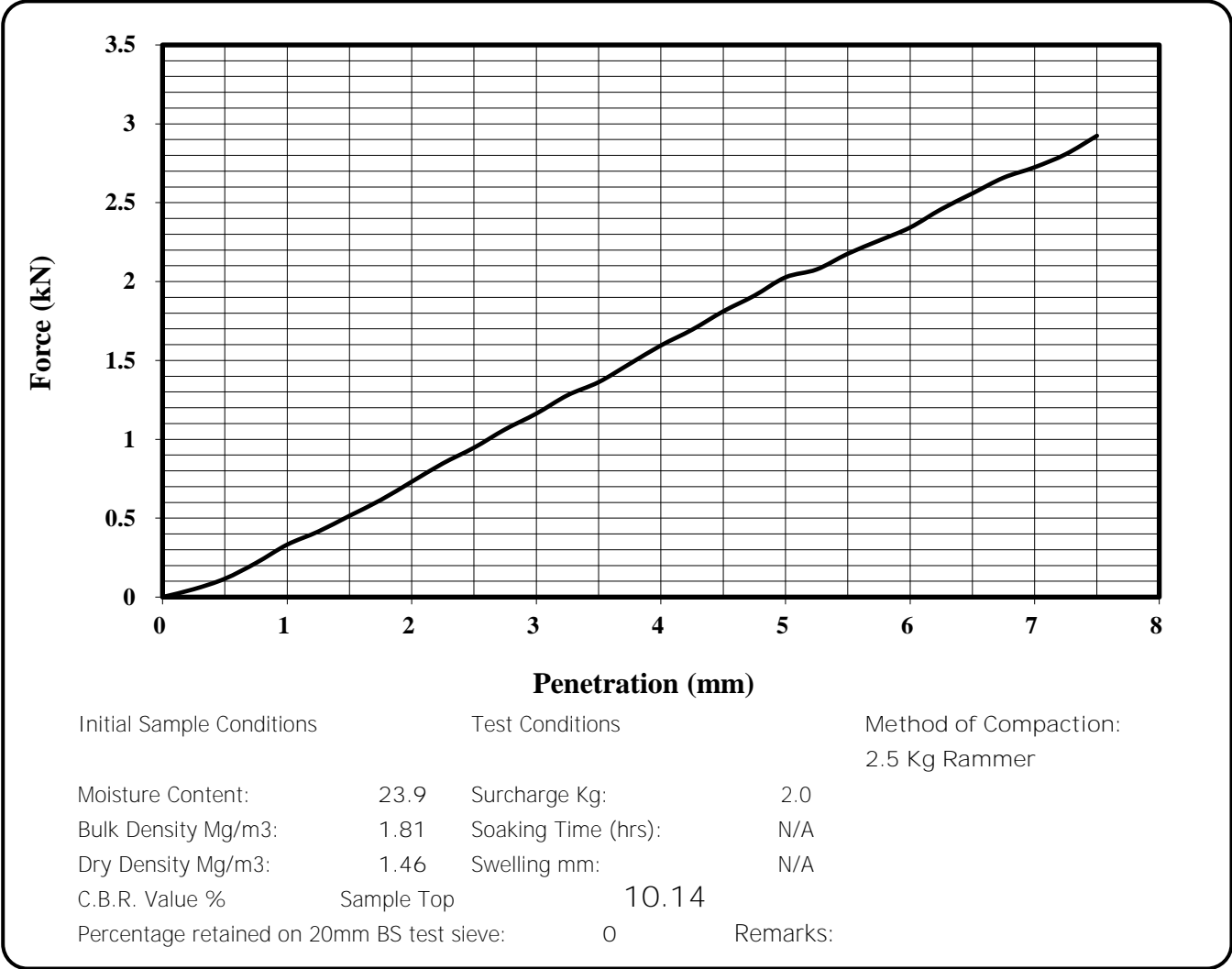
reg. 13

Date Approved:

20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1231
 Sample Number: 6
 Depth (m): 1.90 - 2.30
 Description: Brown slightly sandy silty CLAY



reg. 13



Checked By

Approved By:

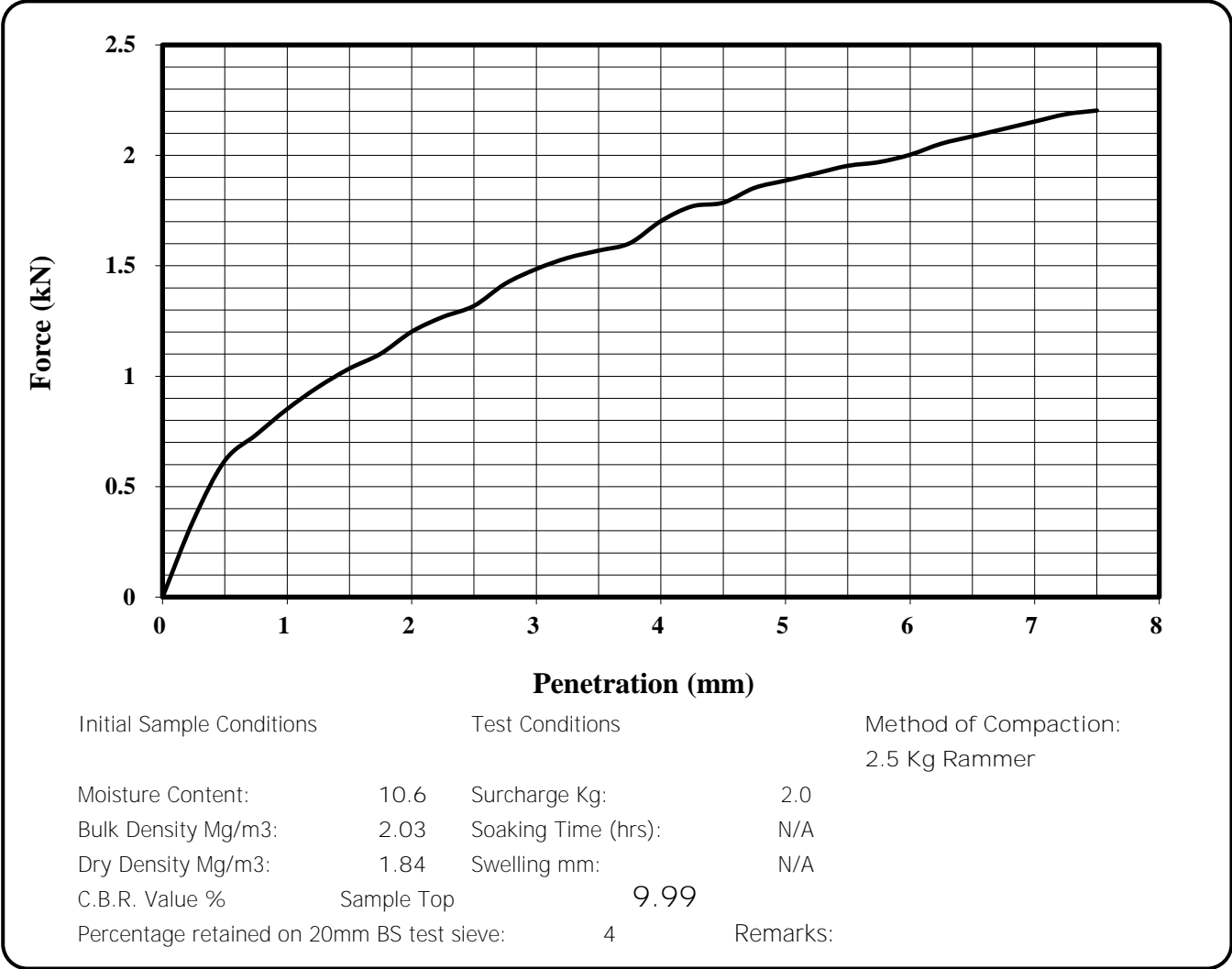
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TP1232
 Sample Number: 11
 Depth (m): 3.00
 Description: Brown fine to coarse gravelly SAND



reg. 13



Checked By

Approved By:

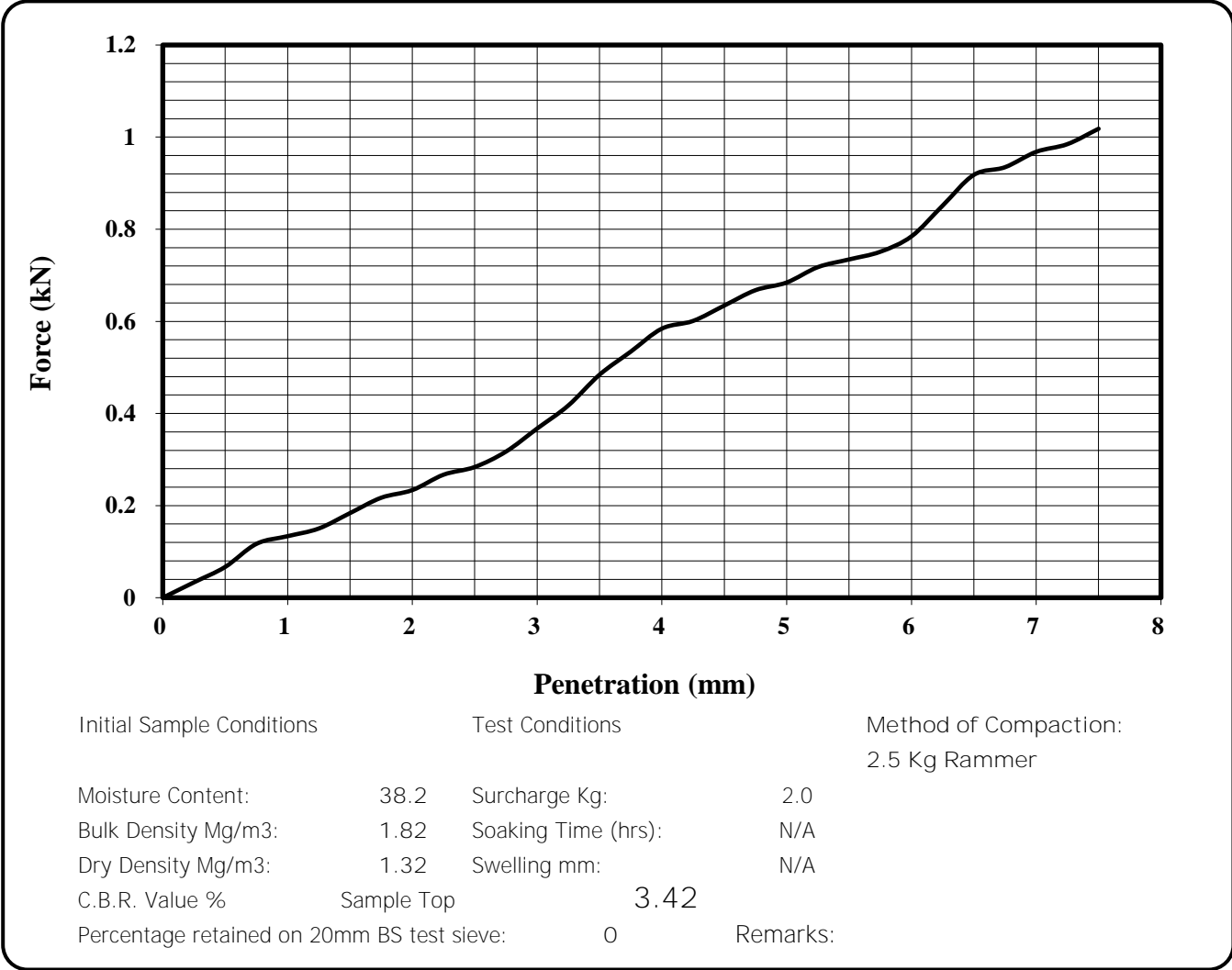
reg. 13

Date Approved:

20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TPSA808
 Sample Number: 6
 Depth (m): 1.80 - 2.30
 Description: Grey silty CLAY



reg. 13



Checked By

Approved By:

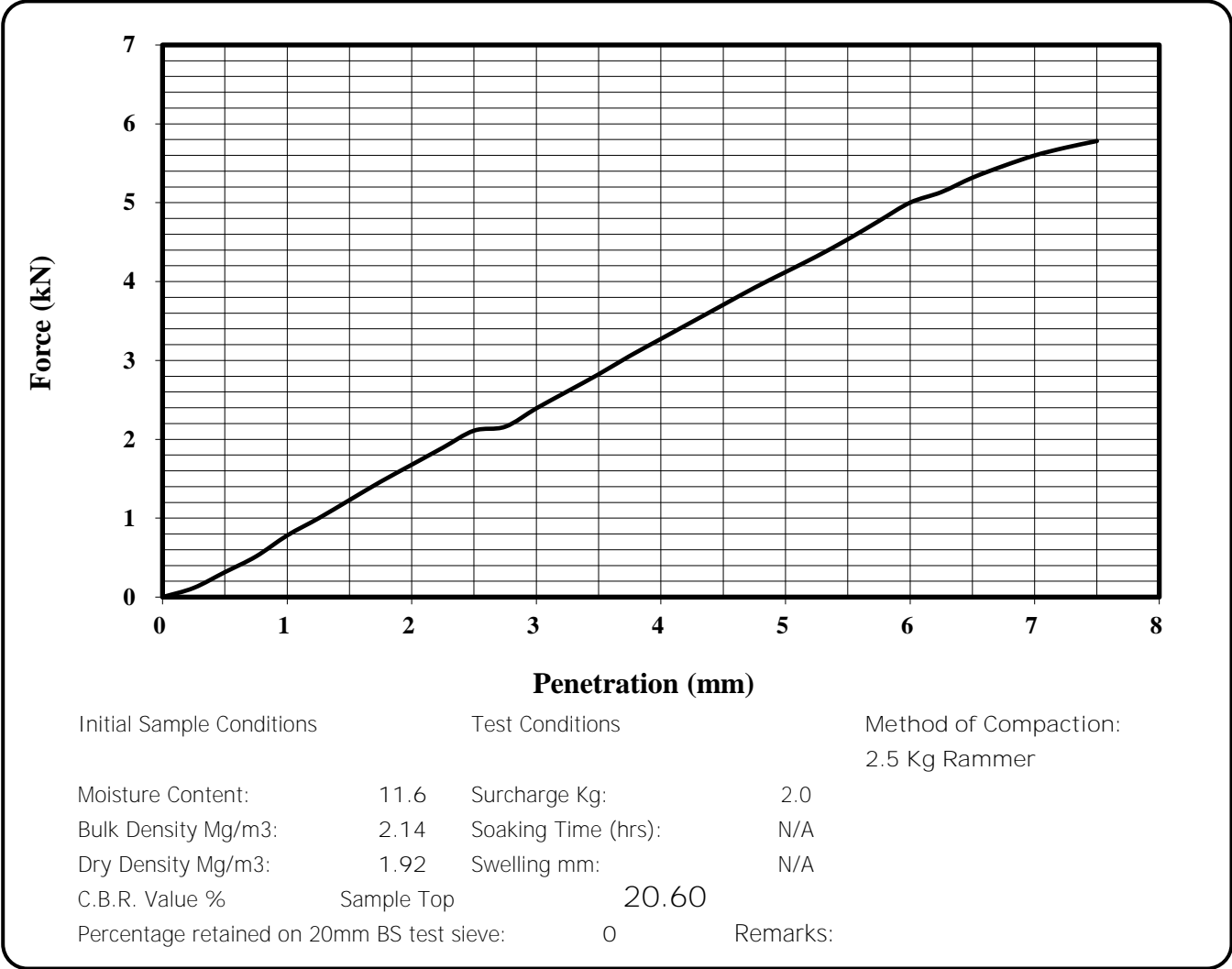
reg. 13

Date Approved:

20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TPSA814
 Sample Number: 5
 Depth (m): 1.20 - 1.50
 Description: Brown fine gravelly SAND



reg. 13



Checked By

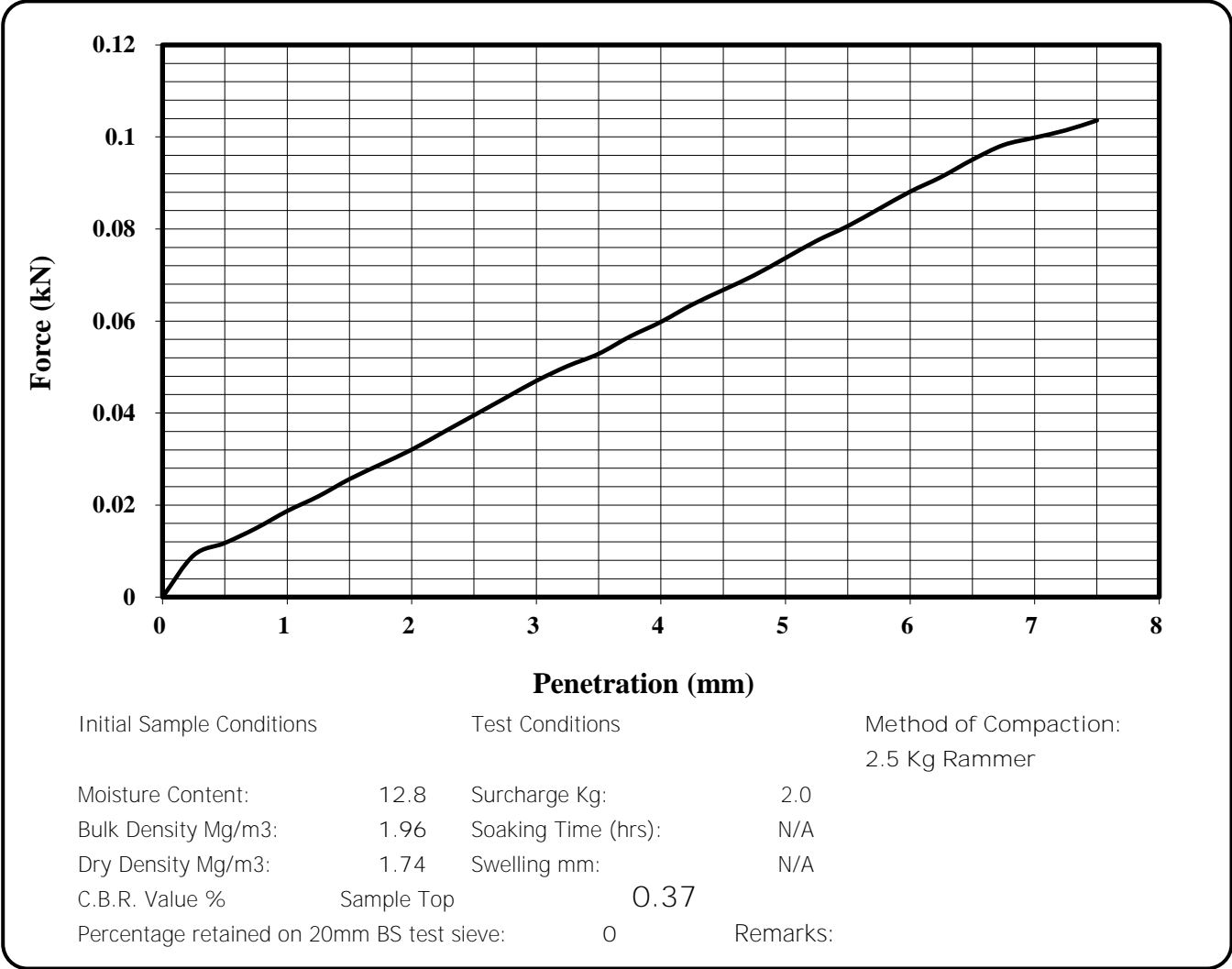
Approved By:

reg. 13

Date Approved: 20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: TPSA847
 Sample Number: 6
 Depth (m): 1.20 - 1.60
 Description: Brown fine gravelly clayey SAND



reg. 13



Checked By

Approved By:

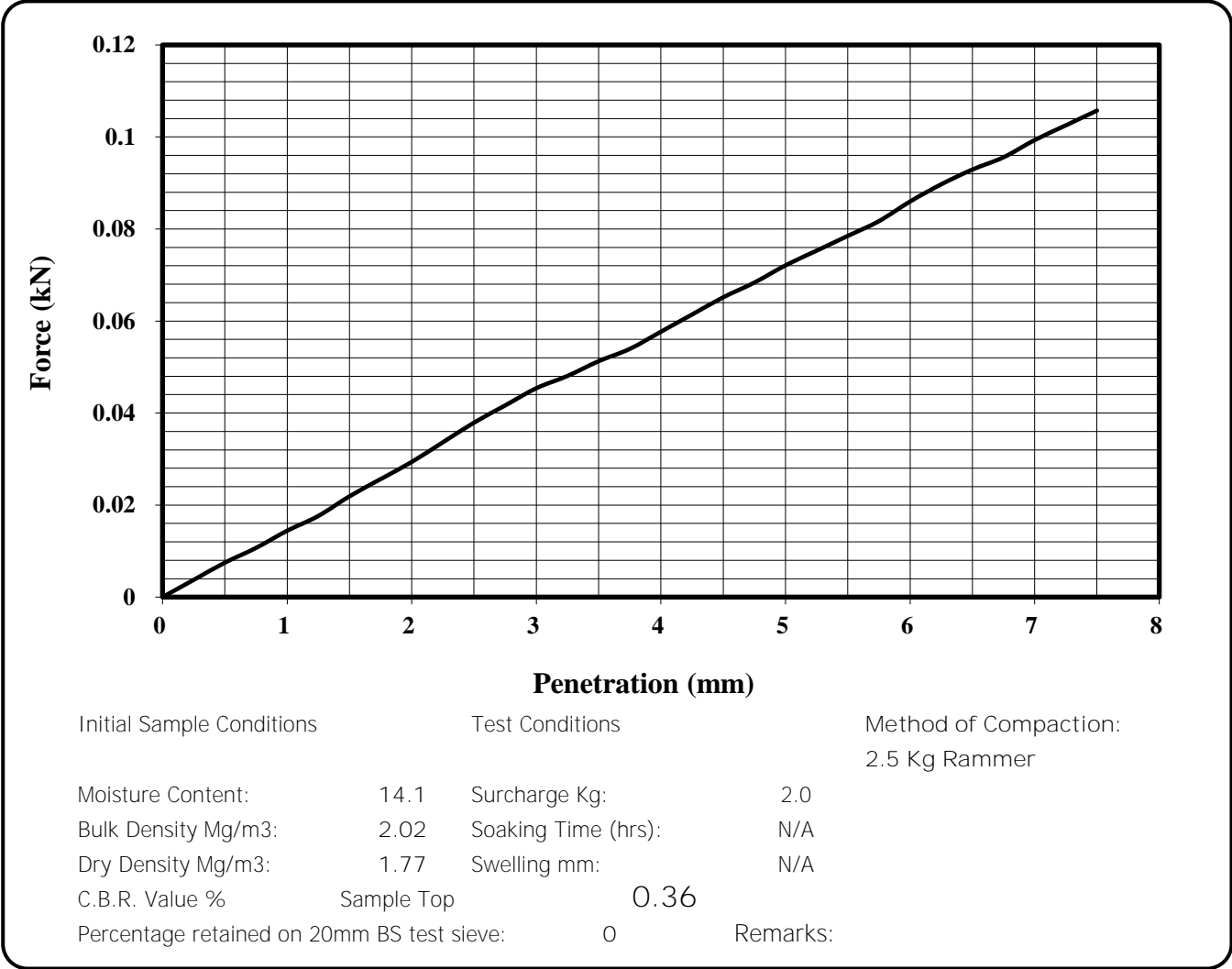
reg. 13

Date Approved:

8.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: WS401
 Sample Number: 3
 Depth (m): 0.70 - 1.20
 Description: Brown slightly clayey fine to medium gravelly SAND



reg. 13



Checked By

Approved By:

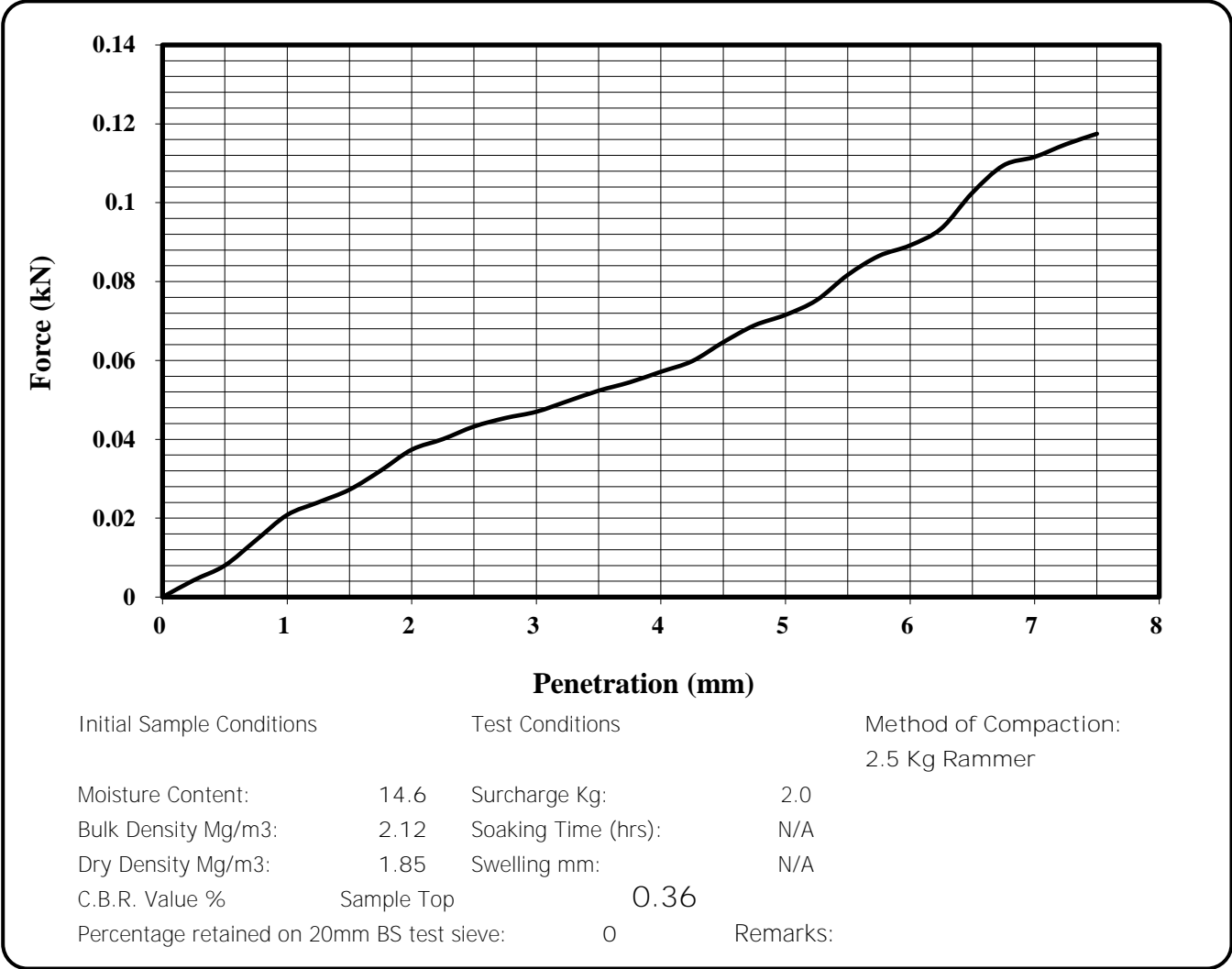
reg. 13

Date Approved:

20.3.17

Test Report: Determination of the California Bearing Ratio
BS 1377: Part 4: 1990 Clause 7

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Sample Type: B
 Hole Number: WS402
 Sample Number: 7
 Depth (m): 1.80 - 2.40
 Description: Brown fine gravelly SAND



reg. 13



Checked By

Approved By:

reg. 13

Date Approved:

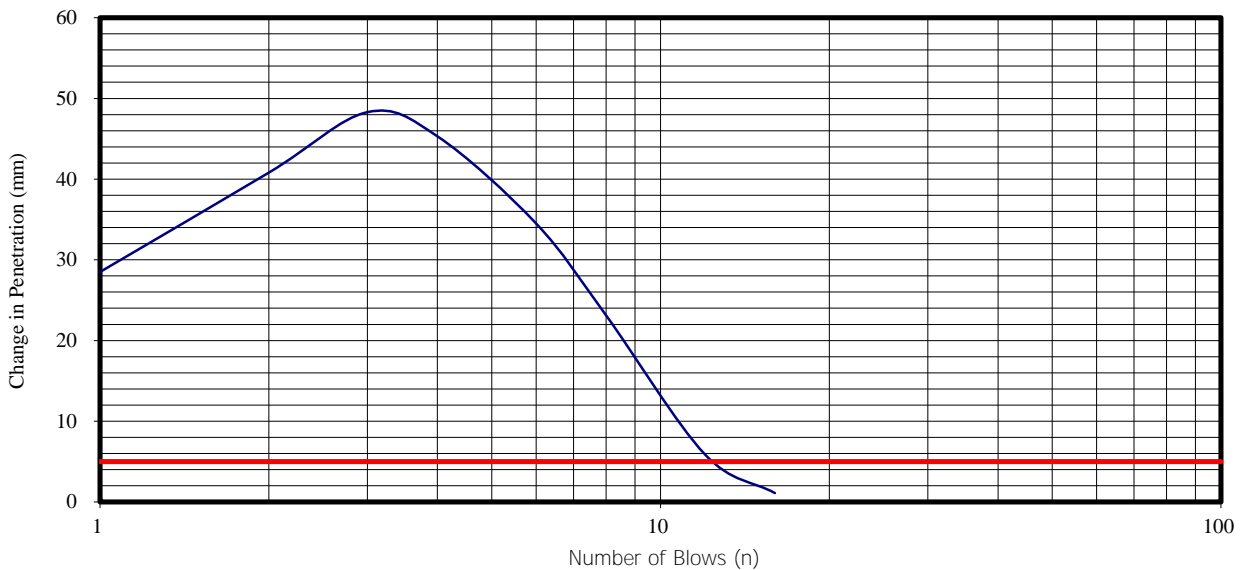
20.3.17

Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 3
 Depth (m): 1.00-2.00
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	146.1	28.5
2	135.7	40.8
3	125.7	48.3
4	117.6	45.3
6	106.6	34.5
8	94.9	23.1
12	77.4	5.9
16	72.3	1.1

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	72.1	
32	71.8	
48	71.5	
64	71.2	
96		
128		
192		
256		

Test Results

Moisture Content (%): 24
 MCV Value: 11.5



reg. 13

Checked By

Approved By:

Date Approved:

24.3.17

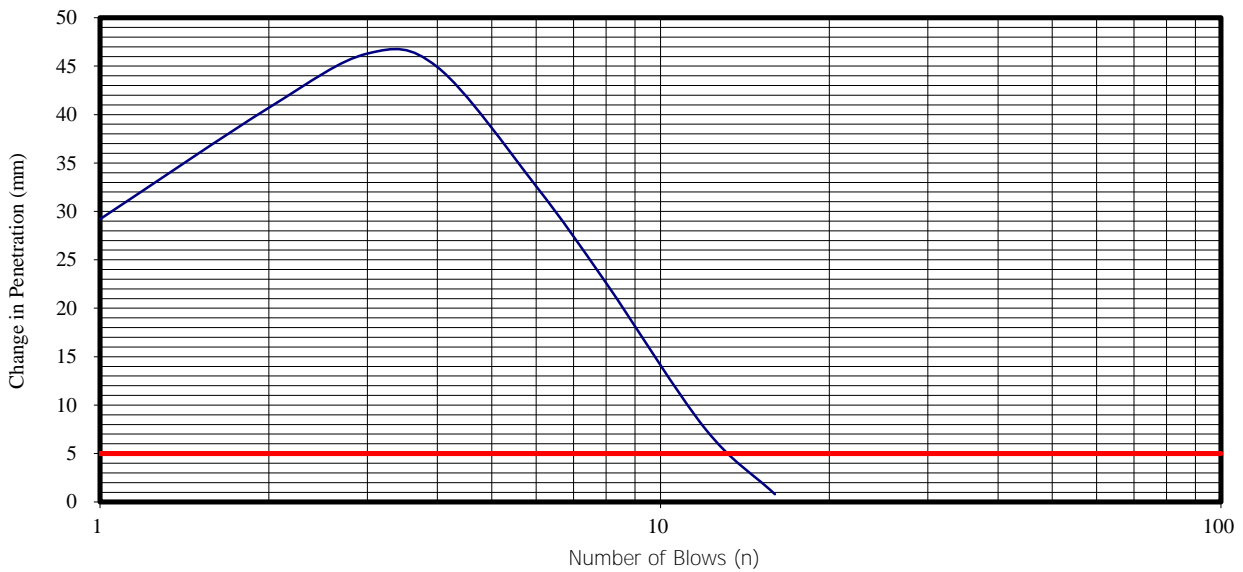


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 9
 Depth (m): 6.50-7.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	147.3	29.2
2	135.8	40.7
3	126.4	46.3
4	118.1	44.9
6	105.5	32.6
8	95.1	22.6
12	80.1	7.6
16	73.2	0.8

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	72.9	
32	72.5	
48	72.5	
64	72.4	
96		
128		
192		
256		

Test Results

Moisture Content (%): 32
 MCV Value: 11.6



reg. 13

Checked By

Approved By:

Date Approved:

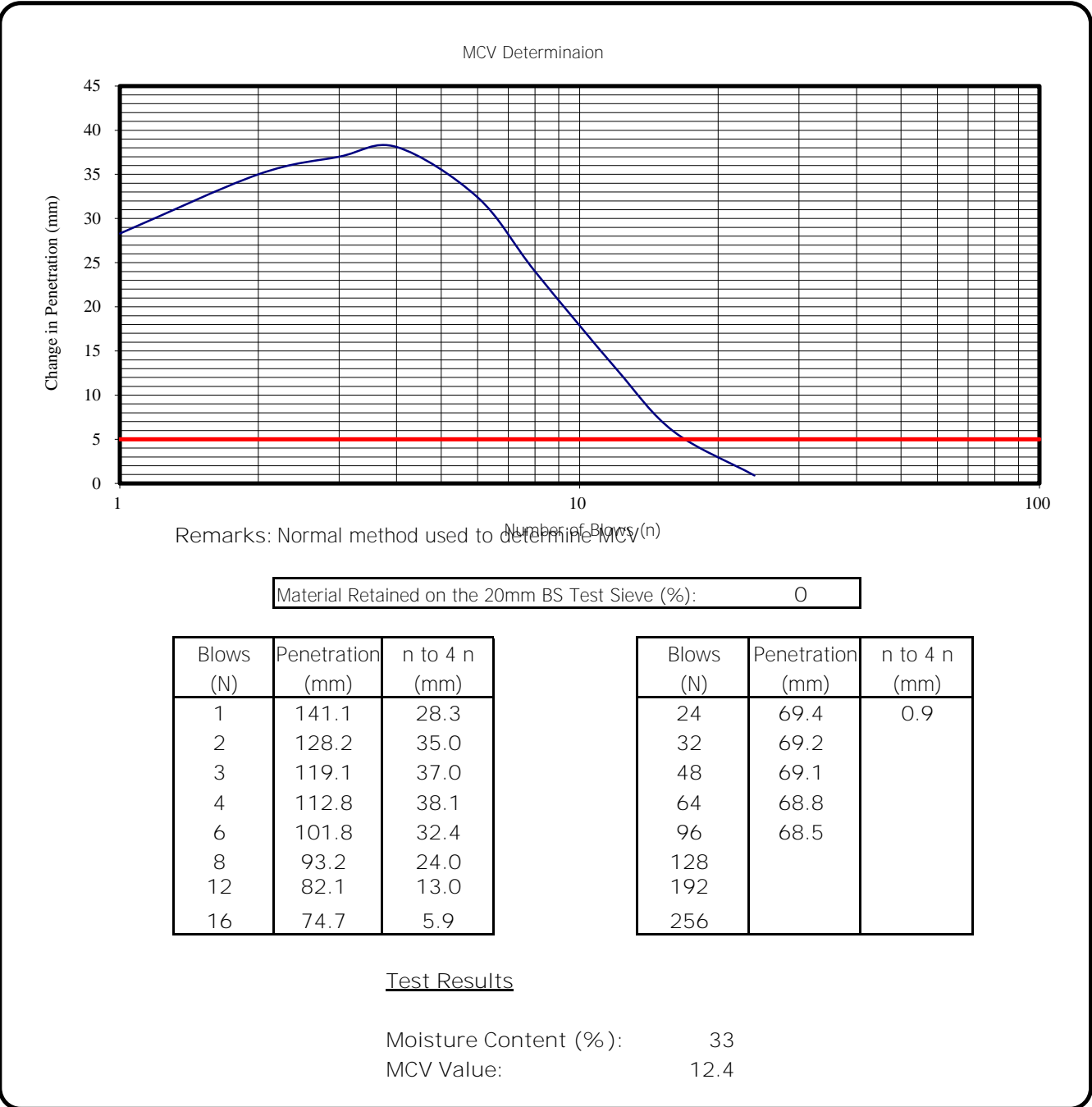
24.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 10
 Depth (m): 7.50
 Sample Type: B



reg. 13

Checked By

Approved By:

Date Approved:

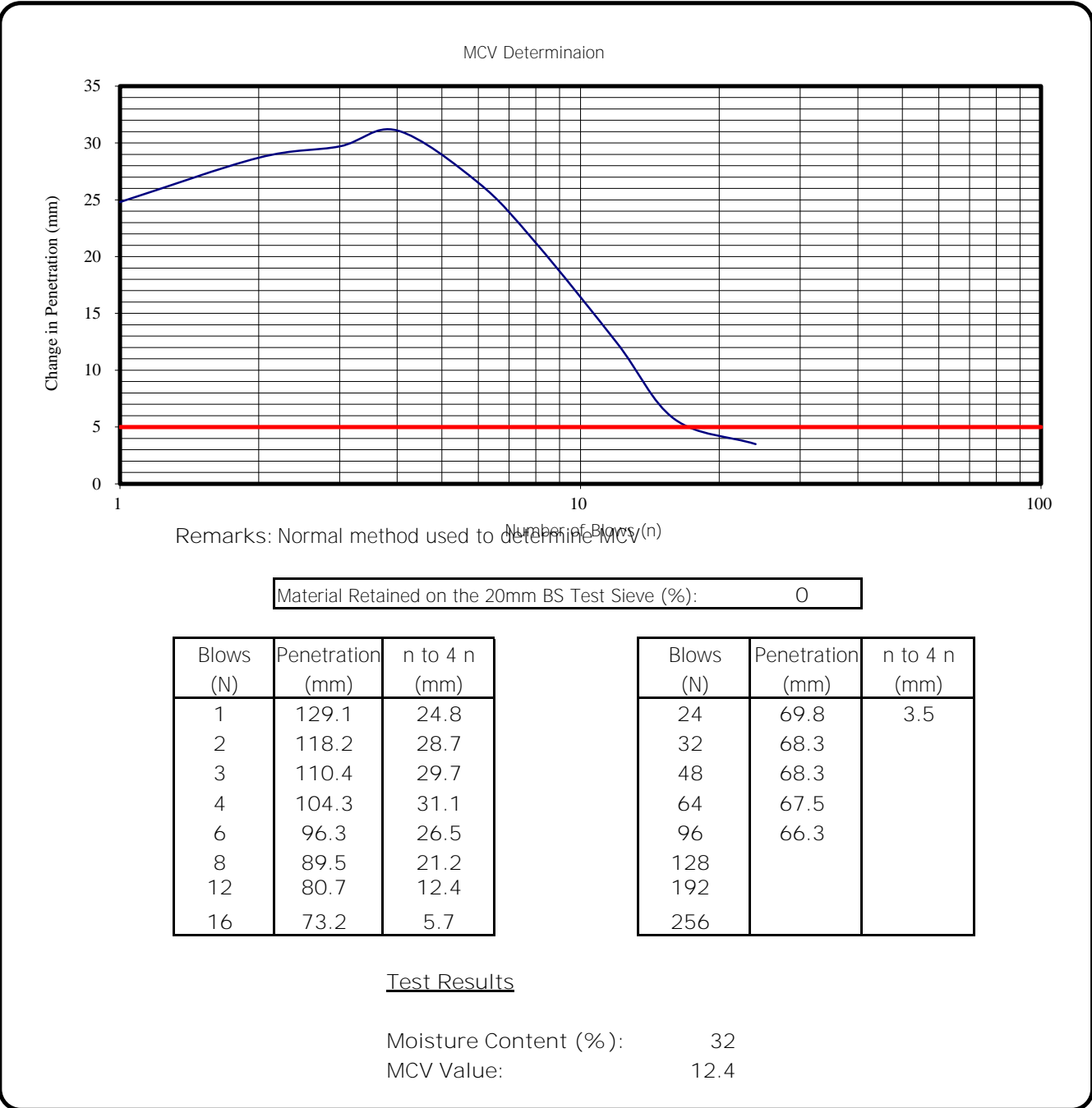
21.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 16
 Depth (m): 9.5
 Sample Type: B



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 11
 Depth (m): 6.00-6.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	139.5	29.4
2	127.3	36.5
3	118.8	41.1
4	110.1	40.6
6	100.5	31.7
8	90.8	22.2
12	77.7	10.6
16	69.5	2.4

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	68.8	
32	68.6	
48	67.1	
64	67.1	
96		
128		
192		
256		

Test Results

Moisture Content (%): 30
 MCV Value: 11.8



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

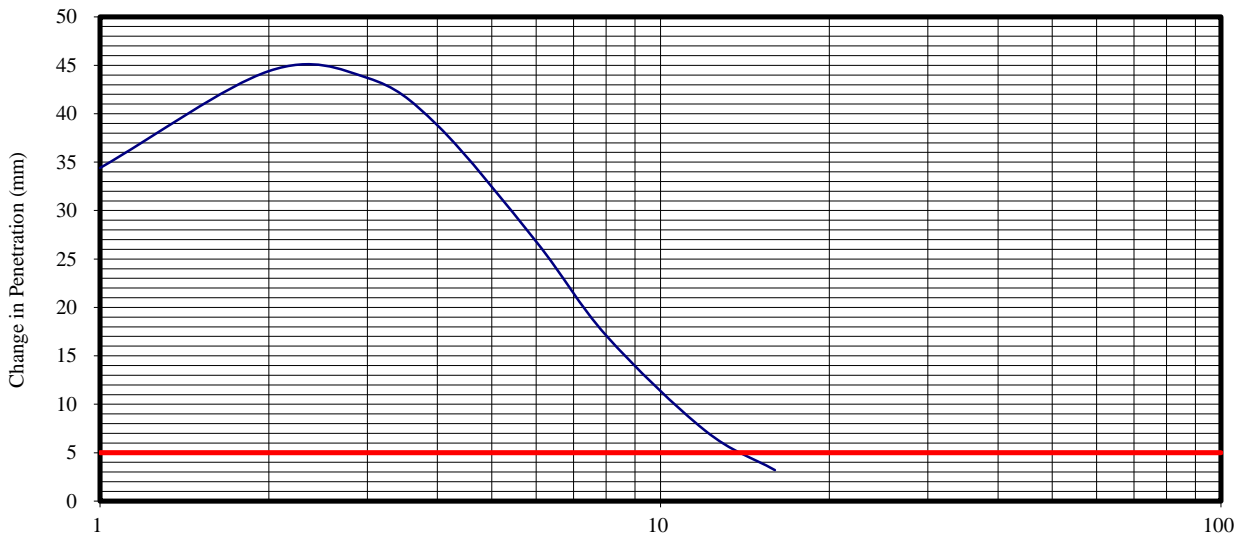


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 12
 Depth (m): 8.00-8.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	148.6	34.4
2	134.7	44.4
3	123.2	43.7
4	114.2	38.8
6	100.1	26.8
8	90.3	17.1
12	79.5	7.3
16	75.4	3.2

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	73.3	
32	73.2	
48	72.2	
64	72.2	
96		
128		
192		
256		

Test Results

Moisture Content (%): 36
 MCV Value: 11.8



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

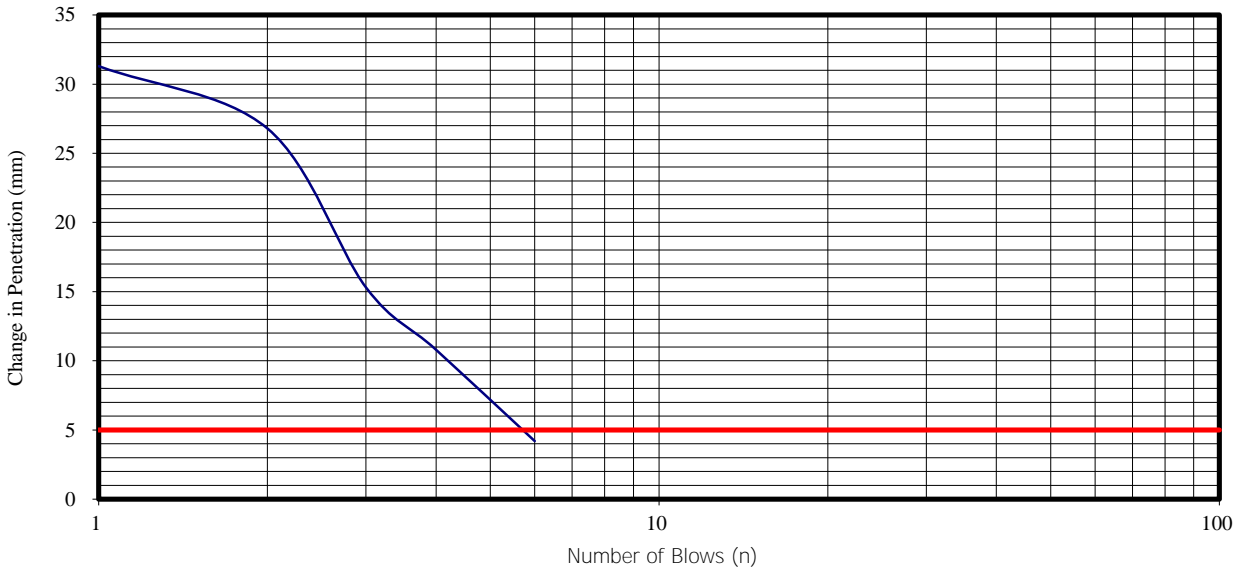


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 3
 Depth (m): 1.00-1.20
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	108.6	31.3
2	94.7	26.8
3	82.4	15.3
4	77.3	10.8
6	69.8	4.2
8	67.9	
12	67.1	
16	66.5	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	65.6	
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 35
 MCV Value: 7.6



reg. 13

Checked By

Approved By:

Date Approved:

24.3.17

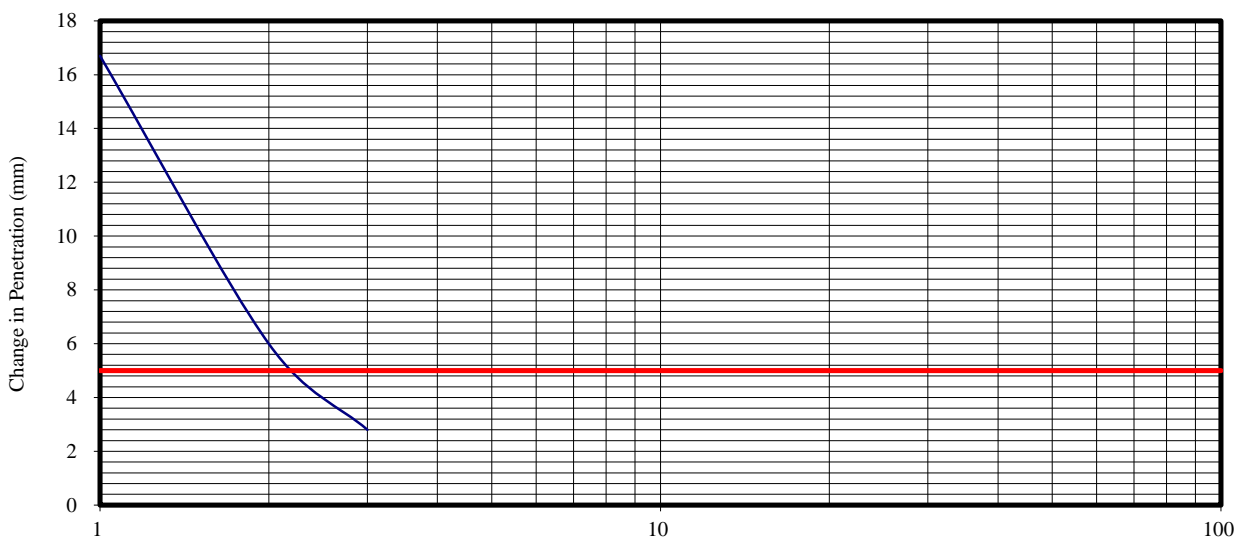


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 14
 Depth (m): 9.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	108.1	16.7
2	96.9	6.0
3	92.8	2.8
4	91.4	
6	91	
8	90.9	
12	90	
16		

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 52
 MCV Value: 3.4



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

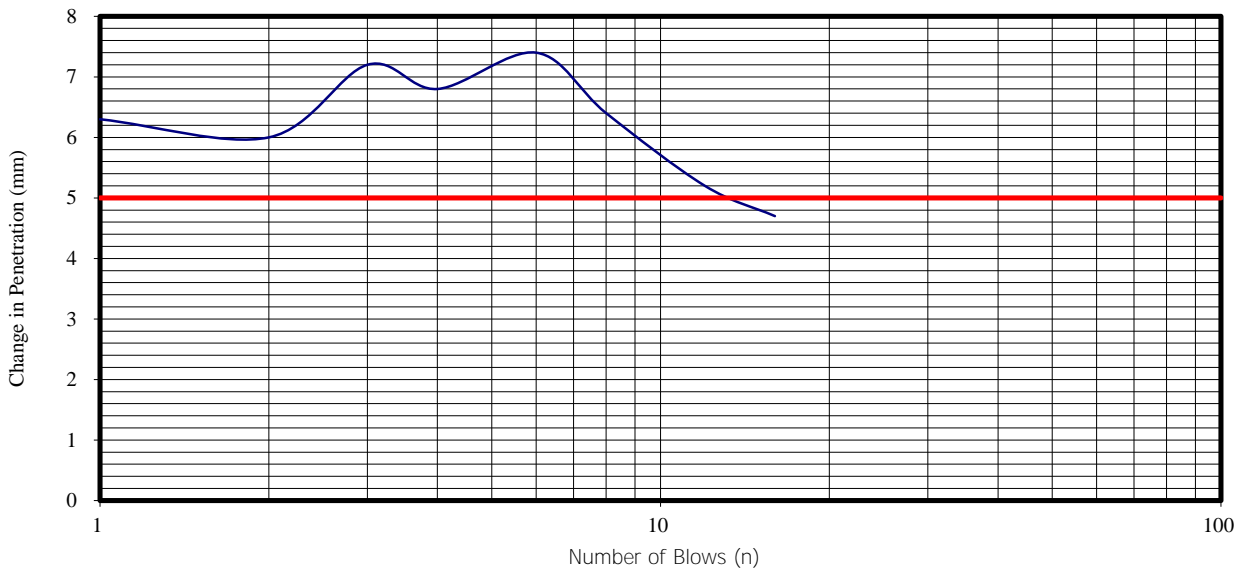


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 2
 Depth (m): 0.30-0.85
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	76.1	6.3
2	72.8	6.0
3	71.5	7.2
4	69.8	6.8
6	68.7	7.4
8	66.8	6.4
12	64.3	5.2
16	63	4.7

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	61.3	
32	60.4	
48	59.1	
64	58.3	
96		
128		
192		
256		

Test Results

Moisture Content (%): 25
 MCV Value: 11.7



reg. 13

Checked By

Approved By:

Date Approved:

24.3.17

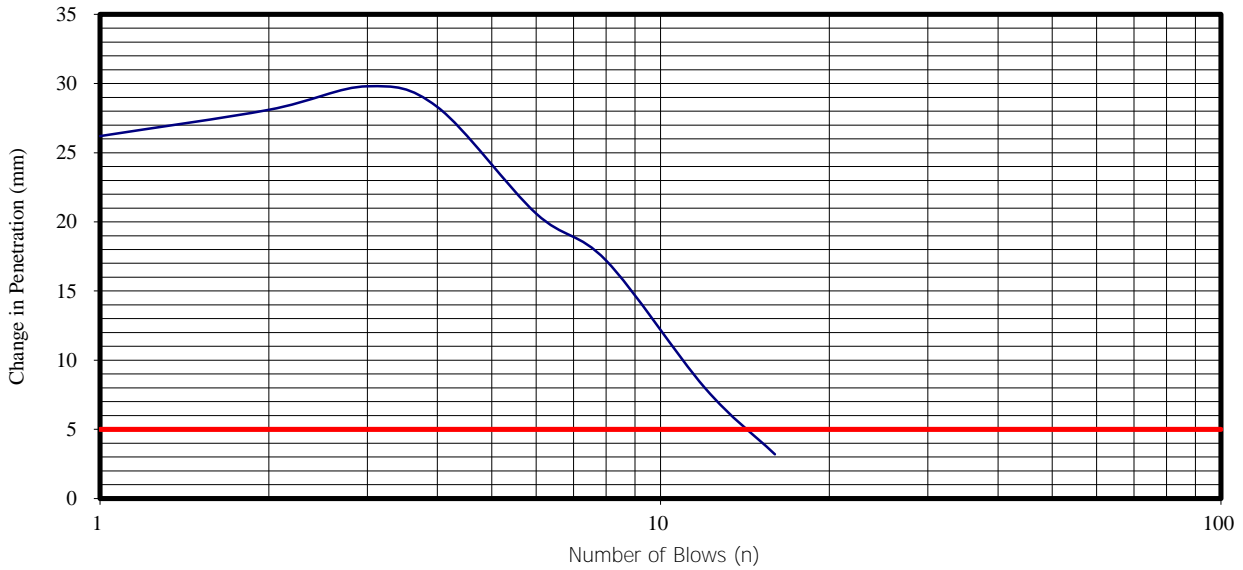


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 2
 Depth (m): 2.00-2.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	121.4	26.2
2	110.2	28.1
3	102.1	29.8
4	95.2	28.3
6	86	20.6
8	82.1	17.2
12	72.3	8.0
16	66.9	3.2

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	65.4	
32	64.9	
48	64.3	
64	63.7	
96		
128		
192		
256		

Test Results

Moisture Content (%): 29
 MCV Value: 11.8

reg. 13



Checked By

Approved By:

Date Approved:

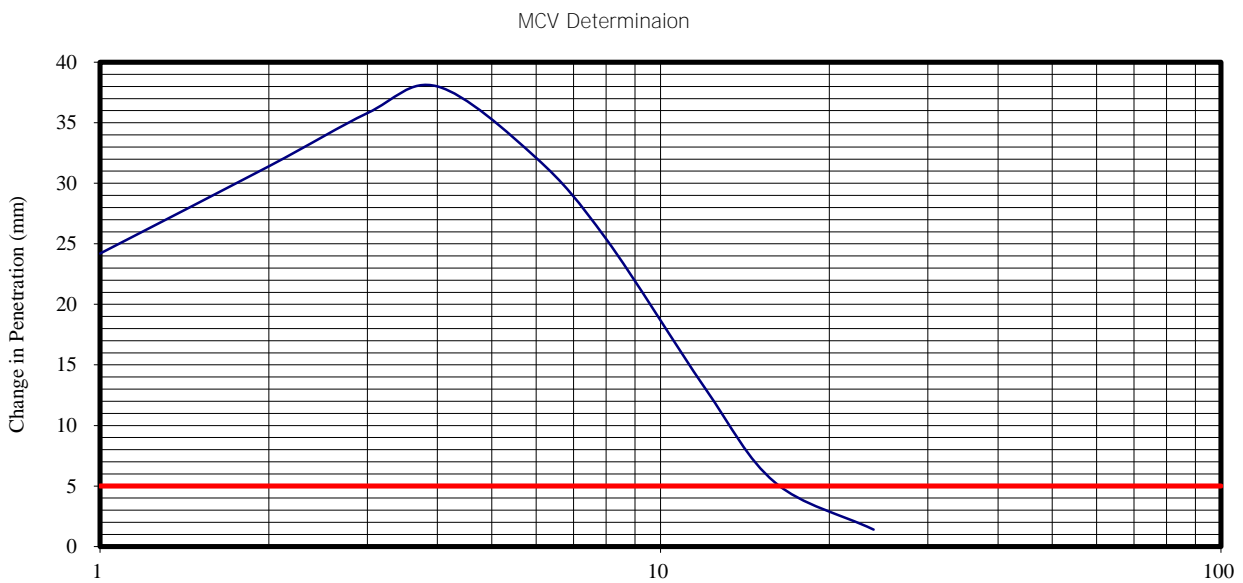
24.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 15
 Depth (m): 3.50-4.00
 Sample Type: B



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	134.6	24.2
2	124.3	31.4
3	116.2	35.8
4	110.4	38.0
6	100.2	32.1
8	92.9	25.4
12	80.4	13.1
16	72.4	5.3

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	68.1	1.4
32	67.5	
48	67.3	
64	67.1	
96	66.7	
128		
192		
256		

Test Results

Moisture Content (%): 28
 MCV Value: 23.4



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

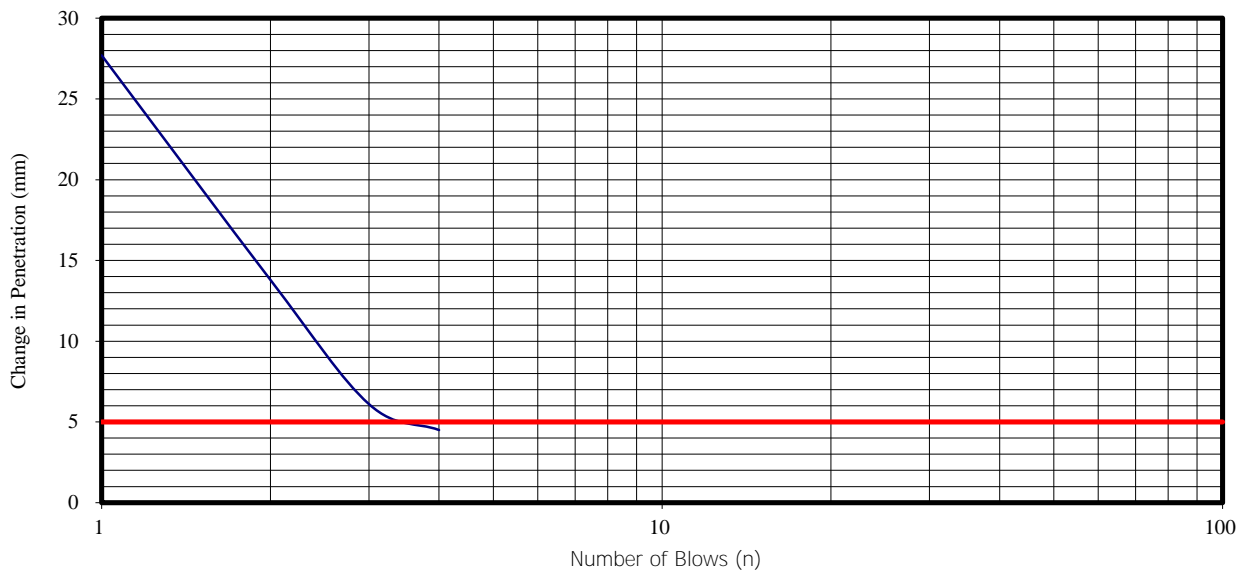


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 6
 Depth (m): 0.30-0.75
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	99.1	27.7
2	83.1	13.8
3	74.2	6.1
4	71.4	4.5
6	70.8	
8	69.3	
12	68.1	
16	66.9	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 29
 MCV Value: 5.3



reg. 13

Checked By

Approved By:

Date Approved:

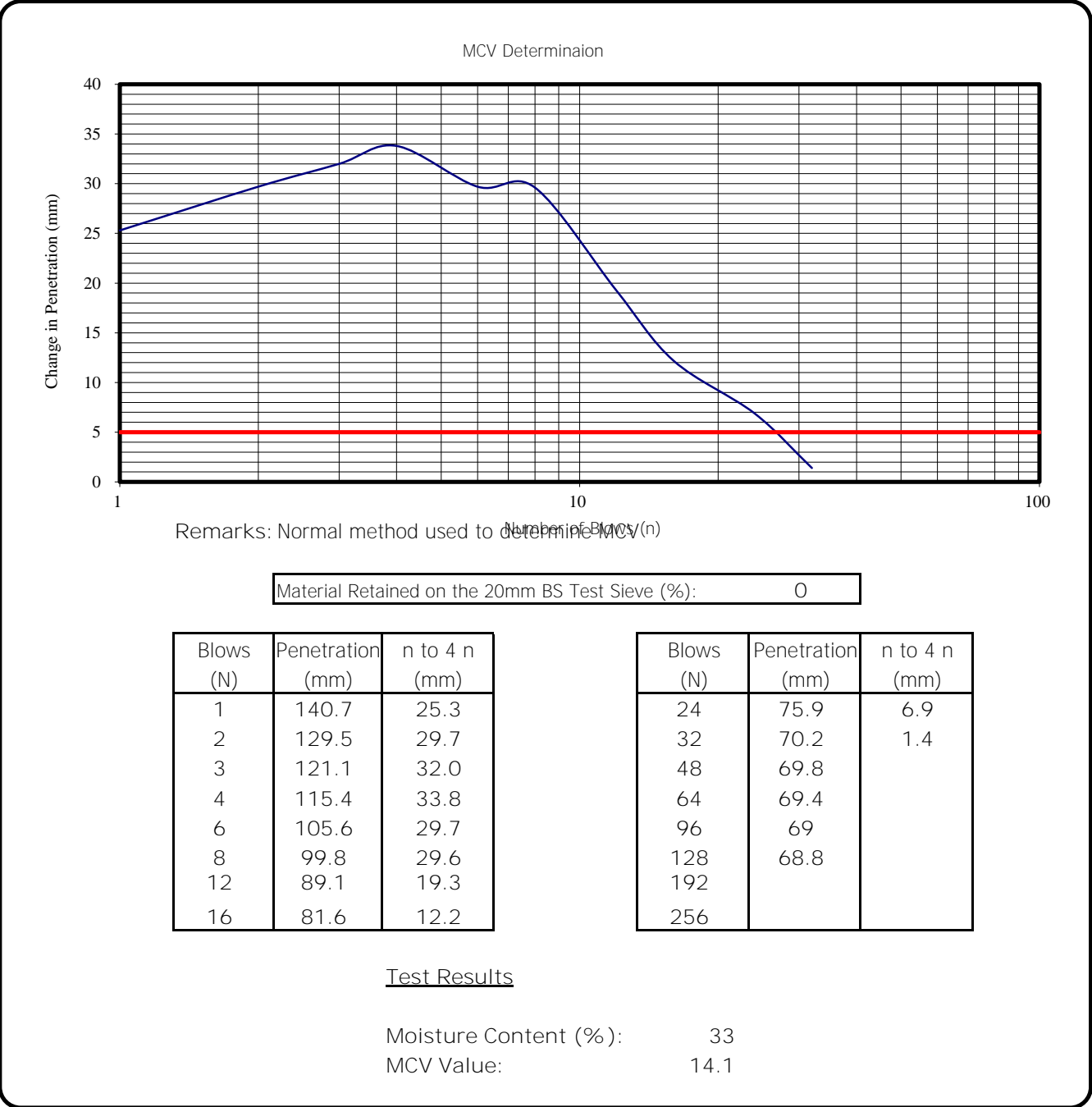
24.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 12
 Depth (m): 5.50-6.00
 Sample Type: B



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

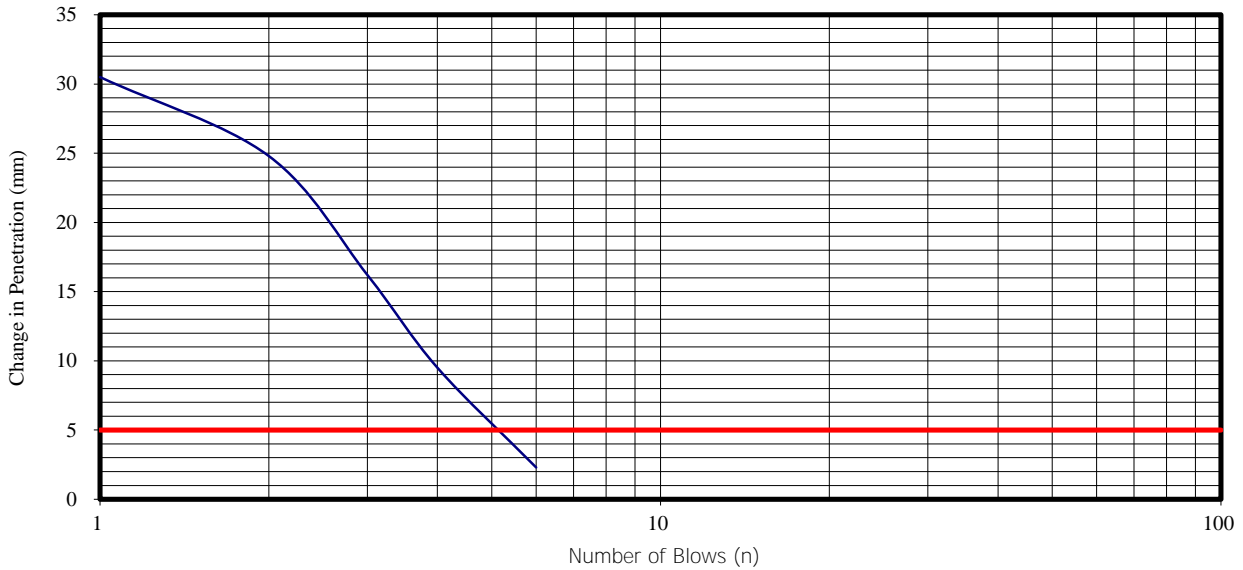


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH606
 Sample Number: 9
 Depth (m): 2.50-3.00
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	116.9	30.5
2	102.1	24.8
3	93.2	16.2
4	86.4	9.5
6	78.8	2.3
8	77.3	
12	77	
16	76.9	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	76.5	
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 40
 MCV Value: 7.1



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

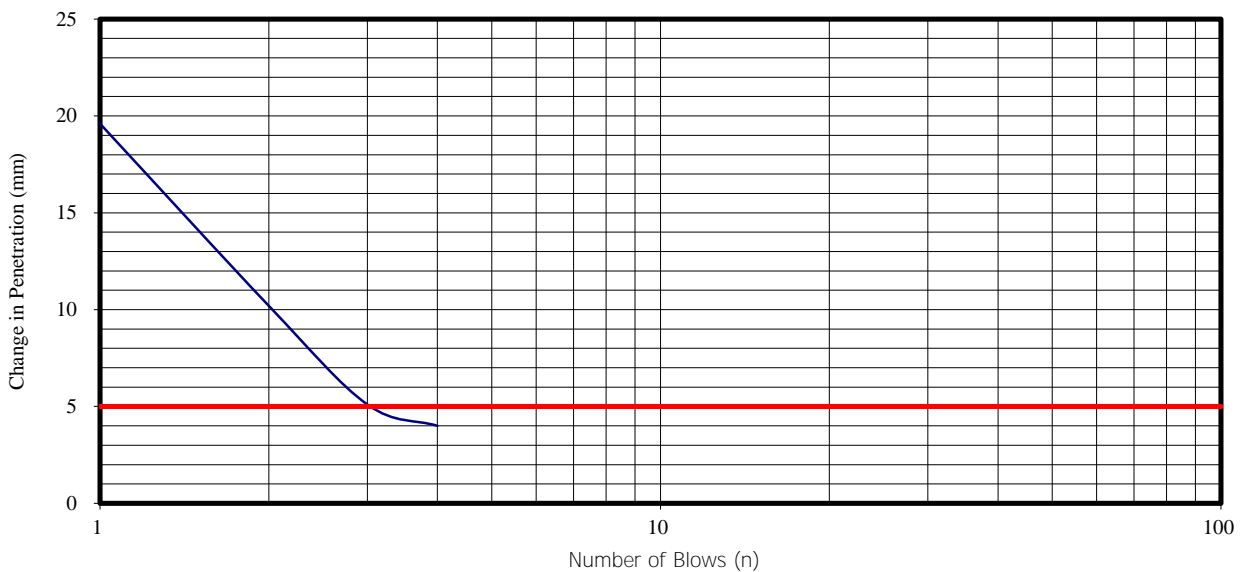


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH606
 Sample Number: 11
 Depth (m): 3.50-4.00
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	95.7	19.6
2	84.2	10.2
3	78.3	5.1
4	76.1	4.0
6	74.5	
8	74	
12	73.2	
16	72.1	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 39
 MCV Value: 4.8

reg. 13



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Approved By:

Date Approved:

21.3.17

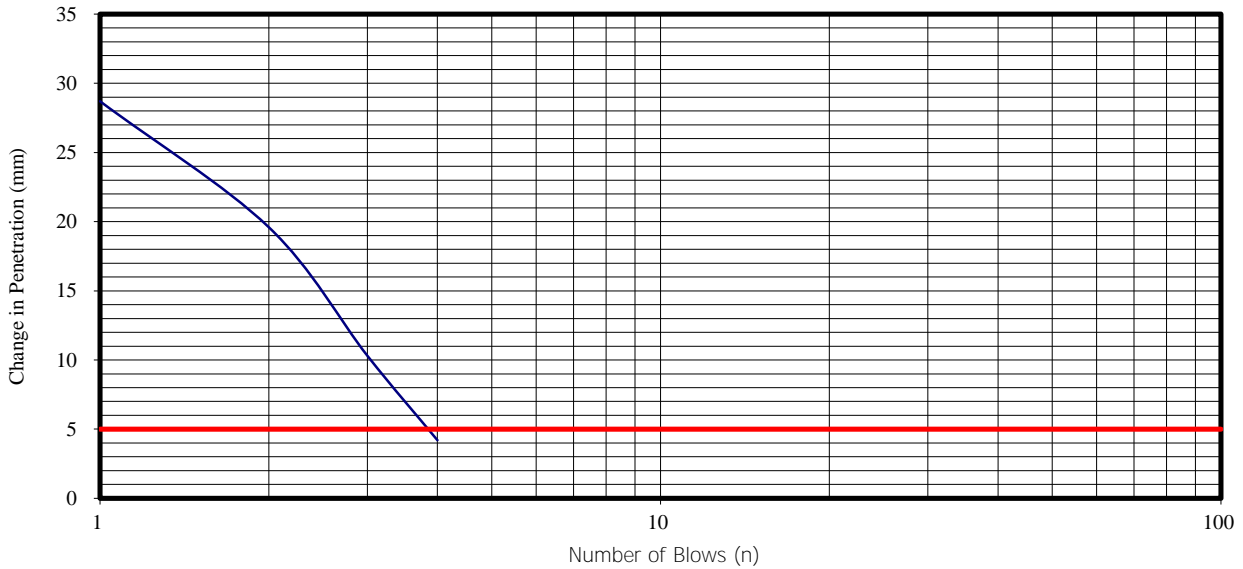


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH607
 Sample Number: 2
 Depth (m): 0.10-0.25
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	106.1	28.7
2	93.7	19.6
3	83.6	10.3
4	77.4	4.2
6	74.3	
8	74.1	
12	73.3	
16	73.2	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 30
 MCV Value: 5.9



reg. 13

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21.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH607
 Sample Number: 3
 Depth (m): 0.30-0.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	97.8	23.2
2	82.8	9.0
3	75.5	2.4
4	74.6	
6	74.2	
8	73.8	
12	73.1	
16		

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 30
 MCV Value: 4.1



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

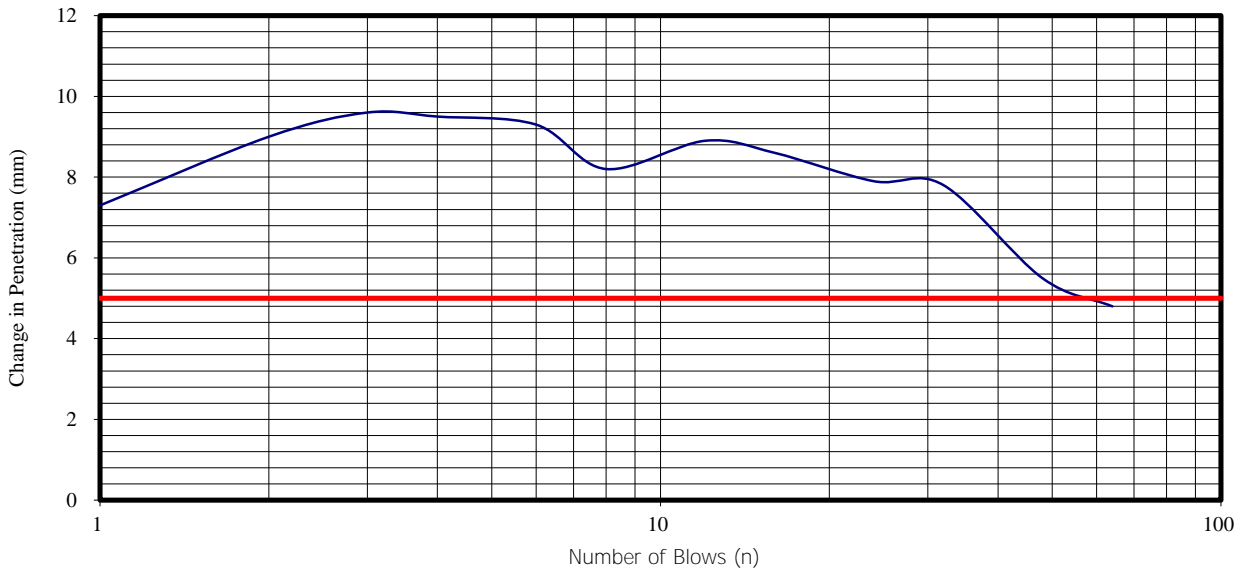


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH608
 Sample Number: 4
 Depth (m): 2.00-3.00
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	93.1	7.3
2	89.9	9.0
3	87.4	9.6
4	85.8	9.5
6	83.2	9.3
8	80.9	8.2
12	77.8	8.9
16	76.3	8.6

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	73.9	7.9
32	72.7	7.8
48	68.9	5.5
64	67.7	4.8
96	66	
128	64.9	
192	63.4	
256	62.9	

Test Results

Moisture Content (%): 1
 MCV Value: 17.5



reg. 13

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Date Approved:

21.3.17

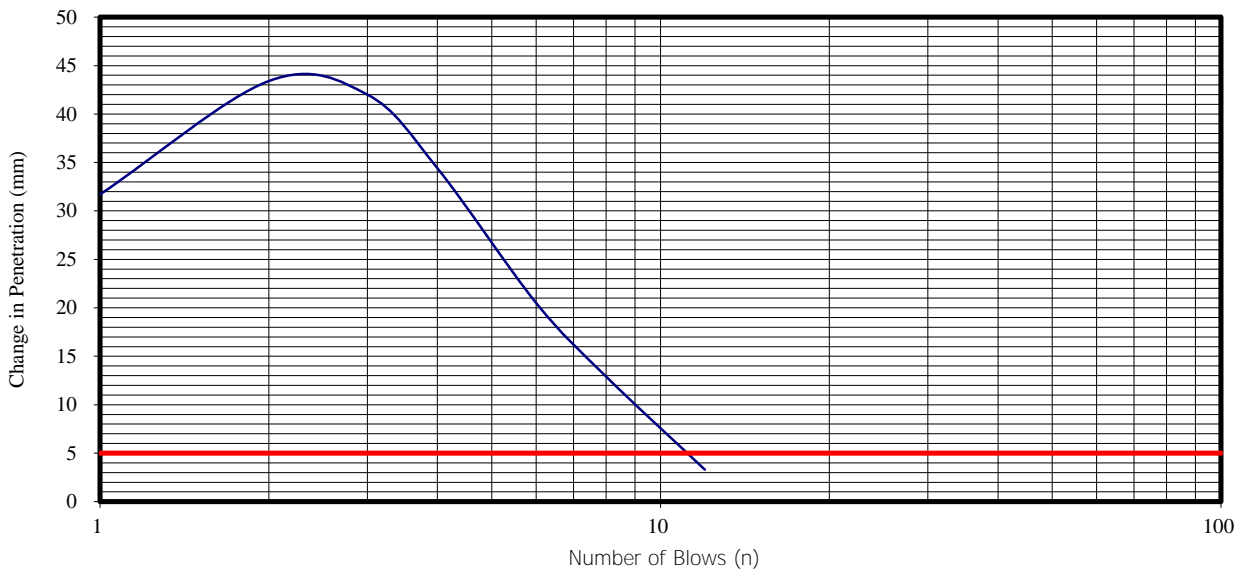


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH608
 Sample Number: 7
 Depth (m): 5.00-6.00
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	135.3	31.7
2	123.7	43.4
3	112.4	42.0
4	103.6	34.4
6	89.2	20.5
8	80.3	12.9
12	70.4	3.3
16	69.2	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 32
 MCV Value: 10.8

reg. 13



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Approved By:

Date Approved:

21.3.17

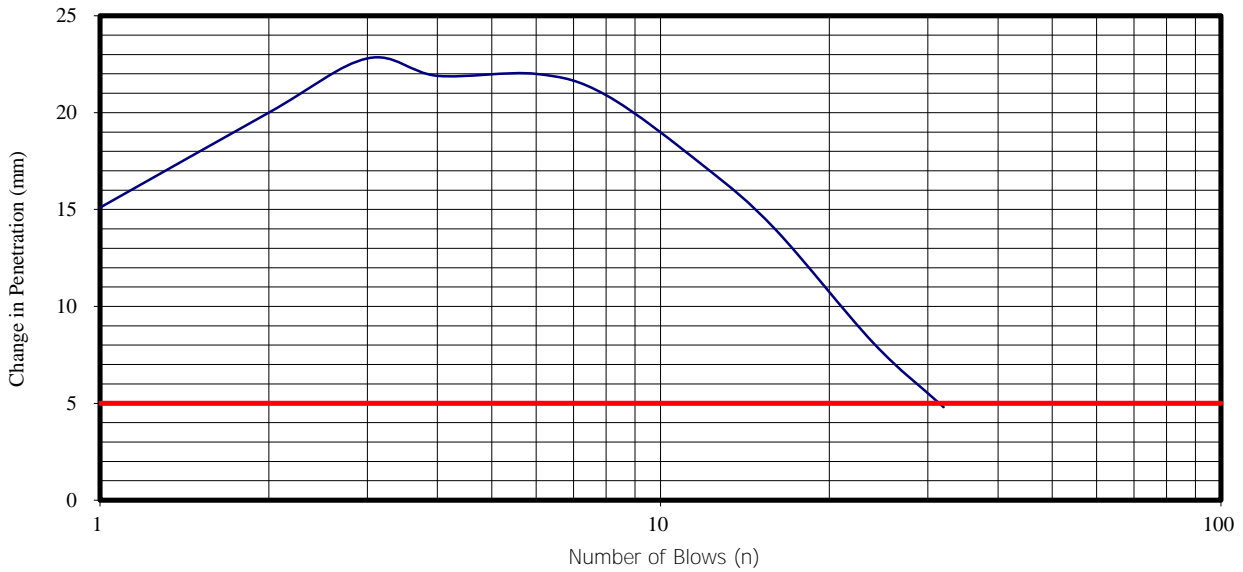


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH609
 Sample Number: 1
 Depth (m): 0.10-0.30
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	119.9	15.1
2	114.1	20.0
3	109.9	22.8
4	104.8	21.9
6	98.6	22.0
8	94.1	20.9
12	87.1	17.2
16	82.9	14.0

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	76.6	8.1
32	73.2	4.8
48	69.9	
64	68.9	
96	68.5	
128	68.4	
192		
256		

Test Results

Moisture Content (%): 28
 MCV Value: 15.1



reg. 13

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Approved By:

Date Approved:

22.3.17

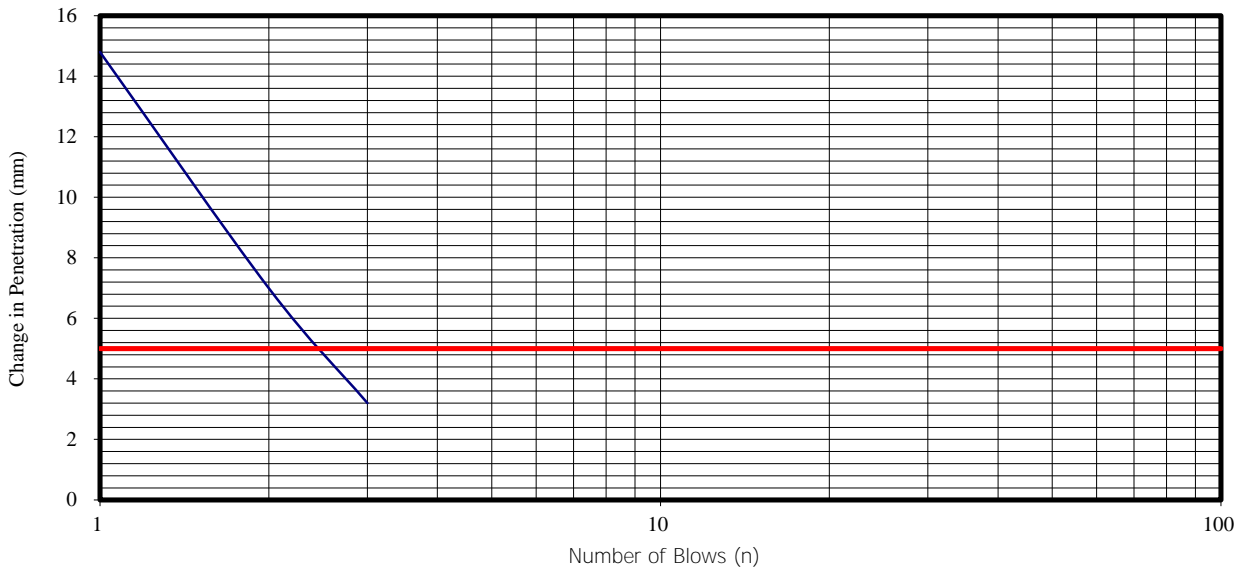


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH609
 Sample Number: 7
 Depth (m): 2.50-3.00
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	83.7	14.8
2	74.3	7.0
3	69.4	3.2
4	68.9	
6	67.8	
8	67.3	
12	66.2	
16		

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 19
 MCV Value: 4.1



reg. 13

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Approved By:

Date Approved:

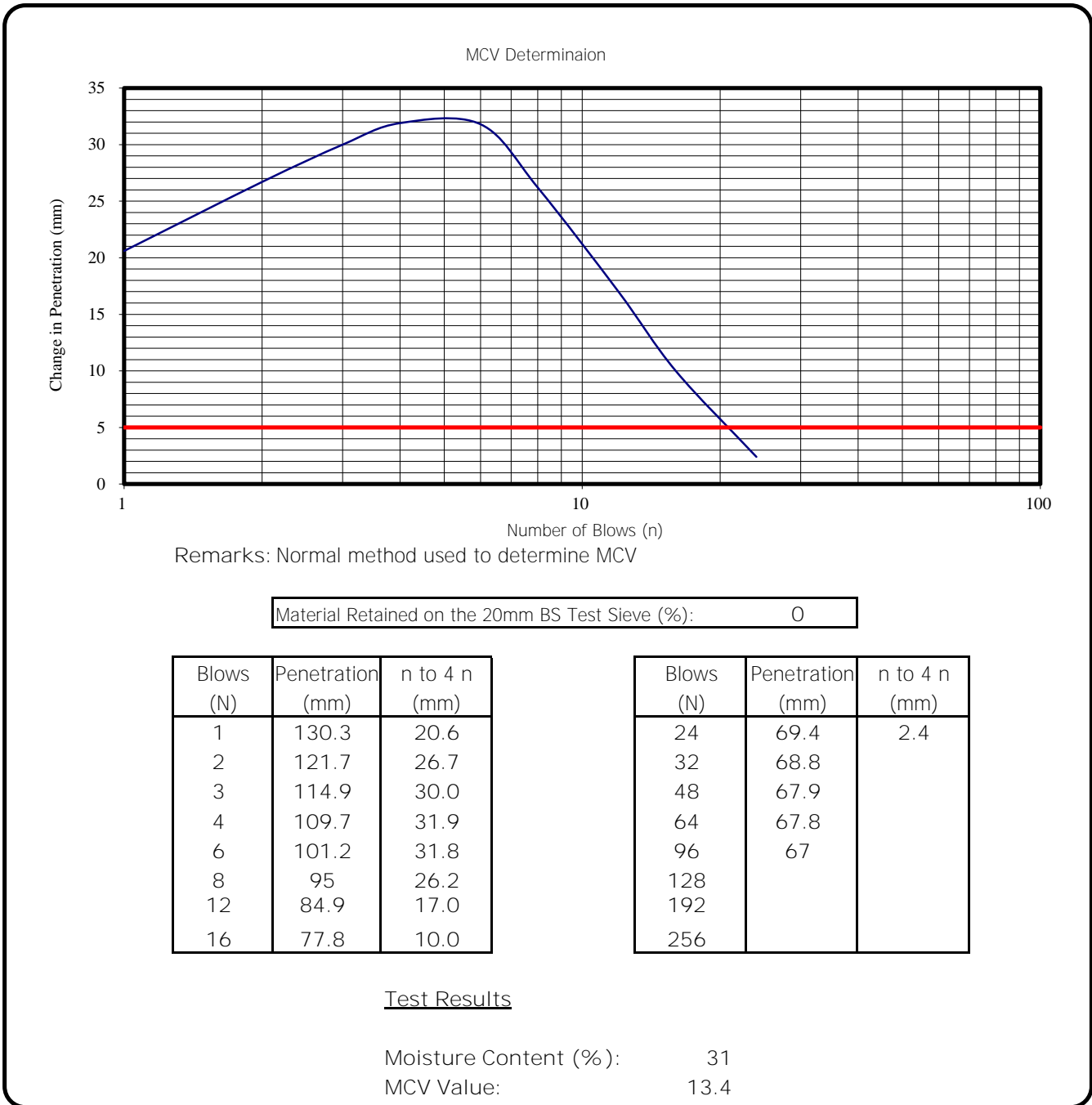
24.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH609
 Sample Number: 9
 Depth (m): 4.50-5.00
 Sample Type: B



reg. 13

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Approved By:

Date Approved:

22.3.17

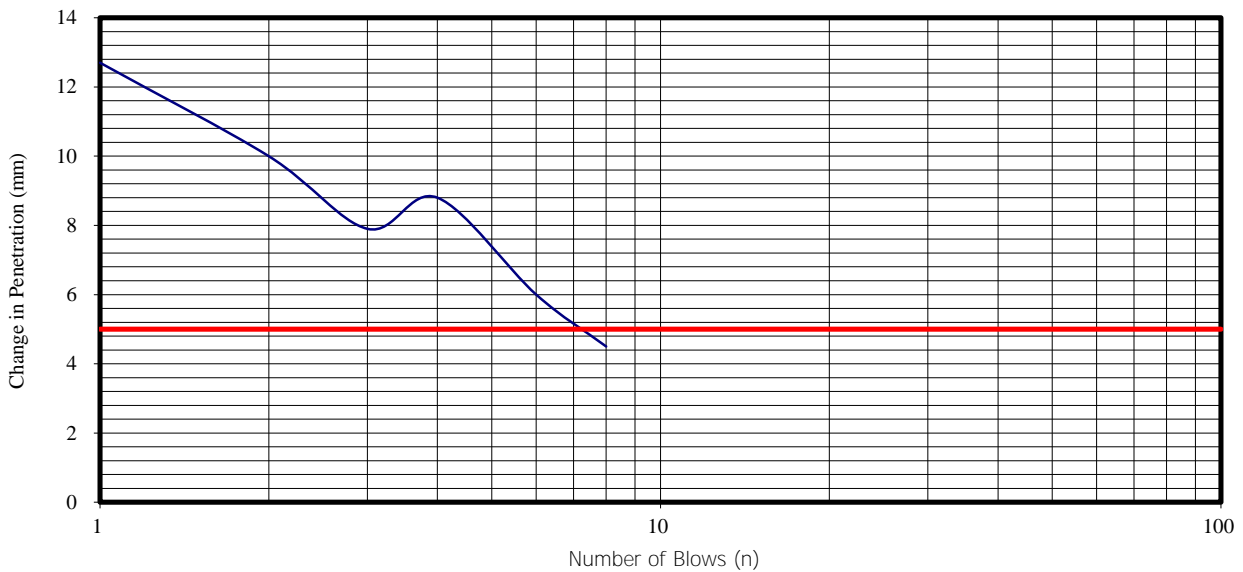


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH611
 Sample Number: 11
 Depth (m): 4.00-5.00
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	78.6	12.7
2	71.1	10.0
3	67.1	7.9
4	65.9	8.8
6	62.9	6.0
8	61.1	4.5
12	59.2	
16	57.1	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	56.9	
32	56.6	
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 12
 MCV Value: 8.7



reg. 13

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Approved By:

Date Approved:

22.3.17

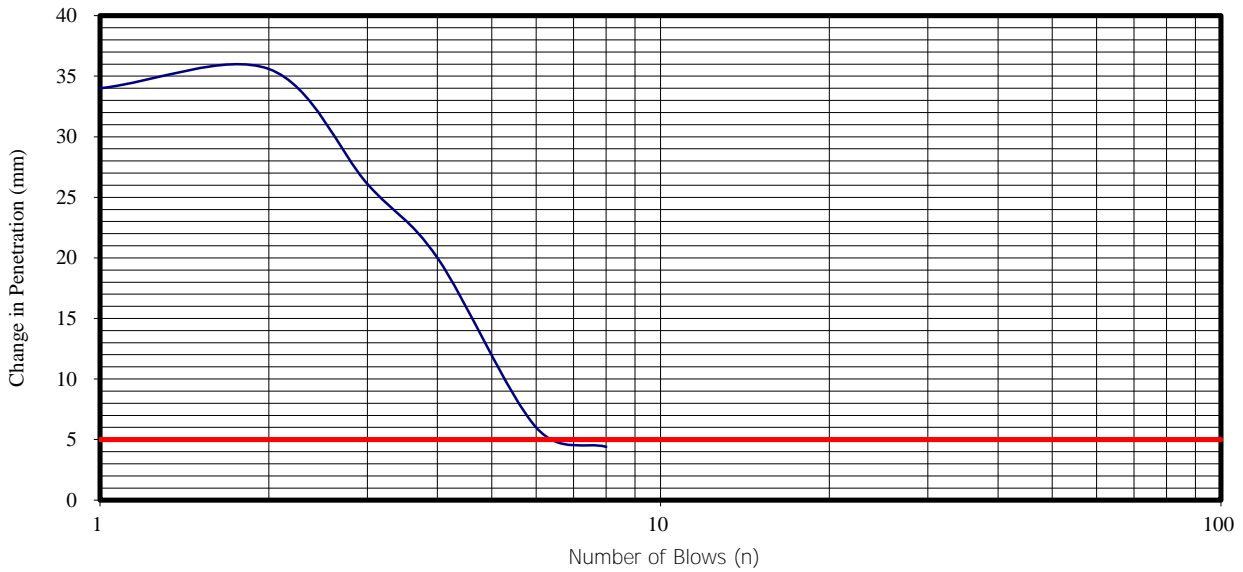


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 3
 Depth (m): 0.20-0.70
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	108.6	34.0
2	93.4	35.6
3	81.8	26.1
4	74.6	20.0
6	59.9	6.0
8	57.8	4.4
12	55.7	
16	54.6	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	53.9	
32	53.4	
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 29
 MCV Value: 8.1



reg. 13

Checked By

Approved By:

Date Approved:

24.3.17

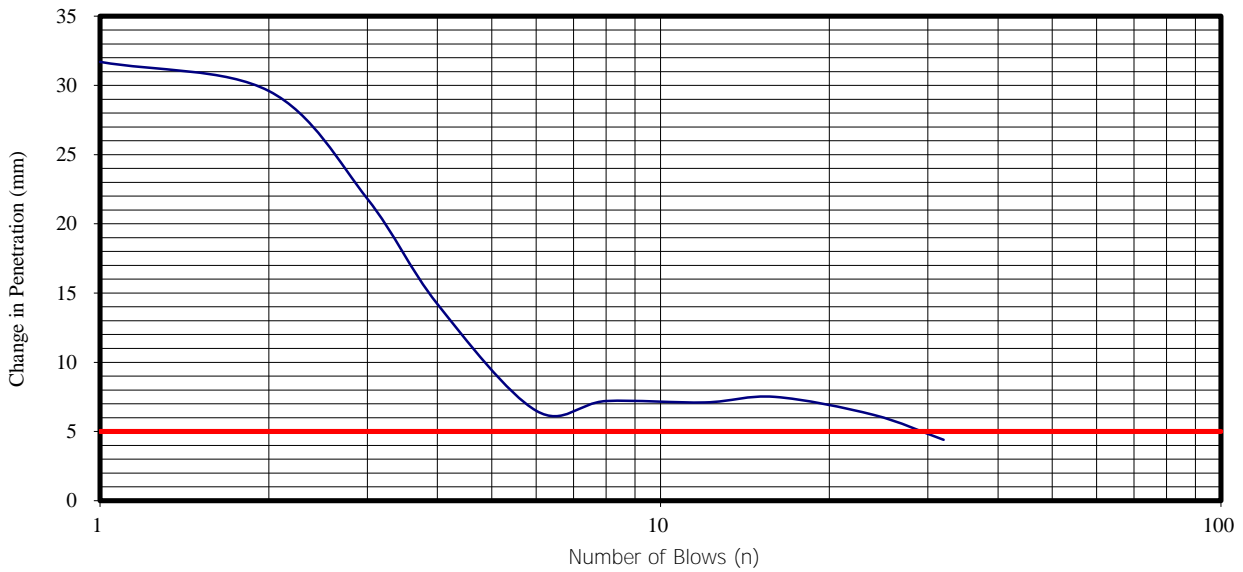


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 7
 Depth (m): 2.00-2.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	102.6	31.7
2	89.7	29.6
3	79.3	21.8
4	70.9	14.2
6	61.2	6.5
8	60.1	7.2
12	57.5	7.1
16	56.7	7.5

Blows (N)	Penetration (mm)	n to 4 n (mm)
24	54.7	6.2
32	52.9	4.4
48	50.4	
64	49.2	
96	48.5	
128	48.5	
192	48.5	
256	48.5	

Test Results

Moisture Content (%): 41
 MCV Value: 14.6

reg. 13



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Approved By:

Date Approved:

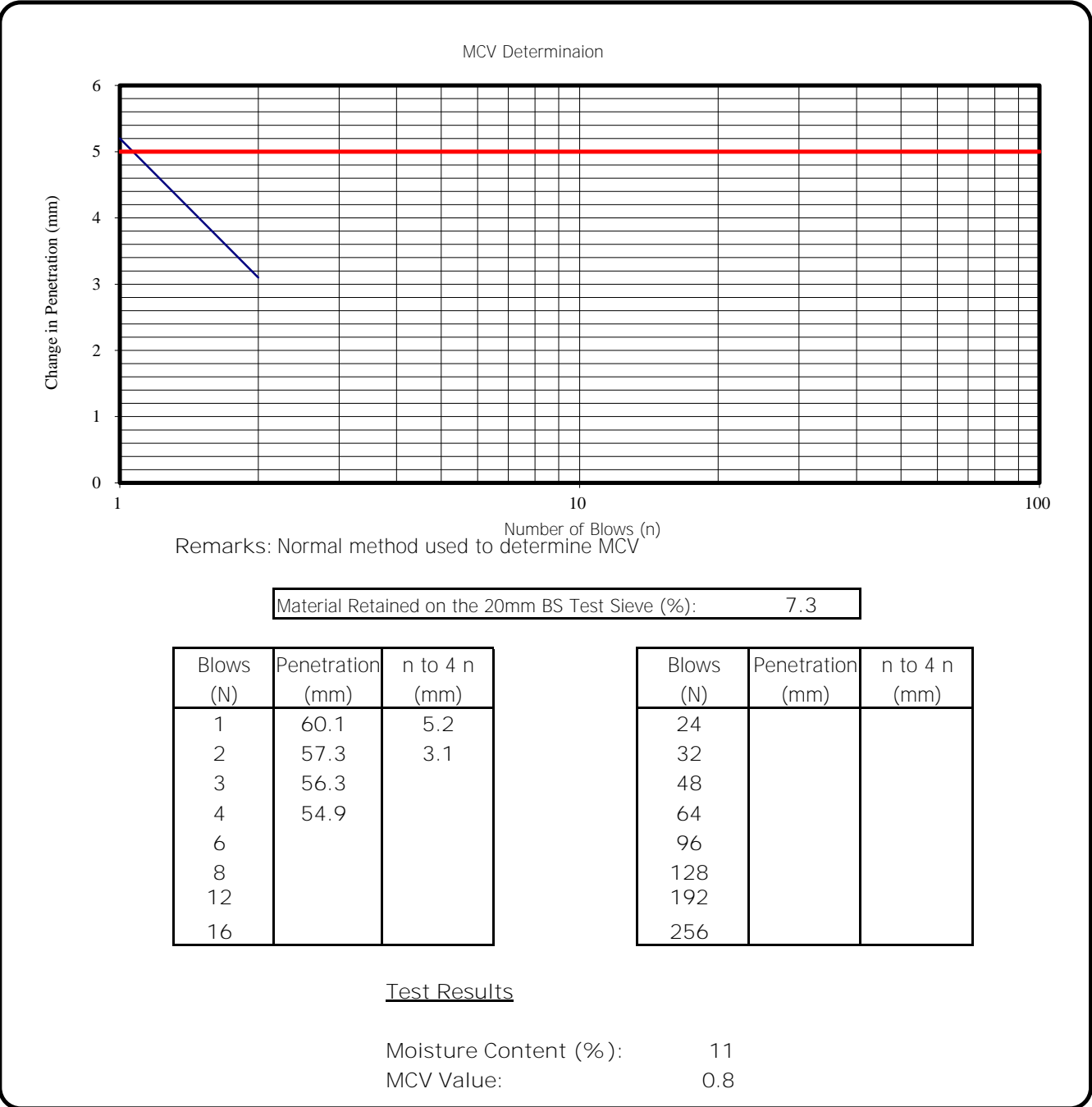
24.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1001
 Sample Number: 4
 Depth (m): 2.00-2.45
 Sample Type: D



reg. 13

Checked By

Approved By:

Date Approved:

21.3.17

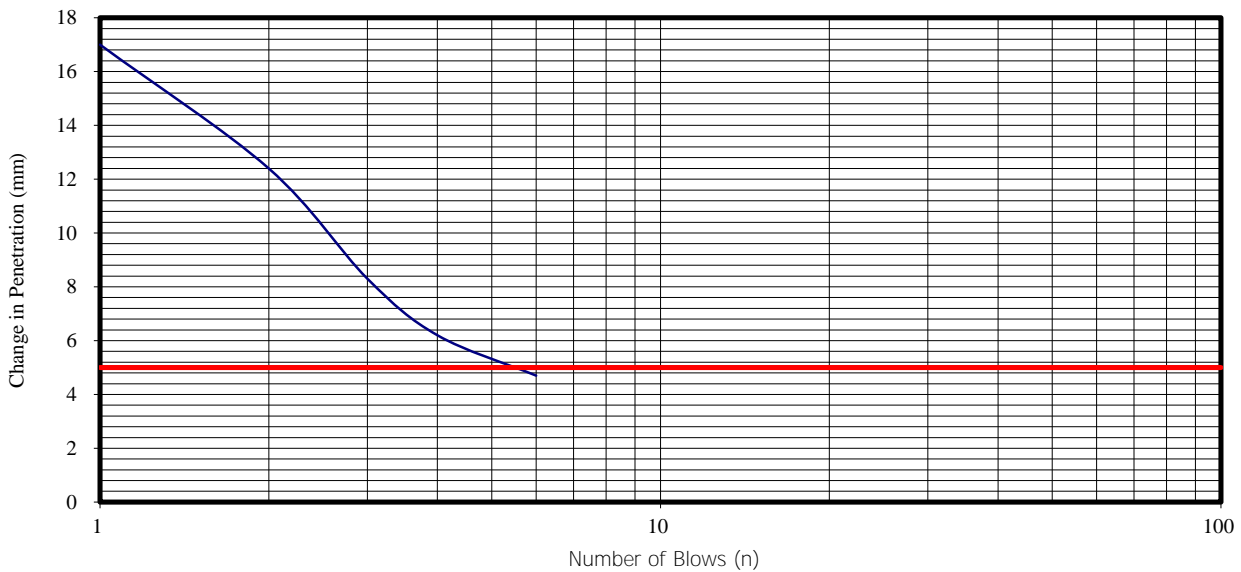


Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1103
 Sample Number: 6
 Depth (m): 1.00-1.50
 Sample Type: B

MCV Determination



Remarks: Normal method used to determine MCV

Material Retained on the 20mm BS Test Sieve (%): 0

Blows (N)	Penetration (mm)	n to 4 n (mm)
1	88.4	17.0
2	79.3	12.4
3	74.2	8.3
4	71.4	6.2
6	68.7	4.7
8	66.9	
12	65.9	
16	65.2	

Blows (N)	Penetration (mm)	n to 4 n (mm)
24		
32		
48		
64		
96		
128		
192		
256		

Test Results

Moisture Content (%): 15
 MCV Value: 6.6



reg. 13

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Date Approved:

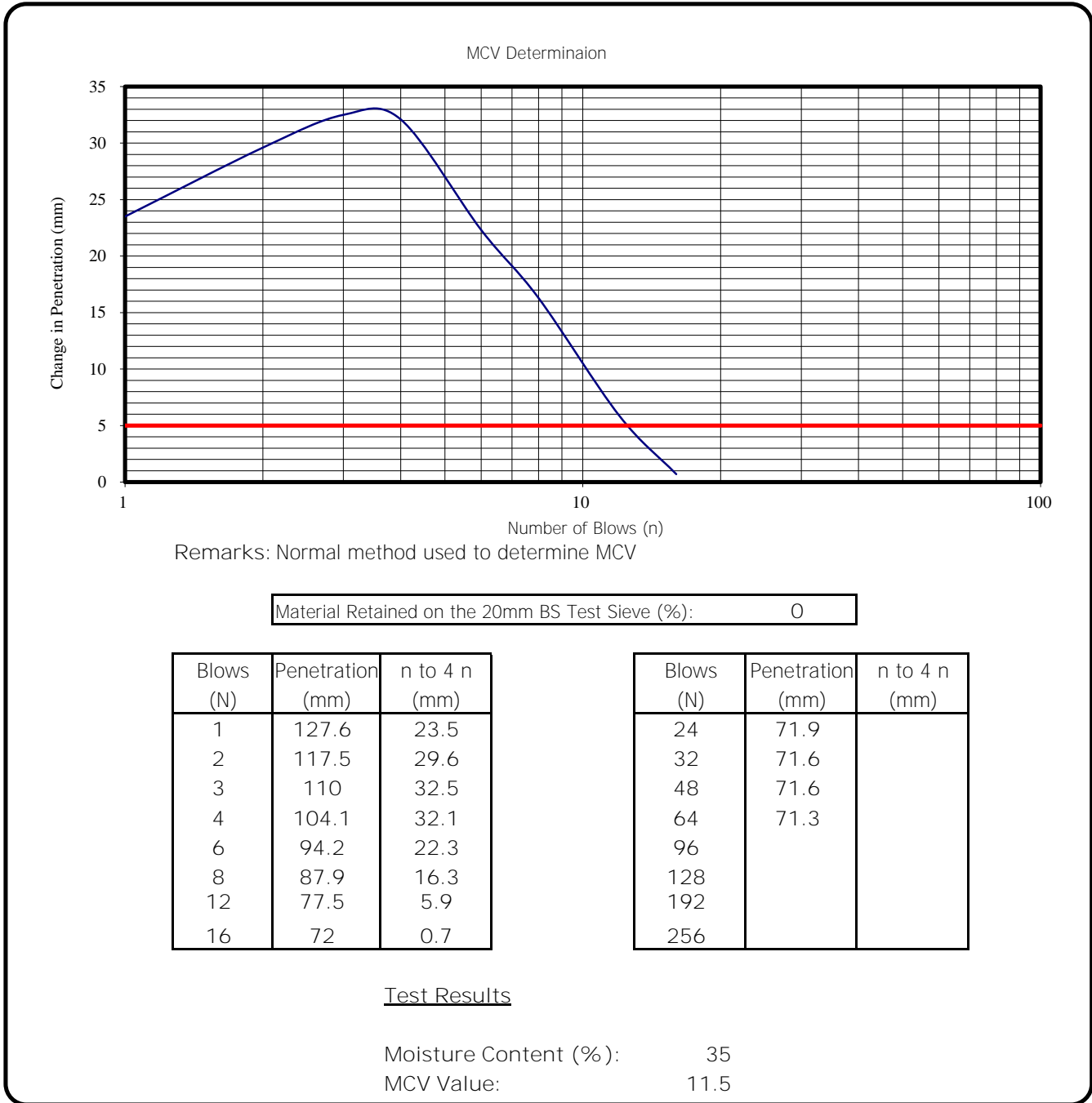
21.3.17



Moisture Condition Value

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1213
 Sample Number: 7
 Depth (m): 1.10
 Sample Type: B



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Approved By:

Date Approved:

22.3.17

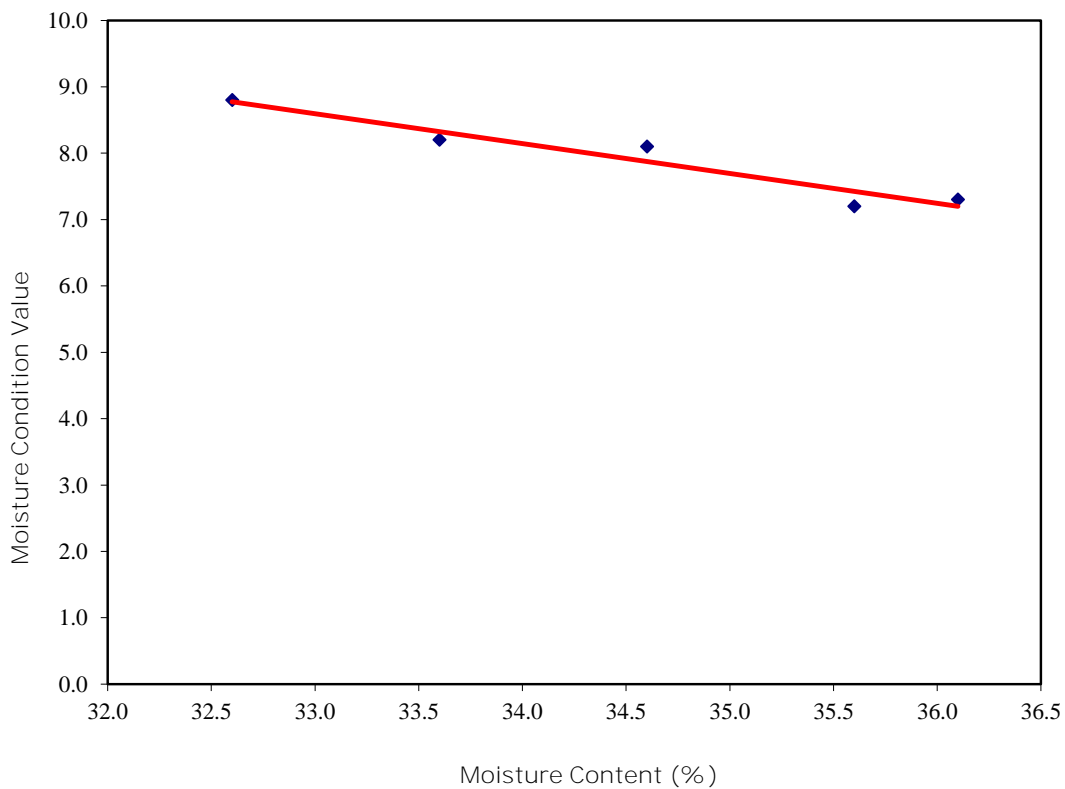


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 4
 Depth (m) : 2.00-3.00
 Sample Type: B

Initial Moisture Content (%):	27.7
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%)	32.6	33.6	34.6	35.6	36.1
MCV	8.8	8.2	8.1	7.2	7.3

* reading unobtainable.



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23-3-17

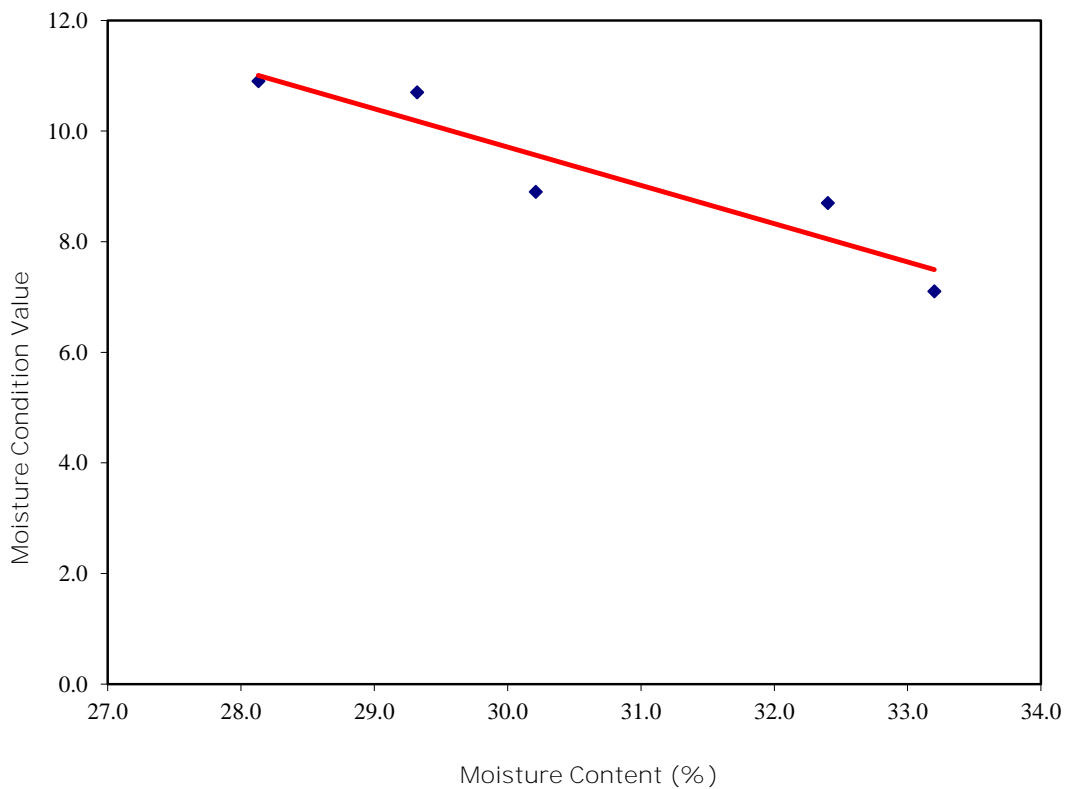


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 5
 Depth (m) : 3
 Sample Type B

Initial Moisture Content (%):	32.4
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	28.1	29.3	30.2	32.4	33.2
MCV	10.9	10.7	8.9	8.7	7.1

* reading unobtainable.



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23-3-17

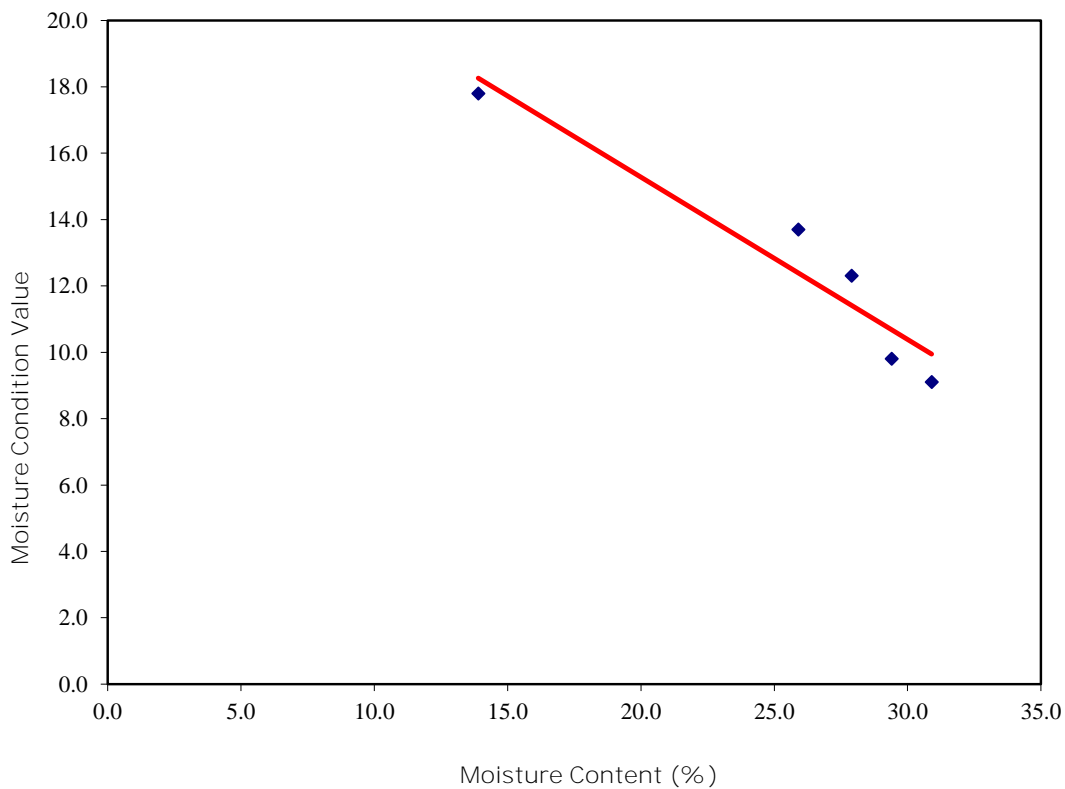


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 2
 Depth (m) : 0.00-1.00
 Sample Type B

Initial Moisture Content (%):	13.9
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	13.9	25.9	27.9	29.4	30.9
MCV	17.8	13.7	12.3	9.8	9.1

* reading unobtainable.



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reg. 13

Date approved:

23-3-17

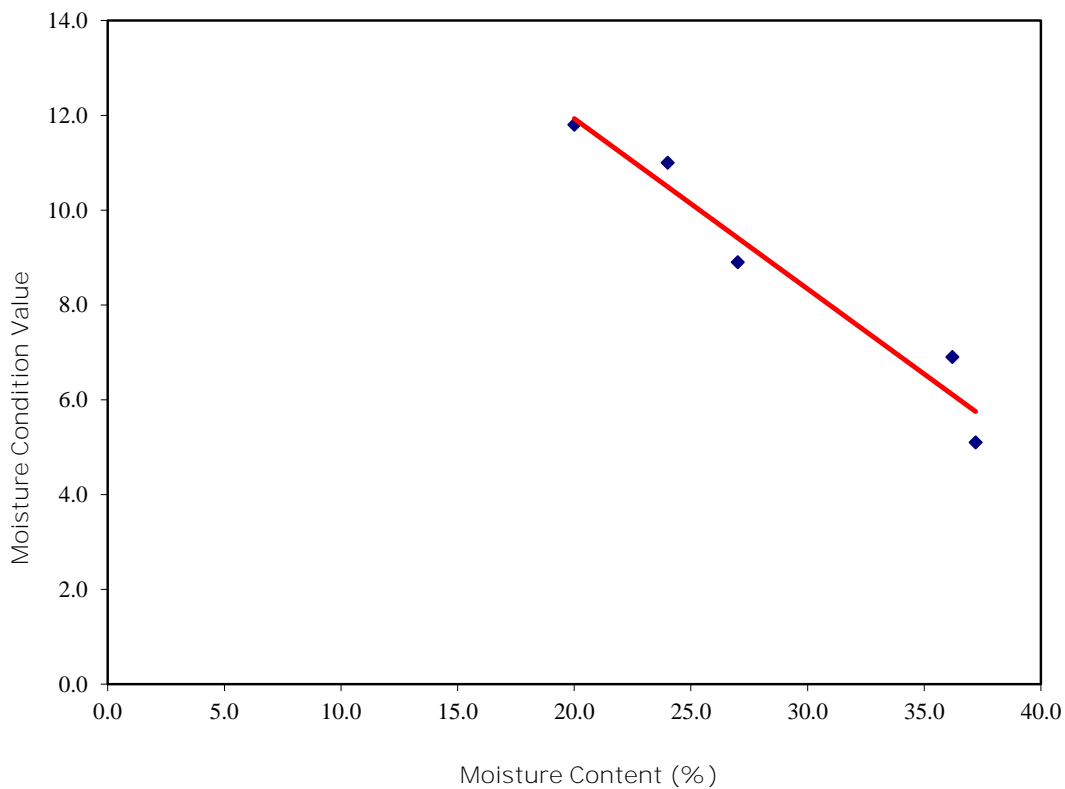


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 5
 Depth (m) : 1.80-2.30
 Sample Type: B

Initial Moisture Content (%):	36.2
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%)	20.0	24.0	27.0	36.2	37.2
MCV	11.8	11.0	8.9	6.9	5.1

* reading unobtainable.



reg. 13

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reg. 13

Date approved:

23-3-17

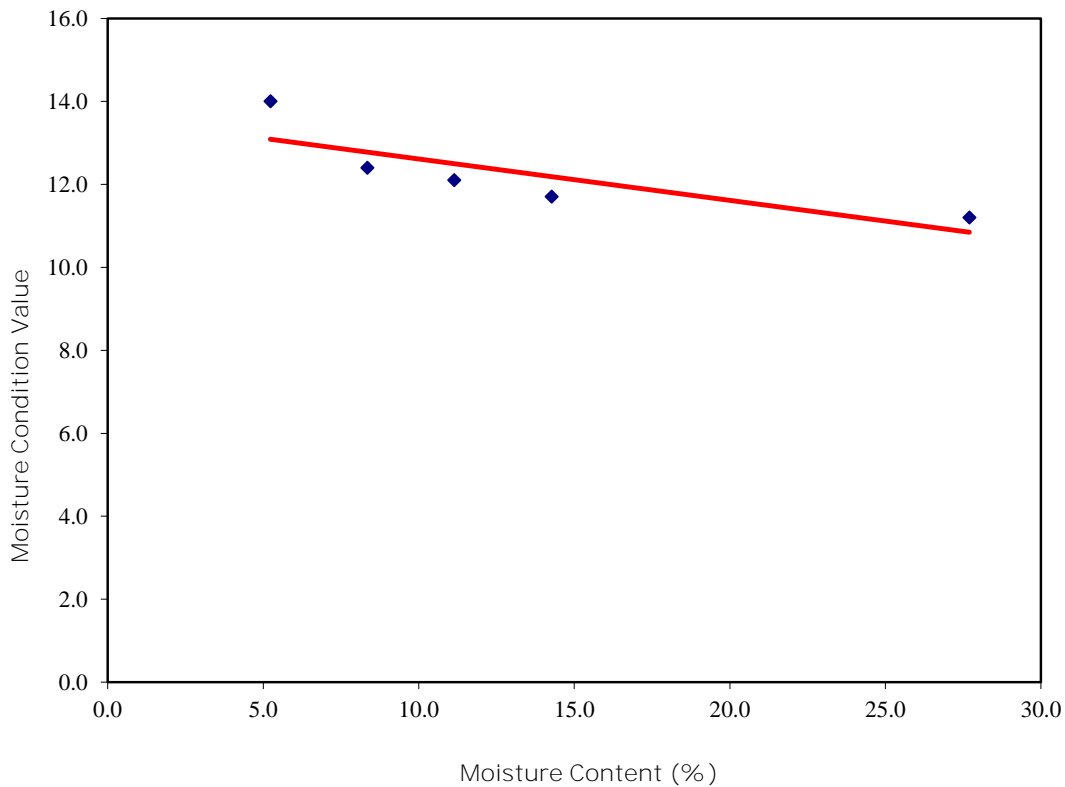


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH602
 Sample Number: 10
 Depth (m) : 5.00-5.50
 Sample Type B

Initial Moisture Content (%):	27.7
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	5.2	8.3	11.1	14.3	27.7
MCV	14.0	12.4	12.1	11.7	11.2

* reading unobtainable.



reg. 13

Checked by

Approved by

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Date approved:

23-3-17

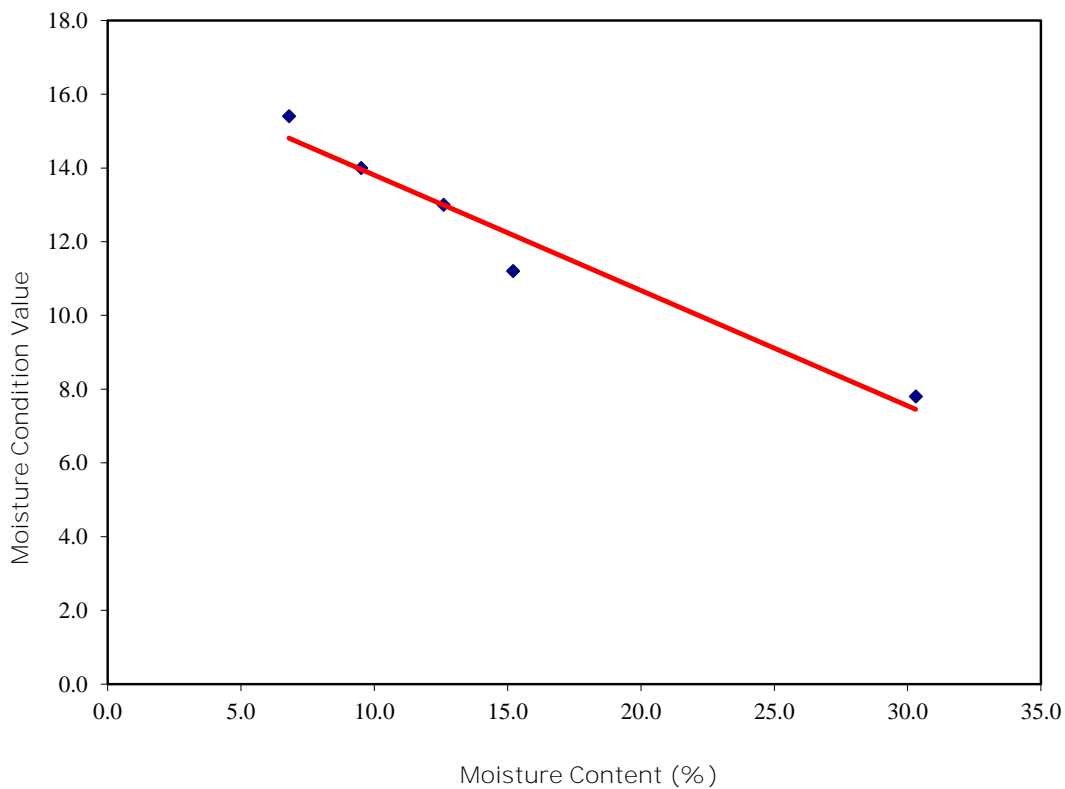


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 5
 Depth (m) : 1.20-1.65
 Sample Type B

Initial Moisture Content (%):	30.3
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	6.8	9.5	12.6	15.2	30.3
MCV	15.4	14.0	13.0	11.2	7.8

* reading unobtainable.



reg. 13

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reg. 13

Date approved:

23-3-17

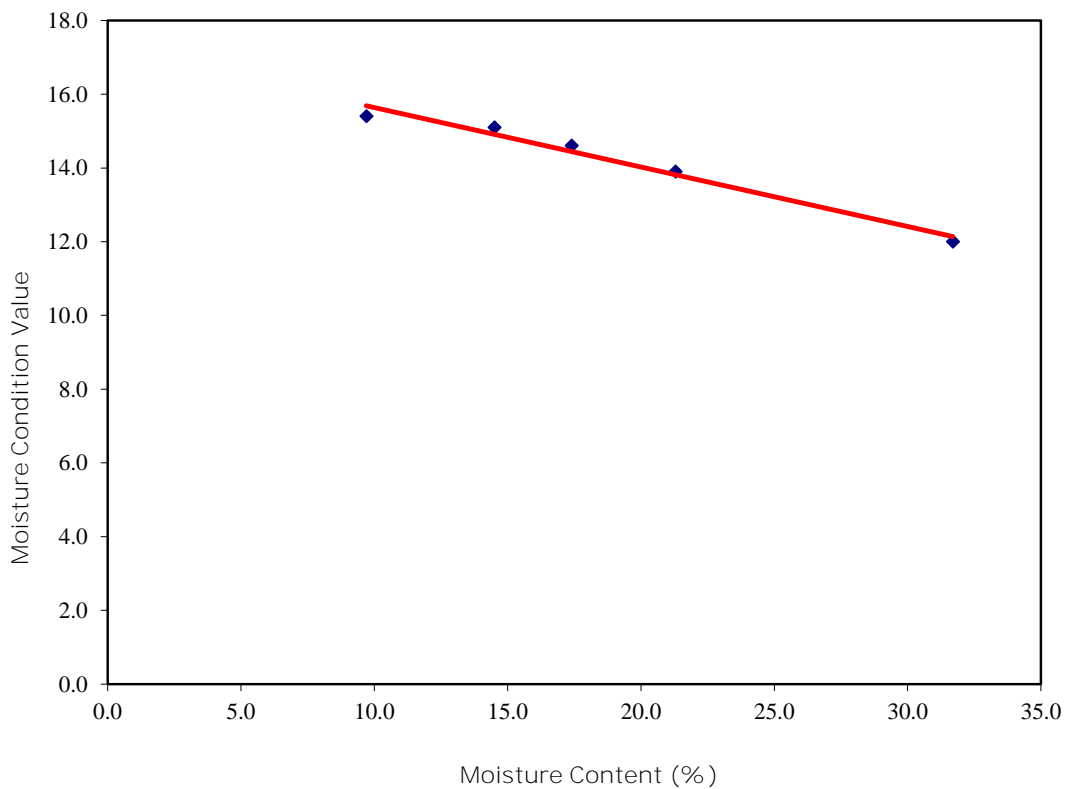


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 7
 Depth (m) : 3.50-4.00
 Sample Type B

Initial Moisture Content (%):	30.3
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	9.7	14.5	17.4	21.3	31.7
MCV	15.4	15.1	14.6	13.9	12.0

* reading unobtainable.



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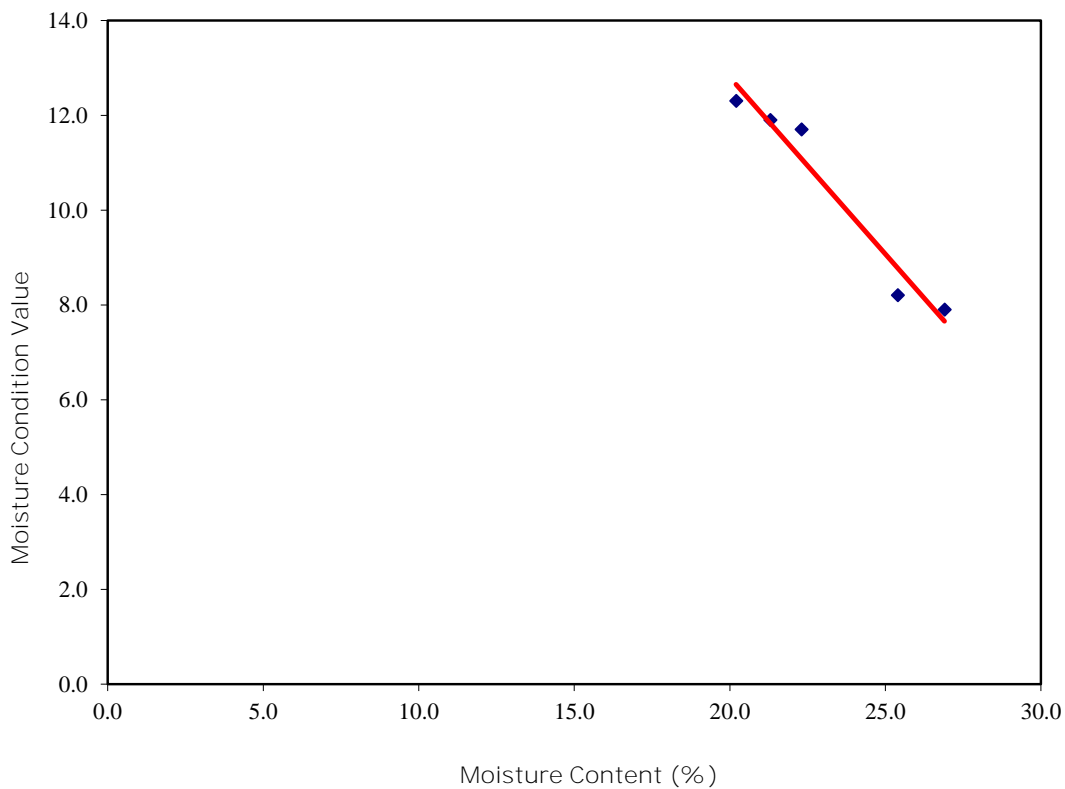


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 3
 Depth (m) : 0.85-1.20
 Sample Type: B

Initial Moisture Content (%):	25.4
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	20.2	21.3	22.3	25.4	26.9
MCV	12.3	11.9	11.7	8.2	7.9

* reading unobtainable.



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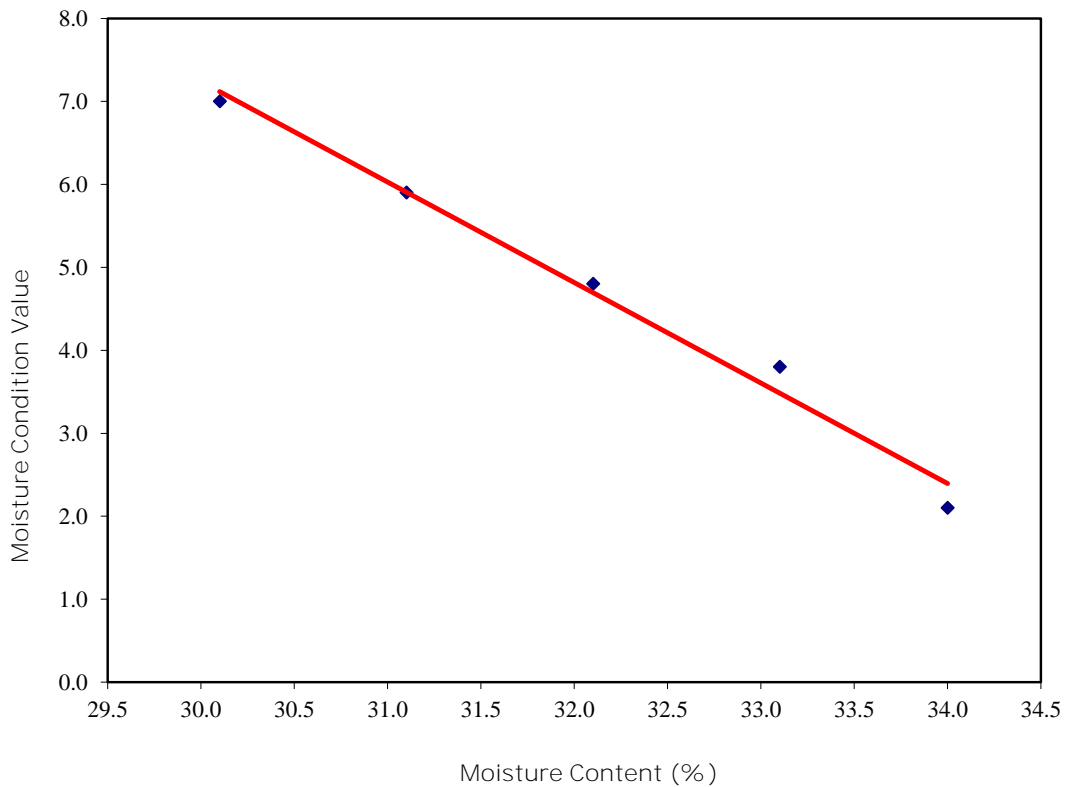


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH604
 Sample Number: 7
 Depth (m) : 4.50-5.00
 Sample Type: B

Initial Moisture Content (%):	33.1
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	30.1	31.1	32.1	33.1	34.0
MCV	7.0	5.9	4.8	3.8	2.1

* reading unobtainable.



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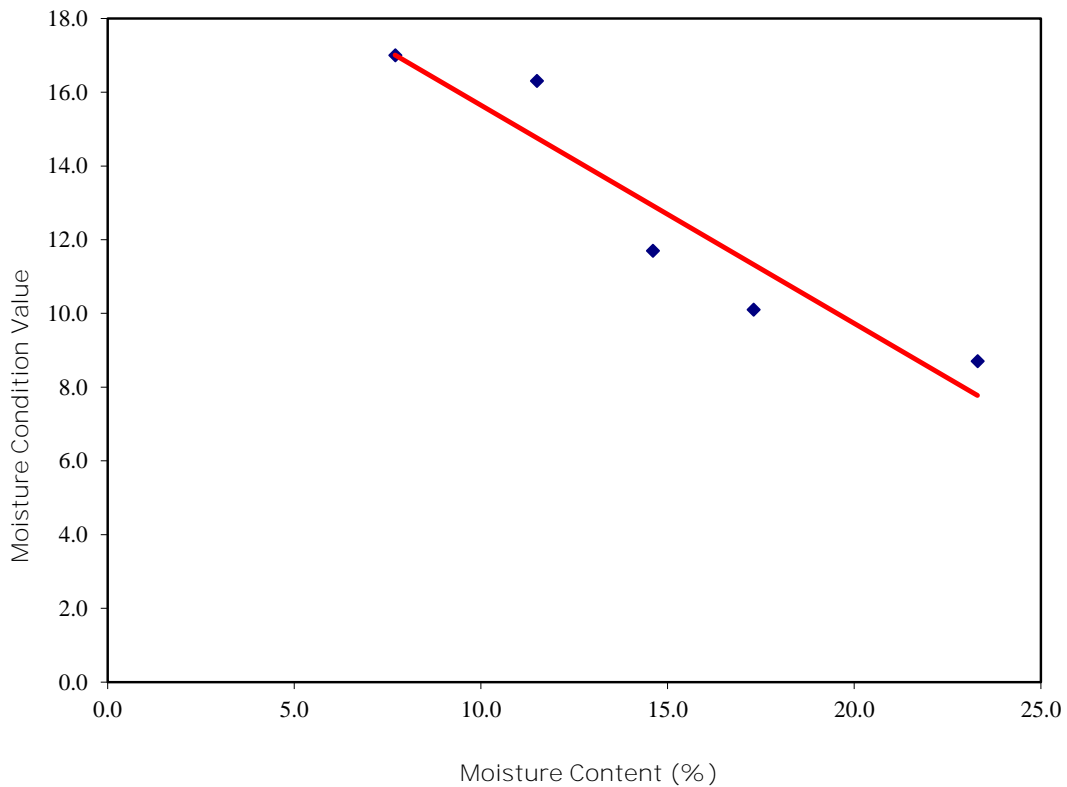


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 7
 Depth (m) : 0.75-1.20
 Sample Type B

Initial Moisture Content (%):	23.3
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	7.7	11.5	14.6	17.3	23.3
MCV	17.0	16.3	11.7	10.1	8.7

* reading unobtainable.



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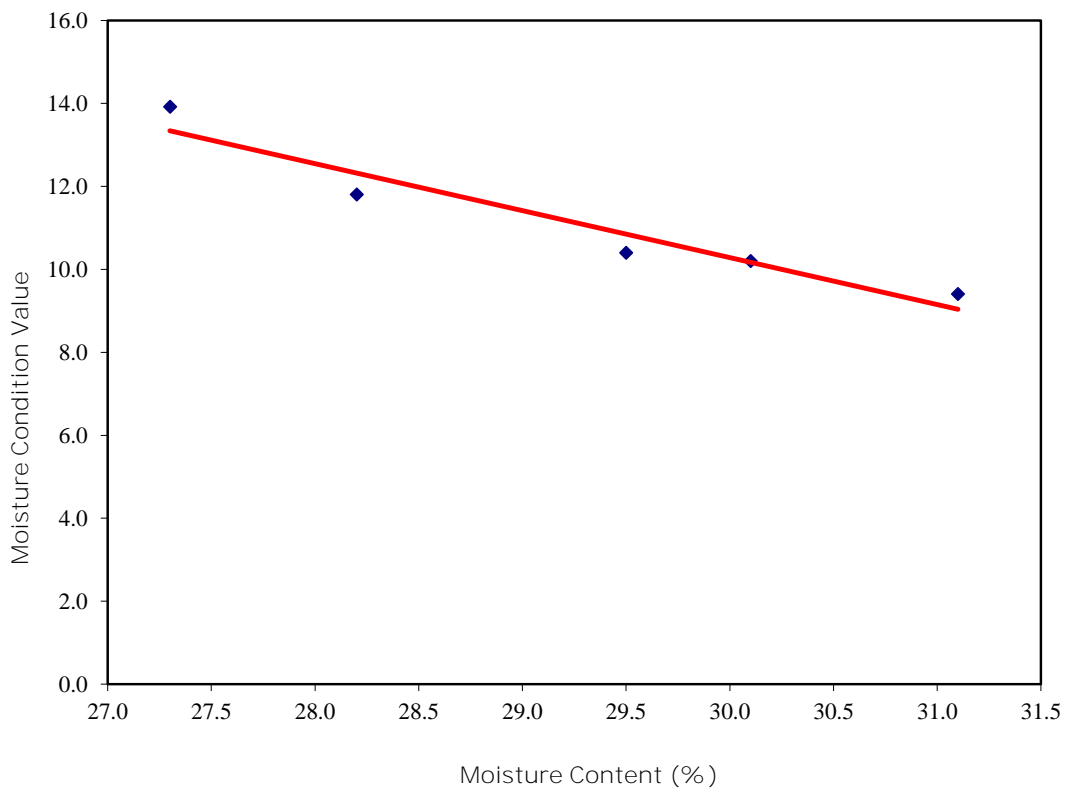


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 9
 Depth (m) : 2.00-2.50
 Sample Type B

Initial Moisture Content (%):	27.3
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	27.3	28.2	29.5	30.1	31.1
MCV	13.9	11.8	10.4	10.2	9.4

* reading unobtainable.



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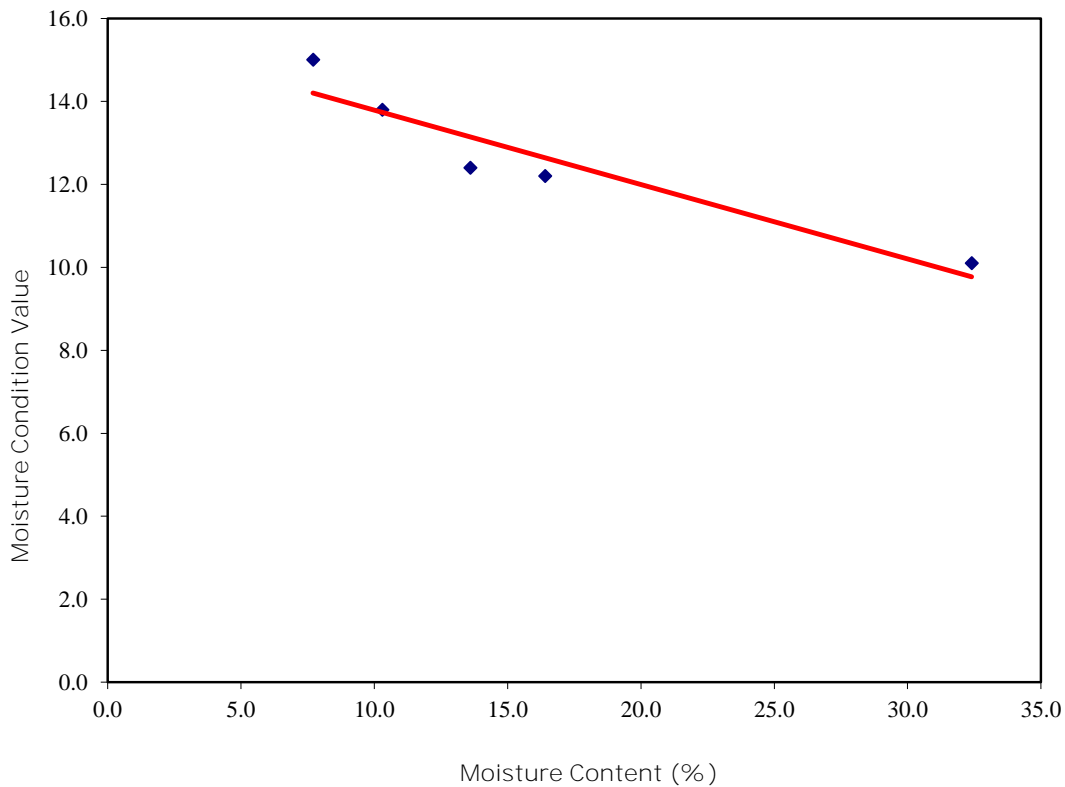


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 11
 Depth (m) : 4.50-5.00
 Sample Type: B

Initial Moisture Content (%):	32.4
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	7.7	10.3	13.6	16.4	32.4
MCV	15.0	13.8	12.4	12.2	10.1

* reading unobtainable.



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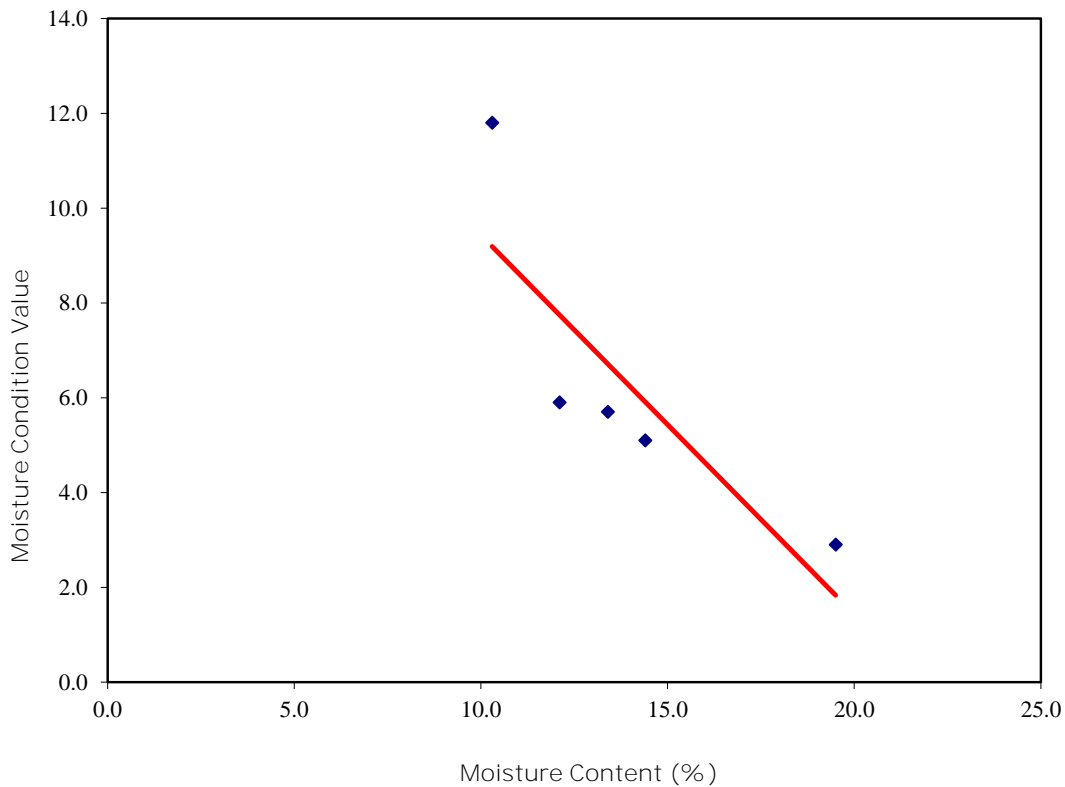


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH606
 Sample Number: 6
 Depth (m) : 1.20-1.70
 Sample Type B

Initial Moisture Content (%):	19.5
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	10.3	12.1	13.4	14.4	19.5
MCV	11.8	5.9	5.7	5.1	2.9

* reading unobtainable.



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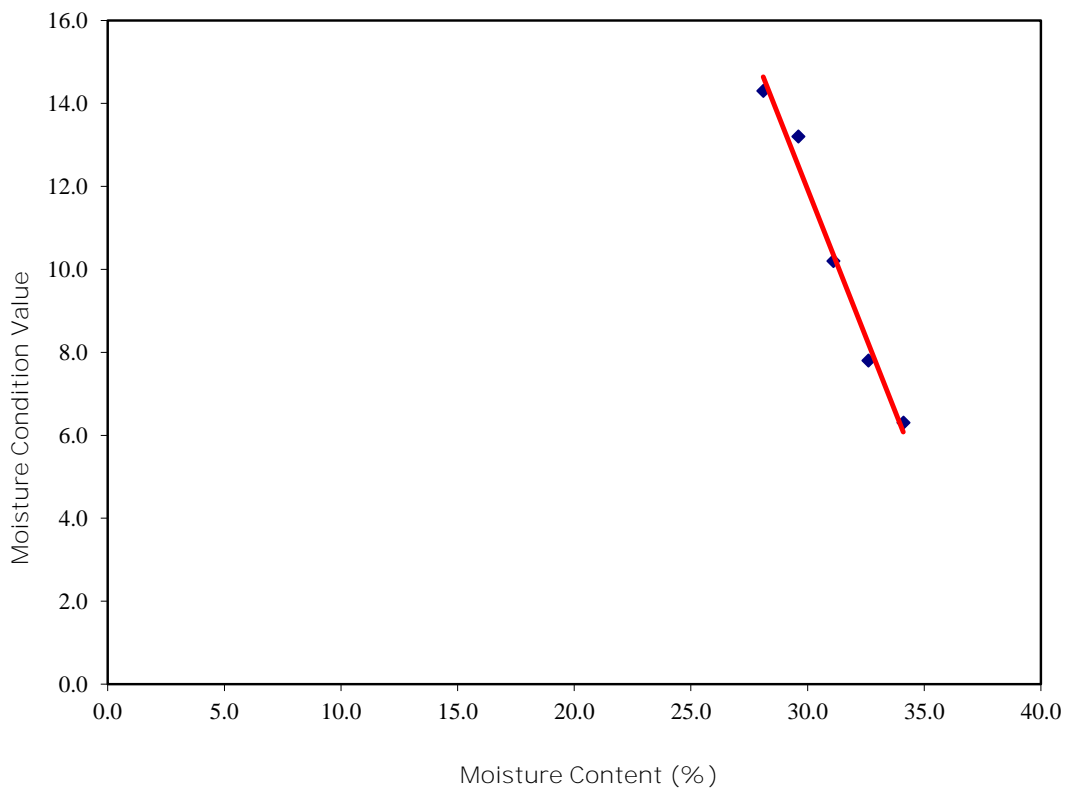


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH606
 Sample Number: 12
 Depth (m) : 4.50-5.00
 Sample Type B

Initial Moisture Content (%):	28.1
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	28.1	29.6	31.1	32.6	34.1
MCV	14.3	13.2	10.2	7.8	6.3

* reading unobtainable.



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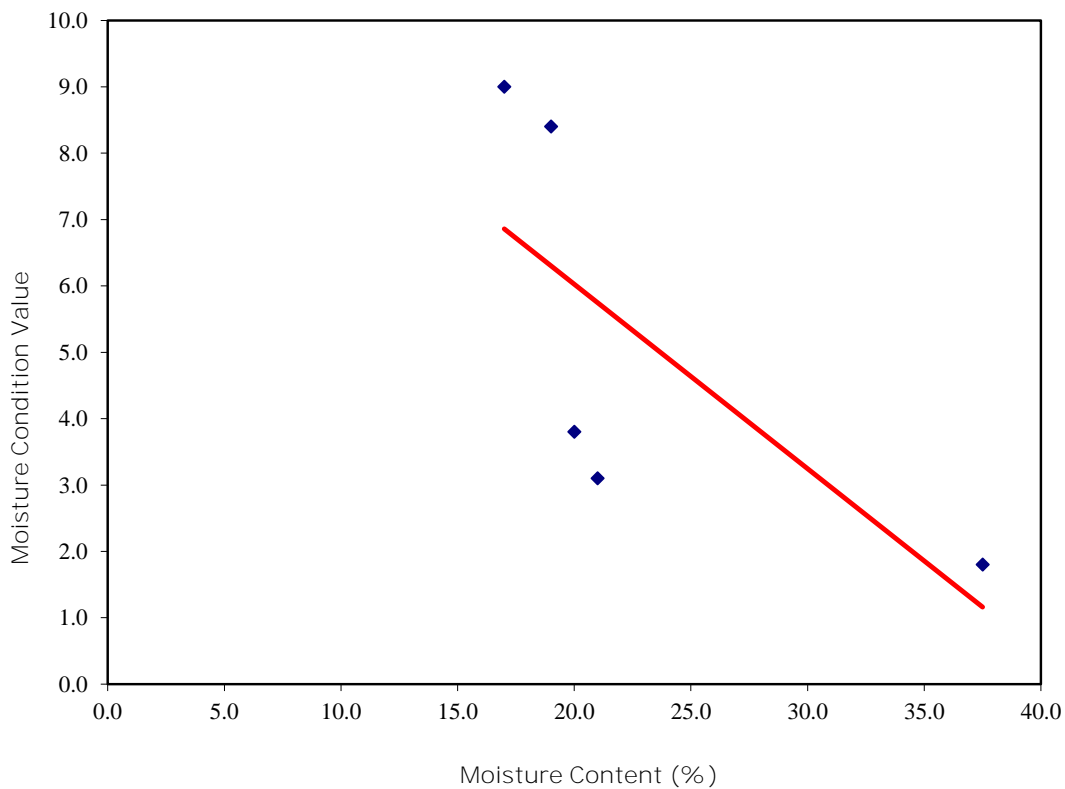


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH607
 Sample Number: 4
 Depth (m) : 0.50-0.80
 Sample Type: B

Initial Moisture Content (%):	37.5
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	17.0	19.0	20.0	21.0	37.5
MCV	9.0	8.4	3.8	3.1	1.8

* reading unobtainable.



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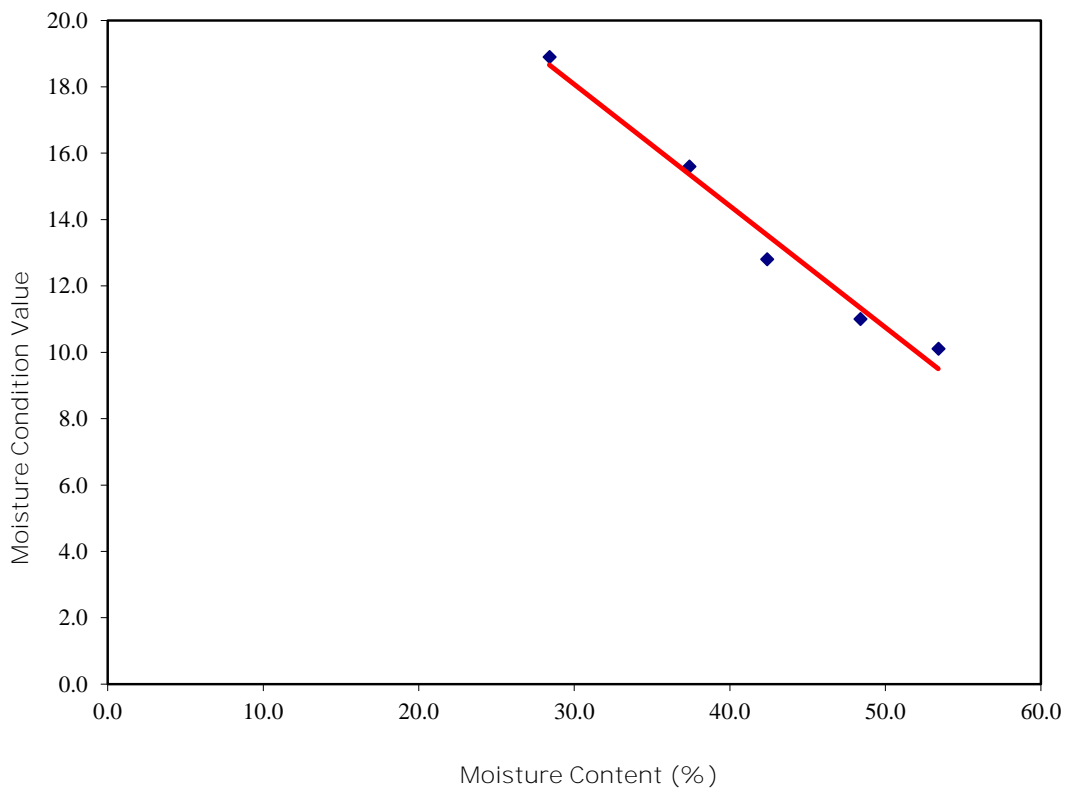


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH607
 Sample Number: 10
 Depth (m) : 1.90-2.40
 Sample Type B

Initial Moisture Content (%):	28.4
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	28.4	37.4	42.4	48.4	53.4
MCV	18.9	15.6	12.8	11.0	10.1

* reading unobtainable.



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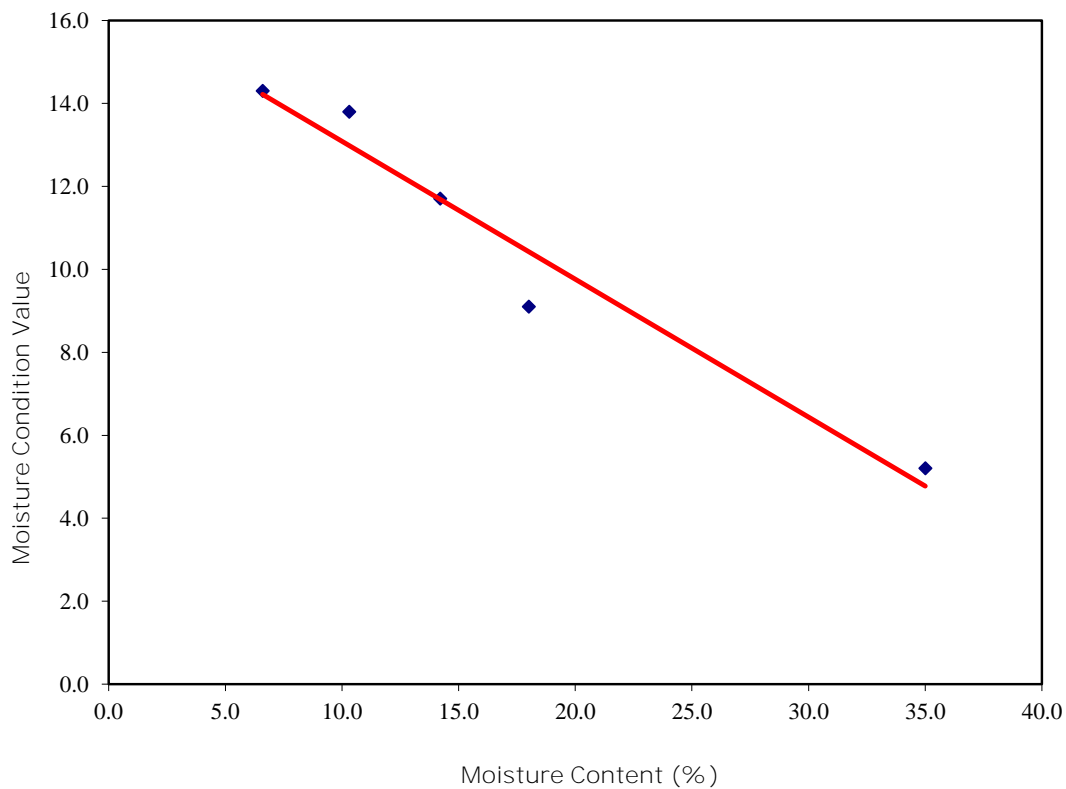


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH608
 Sample Number: 6
 Depth (m) : 4.00-5.00
 Sample Type: B

Initial Moisture Content (%):	35.0
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	6.6	10.3	14.2	18.0	35.0
MCV	14.3	13.8	11.7	9.1	5.2

* reading unobtainable.



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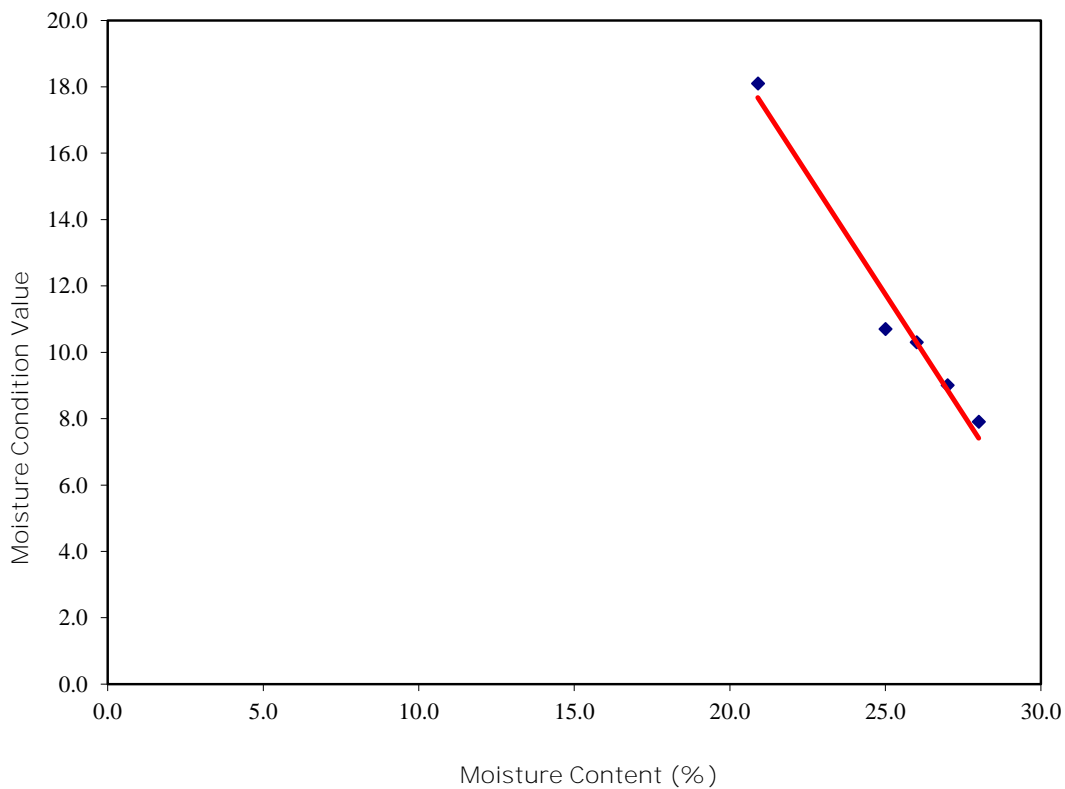


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH609
 Sample Number: 4
 Depth (m) : 0.30-0.90
 Sample Type B

Initial Moisture Content (%):	20.9
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	20.9	25.0	26.0	27.0	28.0
MCV	18.1	10.7	10.3	9.0	7.9

* reading unobtainable.



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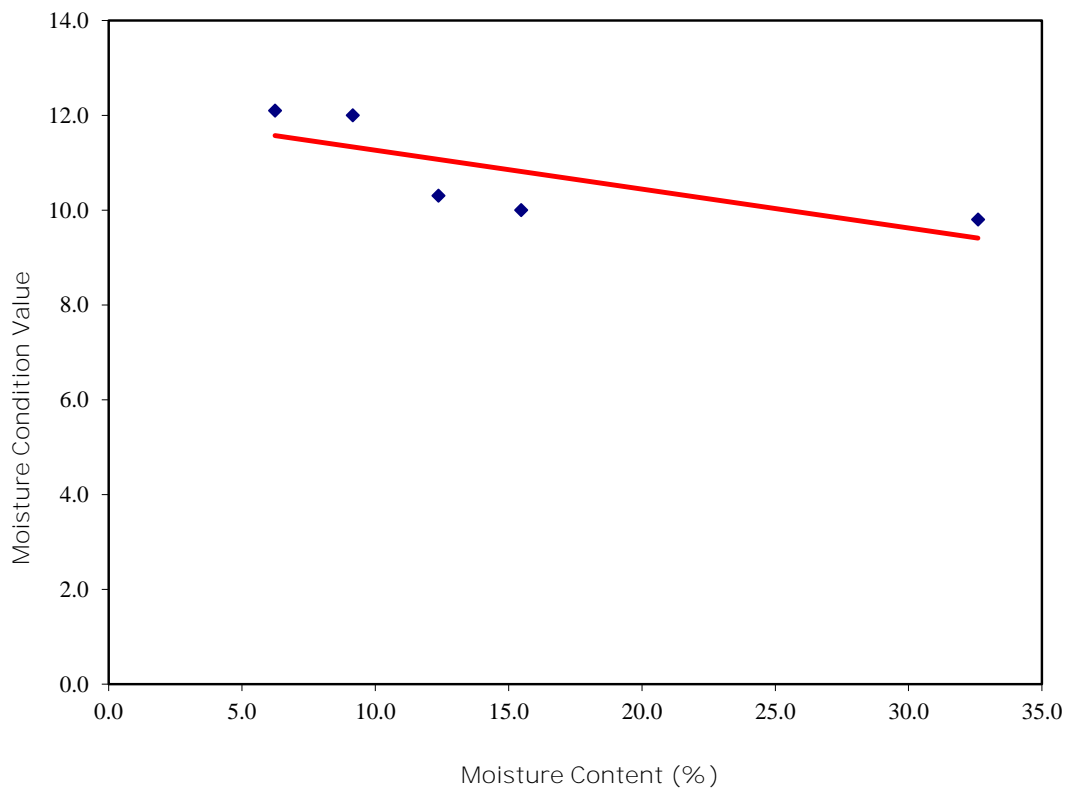


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH610
 Sample Number: 9
 Depth (m) : 3.00-4.00
 Sample Type B

Initial Moisture Content (%):	32.6
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	6.2	9.2	12.4	15.5	32.6
MCV	12.1	12.0	10.3	10.0	9.8

* reading unobtainable.



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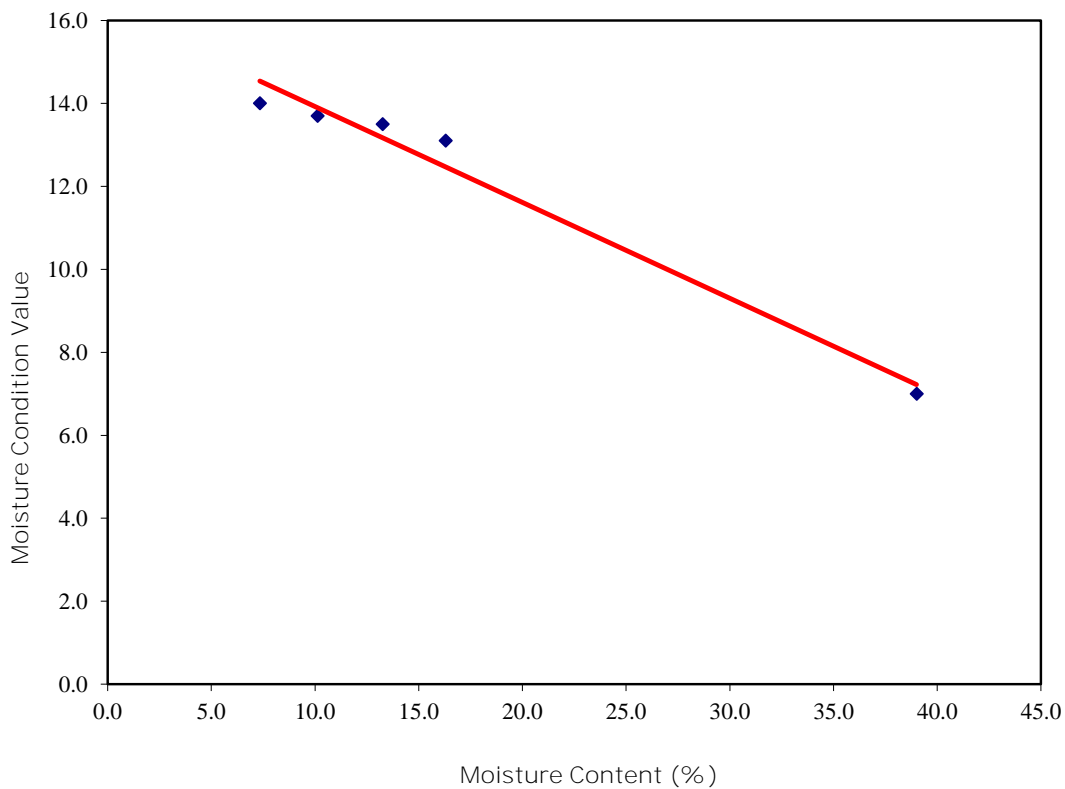


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 10
 Depth (m) : 5.00-5.50
 Sample Type: B

Initial Moisture Content (%):	39.0
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	7.3	10.1	13.3	16.3	39.0
MCV	14.0	13.7	13.5	13.1	7.0

* reading unobtainable.



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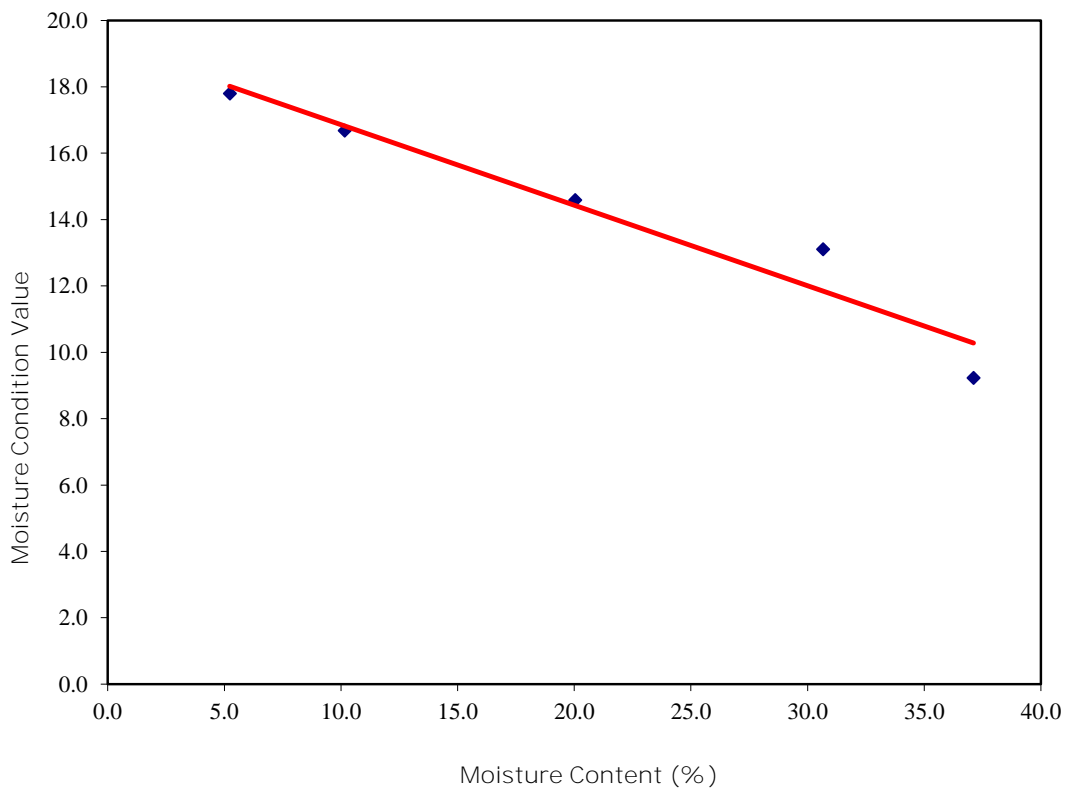


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1204
 Sample Number: 6
 Depth (m) : 2.40-2.80
 Sample Type B

Initial Moisture Content (%):	37.1
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	5.2	10.2	20.0	30.7	37.1
MCV	17.8	16.7	14.6	13.1	9.2

* reading unobtainable.



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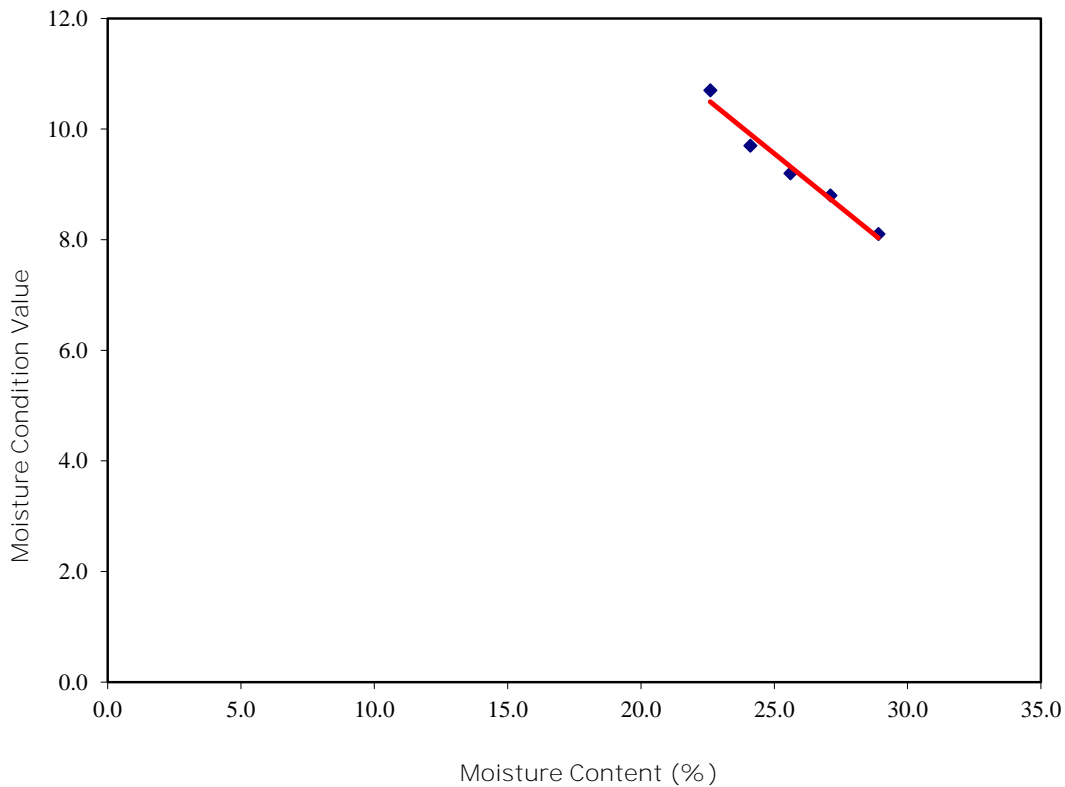


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
Location: Northstowe Phase 2
Contract Number: 34142
Hole Number: TP1215
Sample Number: 6
Depth (m) : 0.40-0.70
Sample Type B

Initial Moisture Content (%):	22.6
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	22.6	24.1	25.6	27.1	28.9
MCV	10.7	9.7	9.2	8.8	8.1

* reading unobtainable.



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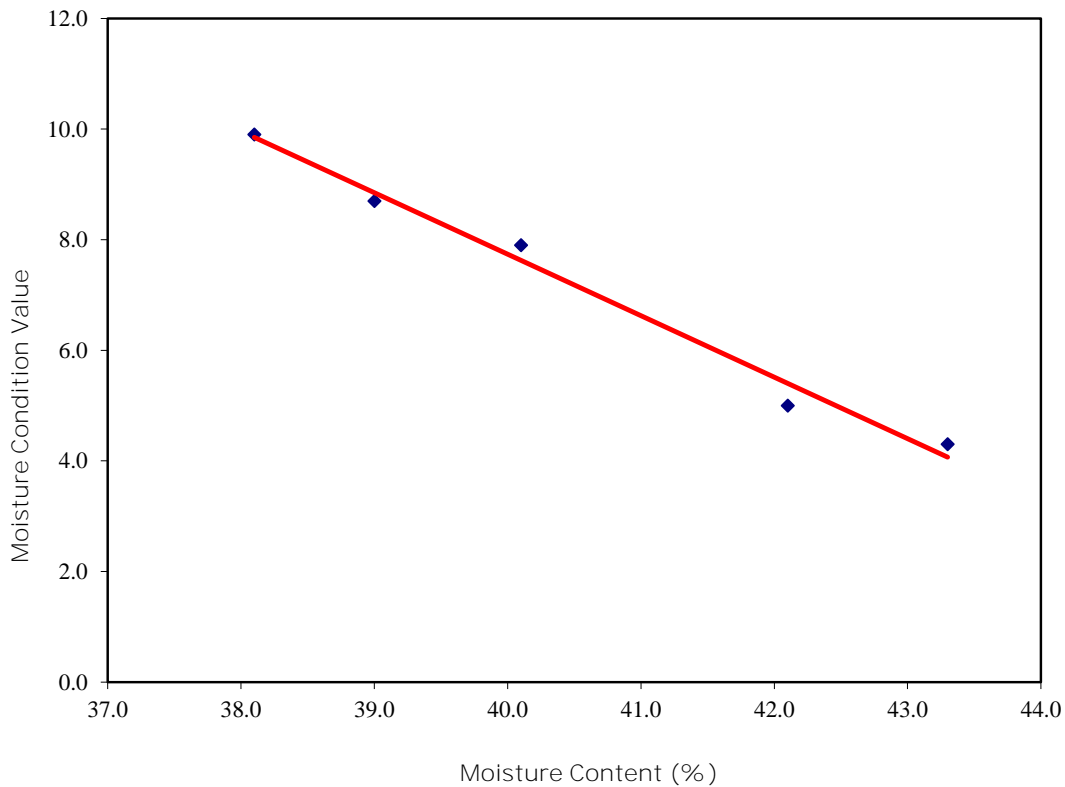


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1217
 Sample Number: 10
 Depth (m) : 2.8
 Sample Type B

Initial Moisture Content (%):	38.1
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	38.1	39.0	40.1	42.1	43.3
MCV	9.9	8.7	7.9	5.0	4.3

* reading unobtainable.



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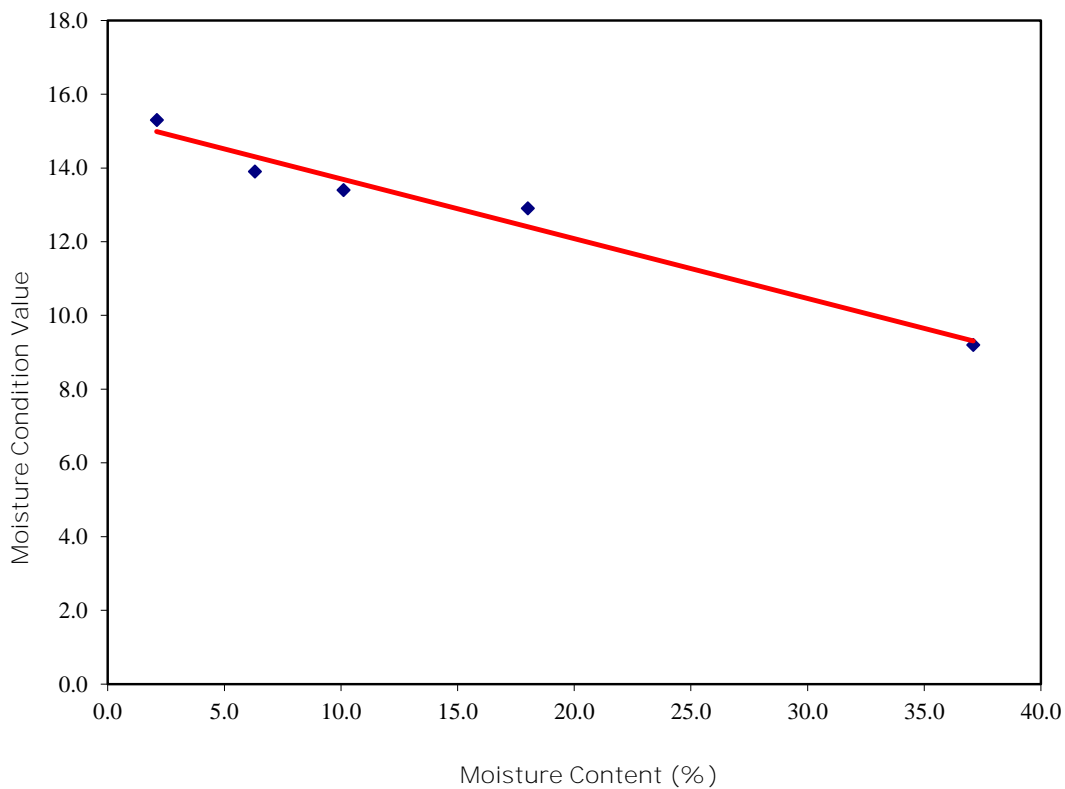


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1219
 Sample Number: 6
 Depth (m) : 2.30-2.70
 Sample Type B

Initial Moisture Content (%):	37.1
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	2.1	6.3	10.1	18.0	37.1
MCV	15.3	13.9	13.4	12.9	9.2

* reading unobtainable.



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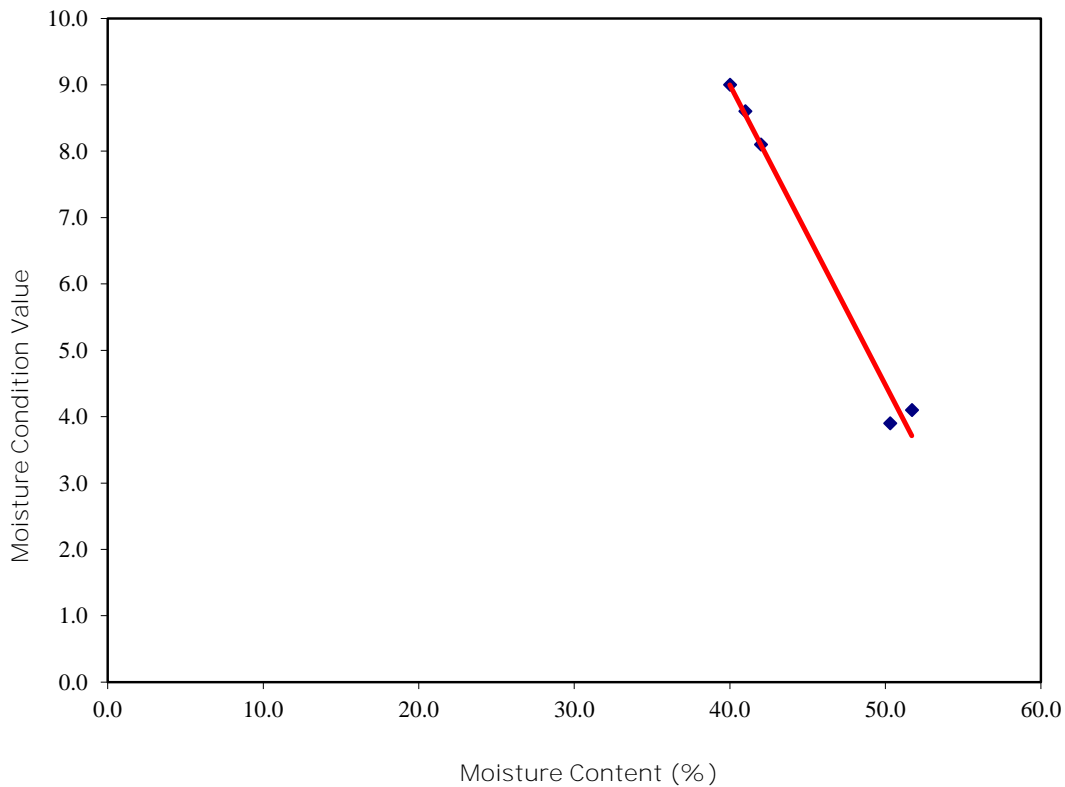


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1226
 Sample Number: 3
 Depth (m) : 2.7
 Sample Type B

Initial Moisture Content (%):	51.7
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	40.0	41.0	42.0	51.7	50.3
MCV	9.0	8.6	8.1	4.1	3.9

* reading unobtainable.



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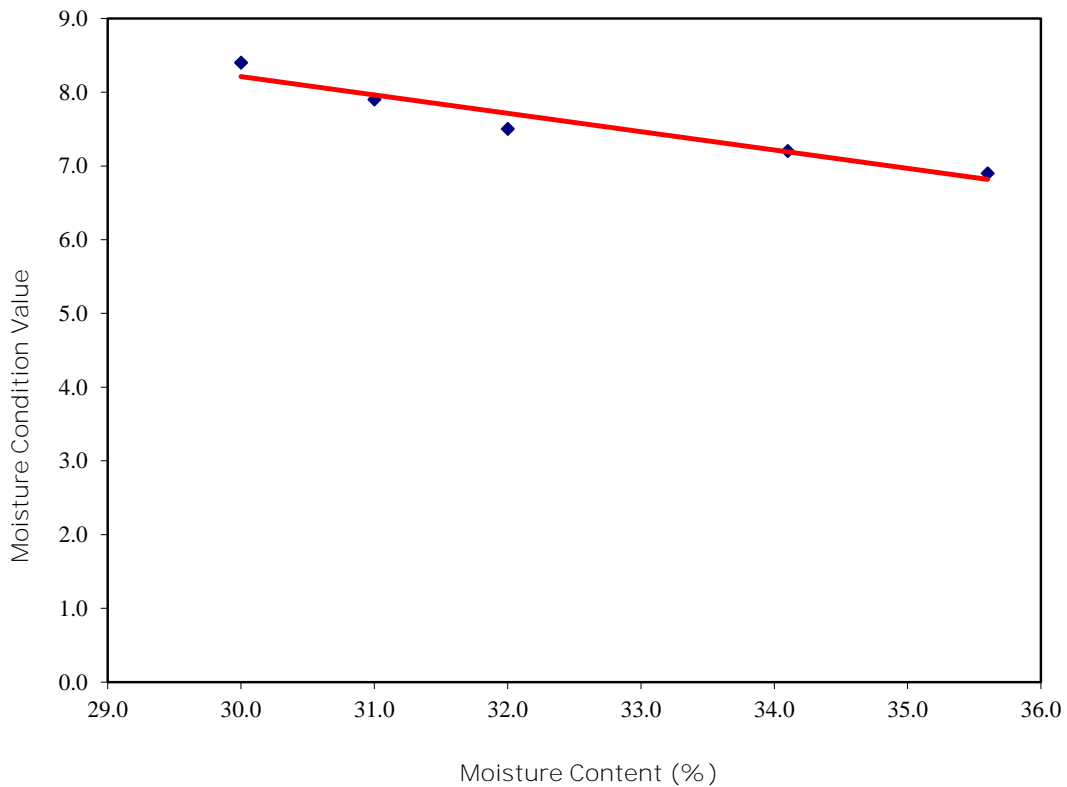


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1228
 Sample Number: 9
 Depth (m) : 1.60-1.70
 Sample Type B

Initial Moisture Content (%):	34.1
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	30.0	31.0	32.0	34.1	35.6
MCV	8.4	7.9	7.5	7.2	6.9

* reading unobtainable.



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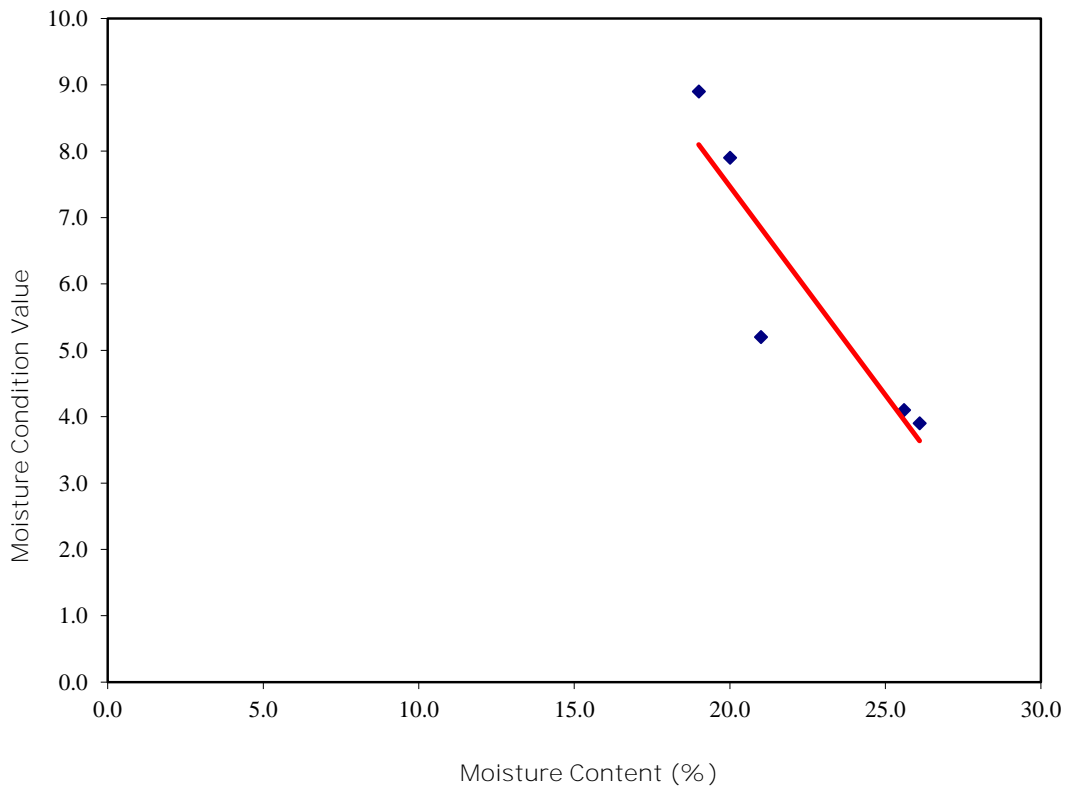


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1235
 Sample Number: 9
 Depth (m) : 1
 Sample Type: B

Initial Moisture Content (%):	25.6
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	19.0	20.0	21.0	25.6	26.1
MCV	8.9	7.9	5.2	4.1	3.9

* reading unobtainable.



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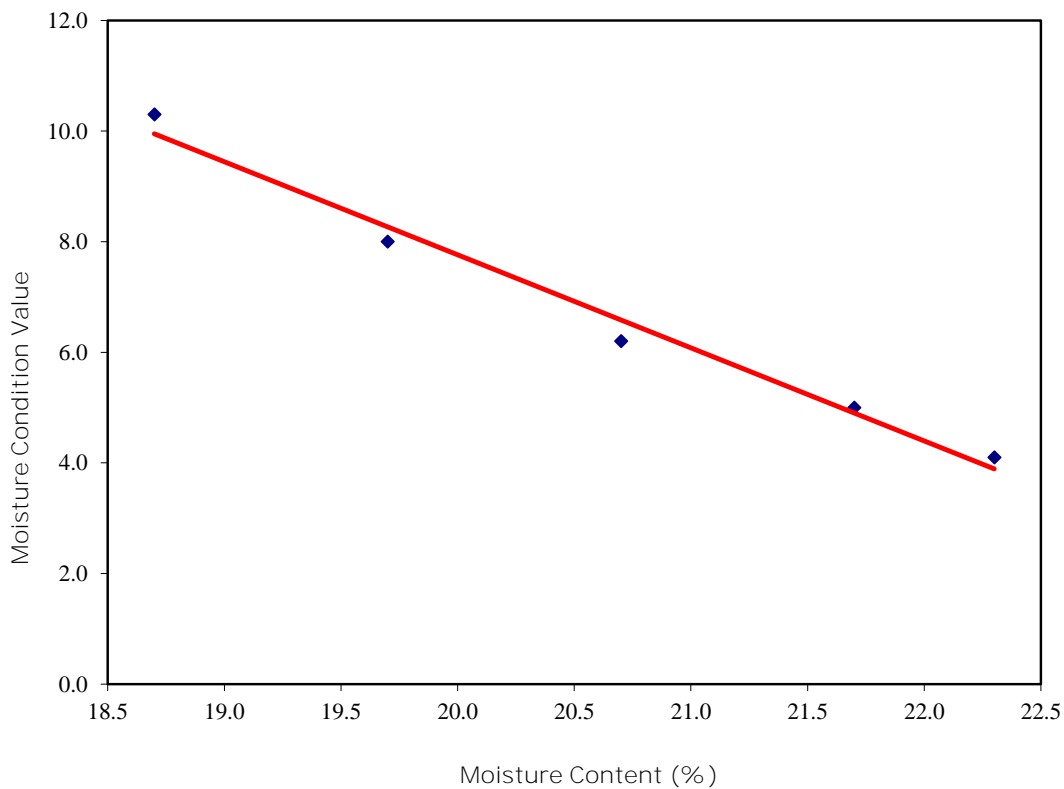


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP1235
 Sample Number: 15
 Depth (m) : 2.3
 Sample Type B

Initial Moisture Content (%):	18.7
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	18.7	19.7	20.7	21.7	22.3
MCV	10.3	8.0	6.2	5.0	4.1

* reading unobtainable.



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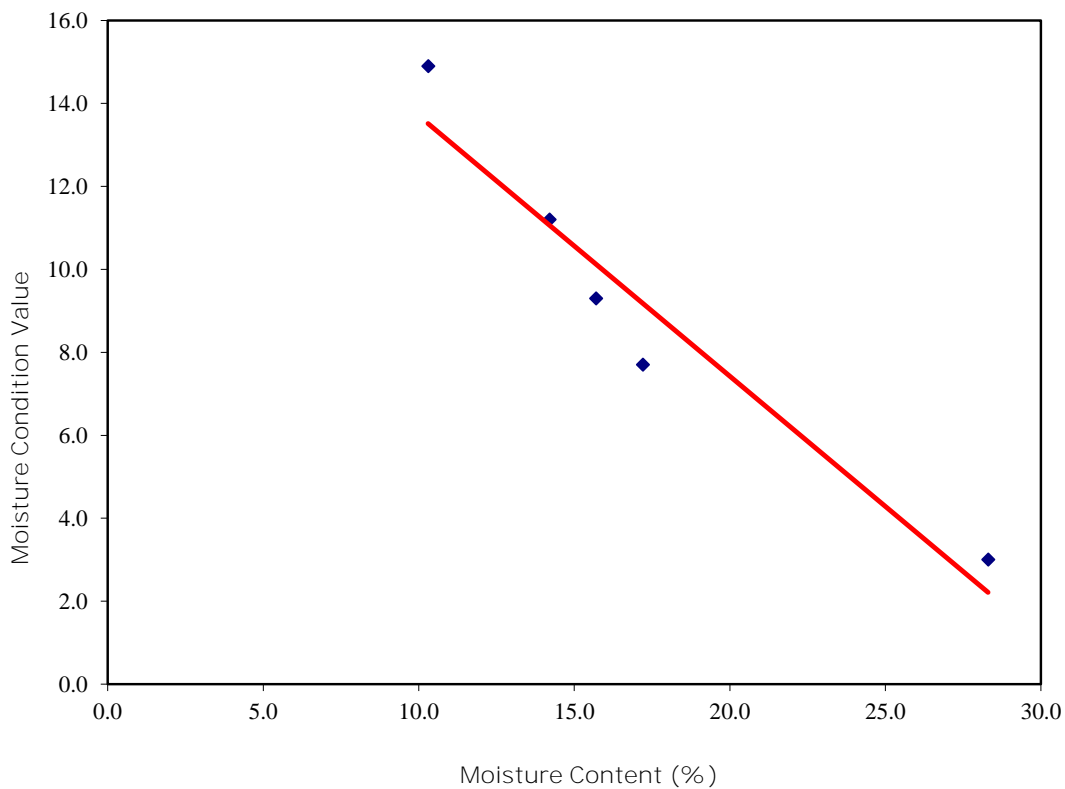


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP602
 Sample Number: 2
 Depth (m) : 0.10-0.20
 Sample Type: B

Initial Moisture Content (%):	28.3
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%)	10.3	14.2	15.7	17.2	28.3
MCV	14.9	11.2	9.3	7.7	3.0

* reading unobtainable.



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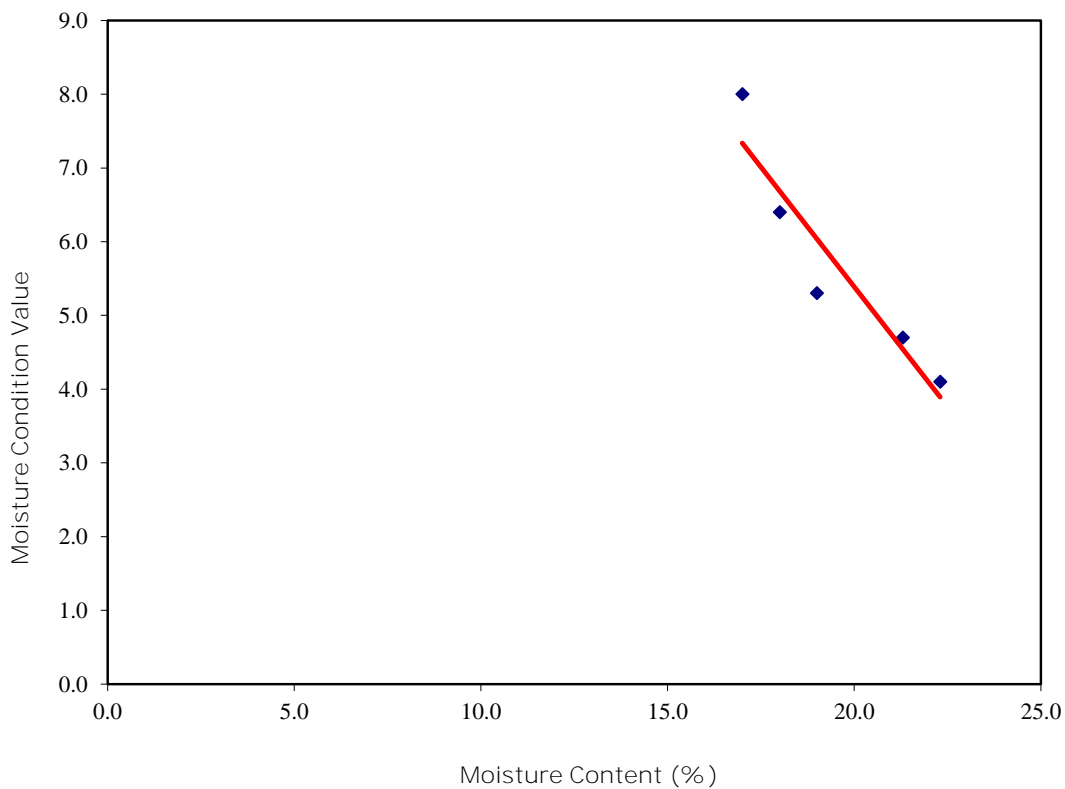


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP603
 Sample Number: 9
 Depth (m) : 2.50-2.90
 Sample Type: B

Initial Moisture Content (%):	21.3
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	17.0	18.0	19.0	21.3	22.3
MCV	8.0	6.4	5.3	4.7	4.1

* reading unobtainable.



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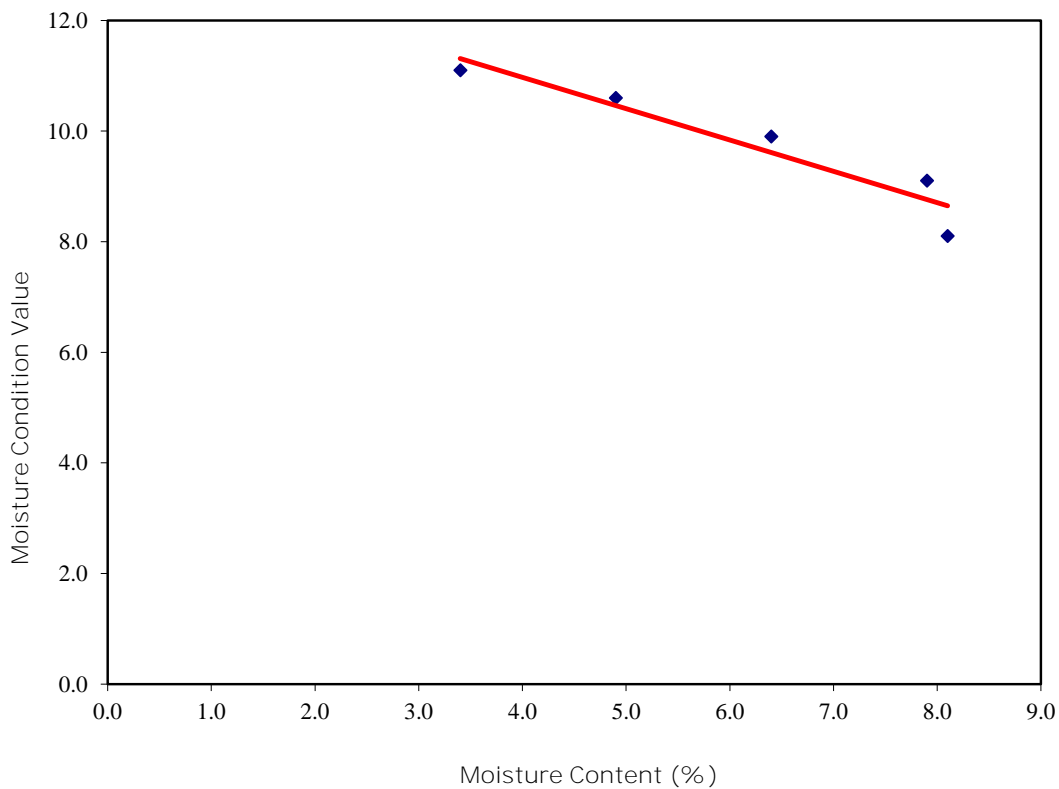


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP606
 Sample Number: 3
 Depth (m) : 1
 Sample Type: B

Initial Moisture Content (%):	3.4
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	3.4	4.9	6.4	7.9	8.1
MCV	11.1	10.6	9.9	9.1	8.1

* reading unobtainable.



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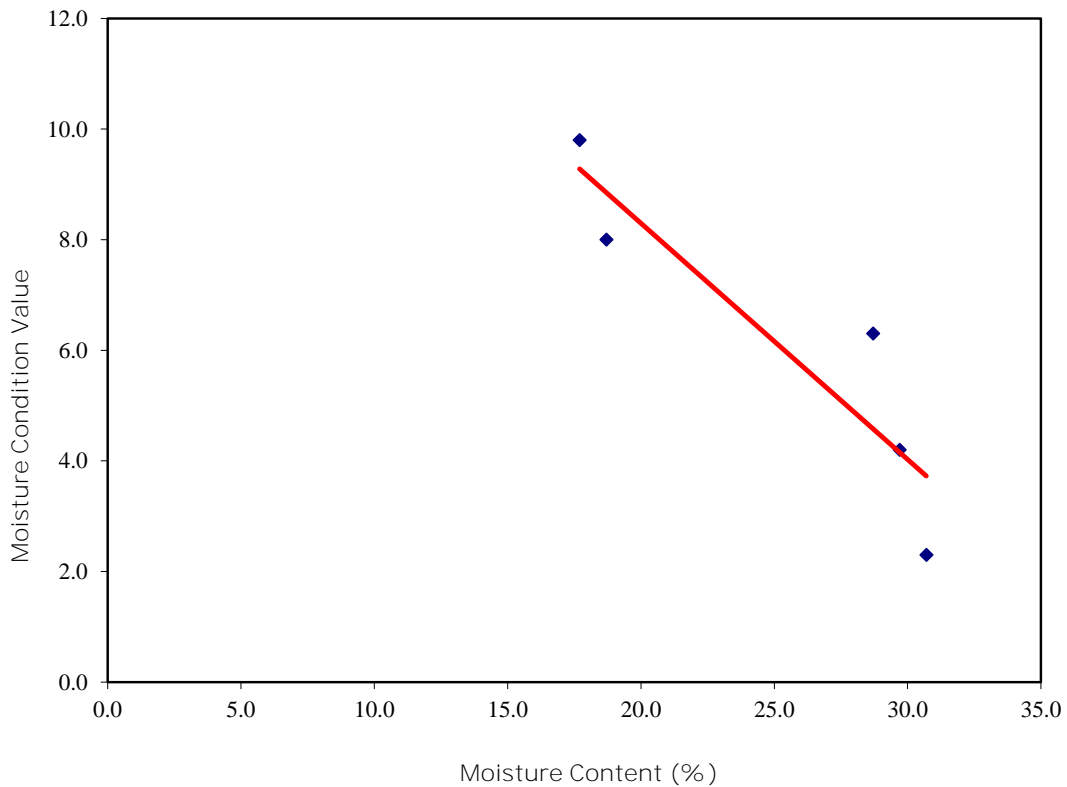


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP606A
 Sample Number: 2
 Depth (m) : 0.30-0.40
 Sample Type B

Initial Moisture Content (%):	17.7
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	17.7	18.7	28.7	29.7	30.7
MCV	9.8	8.0	6.3	4.2	2.3

* reading unobtainable.



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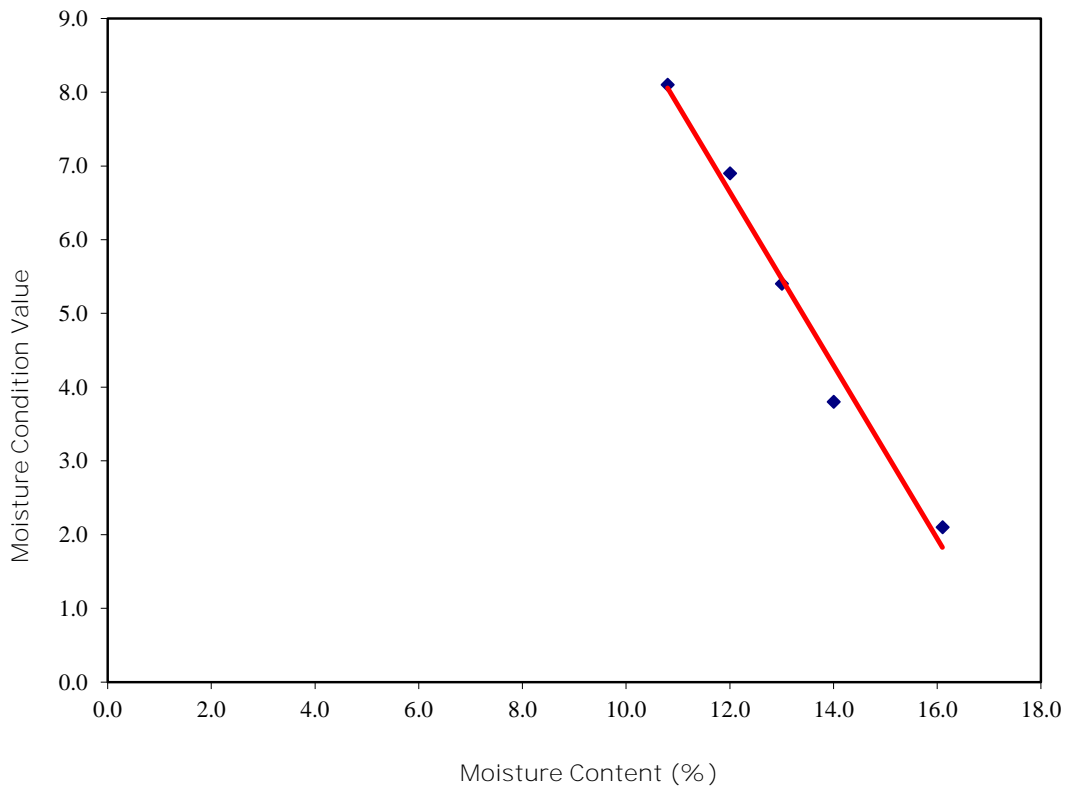


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP607
 Sample Number: 0
 Depth (m) : 2.15
 Sample Type: B

Initial Moisture Content (%):	10.8
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	10.8	12.0	13.0	14.0	16.1
MCV	8.1	6.9	5.4	3.8	2.1

* reading unobtainable.



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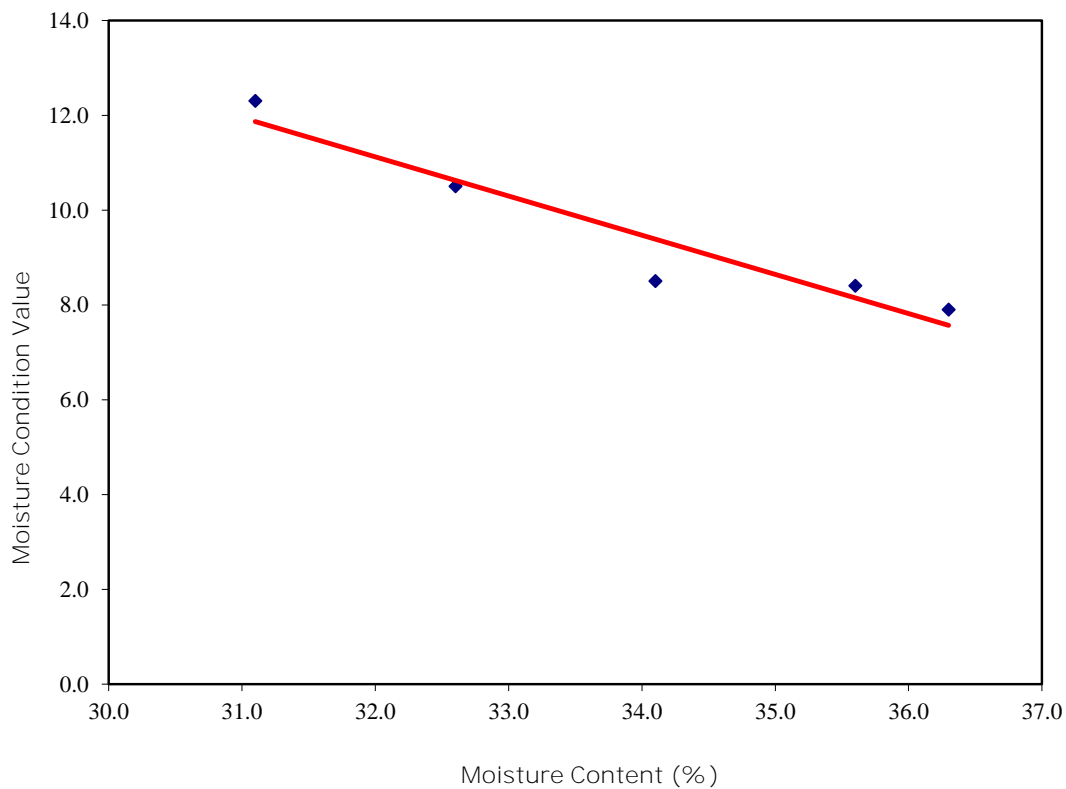


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP612
 Sample Number: 11
 Depth (m) : 2.50-2.80
 Sample Type B

Initial Moisture Content (%):	31.1
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	31.1	32.6	34.1	35.6	36.3
MCV	12.3	10.5	8.5	8.4	7.9

* reading unobtainable.



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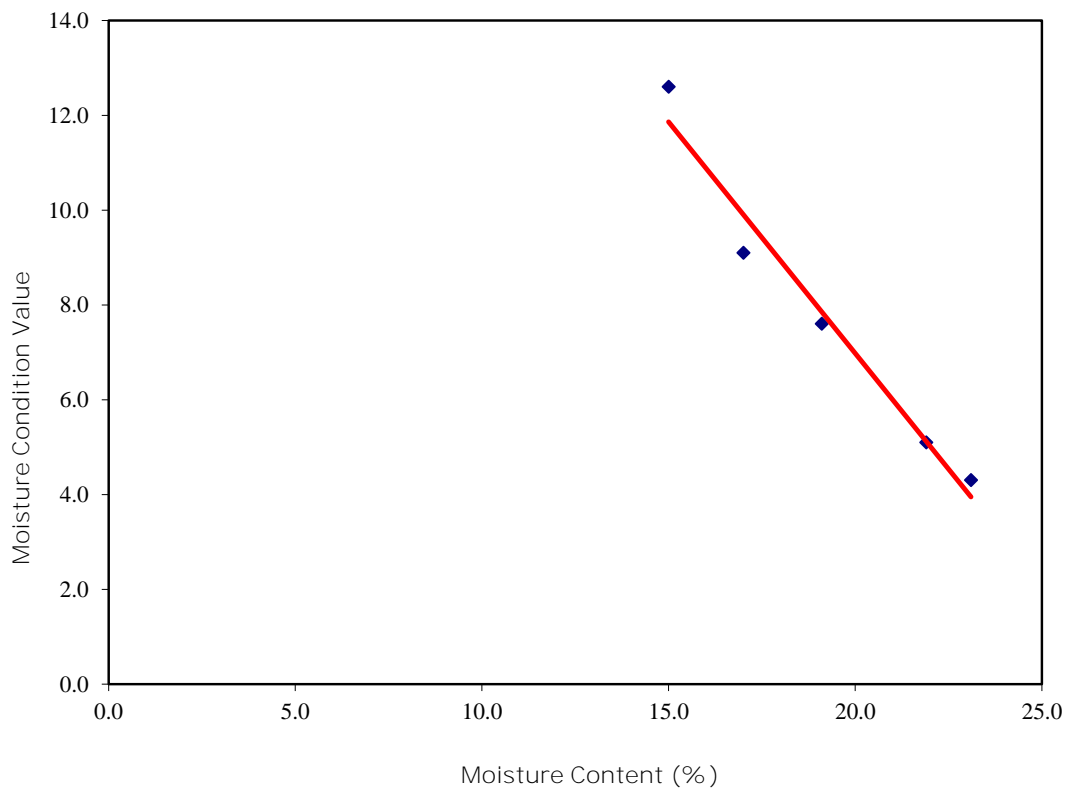


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP622
 Sample Number: 2
 Depth (m) : 3.1
 Sample Type B

Initial Moisture Content (%):	21.9
Single/Separate Samples Tested:	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%)	15.0	17.0	19.1	21.9	23.1
MCV	12.6	9.1	7.6	5.1	4.3

* reading unobtainable.



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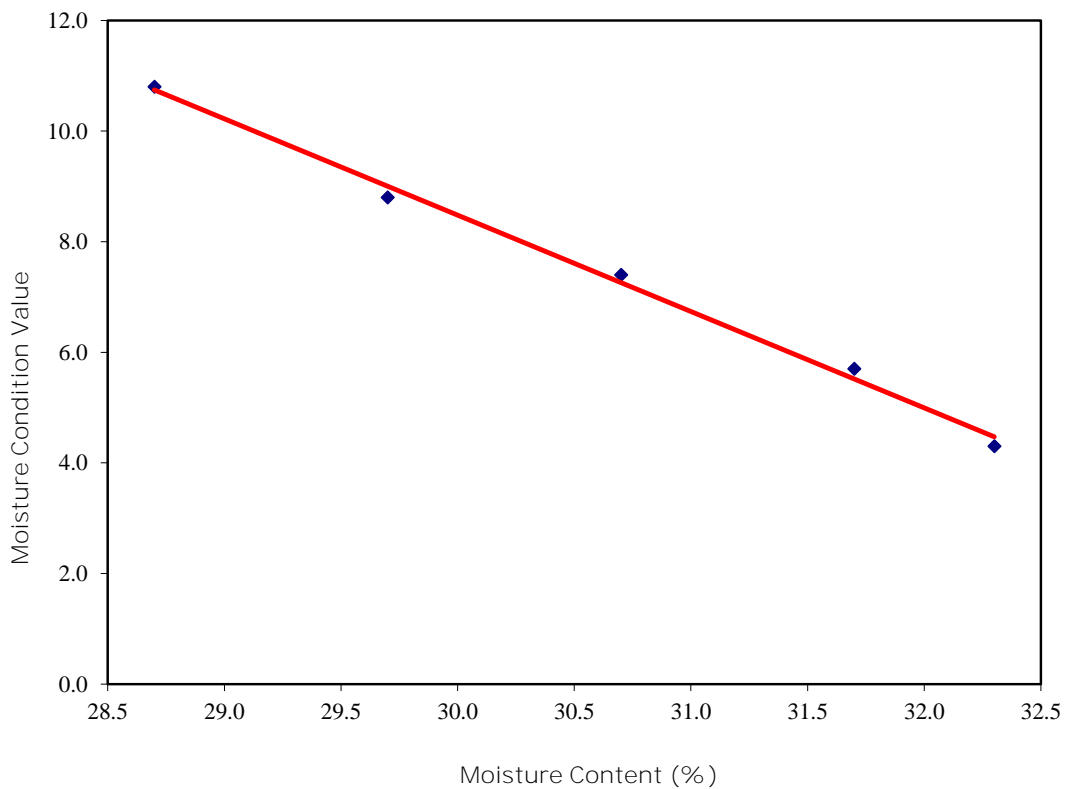


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TP624
 Sample Number: 4
 Depth (m) : 0.6
 Sample Type B

Initial Moisture Content (%):	28.7
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	28.7	29.7	30.7	31.7	32.3
MCV	10.8	8.8	7.4	5.7	4.3

* reading unobtainable.



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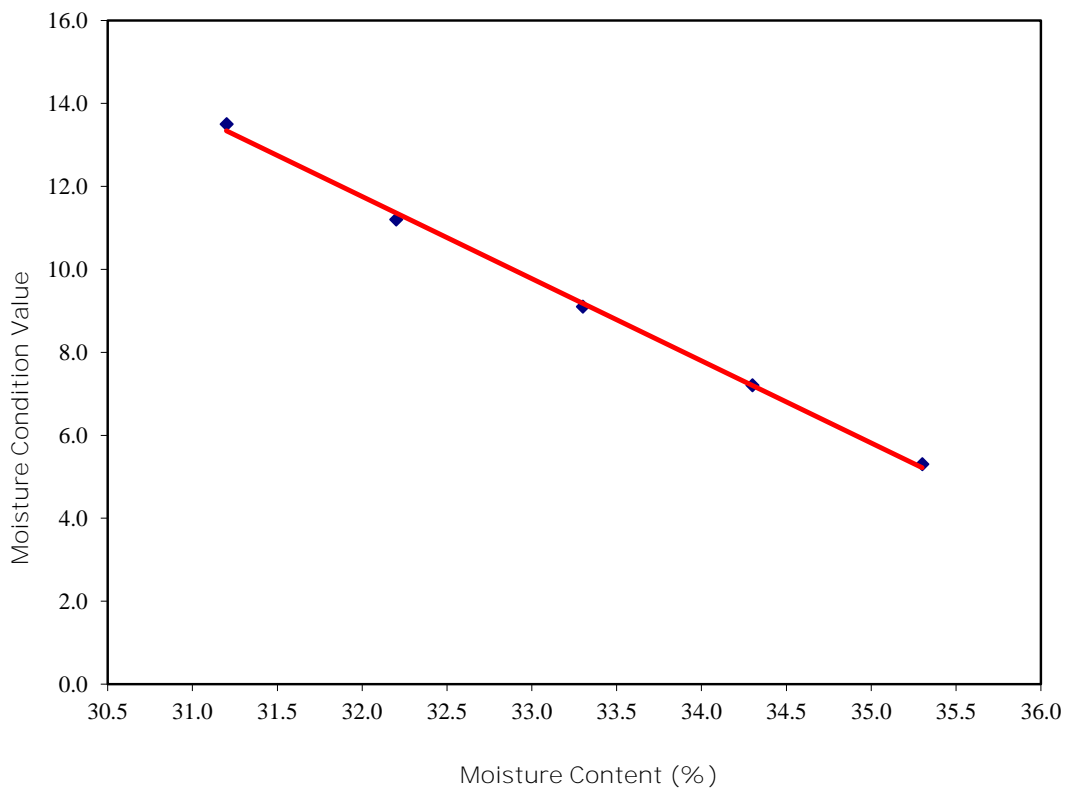


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: TPBH612
 Sample Number: 9
 Depth (m) : 3.3
 Sample Type B

Initial Moisture Content (%):	31.2
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	31.2	32.2	33.3	34.3	35.3
MCV	13.5	11.2	9.1	7.2	5.3

* reading unobtainable.



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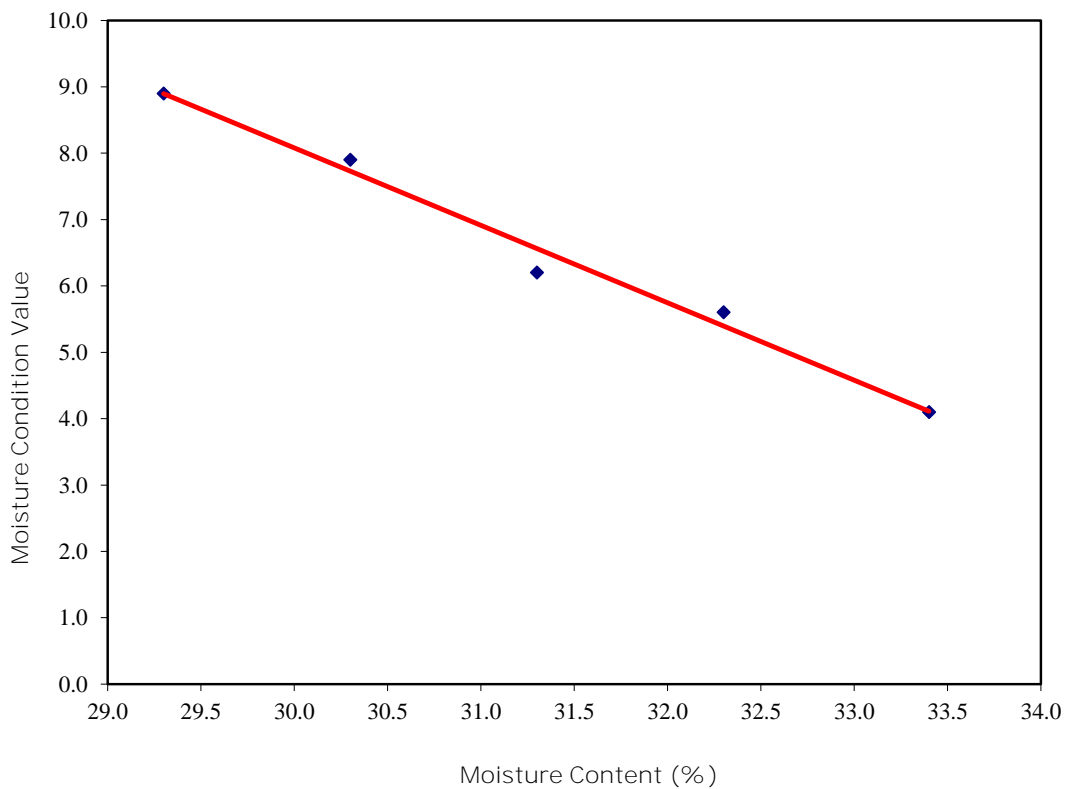


Moisture Condition Value Calibration

BS 1377:Part 4:1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: WS621
 Sample Number: 13
 Depth (m) : 2.40-3.00
 Sample Type B

Initial Moisture Content (%):	29.3
Single/Separate Samples Tested.	Single
Material Retained on the 20mm BS Test Sieve (%):	0



Test Results.

Test Number.	1	2	3	4	5
Moisture Content (%).	29.3	30.3	31.3	32.3	33.4
MCV	8.9	7.9	6.2	5.6	4.1

* reading unobtainable.



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SUMMARY OF SHEAR STRENGTH TESTS (TOTAL STRESS)

(BS 1377 : PART 7 : 3 : 1990)

Borehole Number	Sample Number	Depth from (m)	Depth to (m)	Sample Type	Diameter of Sampling Tube (mm)	Location of Test Horizon	Vane Size (mm)	Sample Undisturbed/ Remoulded	Hand Vane (kPa)		Moisture Content at Test Horizon (%)	Description of Soil at Test Horizon
									Peak	Residual		
									BH1102	4		
BH1102	11	3.00	3.45	B			33	Remoulded	5	3	52.8	Grey slightly silty CLAY
BH1102	20	13.00	13.50	B			19	Remoulded	45	22	38.5	Grey silty CLAY
BH1110		1.00	1.50	B			19	Remoulded	73	30	17.3	Brown slightly clayey gravelly silty CLAY
BH601	3	1.00	2.00	B			19	Remoulded	46	25	23.7	Brownish grey CLAY

SYMBOLS: Vane Size : 19/33mm



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Northstowe Phase 2

Contract No. 34142

Client Ref No. UA008426-01

Test Report: SUMMARY OF SOIL DENSITY TESTS.
(B.S. 1377 : PART 4 : 4.3/4.4 : 1990)

Client Ref.: UA008426-01
 Contract Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: As Stated
 Sample Number: As Stated
 Depth (m): As Stated
 Sample Type: As Stated

Hole Number	Sample Number	Depth from (m)	Depth to (m)	Sample Type	Moisture Content %	Bulk Density (Mg/m3)	Maximum Dry Density (Mg/m3)	Minimum Dry Density (Mg/m3)	Method of Laboratory compaction (kg Rammer)	Remarks
BH607	18	0.80	1.20	B	23.0		1.65	1.37		
BH607	8	1.20	1.70	B	15.0		1.78	1.39		
BH608	2	0.30	1.20	B	11.0		1.87	1.45		
BH608	3	1.20	2.00	B	11.0		1.75	1.51		
BH608	5	3.00	4.00	B	14.0		1.71	1.42		
BH611	13	4.50	4.90	B	15.0		1.81	1.44		
TP605	7	0.90	1.70	B	24.0		1.58	1.40		
TP606A	3	0.40	0.70	B	17.0		1.68	1.39		
TP606A	4	0.70	1.50	B	17.0		1.68	1.37		
TP623	10	0.90		B	13.0		1.80	1.43		
TP633	7	1.50		B	31.0		1.58	1.40		
WS616	1	0.00	0.40	B	27.0		1.36	0.97		
WS616	3	0.40	1.20	B	23.0		1.58	1.19		
WS616	6	1.20	1.70	B	21.0		1.59	1.20		
WS617	3	0.40	1.20	B	21.0		1.69	1.30		
WS618	1	0.00	0.50	B	27.0		1.35	1.03		
WS618	3	0.50	1.20	B	20.0		1.71	1.42		
WS618	6	1.20	2.00	B	14.0		1.69	1.42		
WS618	9	2.00	3.00	B	19.0		1.69	1.39		
WS619	3	0.50	1.20	B	34.0		1.29	1.00		



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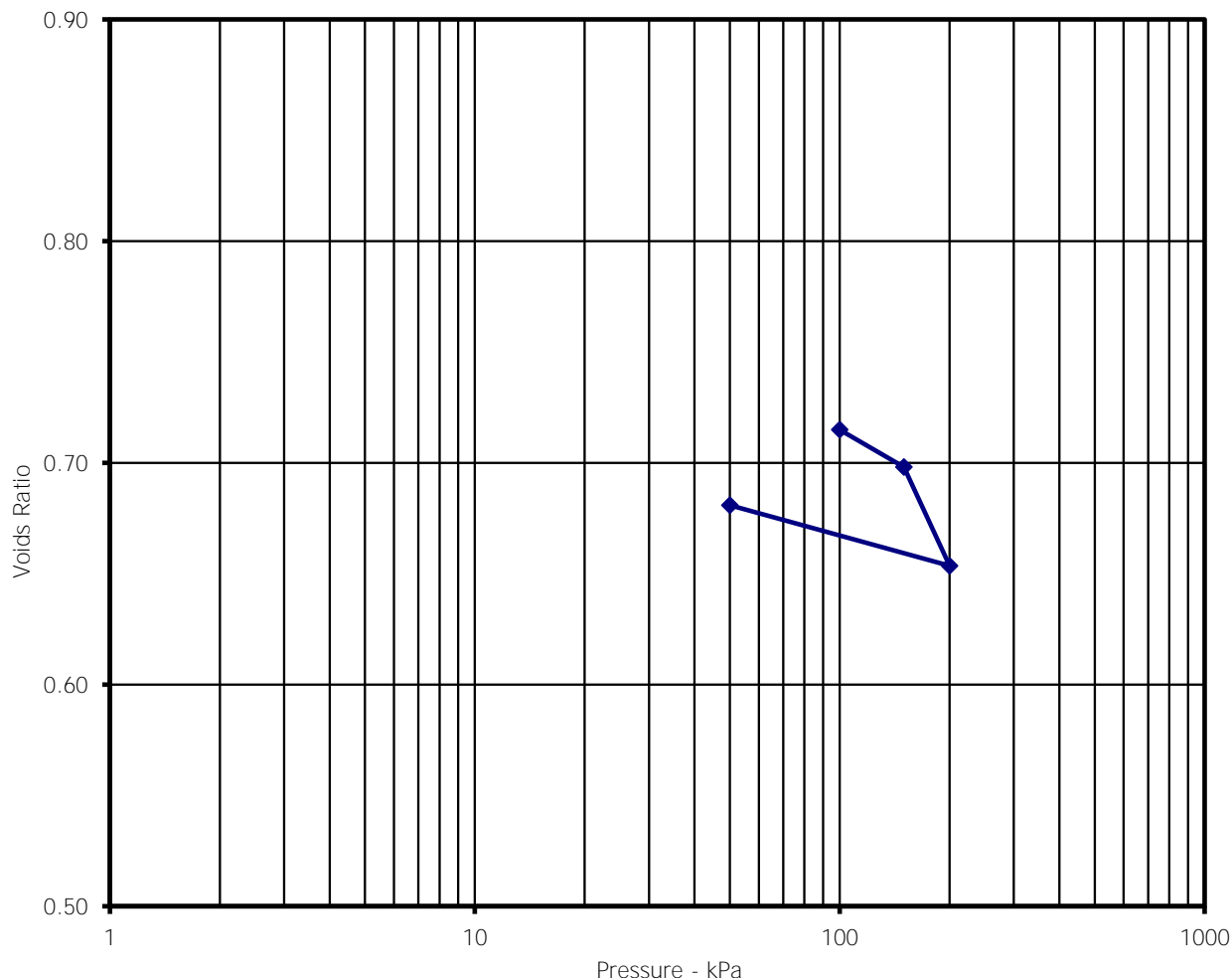


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH601 / 30
 Depth (m) : 3.00 -
 Sample Type: UT
 Description : Brown/grey slightly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	30	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.99	0 - 50	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.53	50 - 100	0.23	10.0	
Voids Ratio:	0.7272	100 - 150	0.200	2.5	Location of specimen with sample
Degree of saturation:	108.4	150 - 200	0.520	0.57	top
Height (mm):	18.64	200 - 50	0.110	6.7	Remarks:
Diameter (mm)	74.63				
Particle Density (Mg/m3)	2.65				
Assumed					



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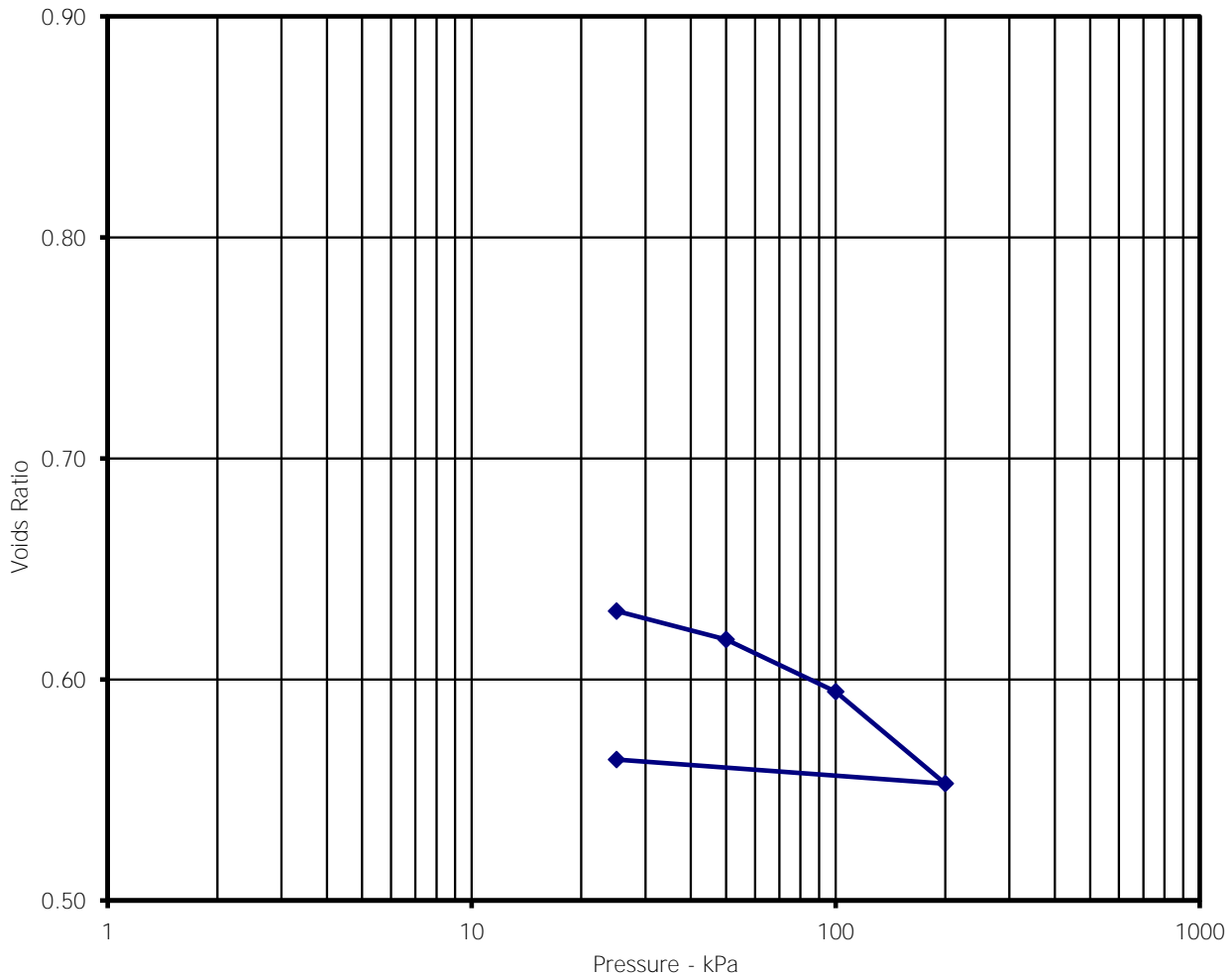
2788

Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH602 / 28
 Depth (m) : 3.00 - 3.20
 Sample Type: UT
 Description : Grey/brown fine gravelly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	26	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	2.03	0 - 25	0.31	18	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.61	25 - 50	0.32	18.0	
Voids Ratio:	0.6435	50 - 100	0.290	18	Location of specimen with sample top
Degree of saturation:	107.7	100 - 200	0.260	17.00	
Height (mm):	19.88	200 - 25	0.040	7.3	Remarks:
Diameter (mm)	75.05				
Particle Density (Mg/m3)	2.65				
Assumed					



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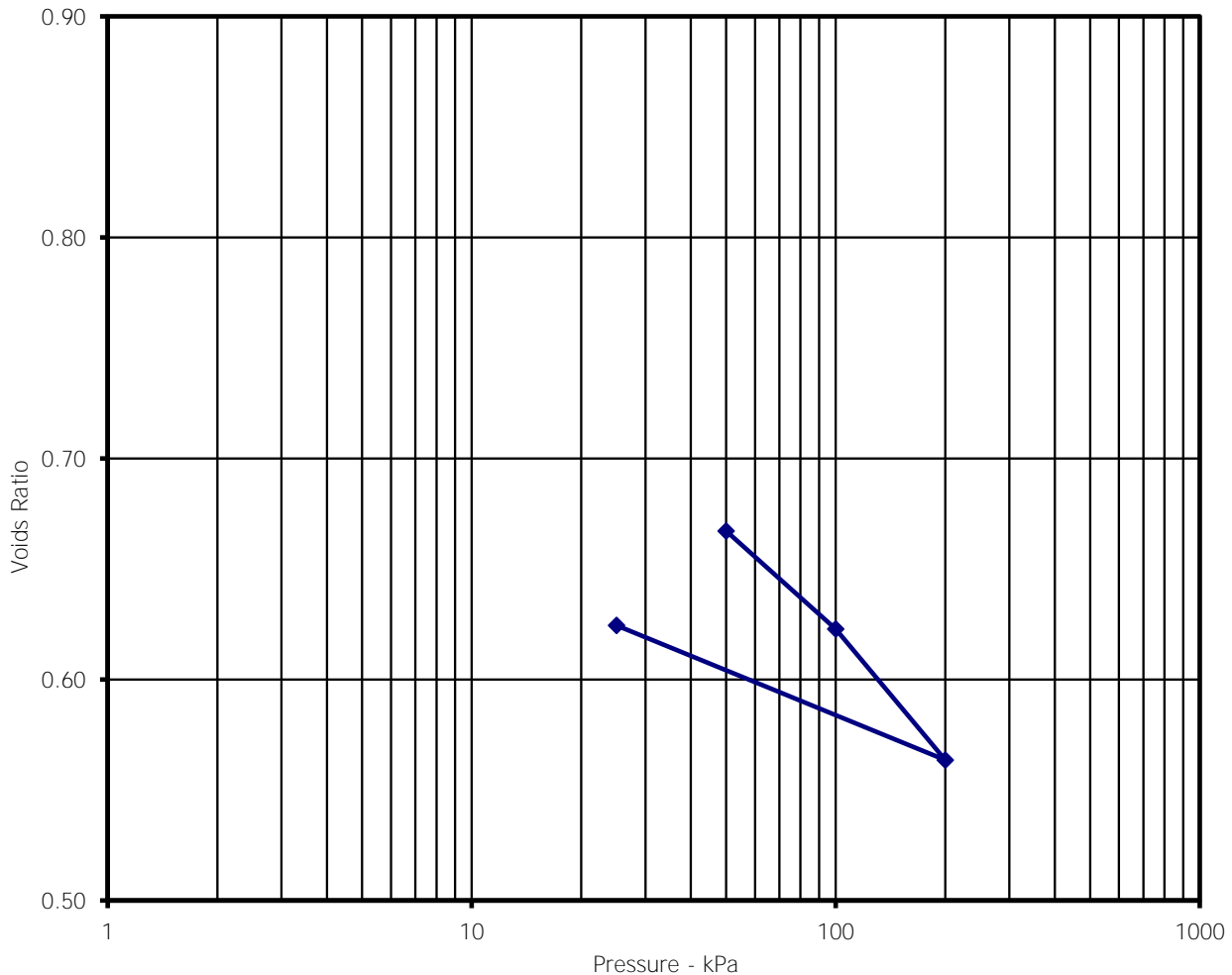


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH603 / 16
 Depth (m) : 1.20 - 1.65
 Sample Type: UT
 Description : Grey/brown slightly sandy slightly fine gravelly silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	26	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.99	0 - 25	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.58	25 - 50	0.62	18.0	
Void Ratio:	0.6812	50 - 100	0.530	6.6	Location of specimen with sample
Degree of saturation:	102.9	100 - 200	0.370	16.00	top
Height (mm):	19.76	200 - 25	0.220	3.6	Remarks:
Diameter (mm)	75				
Particle Density (Mg/m3)	2.65				
Assumed					



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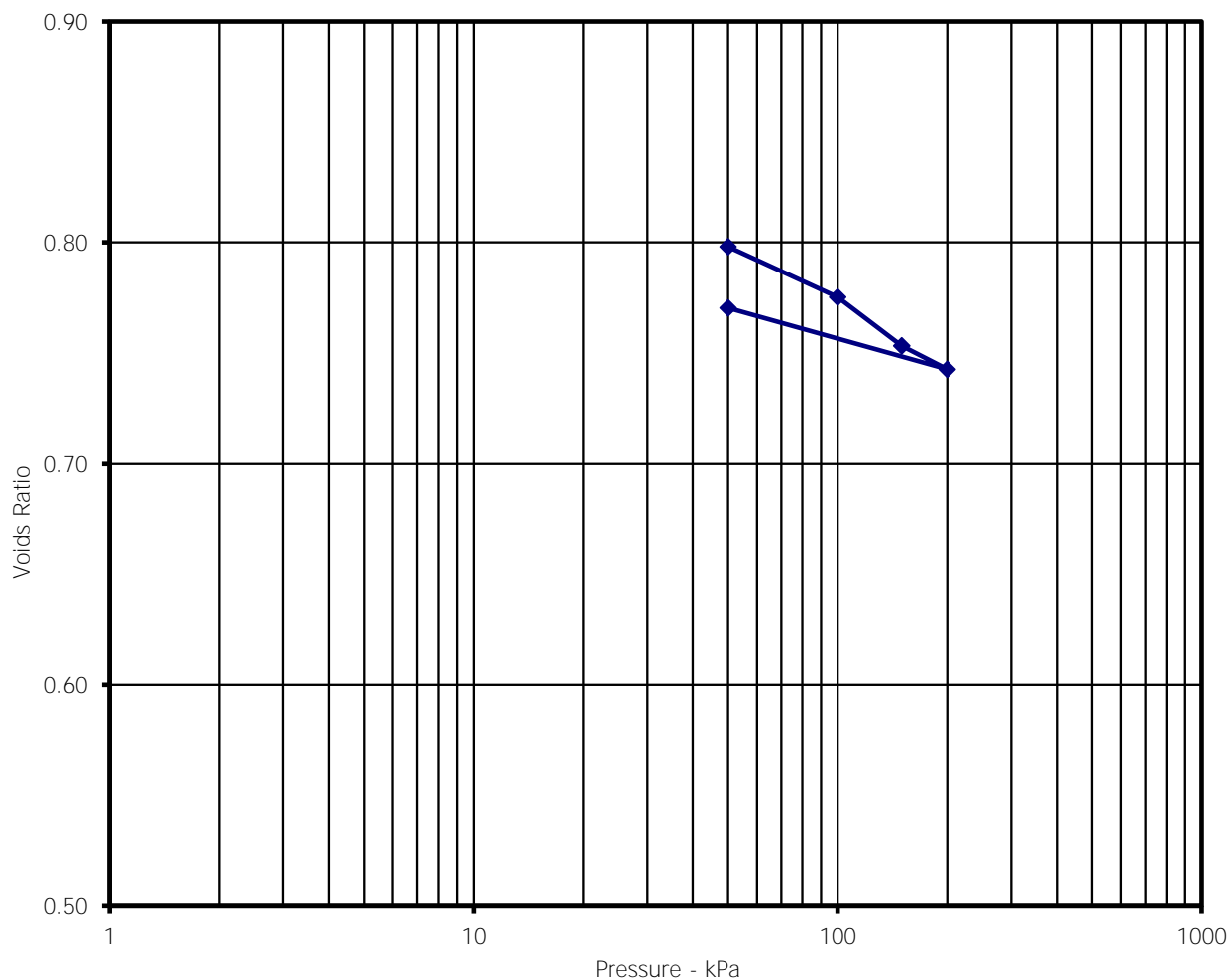


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH603 / 29
 Depth (m) : 4.50 - 4.95
 Sample Type: UT
 Description : Grey/brown slightly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	34	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.92	0 - 50	0.57	14	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.43	50 - 100	0.25	18.0	
Void Ratio:	0.8507	100 - 150	0.250	2.6	Location of specimen with sample middle
Degree of saturation:	106.7	150 - 200	0.120	0.62	
Height (mm):	19.77	200 - 50	0.110	1.5	Remarks:
Diameter (mm)	74.71				
Particle Density (Mg/m3)	2.65				
Assumed					



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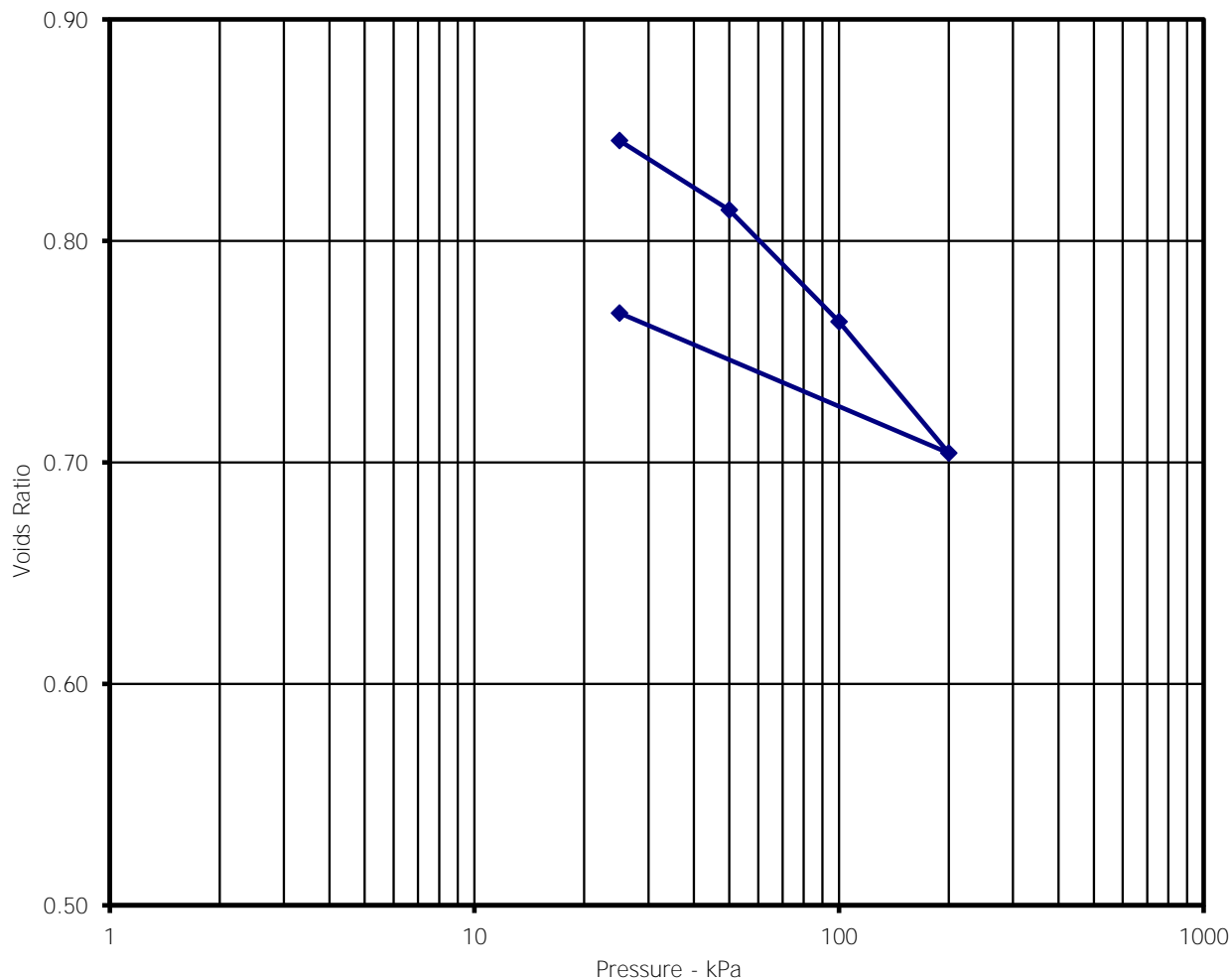


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH604 / 11
 Depth (m) : 3.00 - 3.45
 Sample Type: UT
 Description : Grey silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	36	kPa	m ² /MN	m ² /yr	Cv Calculated using t ₉₀
Bulk Density (Mg/m ³):	1.93	0 - 25	0.59	17	Nominal Laboratory Temperature
Dry Density (Mg/m ³):	1.41	25 - 50	0.68	11.0	
Void Ratio:	0.8730	50 - 100	0.560	2	Location of specimen with sample top
Degree of saturation:	110.5	100 - 200	0.340	0.78	
Height (mm):	19.93	200 - 25	0.210	0.5	Remarks:
Diameter (mm)	50.06				
Particle Density (Mg/m ³)	2.65				
Assumed					



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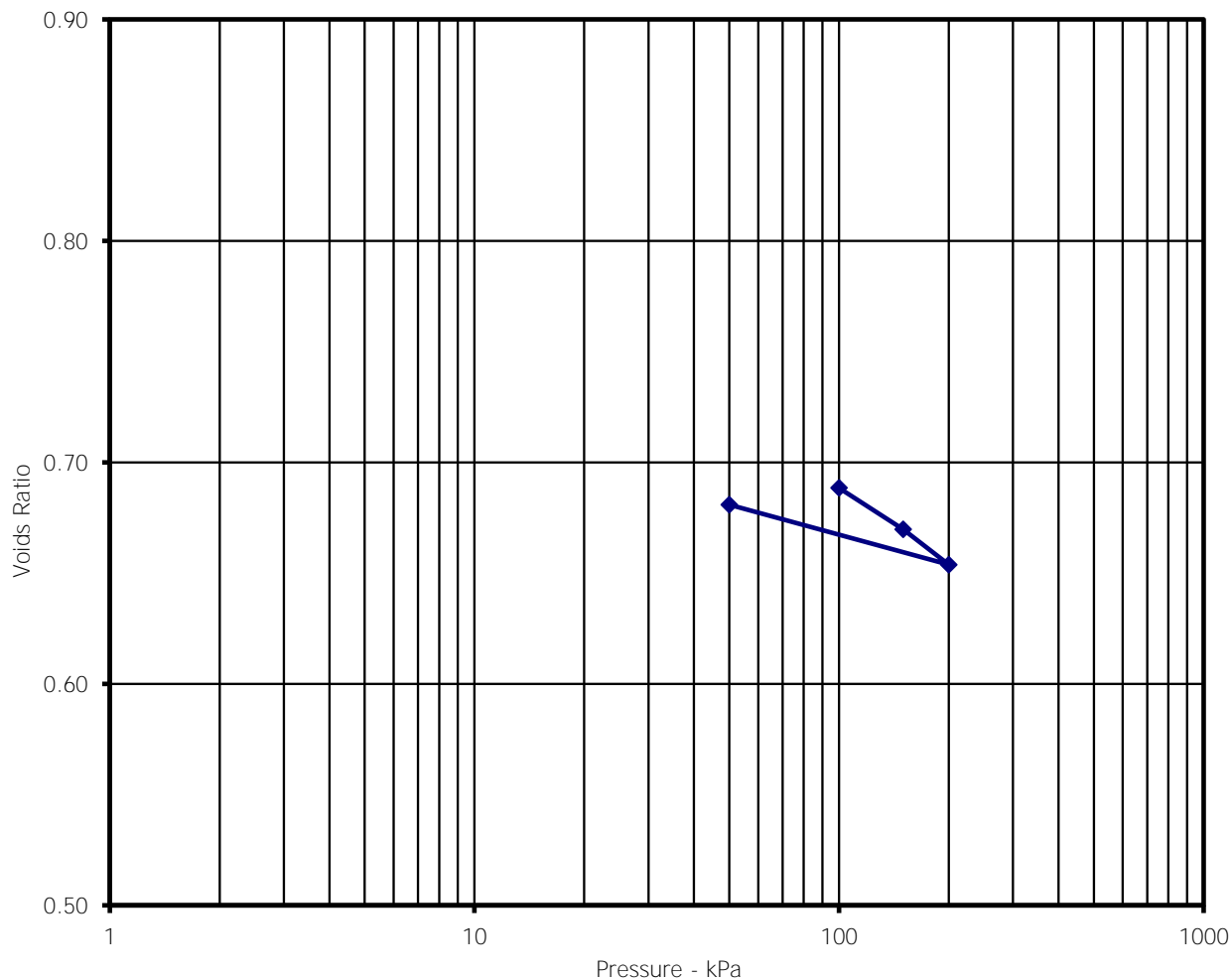


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH609 / 18
 Depth (m) : 3.00 - 3.45
 Sample Type: UT
 Description : Brown/grey silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	23	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.93	0 - 50	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.57	50 - 100	0.24	12.0	
Void Ratio:	0.6894	100 - 150	0.220	11	Location of specimen with sample
Degree of saturation:	89.2	150 - 200	0.190	2.00	top
Height (mm):	19.96	200 - 50	0.110	32.0	Remarks:
Diameter (mm)	50.05				
Particle Density (Mg/m3)	2.65				
Assumed					



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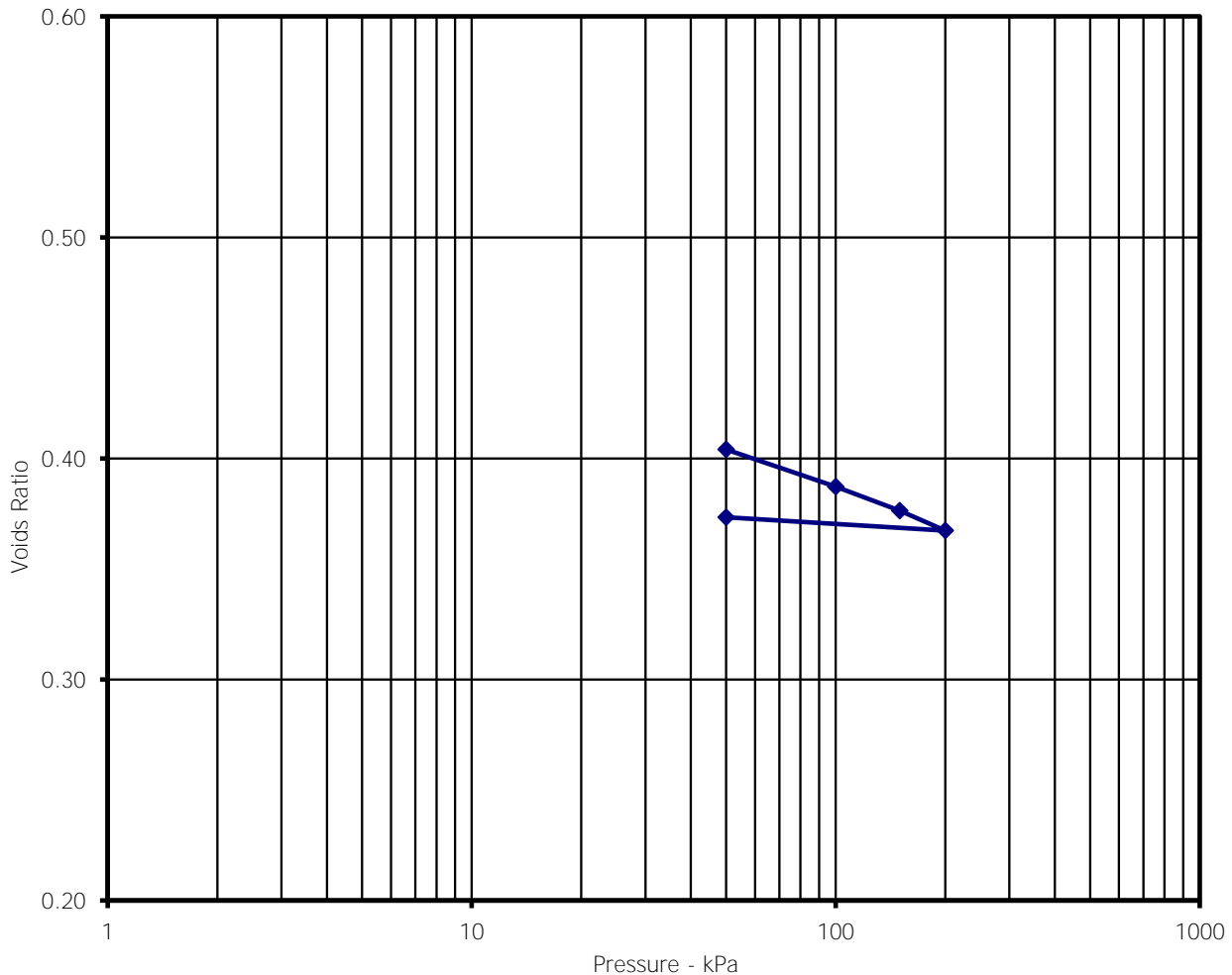


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH610 / 13
 Depth (m) : 5.00 - 5.45
 Sample Type: UT
 Description : Grey/brown slightly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	18	kPa	m ² /MN	m ² /yr	Cv Calculated using t ₉₀
Bulk Density (Mg/m ³):	2.16	0 - 50	0.54	8	Nominal Laboratory Temperature
Dry Density (Mg/m ³):	1.84	50 - 100	0.24	11.0	
Void Ratio:	0.4431	100 - 150	0.160	3.3	Location of specimen with sample top
Degree of saturation:	105.8	150 - 200	0.130	13.00	
Height (mm):	19.77	200 - 50	0.029	7.3	Remarks:
Diameter (mm)	74.91				
Particle Density (Mg/m ³)	2.65				
Assumed					



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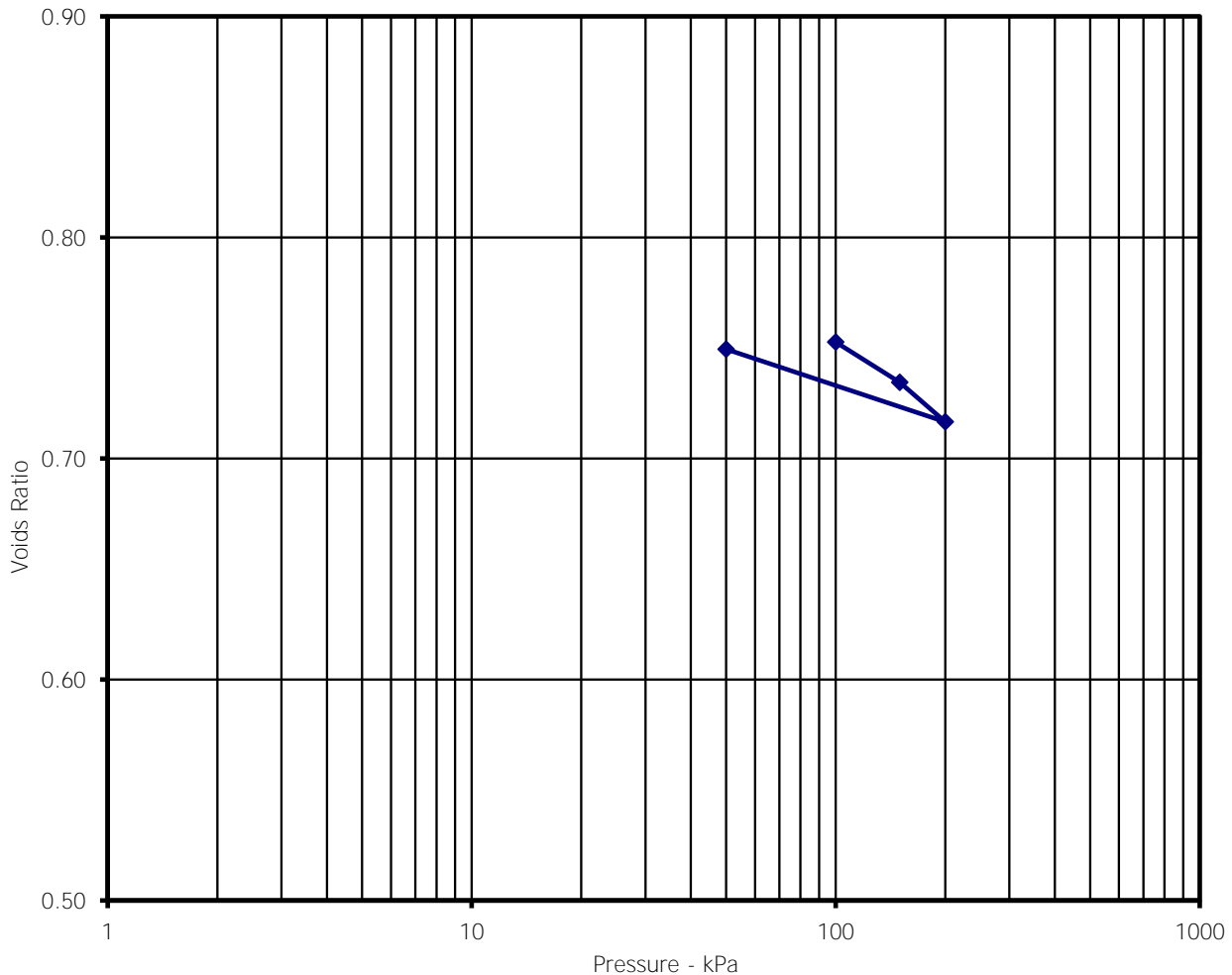


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH613 / 32
 Depth (m) : 3.00 - 3.45
 Sample Type: UT
 Description : Brown/grey slightly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	31	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.94	0 - 50	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.49	50 - 100	0.40	18.0	
Void Ratio:	0.7829	100 - 150	0.210	8.6	Location of specimen with sample
Degree of saturation:	103.9	150 - 200	0.210	0.83	top
Height (mm):	19.65	200 - 50	0.130	11.0	Remarks:
Diameter (mm)	74.99				
Particle Density (Mg/m3)	2.65				
Assumed					



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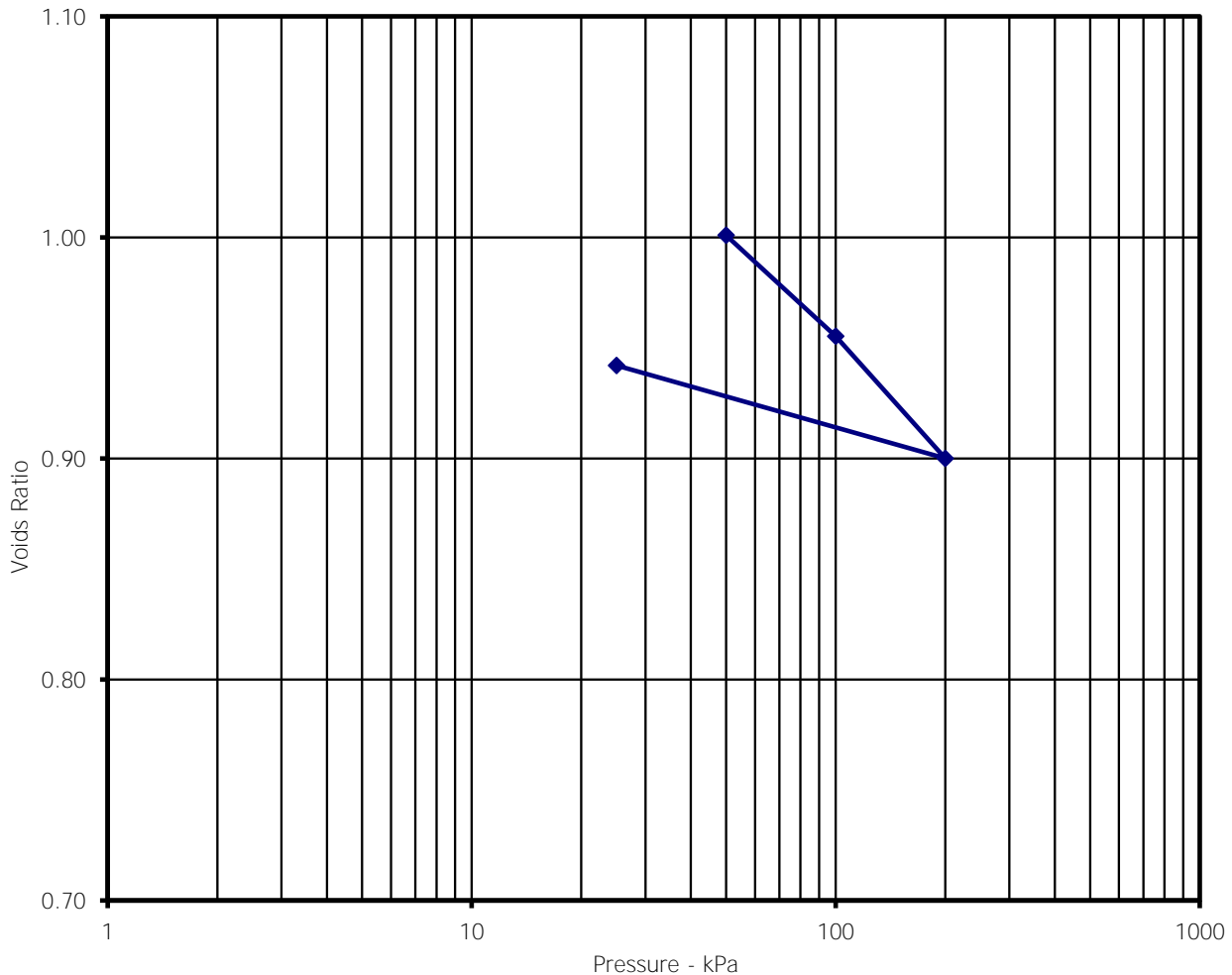


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH1201 / 10
 Depth (m) : 1.20 - 1.40
 Sample Type: **B**
 Description : Brown/grey sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	33	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.79	0 - 25	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.34	25 - 50	0.24	18.0	
Voids Ratio:	0.9715	50 - 100	0.460	18	Location of specimen with sample
Degree of saturation:	89.7	100 - 200	0.280	7.40	top
Height (mm):	19.97	200 - 25	0.130	11.0	Remarks:
Diameter (mm)	49.95				
Particle Density (Mg/m3)	2.65				
Assumed					



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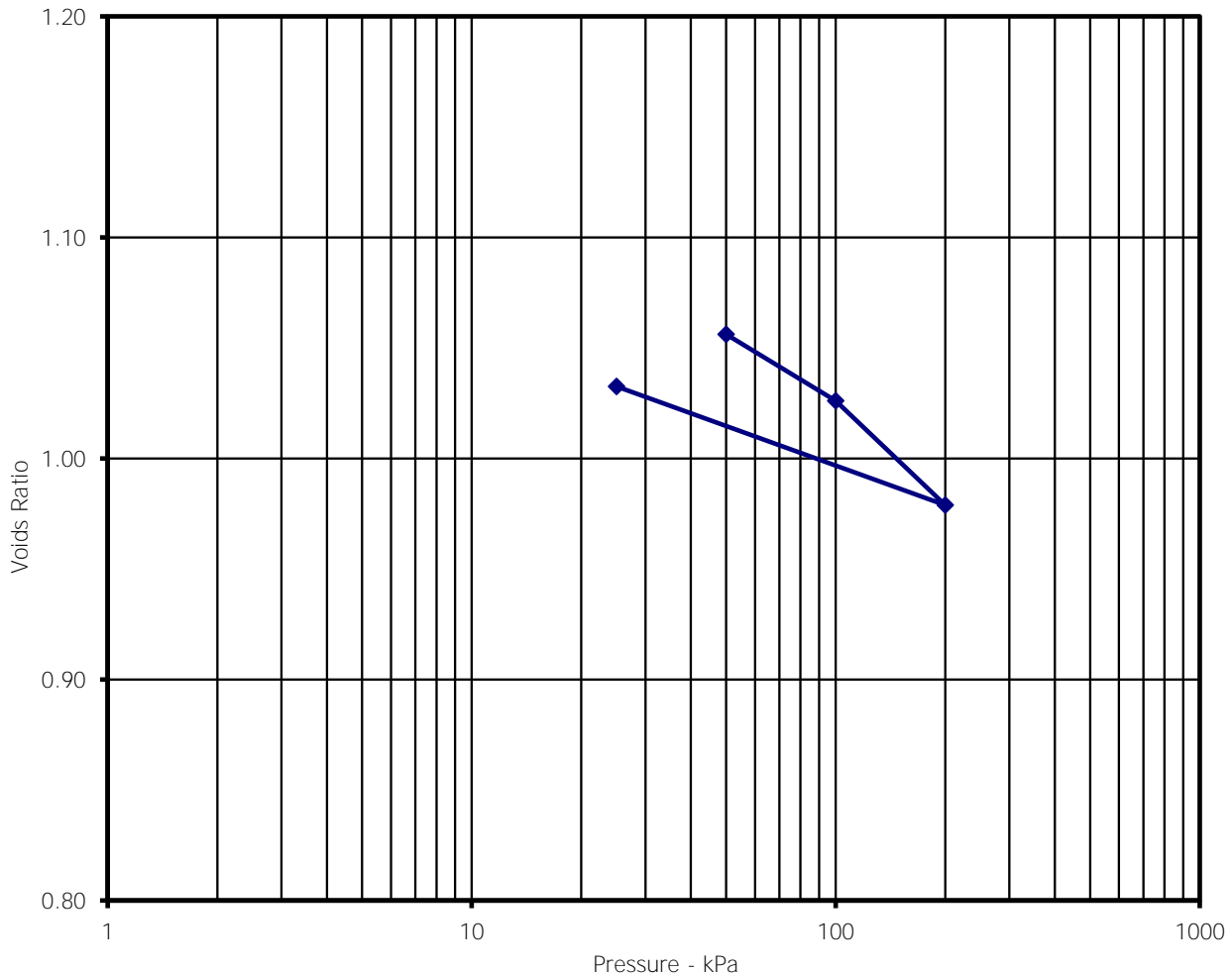


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH1201 / 5
 Depth (m) : 4.50 -
 Sample Type: D
 Description : Brown/grey slightly sandy fine gravelly silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	43	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.83	0 - 25	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.28	25 - 50	0.35	7.3	
Voids Ratio:	1.0670	50 - 100	0.290	4.5	Location of specimen with sample
Degree of saturation:	105.9	100 - 200	0.230	0.53	top
Height (mm):	18.77	200 - 25	0.150	0.1	Remarks:
Diameter (mm)	74.96				
Particle Density (Mg/m3)	2.65				
Assumed					



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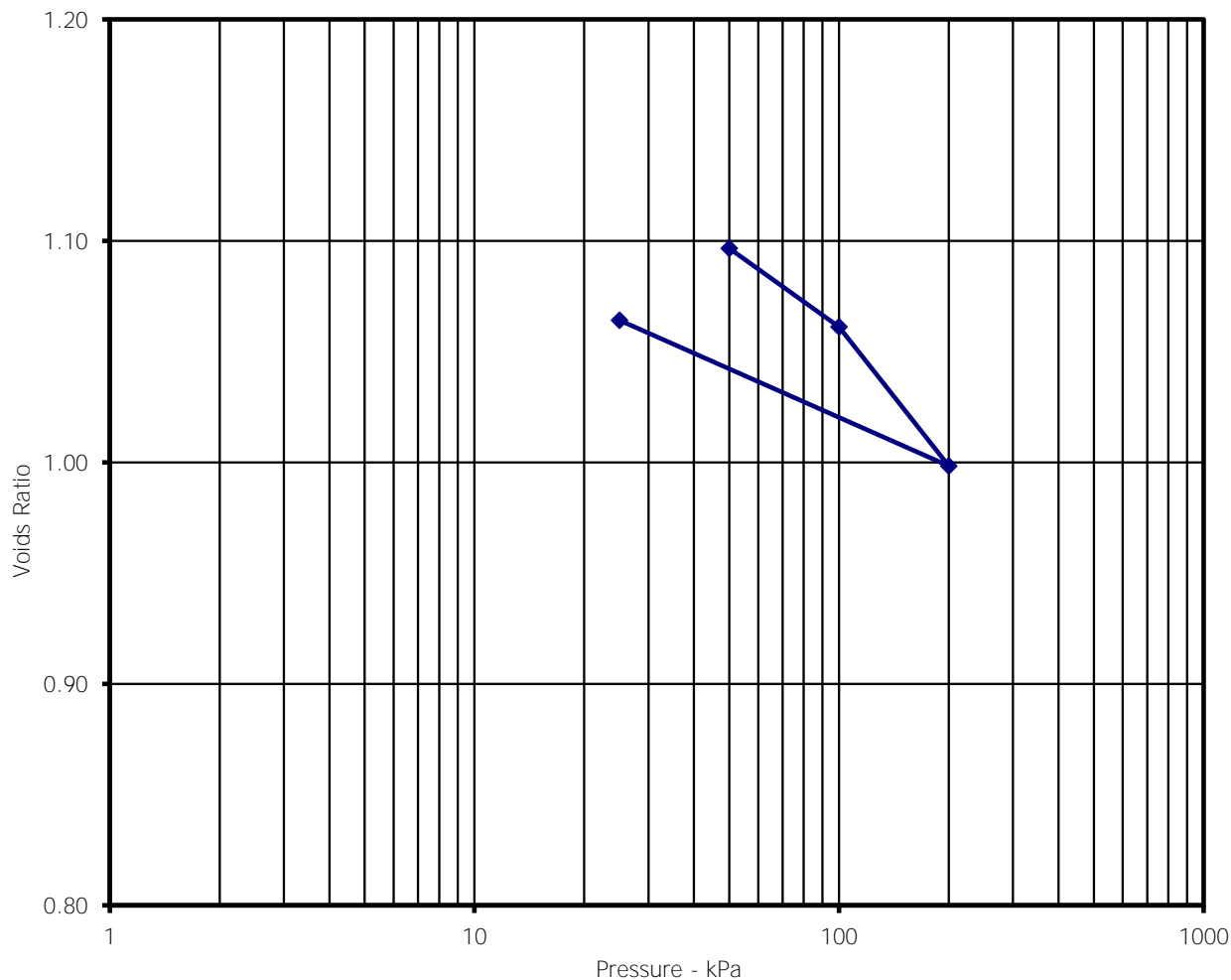


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH1202 / 6
 Depth (m) : 3.00 - 3.45
 Sample Type: UT
 Description : Grey slightly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	43	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.81	0 - 25	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.26	25 - 50	0.24	11.0	
Voids Ratio:	1.0972	50 - 100	0.340	5	Location of specimen with sample
Degree of saturation:	104.4	100 - 200	0.300	1.20	top
Height (mm):	19.91	200 - 25	0.190	6.4	Remarks:
Diameter (mm)	49.95				
Particle Density (Mg/m3)	2.65				
Assumed					



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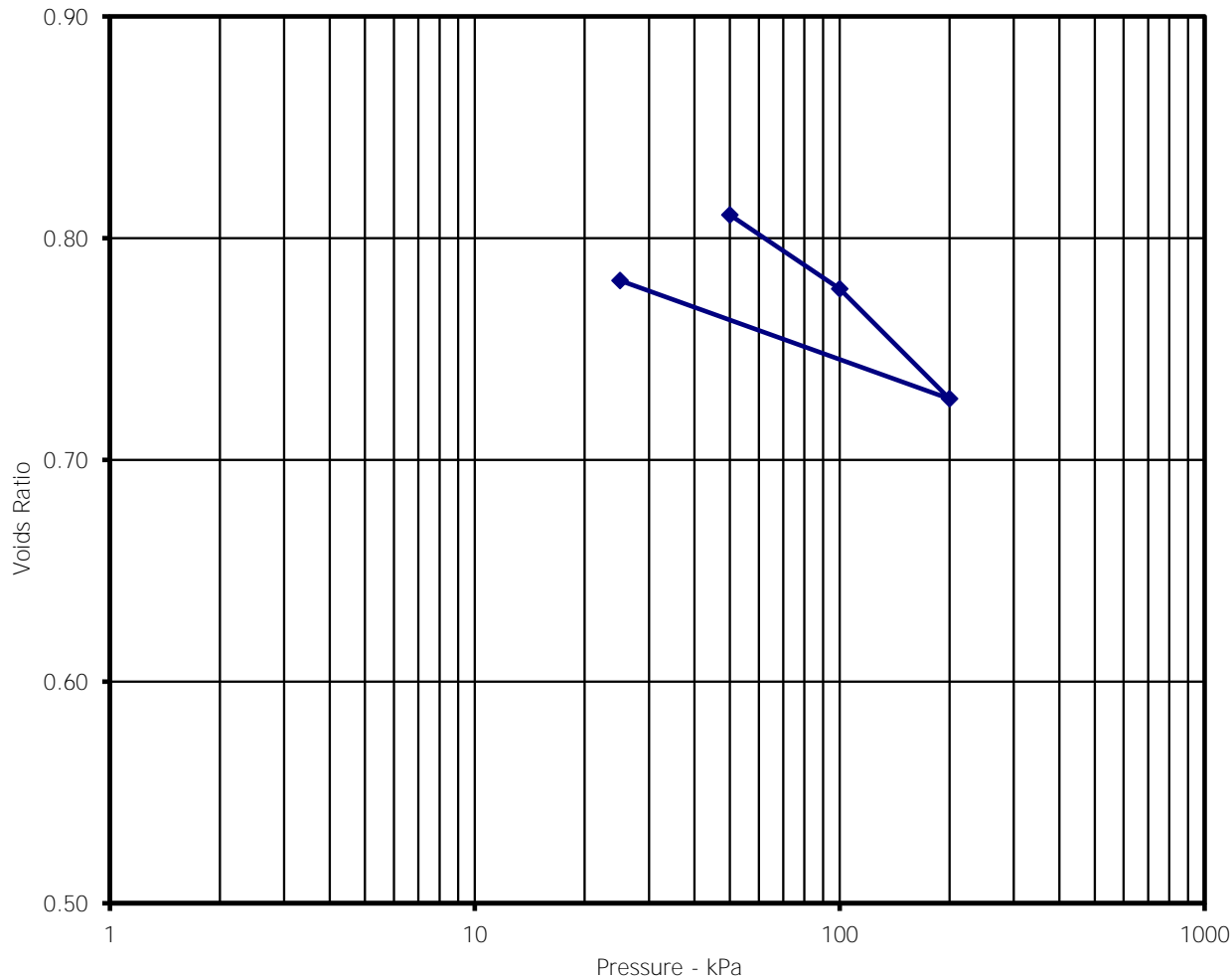


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH1202 / 34
 Depth (m) : 4.50 -
 Sample Type: D
 Description : Grey silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	34	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.95	0 - 25	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.46	25 - 50	0.14	14.0	
Void Ratio:	0.8114	50 - 100	0.370	22	Location of specimen with sample
Degree of saturation:	109.8	100 - 200	0.280	7.30	top
Height (mm):	19.95	200 - 25	0.180	0.4	Remarks:
Diameter (mm)	49.91				
Particle Density (Mg/m3)	2.65				
Assumed					



Checked by: **reg. 13**
 Approved by: **reg. 13**

Date approved: 06/03/17

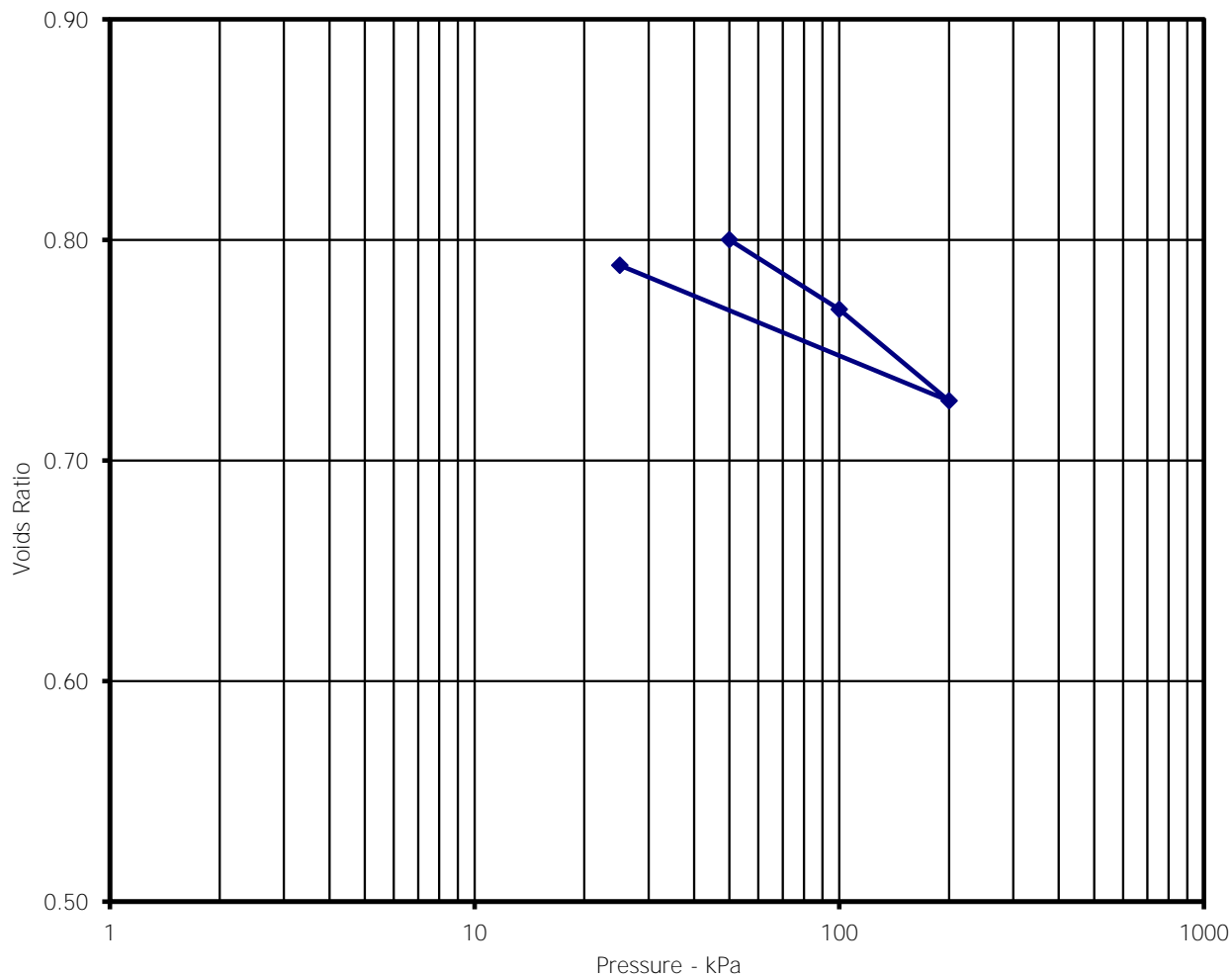


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH1202 / 13
 Depth (m) : 6.30 - 6.80
 Sample Type: B
 Description : Grey silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	25	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.85	0 - 25	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.49	25 - 50	0.35	12.0	
Voids Ratio:	0.7806	50 - 100	0.350	11	Location of specimen with sample
Degree of saturation:	83.3	100 - 200	0.230	1.70	top
Height (mm):	19.97	200 - 25	0.200	0.5	Remarks:
Diameter (mm)	75				
Particle Density (Mg/m3)	2.65				
Assumed					



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Date approved:

06/03/17

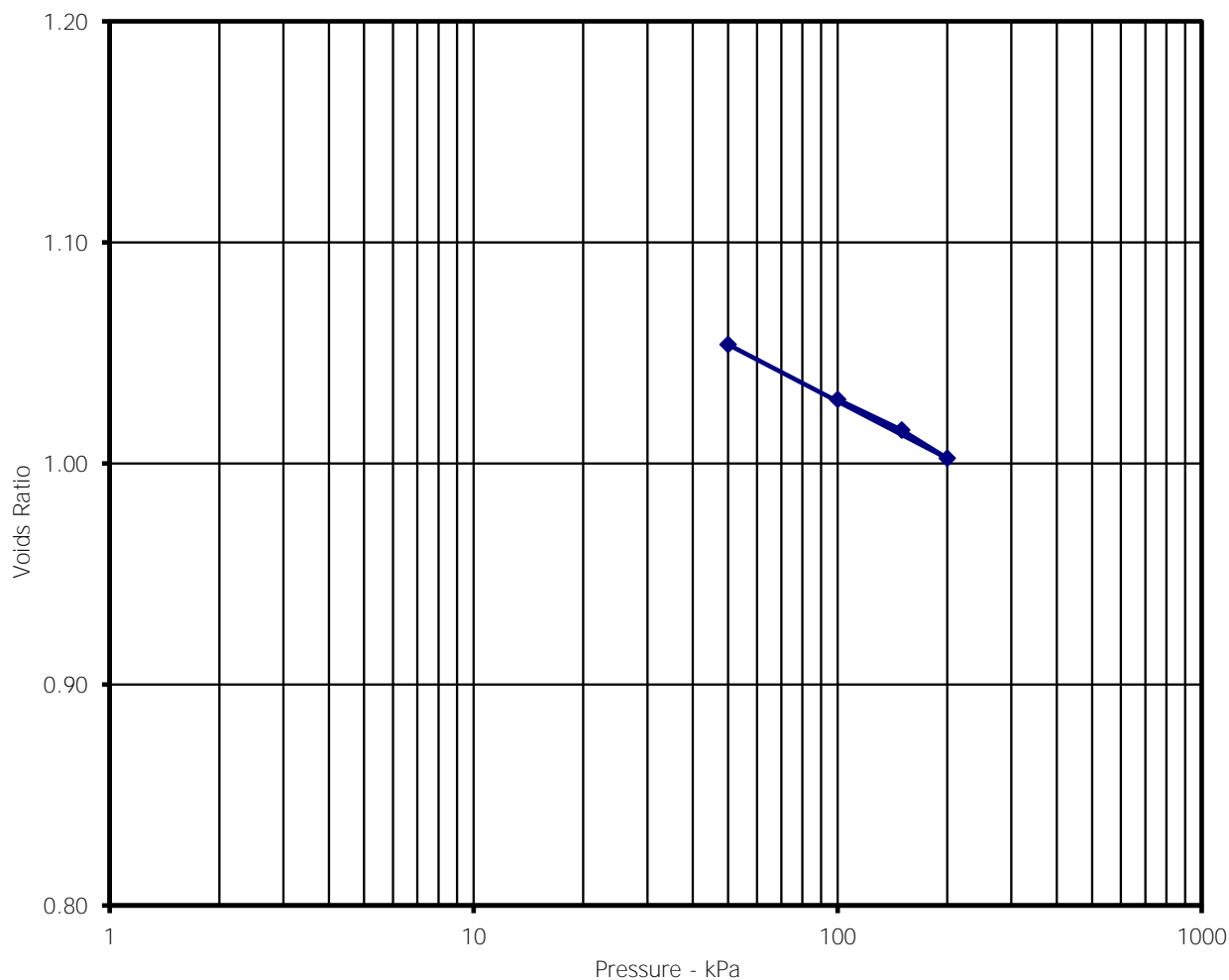


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH1206 / 12
 Depth (m) : 3.00 -
 Sample Type: B
 Description : Grey/brown slightly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	40	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.83	0 - 50	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.31	50 - 100	0.12	11.0	
Void Ratio:	1.0236	100 - 150	0.140	12	Location of specimen with sample
Degree of saturation:	102.9	150 - 200	0.130	2.20	top
Height (mm):	19.82	200 - 50	0.170	7.8	Remarks:
Diameter (mm)	75.01				
Particle Density (Mg/m3)	2.65				
Assumed					



Checked by: **reg. 13**
 Approved by: **reg. 13**

Date approved: 06/03/17

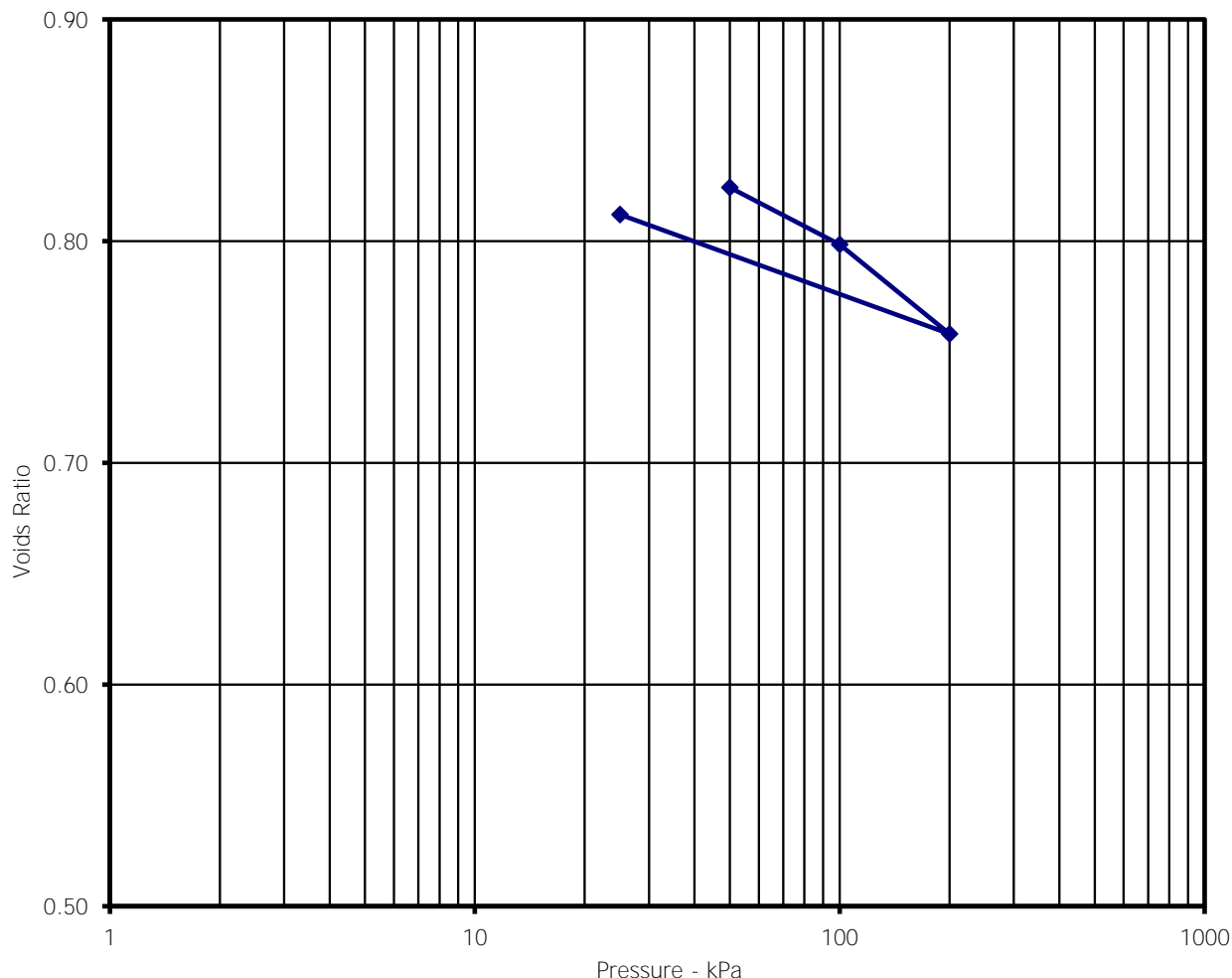


Test Report: ONE DIMENSIONAL CONSOLIDATION

BS 1377 : Part 5 : 3 : 1990

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole/Sample Number: BH1206 / 20
 Depth (m) : 7.00 -
 Sample Type: B
 Description : Dark grey slightly sandy silty CLAY

Initial Conditions		Pressure Range	Mv	Cv	Method of time fitting used
Moisture Content (%):	32	kPa	m2/MN	m2/yr	Cv Calculated using t90
Bulk Density (Mg/m3):	1.97	0 - 25	Swell	Stage	Nominal Laboratory Temperature
Dry Density (Mg/m3):	1.49	25 - 50	0.15	5.4	
Void Ratio:	0.7764	50 - 100	0.280	12	Location of specimen with sample
Degree of saturation:	109.9	100 - 200	0.220	14.00	top
Height (mm):	19.93	200 - 25	0.170	0.7	Remarks:
Diameter (mm)	50.01				
Particle Density (Mg/m3)	2.65				
Assumed					



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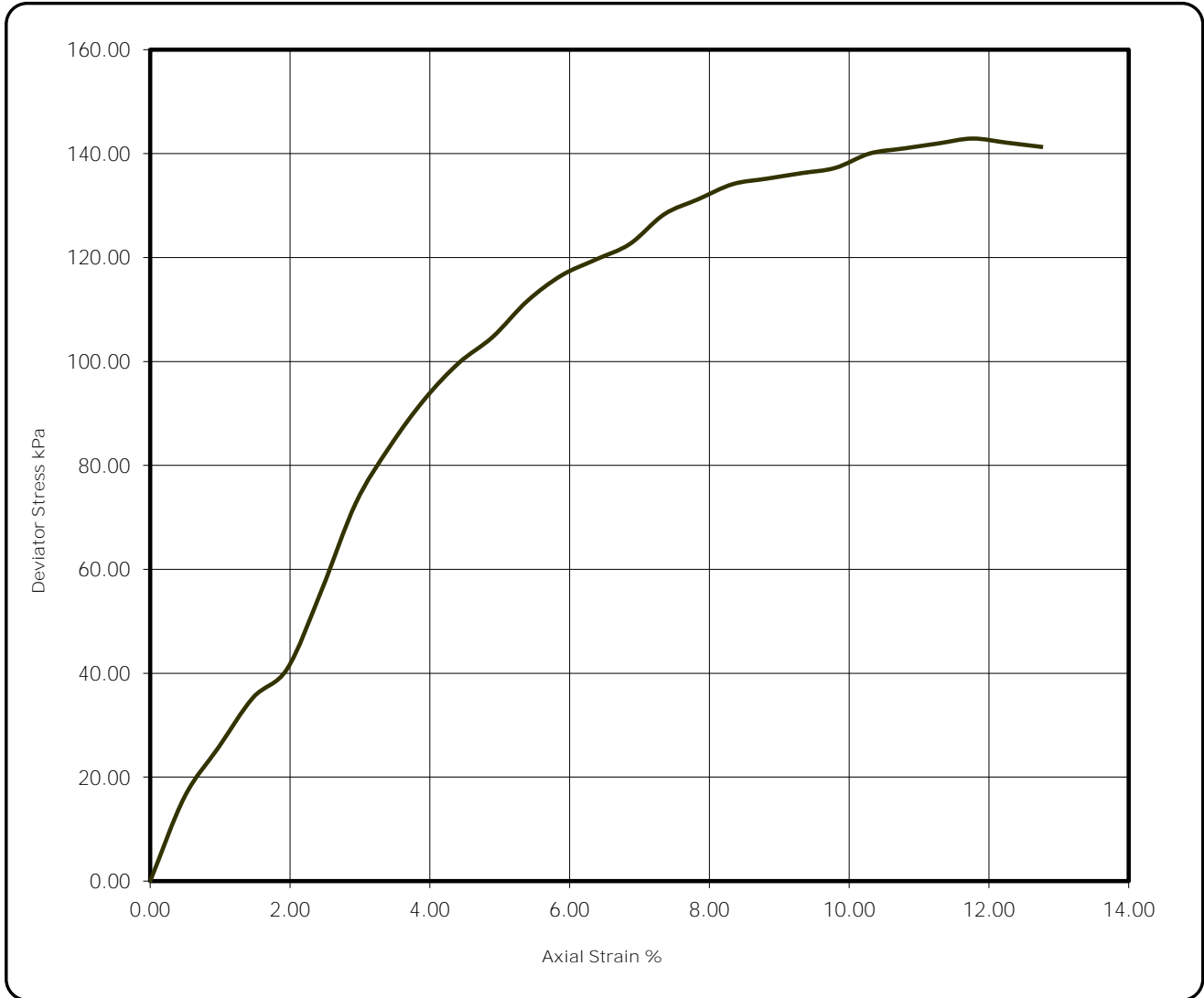
Date approved:

07/03/17



Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 30
 Depth (m) : 3.00 -
 Sample Description : Brown/grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	30.3	1.96	1.50	30	123	61	7	Plastic	Sample taken from Top of tube		
				60	137	69	10		Rate of strain = 2 %/min		
				120	143	71	12		Latex Membrane used mm thickness		



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Date Approved: **7.3.17**

Test Report:

Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH601
 Sample Number: 30
 Depth (m) : 3.00



Post Test Specimen



Specimen Split

Diameter (mm):		103		Height (mm):		200		Test: 100mm Multistage		
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Cohesion (kPa)	Failure Strain (%)	Mode of Failure	Remarks	
A	30.3	1.96	1.50	30	123	61	6.9	Plastic	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness	
				60	137	69	9.8			
				120	143	71	11.8			



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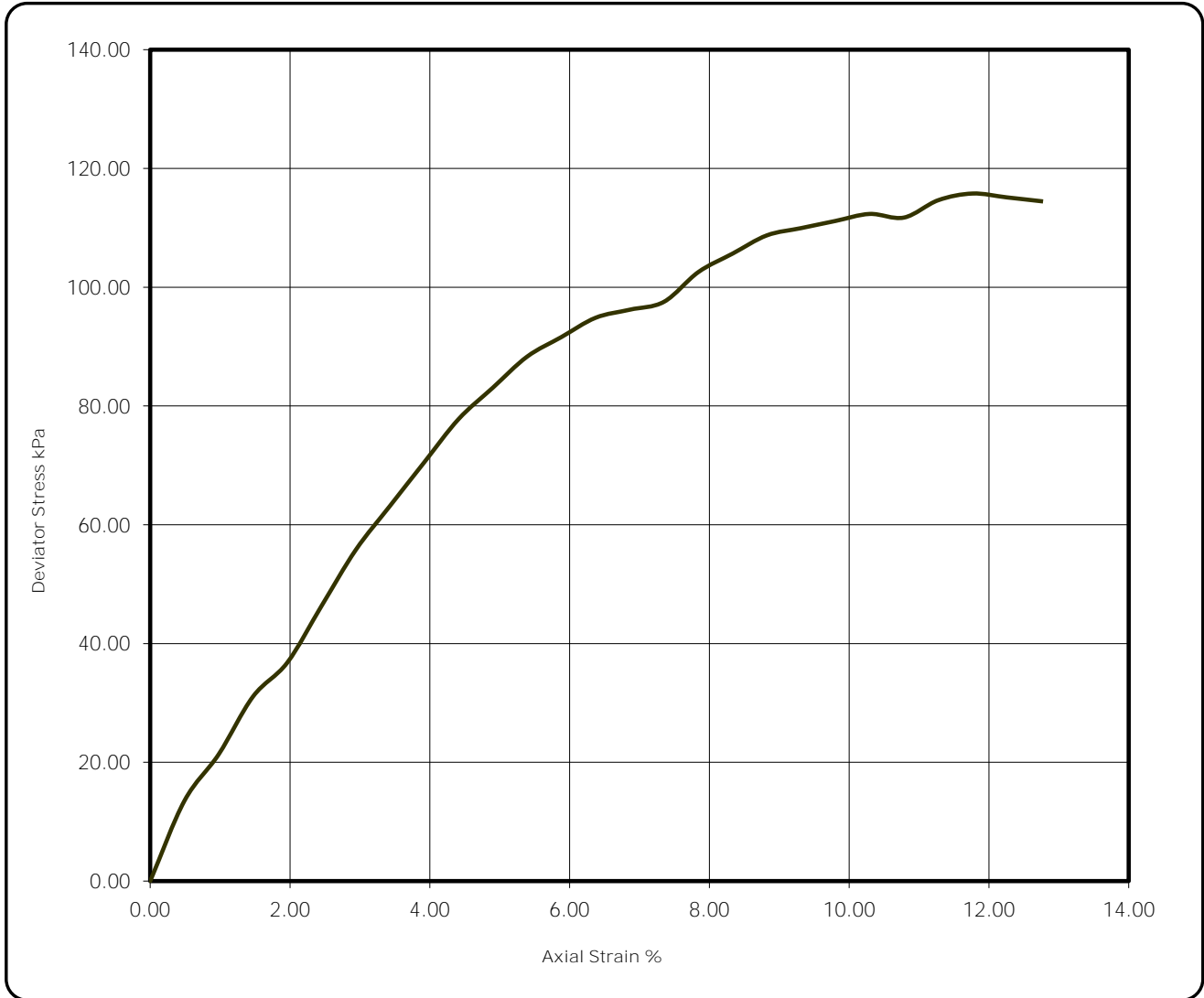
Approved By:

Date Approved: **7.3.17**



Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 16
 Depth (m) : 1.25 - 1.65
 Sample Description : Grey/brown slightly sandy slightly fine gravelly silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	26.3	2.01	1.59	20	98	49	7	Compound	Sample taken from Top of tube		
				40	112	56	10		Rate of strain = 2 %/min		
				80	116	58	12		Latex Membrane used mm thickness		



reg. 13



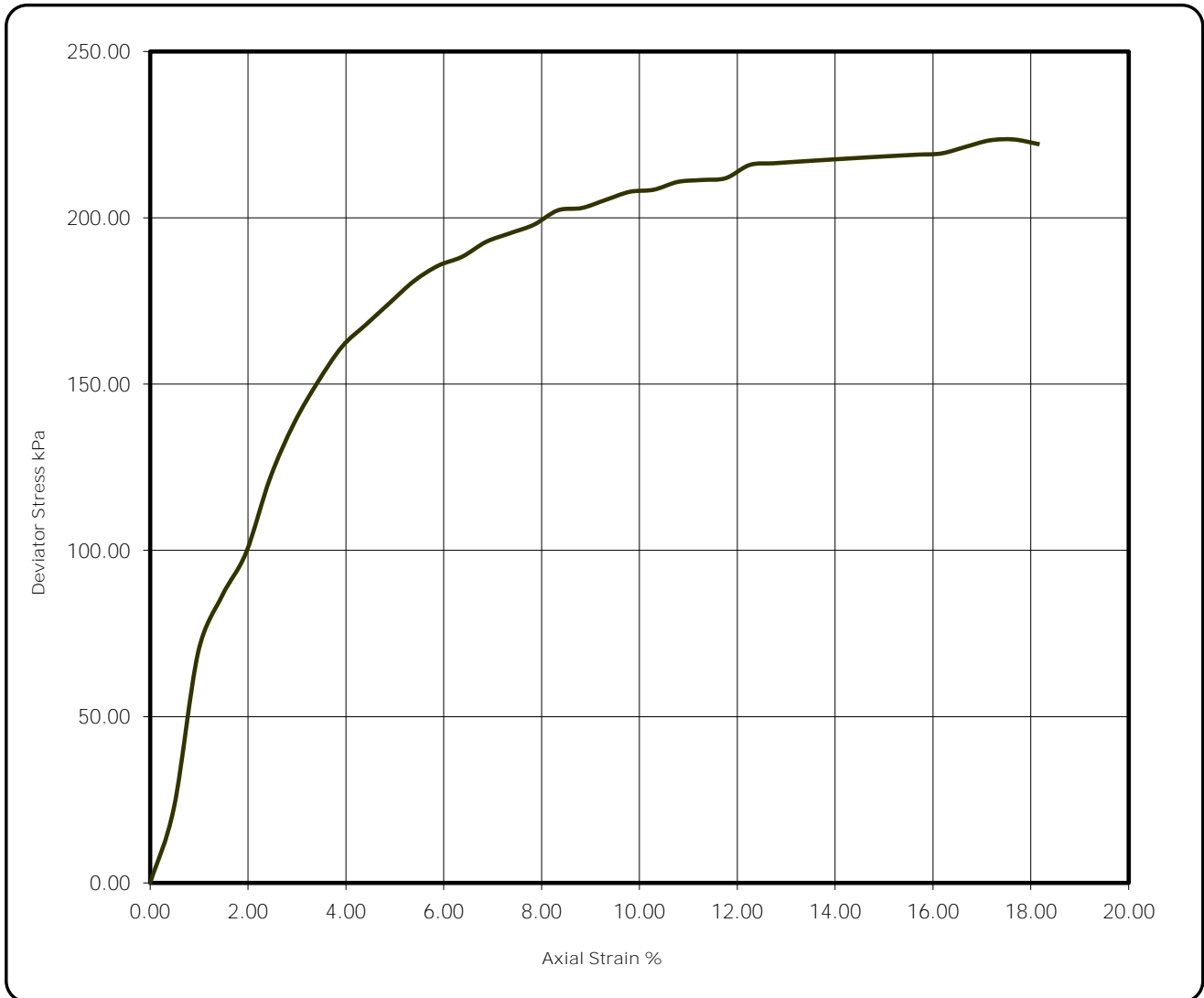
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Date Approved: 7.3.17

Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH603
 Sample Number: 29
 Depth (m) : 4.50 - 4.95
 Sample Description : Grey/brown silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	29.4	1.96	1.52	45	212	106	12	Compound	Sample taken from Top of tube		
				90	219	110	16		Rate of strain = 2 %/min		
				180	224	112	18		Latex Membrane used mm thickness		



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Test Report:

Undrained Shear Strength in Triaxial Compression
BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
without measurement of Pore Pressure

Client ref: UA008426-01
Location: Northstowe Phase 2
Contract Number: 34142
Hole Number: BH603
Sample Number: 29
Depth (m) : 4.50



Post Test Specimen



Specimen Split

Diameter (mm):		103		Height (mm):		200		Test: 100mm Multistage		
Specimen	Moisture Content (%)	Bulk Density (Mg/m ³)	Dry Density (Mg/m ³)	Cell Pressure (kPa)	Deviator Stress (kPa)	Cohesion (kPa)	Failure Strain (%)	Mode of Failure	Remarks	
A	29.4	1.96	1.52	45	212	106	11.8	Compound	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness	
				90	219	110	16.2			
				180	224	112	17.6			



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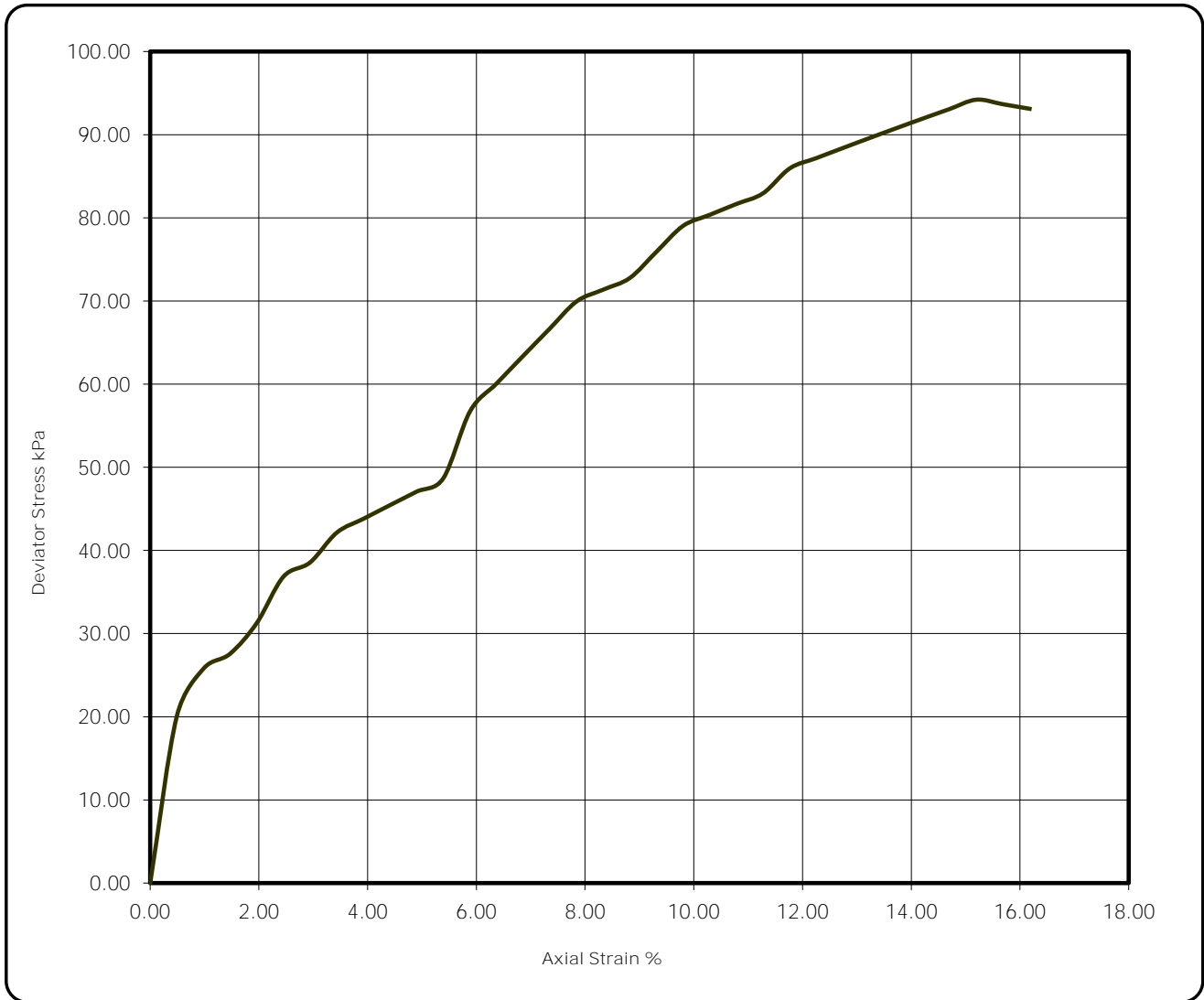
Approved By:

Date Approved: 7.3.17



Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 1
 Depth (m) : 3.00 - 3.45
 Sample Description : Grey/brown slightly sandy slightly fine to medium gravelly silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	39.8	1.73	1.24	30	49	24	5	Compound	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness		
				60	83	41	11				
				120	94	47	15				



reg. 13



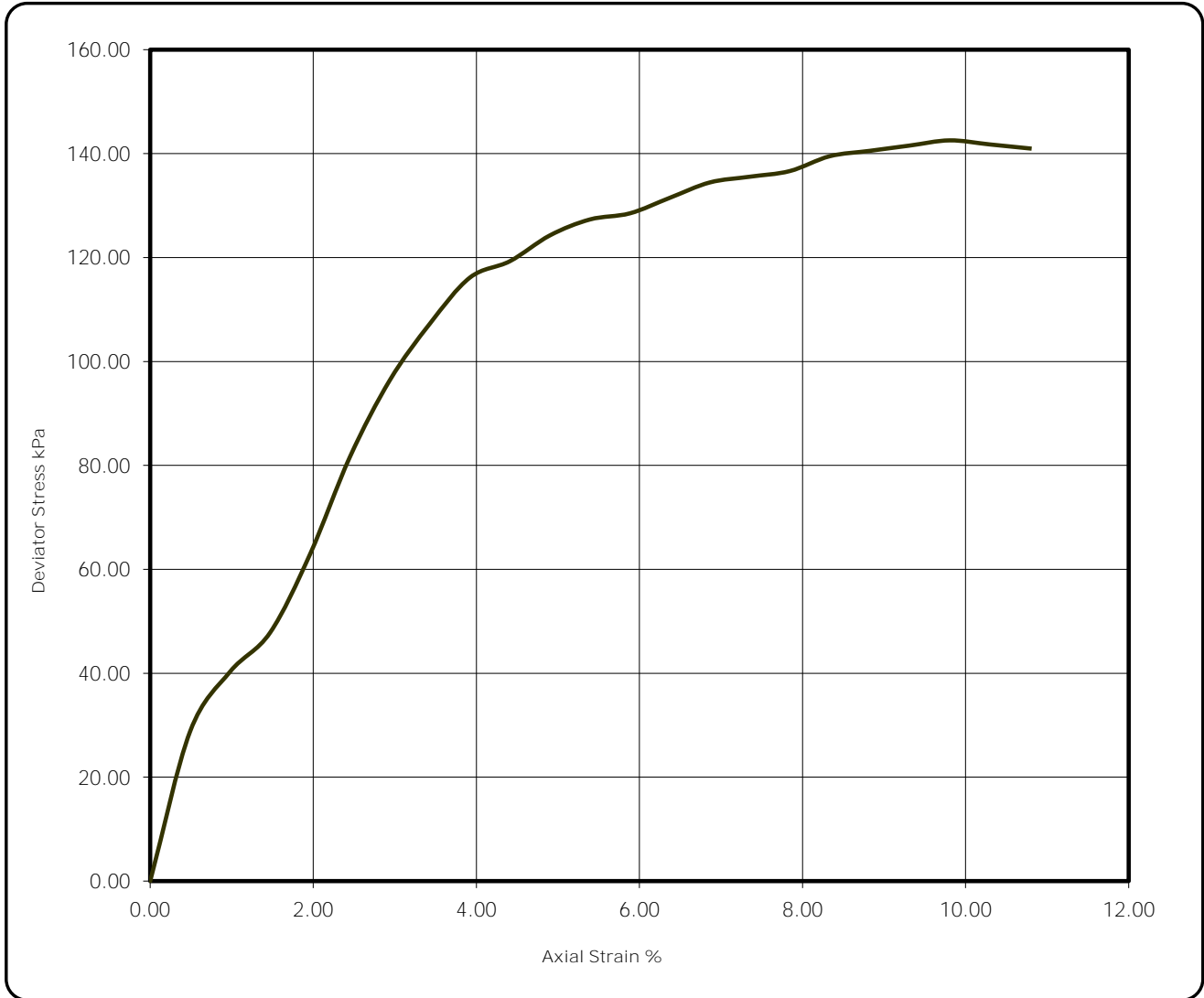
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Date Approved: **7.3.17**

Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH605
 Sample Number: 2
 Depth (m) : 6.00 - 6.45
 Sample Description : Grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	30.7	1.84	1.41	60	129	64	6	Brittle	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness		
				120	137	68	8				
				240	143	71	10				



reg. 13



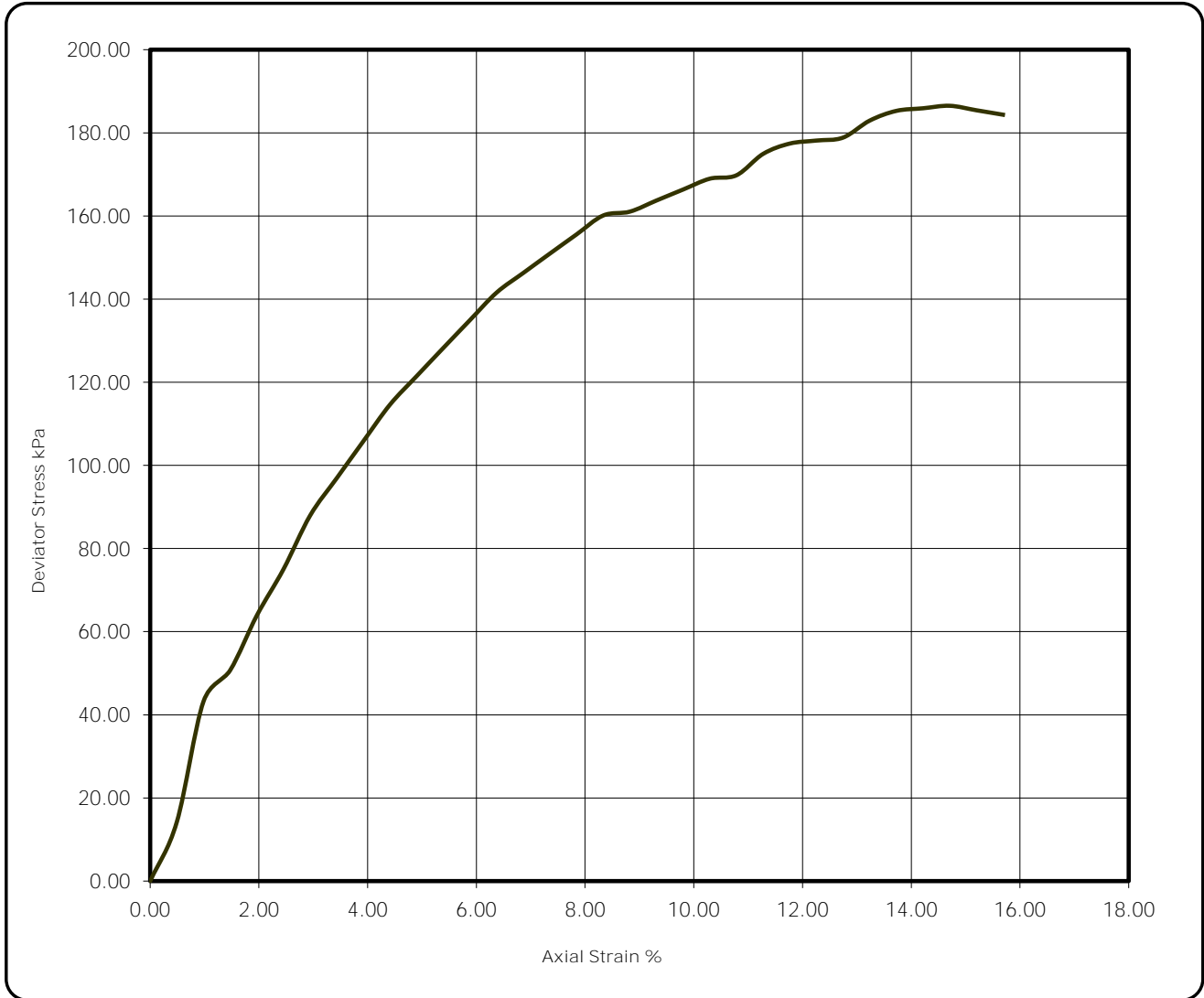
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Date Approved: **7.3.17**

Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH611
 Sample Number: 21
 Depth (m) : 6.00 - 6.45
 Sample Description : Brown/grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	29.8	2.08	1.61	60	170	85	11	Compound	Sample taken from Top of tube		
				120	179	89	13		Rate of strain = 2 %/min		
				240	187	93	15		Latex Membrane used mm thickness		



reg. 13



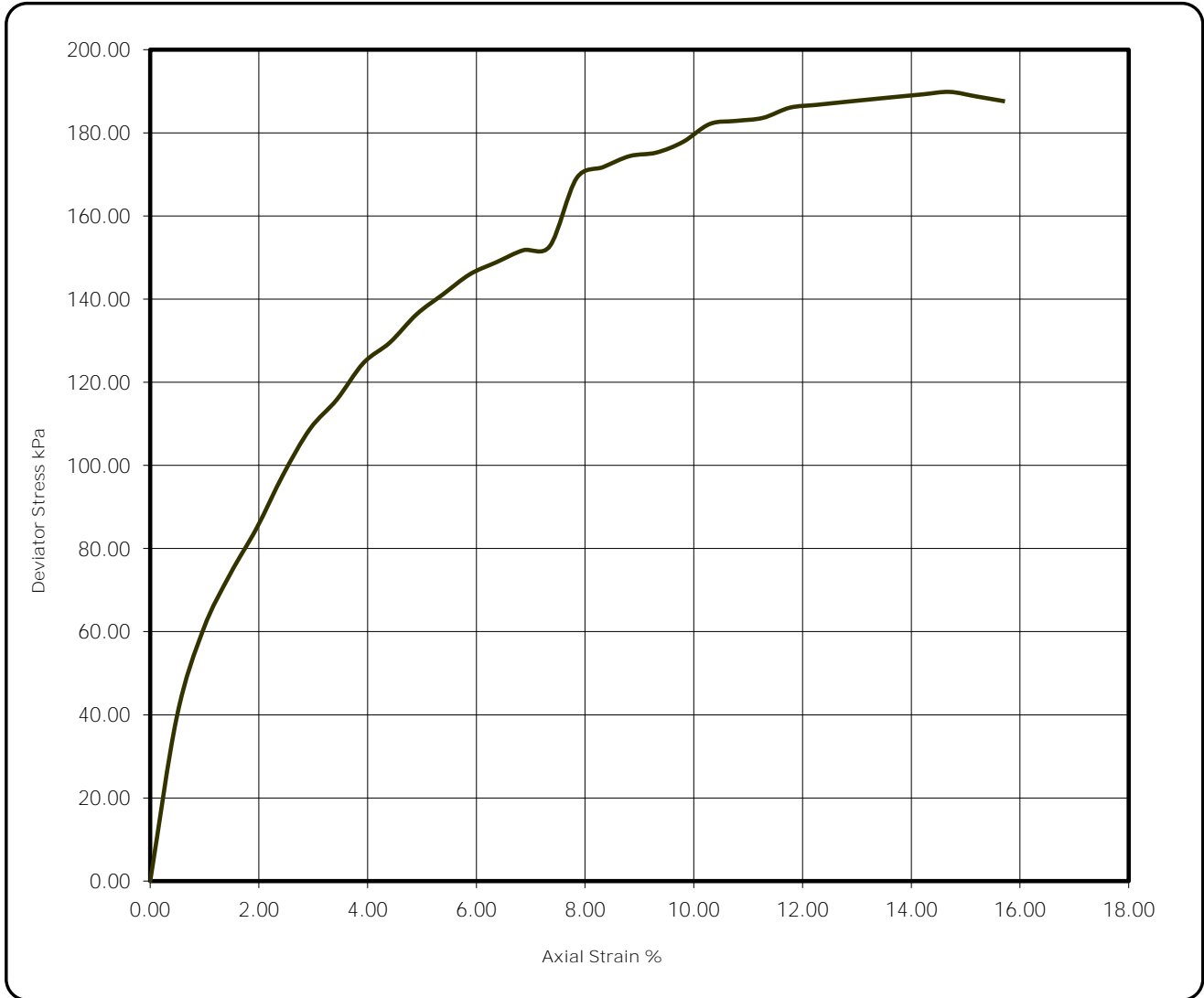
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Date Approved: **7.3.17**

Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH613
 Sample Number: 33
 Depth (m) : 6.00 - 6.45
 Sample Description : Brown/grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	32.9	1.93	1.45	60	153	76	7	Compound	Sample taken from Top of tube		
				120	178	89	10		Rate of strain = 2 %/min		
				240	190	95	15		Latex Membrane used mm thickness		



reg. 13



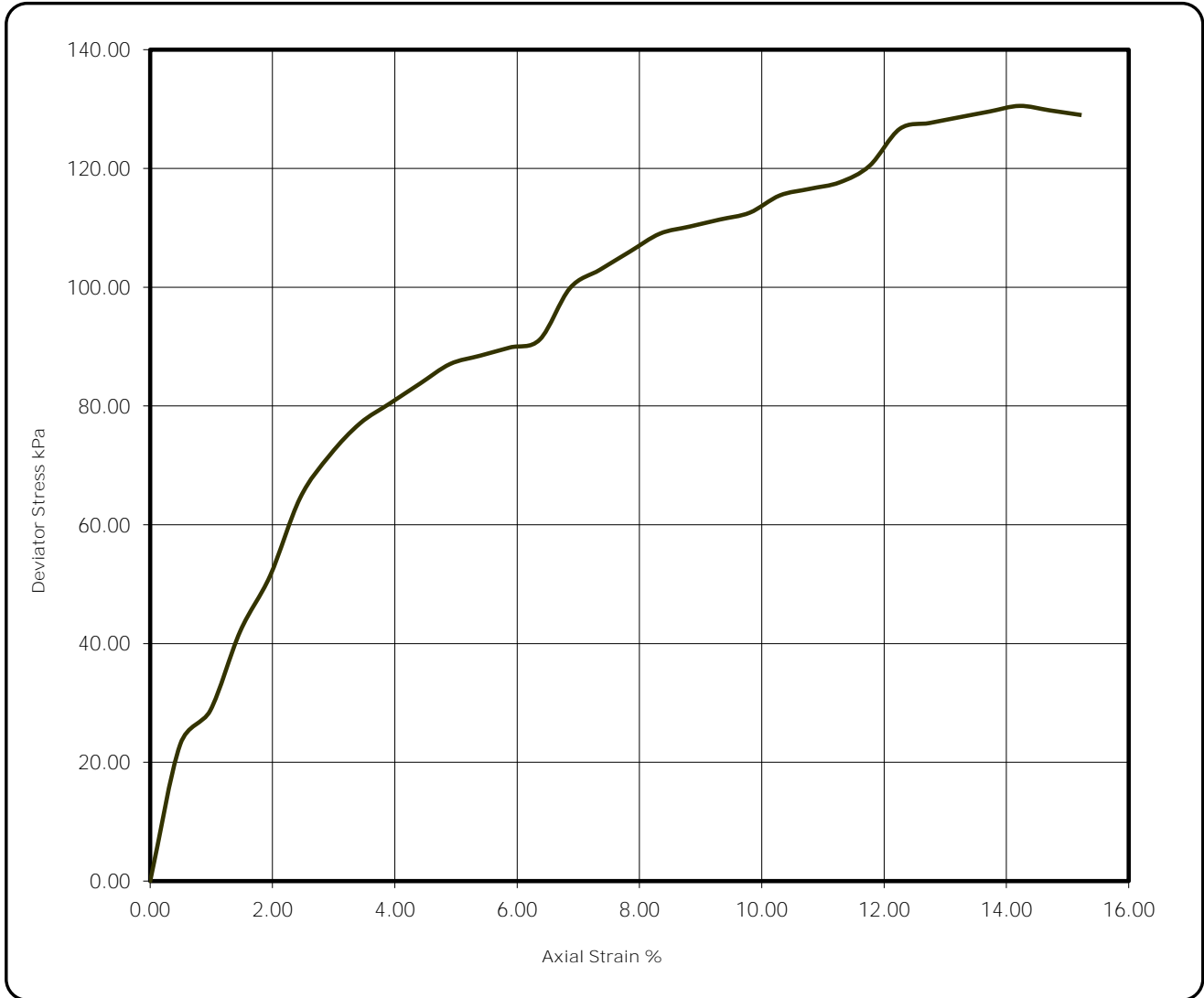
Checked By

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Date Approved: **7.3.17**

Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1201
 Sample Number: 1
 Depth (m) : 3.00 - 3.45
 Sample Description : Grey/brown slightly fine gravelly silty CLAY (With gypsum crystals)



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	37.3	1.85	1.34	30	91	46	6	Compound	Sample taken from Top of tube		
				60	118	59	11		Rate of strain = 2 %/min		
				120	131	65	14		Latex Membrane used mm thickness		



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Date Approved: **7.3.17**

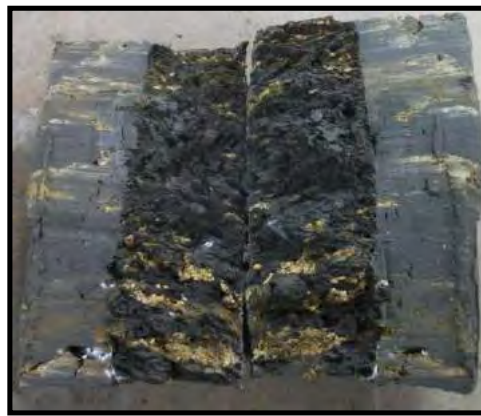
Test Report:

Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1201
 Sample Number: 1
 Depth (m) : 3.00



Post Test Specimen



Specimen Split

Diameter (mm):		103		Height (mm):		200		Test: 100mm Multistage		
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Cohesion (kPa)	Failure Strain (%)	Mode of Failure	Remarks	
A	37.3	1.85	1.34	30	91	46	6.4	Compound	Rate of strain = 2 %/min Latex Membrane used mm thickness	
				60	118	59	11.3			
				120	131	65	14.2			



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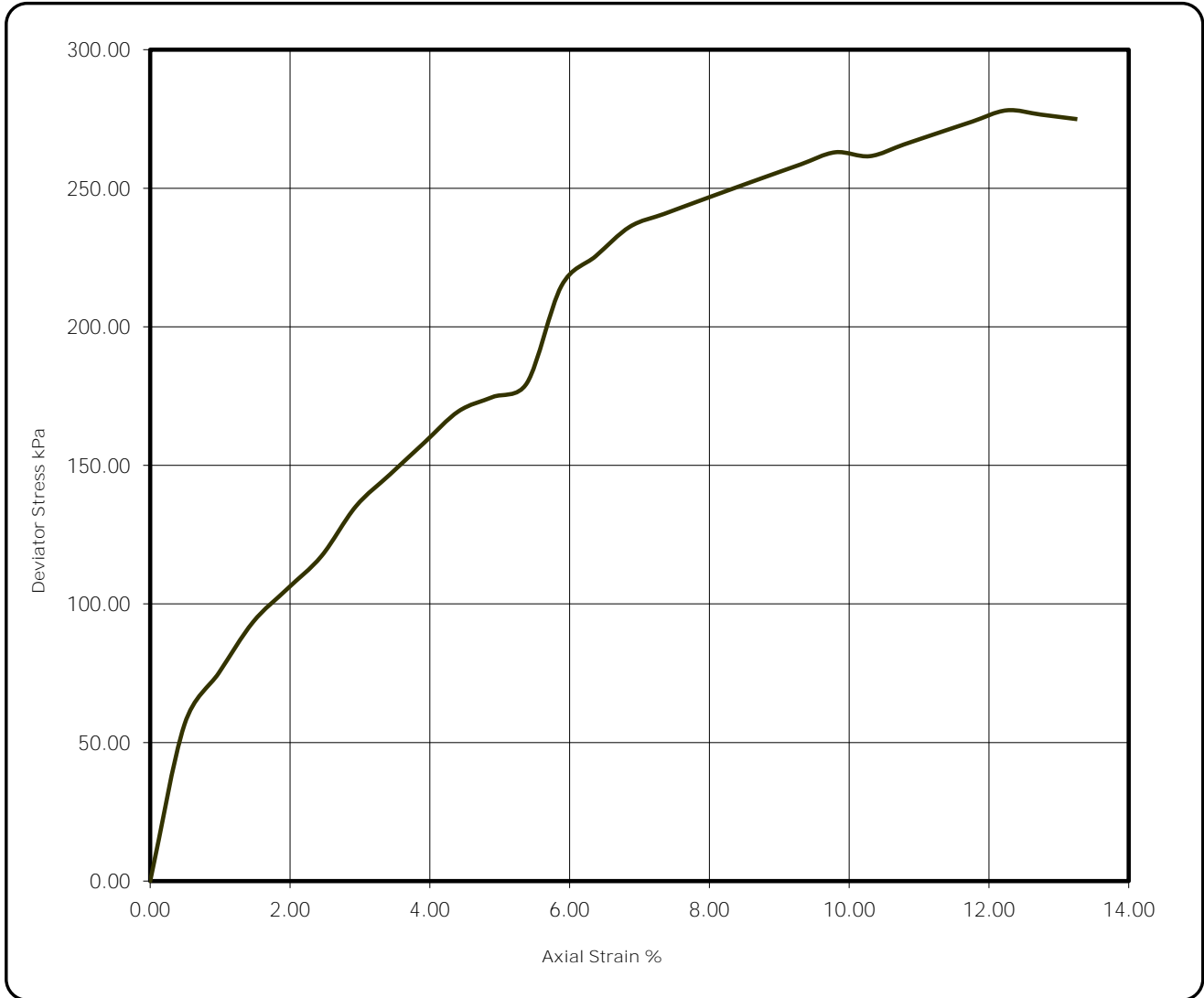
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Date Approved: **7.3.17**



Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1201
 Sample Number: 3
 Depth (m) : 9.00 - 9.45
 Sample Description : Grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	26.1	2.02	1.60	90	180	90	5	Compound	Sample taken from Top of tube		
				300	263	131	10		Rate of strain = 2 %/min		
				600	278	139	12		Latex Membrane used mm thickness		



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Date Approved: **7.3.17**

Test Report:

Undrained Shear Strength in Triaxial Compression
BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
without measurement of Pore Pressure

Client ref: UA008426-01
Location: Northstowe Phase 2
Contract Number: 34142
Hole Number: BH1201
Sample Number: 3
Depth (m) : 9.00



Post Test Specimen



Specimen Split

Diameter (mm):		103		Height (mm):		200		Test: 100mm Multistage		
Specimen	Moisture Content (%)	Bulk Density (Mg/m ³)	Dry Density (Mg/m ³)	Cell Pressure (kPa)	Deviator Stress (kPa)	Cohesion (kPa)	Failure Strain (%)	Mode of Failure	Remarks	
A	26.1	2.02	1.60	90	180	90	5.4	Compound	Rate of strain = 2 %/min Latex Membrane used mm thickness	
				300	263	131	9.8			
				600	278	139	12.3			



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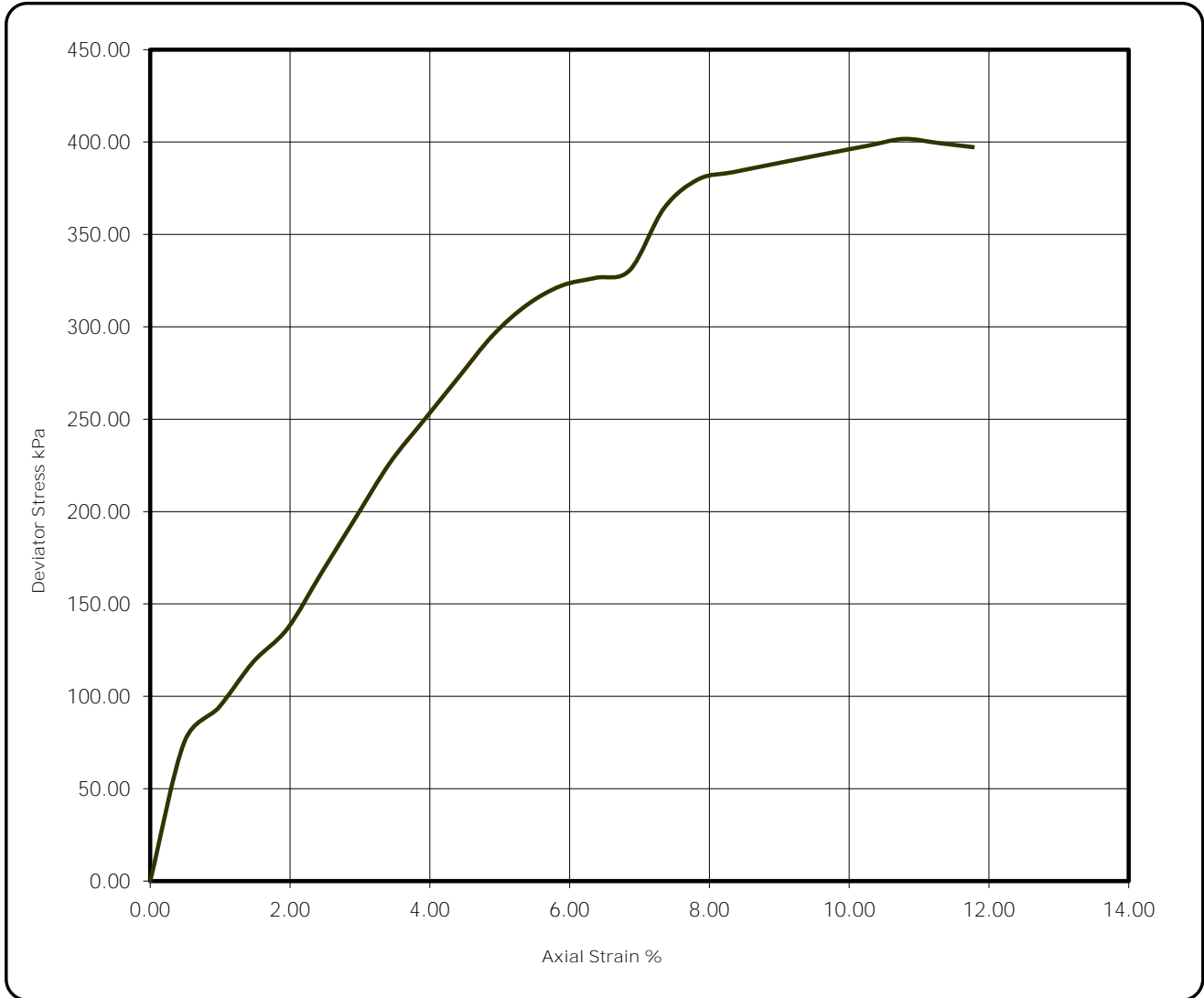
Approved By:



Date Approved: 7.3.17

Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1201
 Sample Number: 5
 Depth (m) : 15.00 - 15.45
 Sample Description : Grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	25.9	2.03	1.61	150	331	165	7	Brittle	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness		
				300	391	196	9				
				600	402	201	11				



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Date Approved: **7.3.17**

Test Report:

Undrained Shear Strength in Triaxial Compression
BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
without measurement of Pore Pressure

Client ref: UA008426-01
Location: Northstowe Phase 2
Contract Number: 34142
Hole Number: BH1201
Sample Number: 5
Depth (m) : 15.00



Post Test Specimen



Specimen Split

Diameter (mm):		103		Height (mm):		200		Test: 100mm Multistage		
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Cohesion (kPa)	Failure Strain (%)	Mode of Failure	Remarks	
A	25.9	2.03	1.61	150	331	165	6.9	Brittle	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness	
				300	391	196	9.3			
				600	402	201	10.8			



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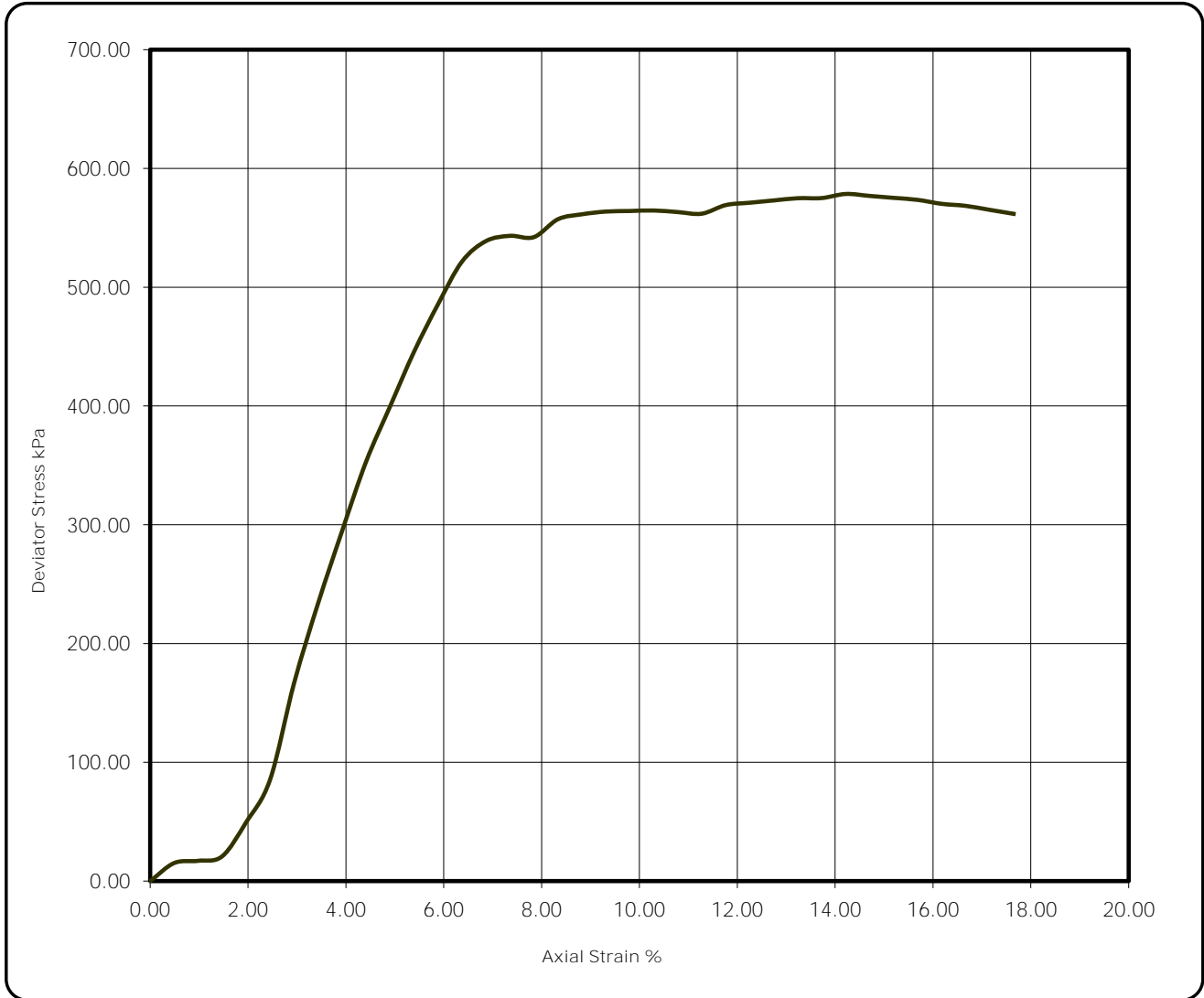
Approved By:



Date Approved: 7.3.17

Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1201
 Sample Number: 8
 Depth (m) : 24.00 - 24.45
 Sample Description : Grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	27.6	1.99	1.56	240	543	272	7	Brittle	Sample taken from Top of tube		
				480	565	282	10		Rate of strain = 2 %/min		
				900	579	289	14		Latex Membrane used mm thickness		



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Date Approved: **7.3.17**

Test Report:

Undrained Shear Strength in Triaxial Compression
BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
without measurement of Pore Pressure

Client ref: UA008426-01
Location: Northstowe Phase 2
Contract Number: 34142
Hole Number: BH1201
Sample Number: 8
Depth (m) : 24.00



Post Test Specimen



Specimen Split

Diameter (mm):		103		Height (mm):		200		Test: 100mm Multistage		
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Cohesion (kPa)	Failure Strain (%)	Mode of Failure	Remarks	
A	27.6	1.99	1.56	240	543	272	7.4	Brittle	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness	
				480	565	282	10.3			
				900	579	289	14.2			



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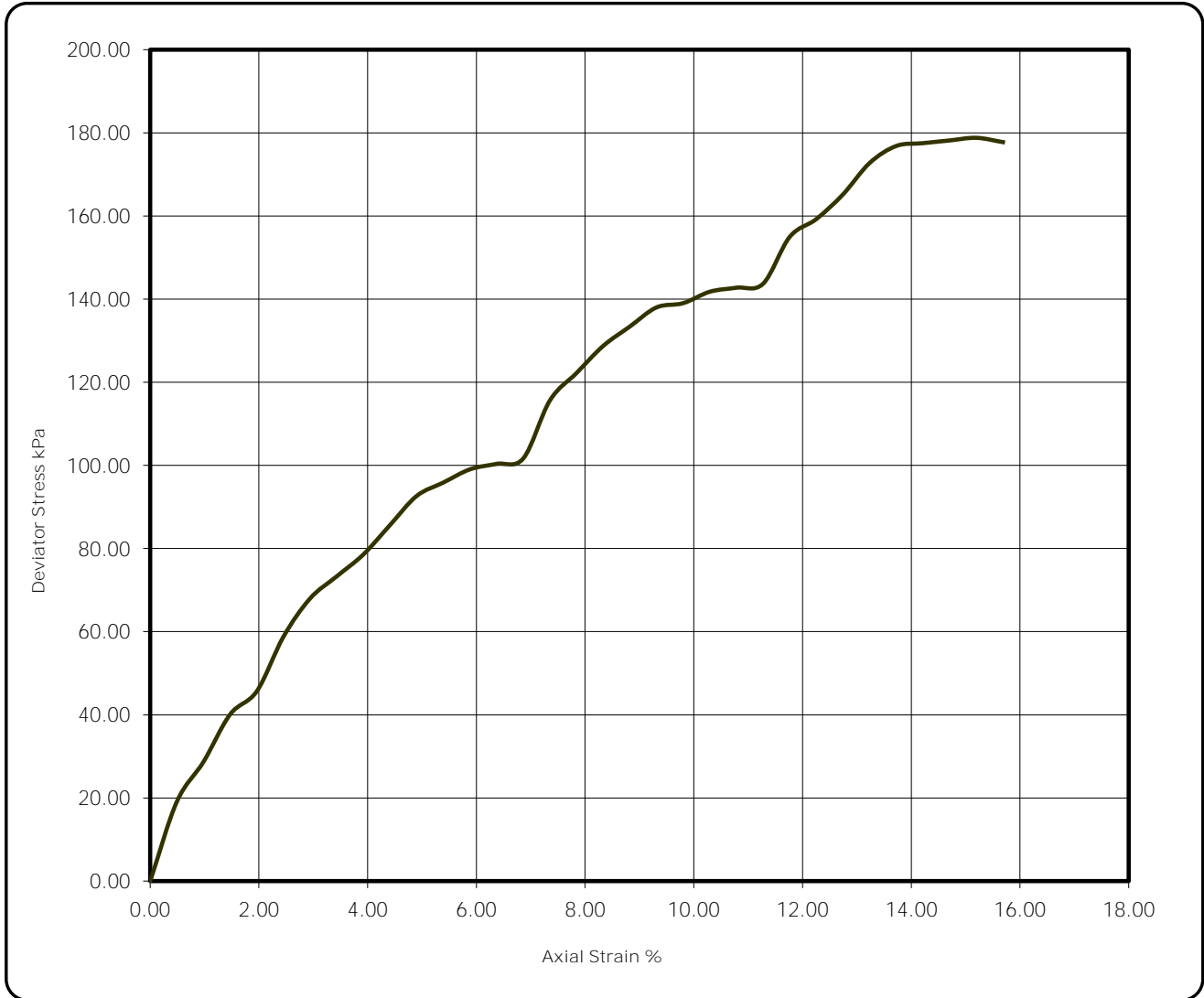
Approved By:

Date Approved: **7.3.17**



Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1204
 Sample Number: 23
 Depth (m) : 11.00 -
 Sample Description : Grey silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	30.8	1.68	1.29	110	102	51	7	Compound	Sample taken from Top of tube		
				220	144	72	11		Rate of strain = 2 %/min		
				480	179	89	15		Latex Membrane used mm thickness		



reg. 13

Checked By

Approved By:



Date Approved: **7.3.17**

Test Report:

Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1204
 Sample Number: 23
 Depth (m) : 11.00



Post Test Specimen



Specimen Split

Diameter (mm):		103		Height (mm):		200		Test: 100mm Multistage		
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Cohesion (kPa)	Failure Strain (%)	Mode of Failure	Remarks	
A	30.8	1.68	1.29	110	102	51	6.9	Compound	Sample taken from Top of tube Rate of strain = 2 %/min Latex Membrane used mm thickness	
				220	144	72	11.3			
				480	179	89	15.2			



reg. 13

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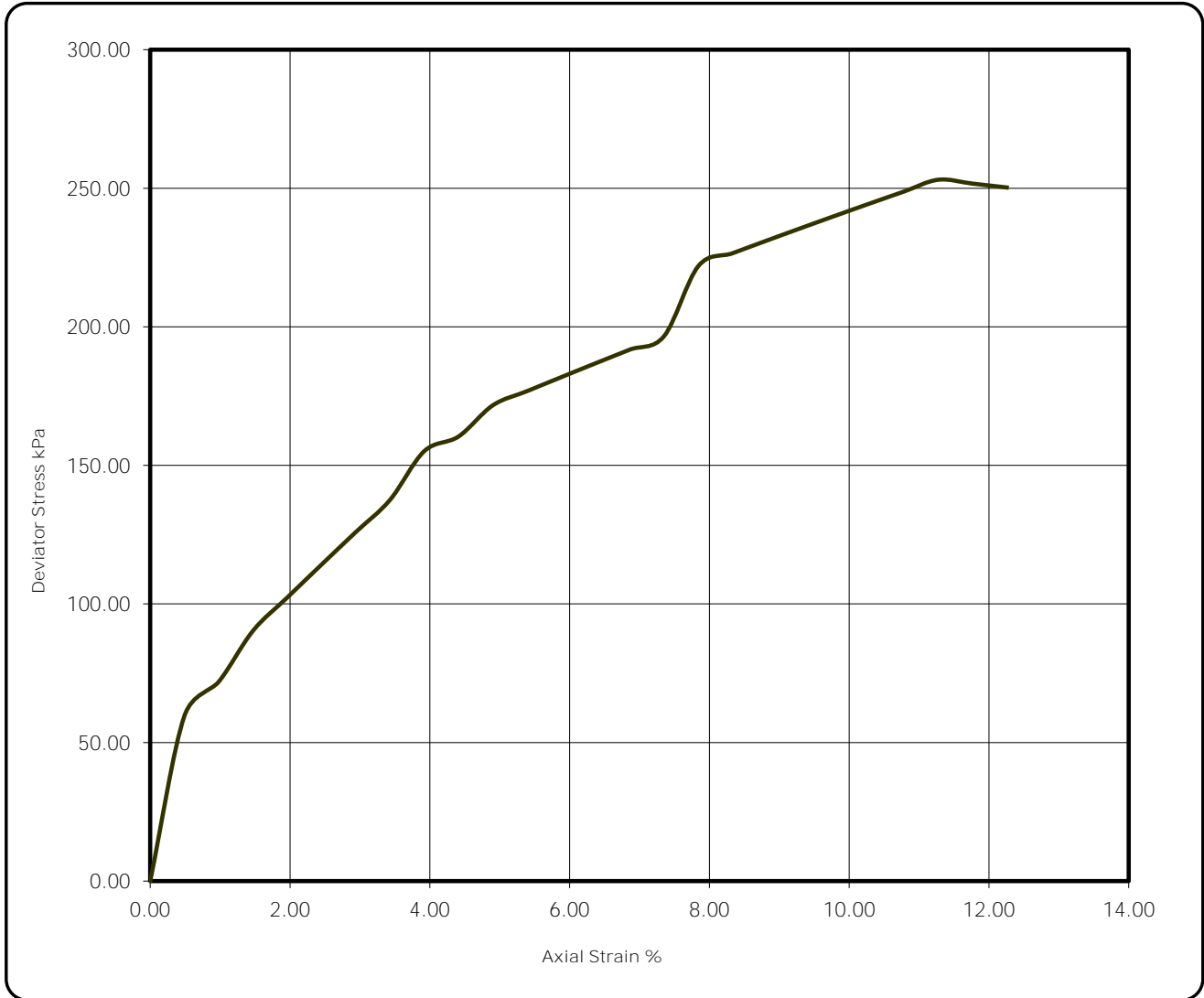
Approved By:

Date Approved: **7.3.17**



Test Report: Undrained Shear Strength in Triaxial Compression
 BS 1377 : Part7 : Clause 8 : 1990 Multistage Test
 without measurement of Pore Pressure

Client ref: UA008426-01
 Location: Northstowe Phase 2
 Contract Number: 34142
 Hole Number: BH1206
 Sample Number: 21
 Depth (m) : 8.00 -
 Sample Description : Grey/Brown silty CLAY



Diameter (mm):		103		Height (mm):		200		Test:		100mm Multistage	
Specimen	Moisture Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Deviator Stress (kPa)	Shear Strength (kPa)	Failure Strain (%)	Mode of Failure	Remarks		
A	28.8	1.96	1.52	80	197	98	7	Compound	Sample taken from Top of tube		
				160	236	118	9		Rate of strain = 2 %/min		
				320	253	127	11		Latex Membrane used mm thickness		



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Approved By:



Date Approved: **7.3.17**

QUICK SHEARBOX TEST.

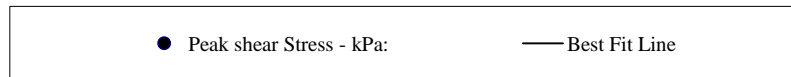
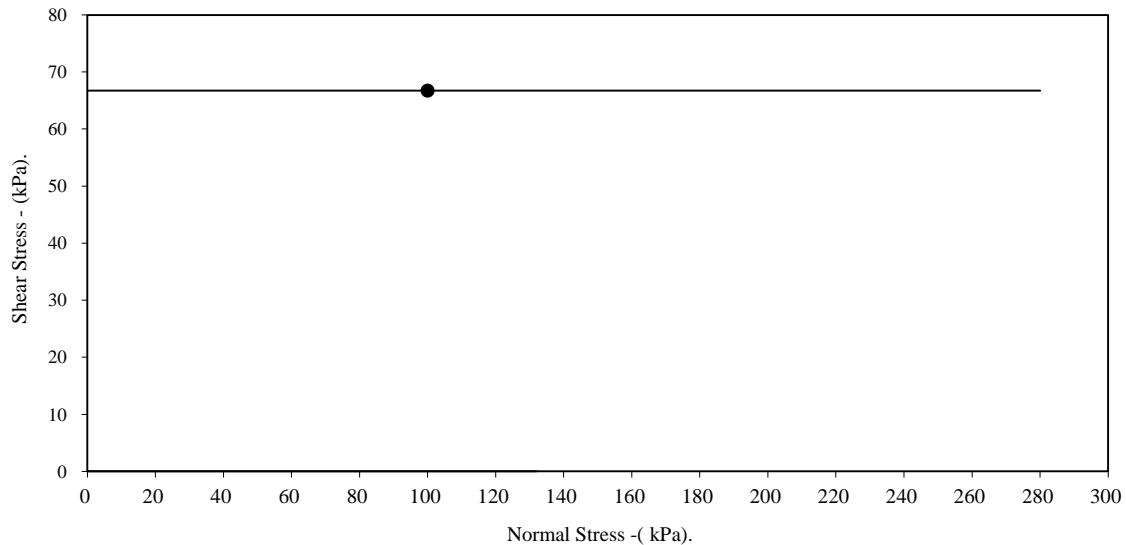
BS1377:Part 7:4.5 :1990.

Borehole/Sample Number: BH607 Depth (m): 1.20

Sample Type:	B		
Particle Density - Mg/m ³ :	2.65	(Assumed)	
Specimen Tested:	Submerged, Remoulded material above 2mm removed		
Sample Description:			
Brown soft clayey gravelly (fine-coarse/angular-subrounded) SAND			
STAGE	1		
Initial Conditions			
Height - mm:	24.27		
Length - mm:	59.97		
Moisture Content - %:	17		
Bulk Density - Mg/m ³ :	2.11		
Dry Density - Mg/m ³ :	1.80		
Voids Ratio:	0.4694		
Normal Pressure - kPa	100		
Consolidation			
Consolidated Height - mm:	22.35		
Shear			
Rate of Strain (mm/min)	0.125		
Strain at peak shear stress (mm)	6.29		
Peak shear Stress - kPa:	67		

PEAK	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	67
RESIDUAL	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	0

FAILURE CONDITIONS



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Northstowe Phase 2

Contract No.:
34142

Client Ref Number:
UA008426-01
Figure.

QUICK SHEARBOX TEST.

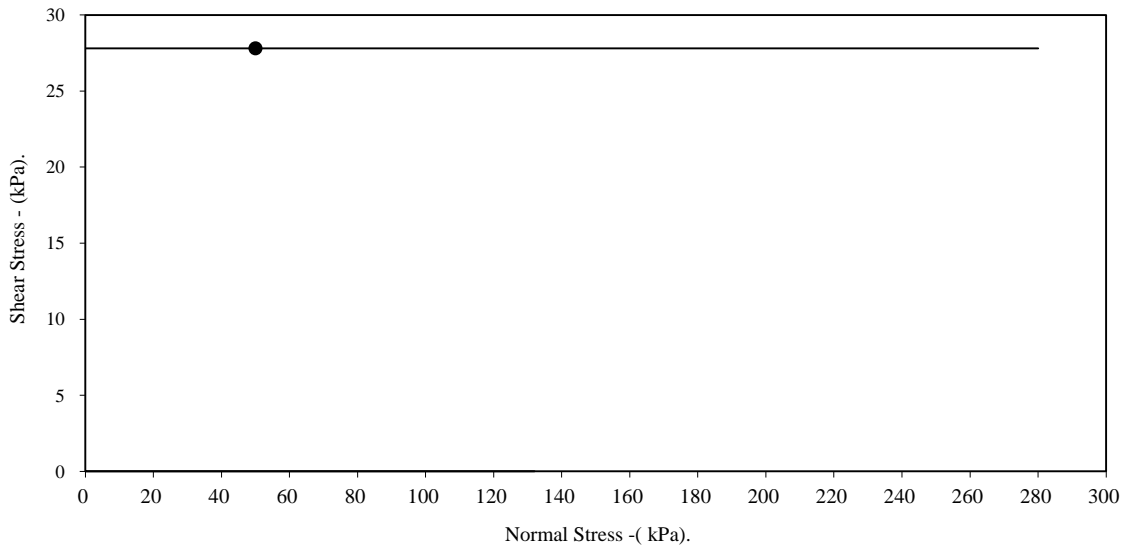
BS1377:Part 7:4.5 :1990.

Borehole/Sample Number: BH608 Depth (m): 3.00

Sample Type:	B		
Particle Density - Mg/m ³ :	2.65	(Assumed)	
Specimen Tested:	Submerged, Remoulded material above 2mm removed		
Sample Description:			
Brown sandy GRAVEL (fine-coarse/angular-rounded)			
STAGE	1		
Initial Conditions			
Height - mm:	24.27		
Length - mm:	59.97		
Moisture Content - %:	16		
Bulk Density - Mg/m ³ :	1.81		
Dry Density - Mg/m ³ :	1.56		
Voids Ratio:	0.6969		
Normal Pressure - kPa	50		
Consolidation			
Consolidated Height - mm:	23.96		
Shear			
Rate of Strain (mm/min)	0.125		
Strain at peak shear stress (mm)	4.87		
Peak shear Stress - kPa:	28		

PEAK	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	28
RESIDUAL	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	0

FAILURE CONDITIONS



● Peak shear Stress - kPa:	— Best Fit Line
----------------------------	-----------------

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Northstowe Phase 2

Contract No.:
34142

Client Ref Number:
UA008426-01
Figure.

QUICK SHEARBOX TEST.

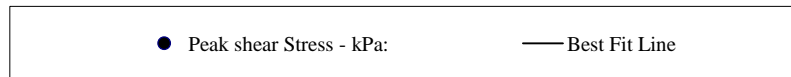
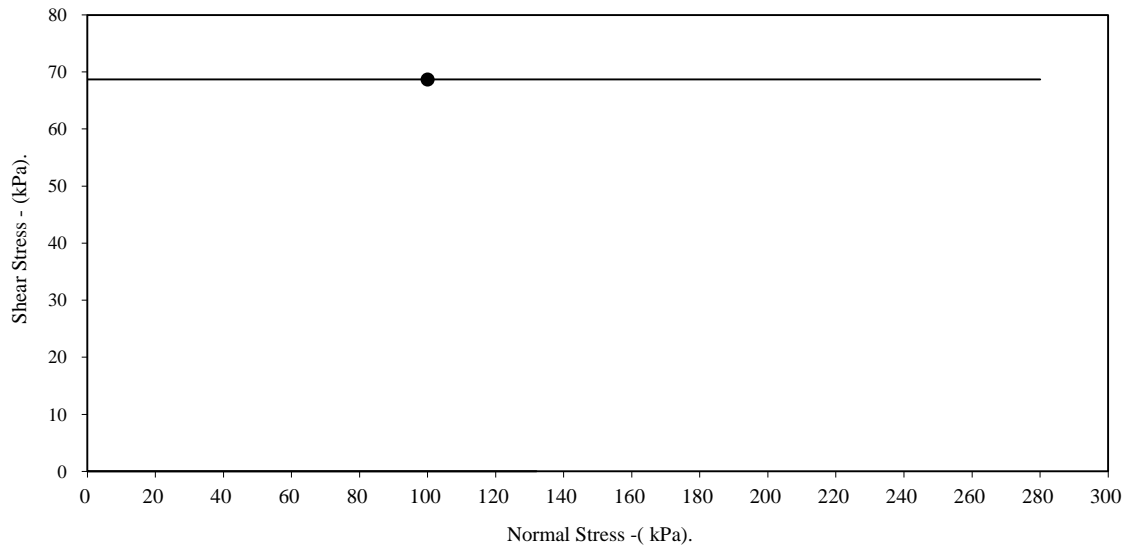
BS1377:Part 7:4.5 :1990.

Borehole/Sample Number: BH611 Depth (m): 4.00 -5.00

Sample Type:	B		
Particle Density - Mg/m ³ :	2.65	(Assumed)	
Specimen Tested:	Submerged, Remoulded material above 2mm removed		
Sample Description:			
Brown very sandy GRAVEL (fine-coarse/angular-subrounded)			
STAGE	1		
Initial Conditions			
Height - mm:	24.27		
Length - mm:	59.97		
Moisture Content - %:	12		
Bulk Density - Mg/m ³ :	2.13		
Dry Density - Mg/m ³ :	1.89		
Voids Ratio:	0.3986		
Normal Pressure- kPa	100		
Consolidation			
Consolidated Height - mm:	24.09		
Shear			
Rate of Strain (mm/min)	0.125		
Strain at peak shear stress (mm)	2.93		
Peak shear Stress - kPa:	69		

PEAK	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	69
RESIDUAL	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	0

FAILURE CONDITIONS



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Figure.

QUICK SHEARBOX TEST.

BS1377:Part 7:4.5 :1990.

Borehole/Sample Number: BH1110 Depth (m): 2.00

Sample Type:	B
Particle Density - Mg/m ³ :	2.65 (Assumed)
Specimen Tested:	Submerged, Remoulded material above 2mm removed

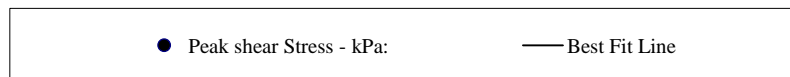
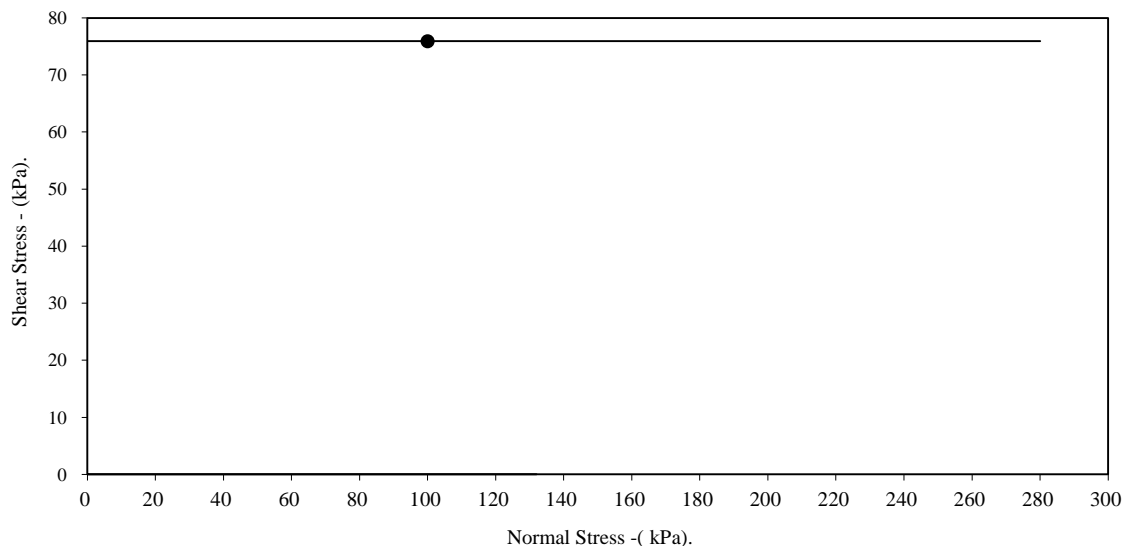
Sample Description:

Brown very clayey sandy GRAVEL (fine-coarse/angular-subrounded)

STAGE	1		
Initial Conditions			
Height - mm:	24.27		
Length - mm:	59.97		
Moisture Content - %:	15		
Bulk Density - Mg/m ³ :	2.13		
Dry Density - Mg/m ³ :	1.86		
Voids Ratio:	0.4253		
Normal Pressure - kPa	100		
Consolidation			
Consolidated Height - mm:	23.57		
Shear			
Rate of Strain (mm/min)	0.125		
Strain at peak shear stress (mm)	4.90		
Peak shear Stress - kPa:	76		

PEAK	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	76
RESIDUAL	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	0

FAILURE CONDITIONS



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Contract No.:
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Client Ref Number:
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Figure.

QUICK SHEARBOX TEST.

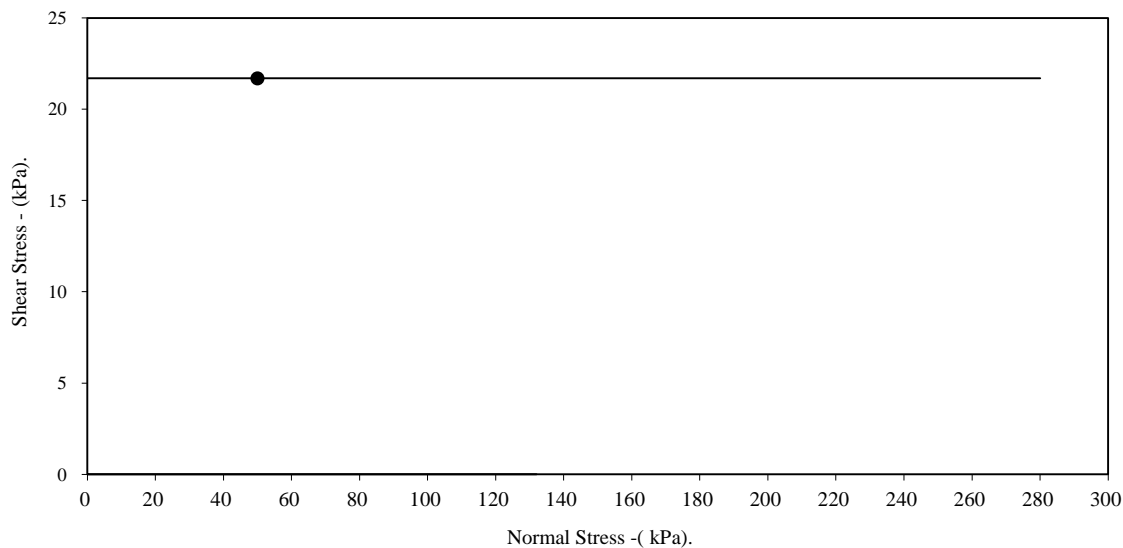
BS1377:Part 7:4.5 :1990.

Borehole/Sample Number: TP623 Depth (m): 0.90

Sample Type:	B		
Particle Density - Mg/m ³ :	2.65	(Assumed)	
Specimen Tested:	Submerged, Remoulded material above 2mm removed		
Sample Description: Brown sandy gravelly CLAY			
STAGE	1		
Initial Conditions			
Height - mm:	24.27		
Length - mm:	59.97		
Moisture Content - %:	13		
Bulk Density - Mg/m ³ :	1.81		
Dry Density - Mg/m ³ :	1.60		
Voids Ratio:	0.6560		
Normal Pressure - kPa	50		
Consolidation			
Consolidated Height - mm:	23.79		
Shear			
Rate of Strain (mm/min)	0.125		
Strain at peak shear stress (mm)	3.60		
Peak shear Stress - kPa:	22		

PEAK	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	22
RESIDUAL	
Angle of Shearing Resistance:(θ)	0.0
Effective Cohesion - kPa:	0

FAILURE CONDITIONS



● Peak shear Stress - kPa:	— Best Fit Line
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Client Ref Number:
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Figure.

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH601
Sample No.		31
Depth	m	6.00-6.45
Date		11/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty CLAY

Initial Specimen Conditions

Height	mm	205.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1741.45
Mass	g	3398.10
Dry Mass	g	2656.50
Density	Mg/m ³	1.95
Dry Density	Mg/m ³	1.53
Moisture Content	%	28
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	30
Density	Mg/m ³	2.12
Dry Density	Mg/m ³	1.63

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH601
Sample No.		31
Depth	m	6.00-6.45
Date		11/03/2017

Test Setup

Date started		20/02/2017
Date Finished		10/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P5
Cell Number		C5

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	400.00
Final Pore Pressure	kPa	388.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	60.00	120.00	240.00
Cell Pressure	kPa	400.00	400.00	400.00
Back Pressure	kPa	340.00	280.00	160.00
Excess Pore Pressure	kPa	48.00	120.00	145.00
Pore Pressure at End	kPa	340.00	280.00	160.00
Consolidated Volume	cm ³	1690.65	1662.75	1630.55
Consolidated Height	mm	203.01	195.53	187.46
Consolidated Area	mm ²	8329.66	8504.39	8698.82
Vol. Compressibility	m ² /MN	0.08580	0.05894	0.12103
Consolidation Coef.	m ² /yr.	2.52793	0.97174	0.59310

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Northstowe Phase 2

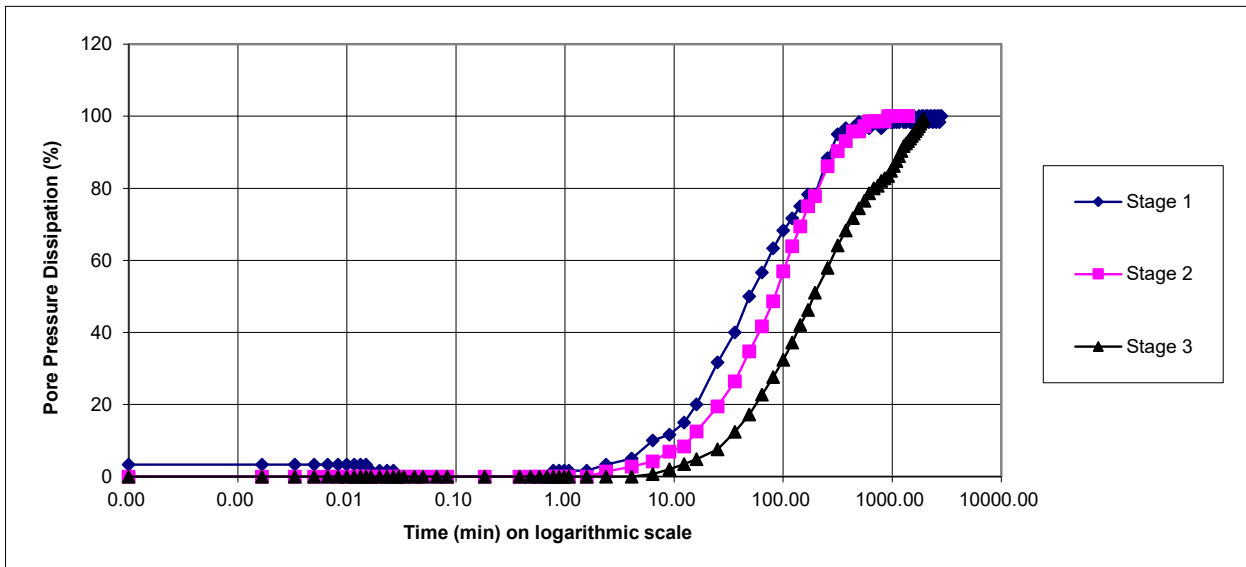
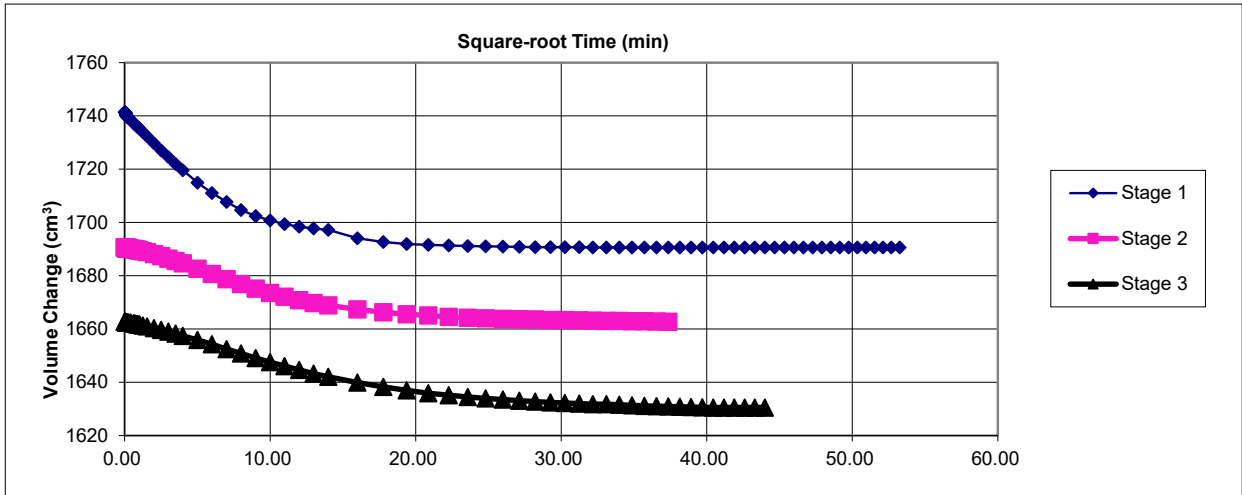
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH601
Sample No.	31
Depth	6.00-6.45
Date	11/03/2017

Consolidation Stage



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Client Ref
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Northstowe Phase 2

Contract No

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH601
Sample No.		31
Depth	m	6.00-6.45
Date		11/03/2017

Shearing

Initial Cell Pressure	kPa	400	400	400
Initial Pore Pressure	kPa	340	280	160
Rate of Strain	mm/min	0.0500	0.0185	0.0108
Max Deviator Stress				
Axial Strain		4.596	8.158	12.000
Axial Stress	kPa	81.778	131.51	206.91
Cor. Deviator stress	kPa	78.788	127.16	202.39
Effective Major Stress	kPa	118.788	215.16	360.39
Effective Minor Stress	kPa	41.000	88.00	158.00
Effective Stress Ratio		2.897	2.445	2.28
s'	kPa	79.894	151.58	259.20
t'	kPa	38.894	63.58	101.20
Max Effective Principle Stress Ratio				
Axial Strain		3.872	7.094	9.941
Axial Stress	kPa	78.937	128.932	203.504
Cor. Deviator stress	kPa	75.000	124.693	199.104
Effective Major Stress	kPa	114.000	208.693	351.104
Effective Minor Stress	kPa	39.000	84.000	152.000
Effective Stress Ratio		2.923	2.484	2.310
s'	kPa	76.500	146.347	251.552
t'	kPa	37.500	62.347	99.552
Shear Resistance Angle	degs	21.3		
Cohesion c'	kPa	11		

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Northstowe Phase 2

Contract No

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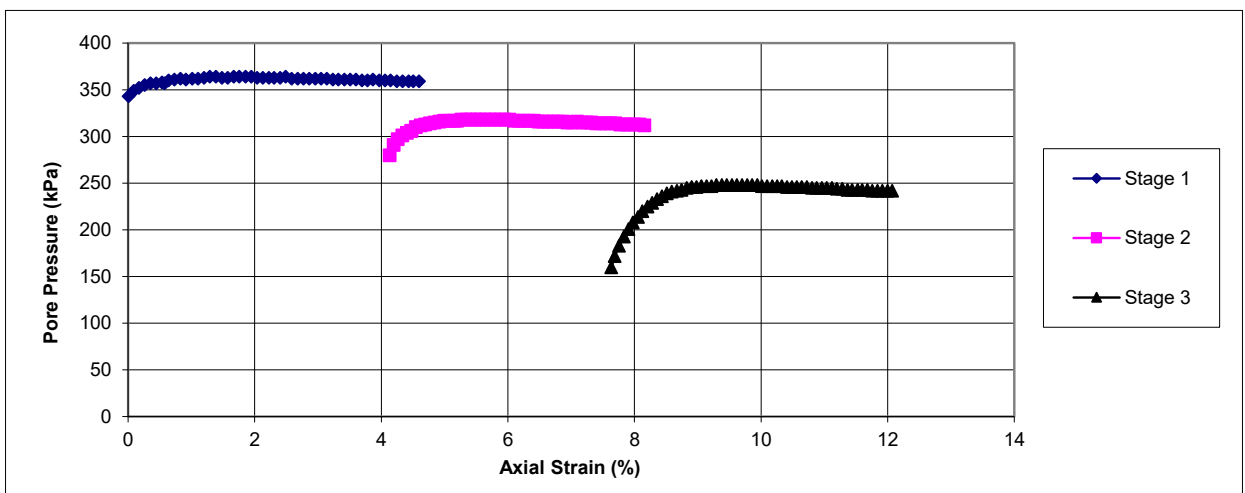
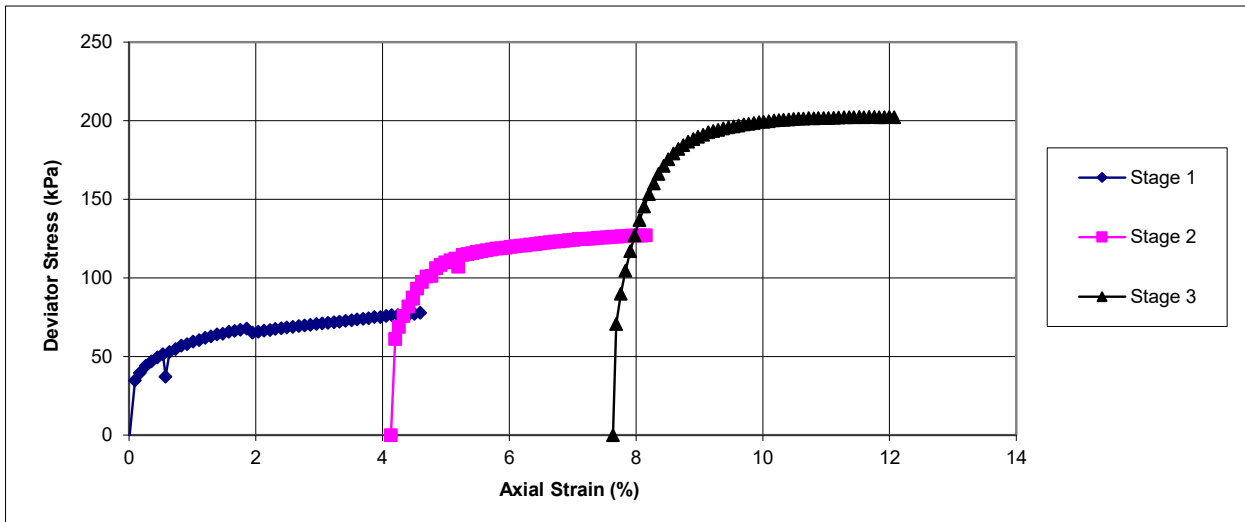
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH601
Sample No.		31
Depth	m	6.00-6.45
Date		11/03/2017

Shearing Stage



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Northstowe Phase 2

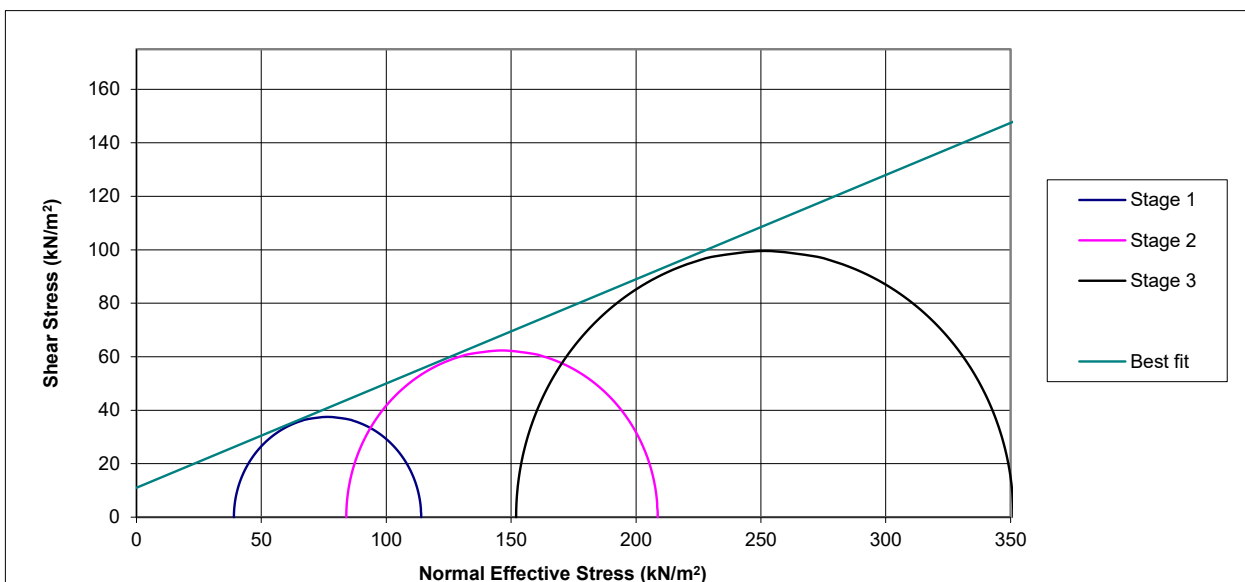
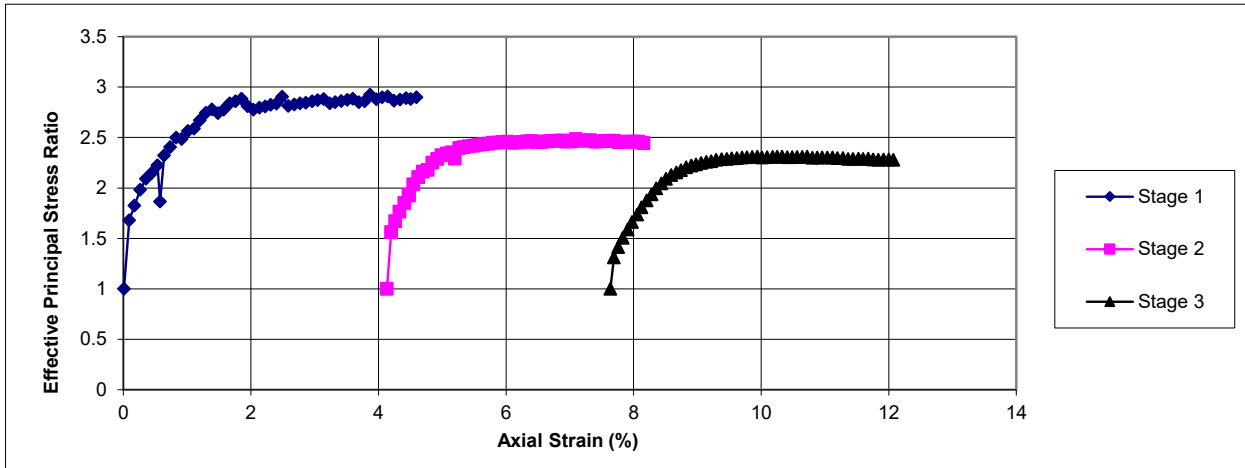
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH601
Sample No.		31
Depth	m	6.00-6.45
Date		11/03/2017

Shearing Stage



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Northstowe Phase 2

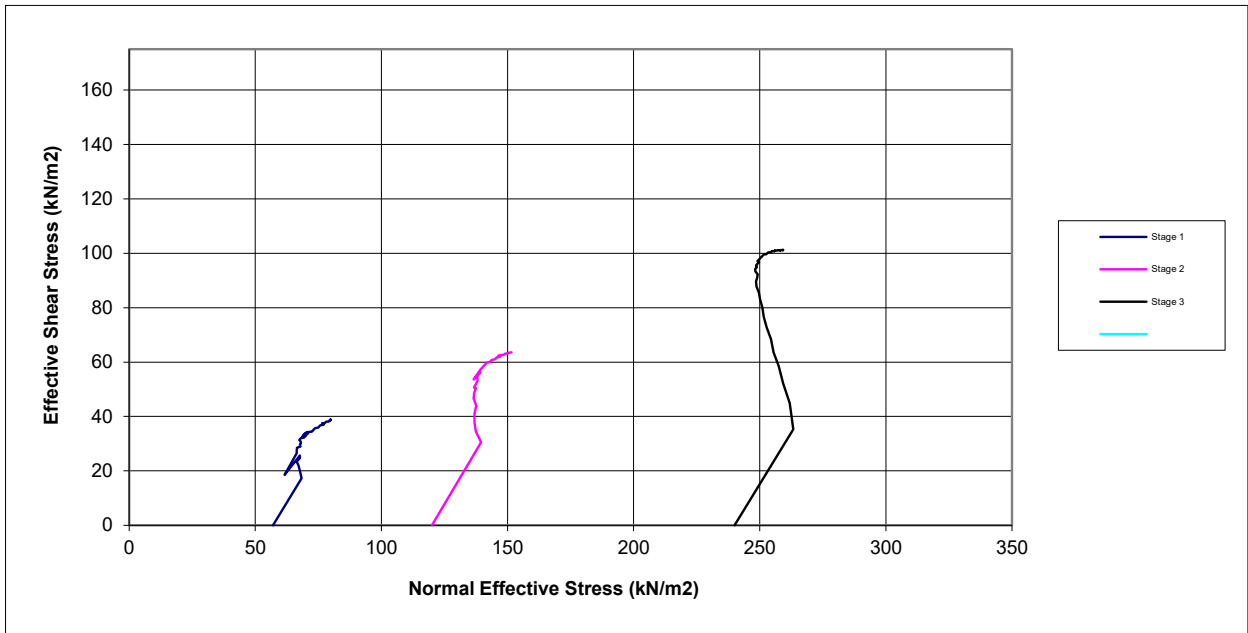
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH601
Sample No.	31
Depth	6.00-6.45
Date	11/03/2017

Shearing Stage



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Contract No

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH601
Sample No.		31
Depth	m	6.00-6.45
Date		11/03/2017



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Northstowe Phase 2

Contract No

34142

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		28
Depth	m	3.00-3.20
Date		20/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brown sl gravelly sl silty firm CLAY

Initial Specimen Conditions

Height	mm	200.00
Diameter	mm	100.00
Area	mm ²	7853.98
Volume	cm ³	1570.80
Mass	g	3150.00
Dry Mass	g	2450.00
Density	Mg/m ³	2.01
Dry Density	Mg/m ³	1.56
Moisture Content	%	29
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	29
Density	Mg/m ³	2.10
Dry Density	Mg/m ³	1.63

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Contract No

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	28
Depth	3.00-3.20
Date	20/03/2017

Test Setup

Date started	11/03/2017
Date Finished	19/03/2017
Top Drain Used	y
Base Drain Used	y
Side Drains Used	y
Pressure System Number	P4
Cell Number	C4

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	291.00
Final B Value		0.96

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	21.00	24.00	36.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1543.30	1525.70	1508.50
Consolidated Height	mm	198.83	194.87	187.00
Consolidated Area	mm ²	1543.30	1525.70	1508.50
Vol. Compressibility	m ² /MN	0.06484	0.02200	0.03477
Consolidation Coef.	m ² /yr.	50.53641	0.86354	0.33067

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Contract No

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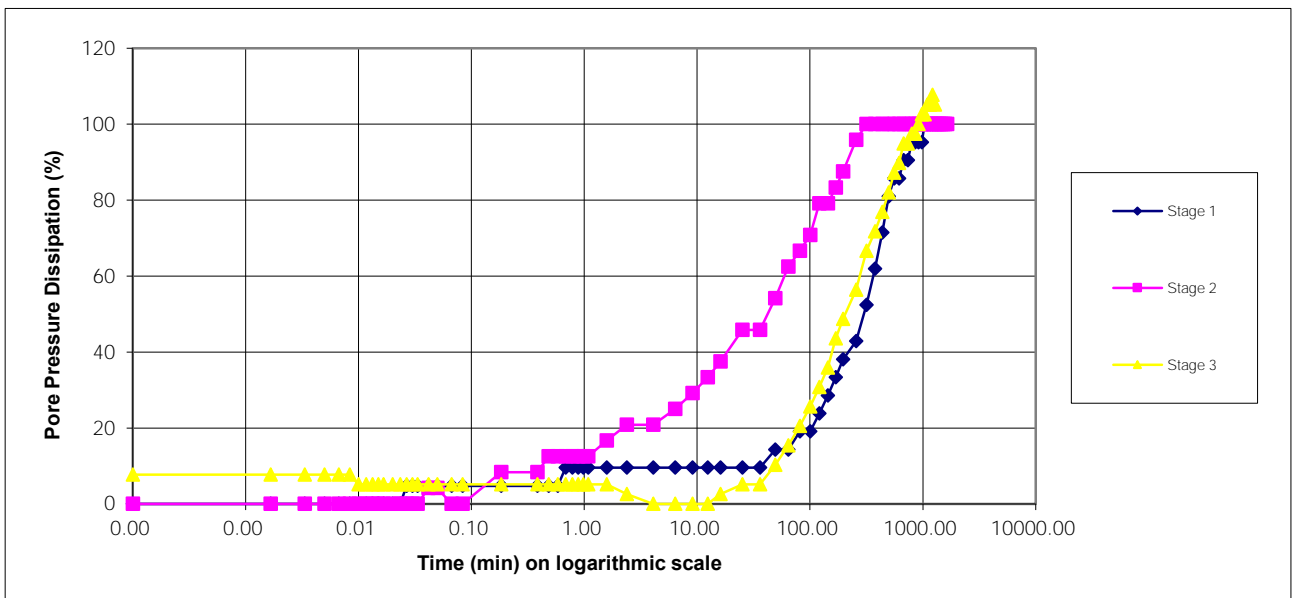
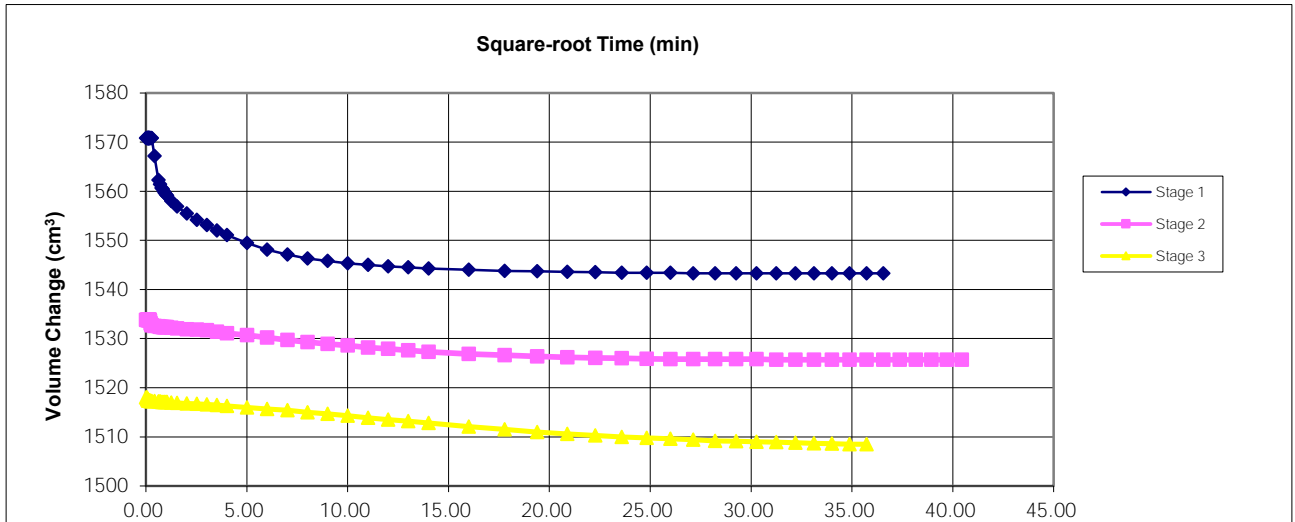
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	28
Depth	m 3.00-3.20
Date	20/03/2017

Consolidation Stage



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Northstowe Phase 2

Client Ref
UA008426-01

Contract No

34142

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		28
Depth	m	3.00-3.20
Date		20/03/2017

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.1522	0.0025	0.0009
Max Deviator Stress				
Axial Strain		3.209	5.098	11.253
Axial Stress	kPa	113.222	159.21	250.82
Cor. Deviator stress	kPa	110.320	155.16	246.30
Effective Major Stress	kPa	139.320	215.16	366.30
Effective Minor Stress	kPa	30.000	60.00	120.00
Effective Stress Ratio		4.644	3.586	3.05
s'	kPa	84.660	137.58	243.15
t'	kPa	54.660	77.58	123.15
Max Effective Principle Stress Ratio				
Axial Strain		3.209	5.098	11.253
Axial Stress	kPa	113.222	159.212	250.819
Cor. Deviator stress	kPa	109.320	155.163	246.304
Effective Major Stress	kPa	139.320	215.163	366.304
Effective Minor Stress	kPa	30.000	60.000	120.000
Effective Stress Ratio		4.644	3.586	3.053
s'	kPa	84.660	137.582	243.152
t'	kPa	54.660	77.582	123.152
Shear Resistance Angle	degs	25.5		
Cohesion c'	kPa	21		

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Client Ref

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Contract No

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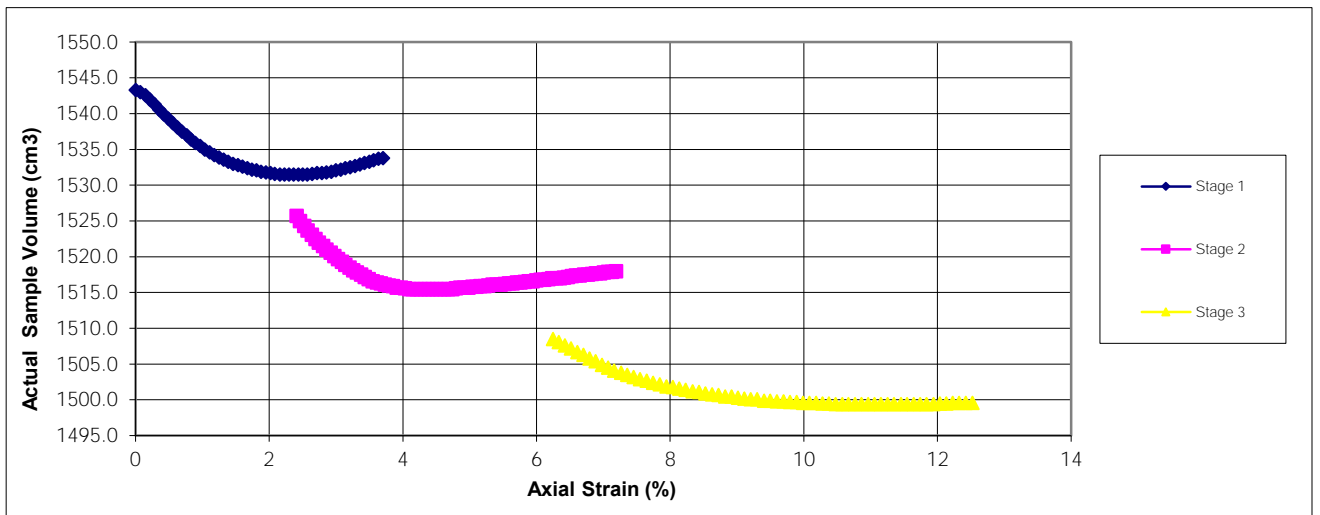
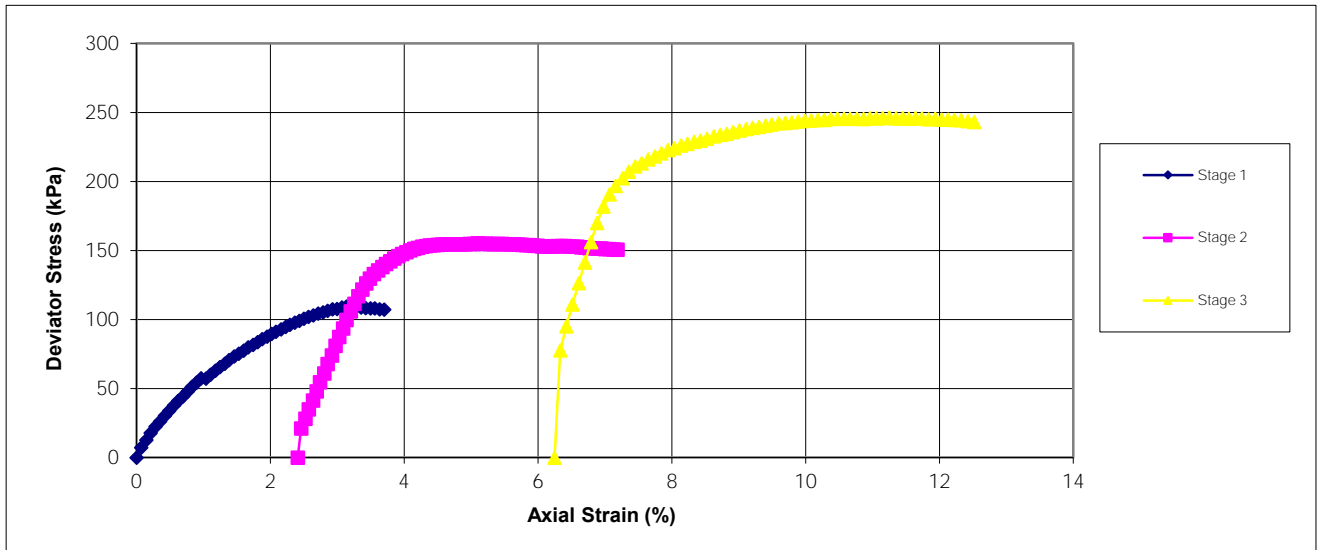
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		28
Depth	m	3.00-3.20
Date		20/03/2017

Shearing Stage



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Northstowe Phase 2

Client Ref
UA008426-01

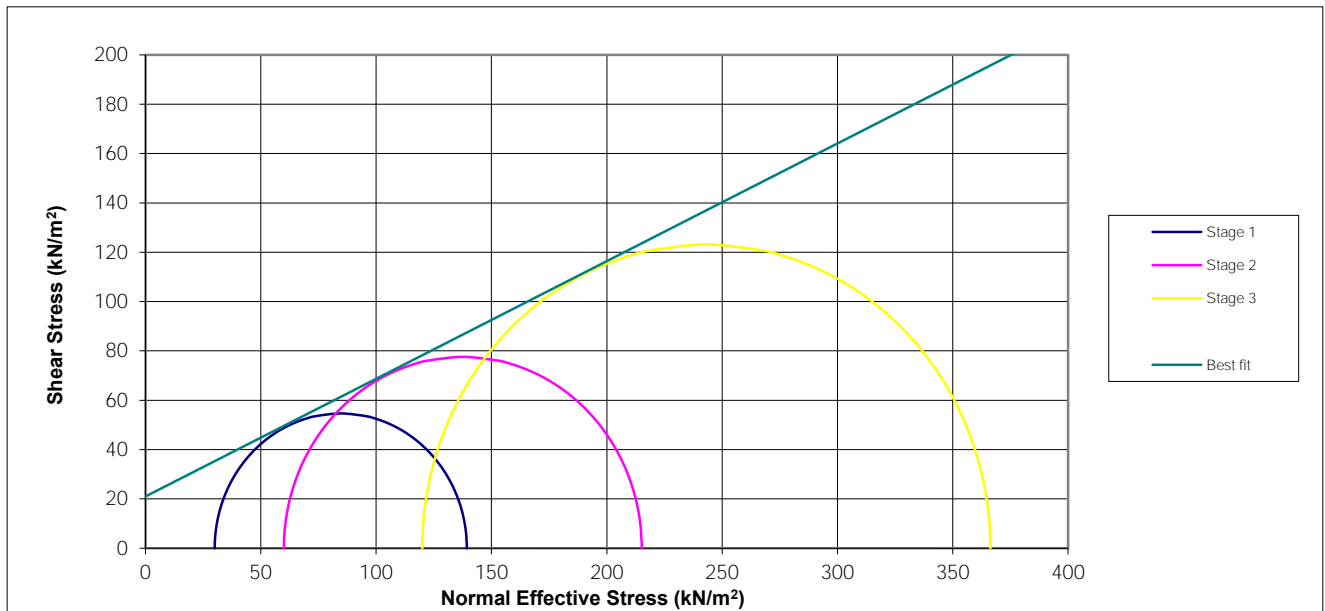
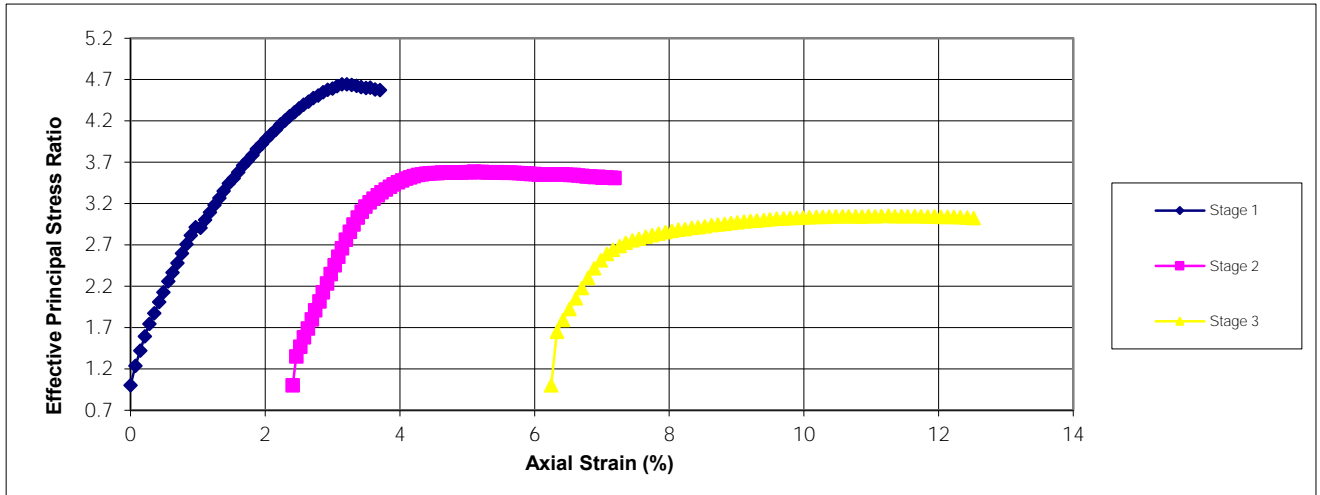
Contract No
34142

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	28
Depth	m 3.00-3.20
Date	20/03/2017

Shearing Stage



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Checked and Approved By

27/03/17

Date

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Contract No

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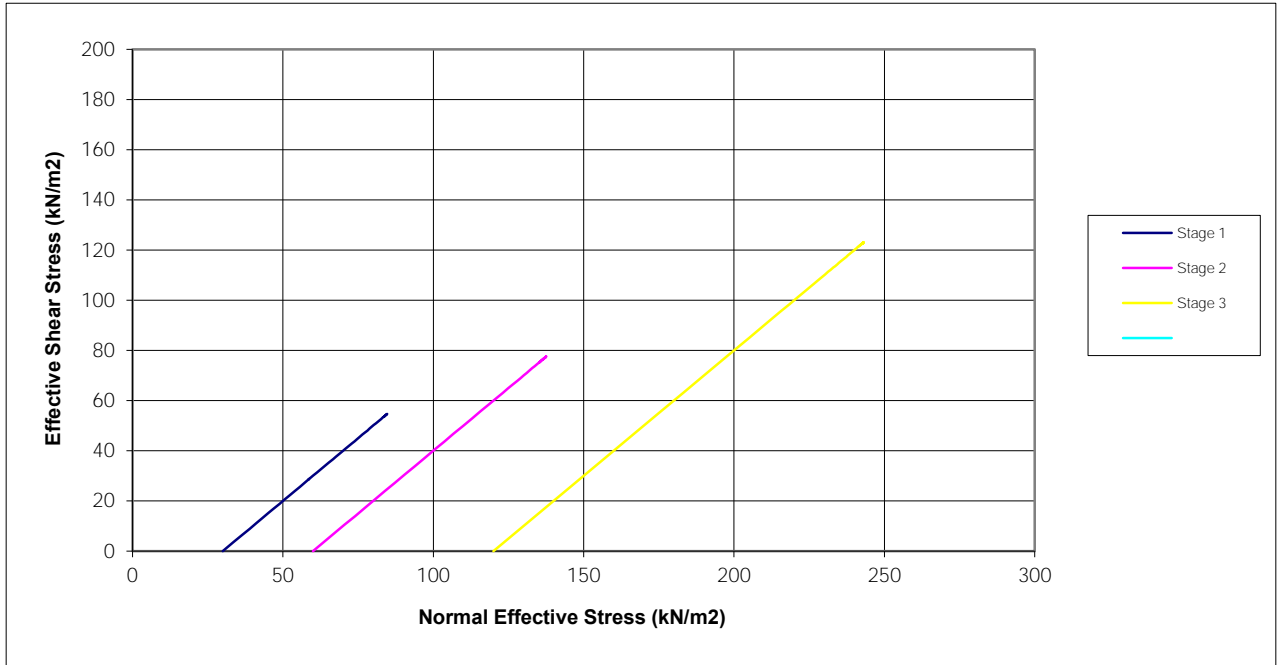
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		28
Depth	m	3.00-3.20
Date		20/03/2017

Shearing Stage



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Checked and Approved By

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		0
Depth	m	4.50-4.95
Date		14/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brown sl grey silty firm CLAY

Initial Specimen Conditions

Height	mm	202.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1715.96
Mass	g	3356.40
Dry Mass	g	2819.00
Density	Mg/m ³	1.96
Dry Density	Mg/m ³	1.64
Moisture Content	%	19
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	20
Density	Mg/m ³	2.04
Dry Density	Mg/m ³	1.70

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		0
Depth	m	4.50-4.95
Date		14/03/2017

Test Setup

Date started		03/03/2017
Date Finished		13/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P9
Cell Number		C9

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	293.00
Final B Value		1.01

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	23.00	30.00	70.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1688.36	1675.66	1657.26
Consolidated Height	mm	200.92	194.21	186.73
Consolidated Area	mm ²	8403.78	8628.13	8875.62
Vol. Compressibility	m ² /MN	0.05957	0.03134	0.06100
Consolidation Coef.	m ² /yr.	0.55770	0.27494	0.11091

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Northstowe Phase 2

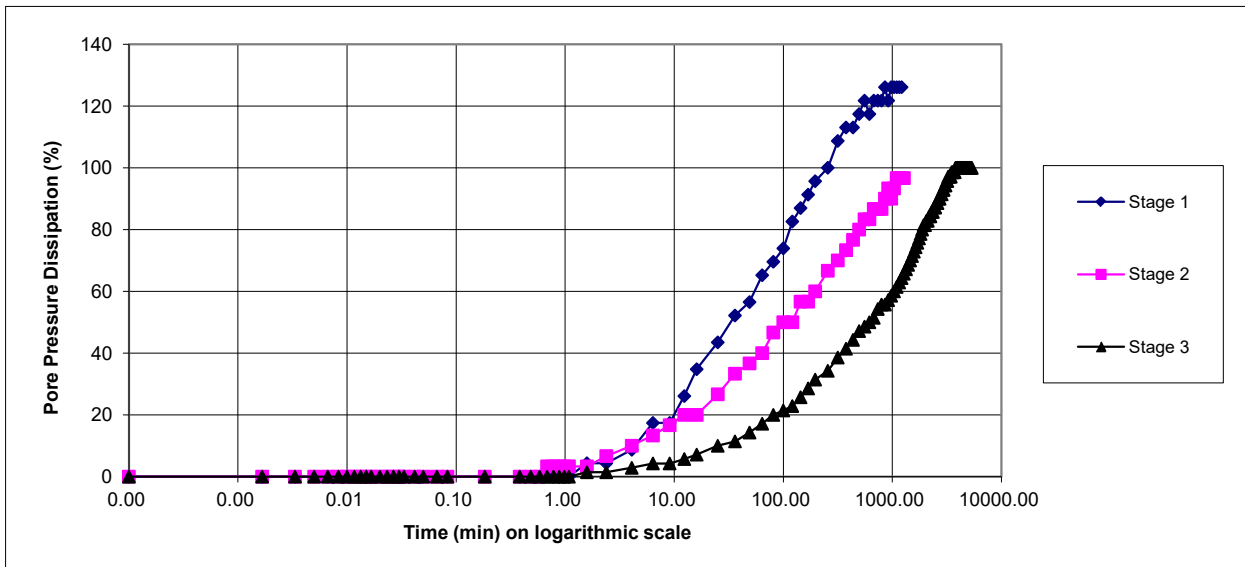
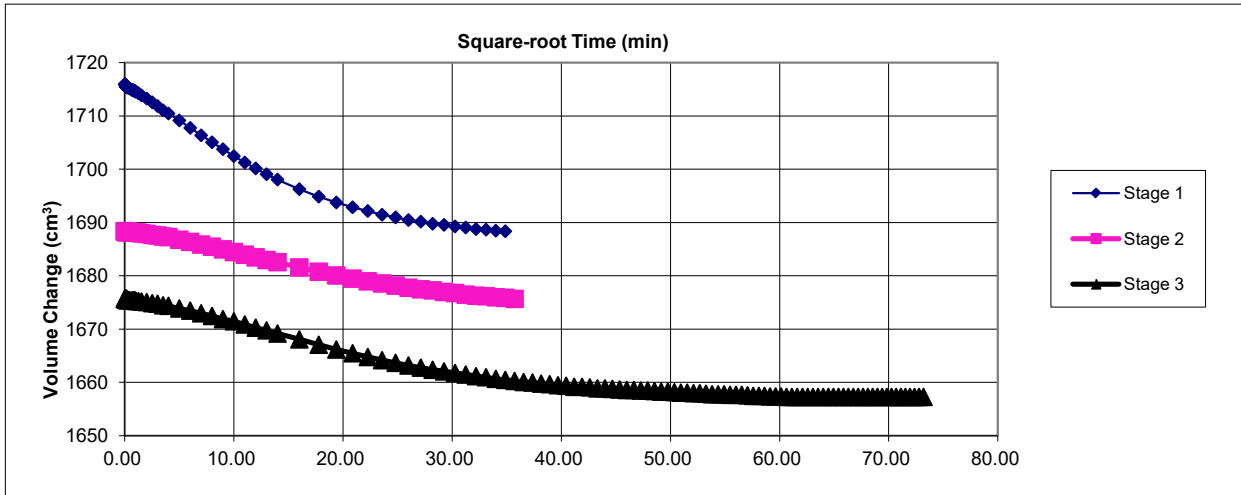
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		0
Depth	m	4.50-4.95
Date		14/03/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		0
Depth	m	4.50-4.95
Date		14/03/2017

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.0109	0.0052	0.0020
Max Deviator Stress				
Axial Strain		3.907	7.469	12.704
Axial Stress	kPa	81.642	112.46	160.01
Cor. Deviator stress	kPa	78.703	108.18	155.45
Effective Major Stress	kPa	103.703	150.18	228.45
Effective Minor Stress	kPa	26.000	42.00	73.00
Effective Stress Ratio		3.989	3.576	3.13
s'	kPa	64.852	96.09	150.73
t'	kPa	38.852	54.09	77.73
Max Effective Principle Stress Ratio				
Axial Strain		1.881	5.070	10.991
Axial Stress	kPa	71.338	103.034	156.853
Cor. Deviator stress	kPa	71.050	99.006	152.392
Effective Major Stress	kPa	91.050	136.006	222.392
Effective Minor Stress	kPa	20.000	37.000	70.000
Effective Stress Ratio		4.552	3.676	3.177
s'	kPa	55.525	86.503	146.196
t'	kPa	35.525	49.503	76.196
Shear Resistance Angle	degs	26.7		
Cohesion c'	kPa	12		

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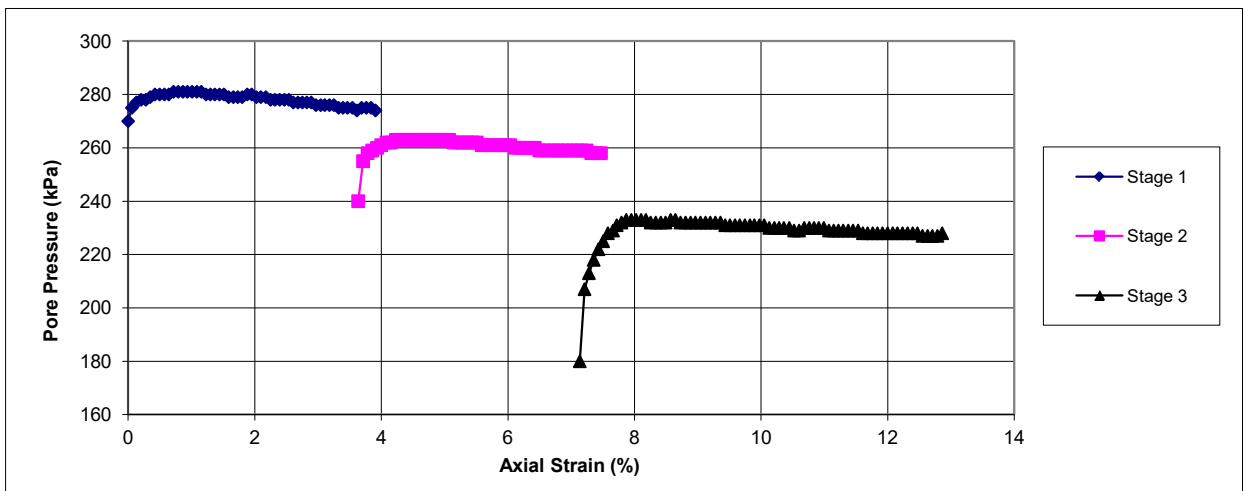
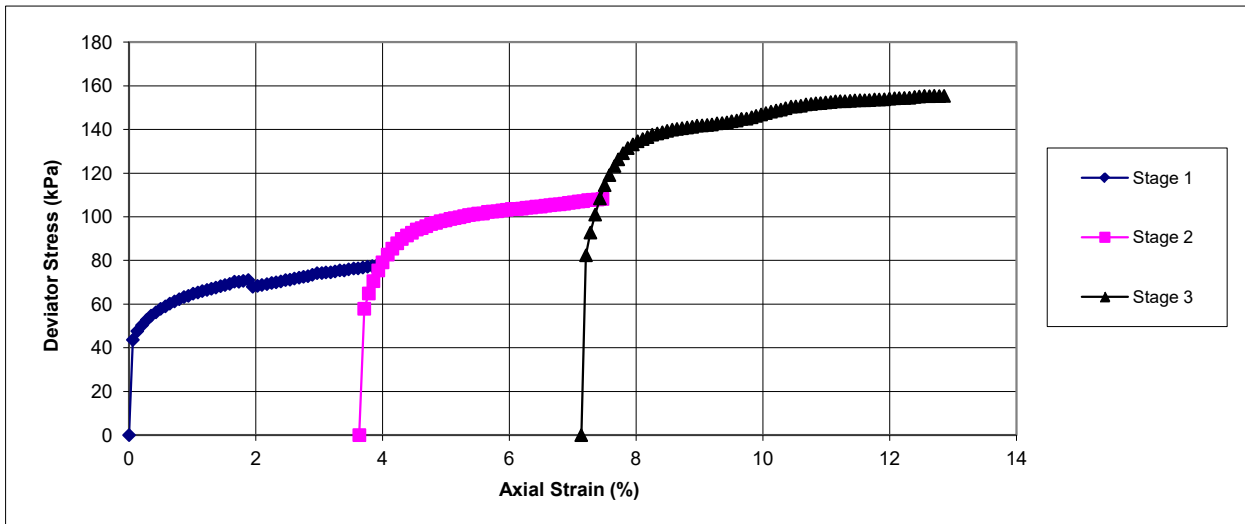
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		0
Depth	m	4.50-4.95
Date		14/03/2017

Shearing Stage



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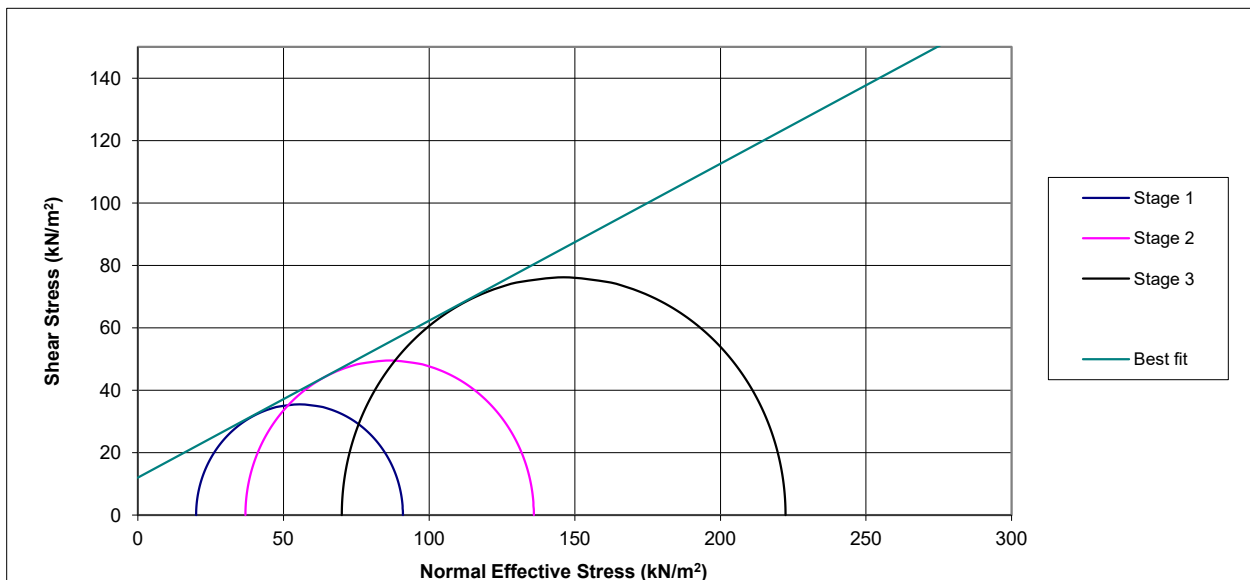
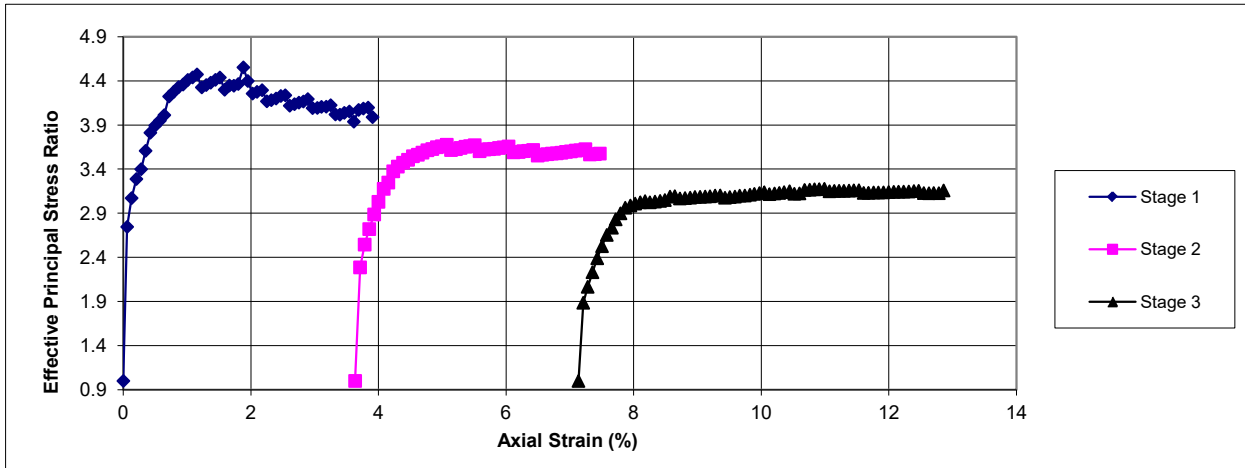
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		0
Depth	m	4.50-4.95
Date		14/03/2017

Shearing Stage



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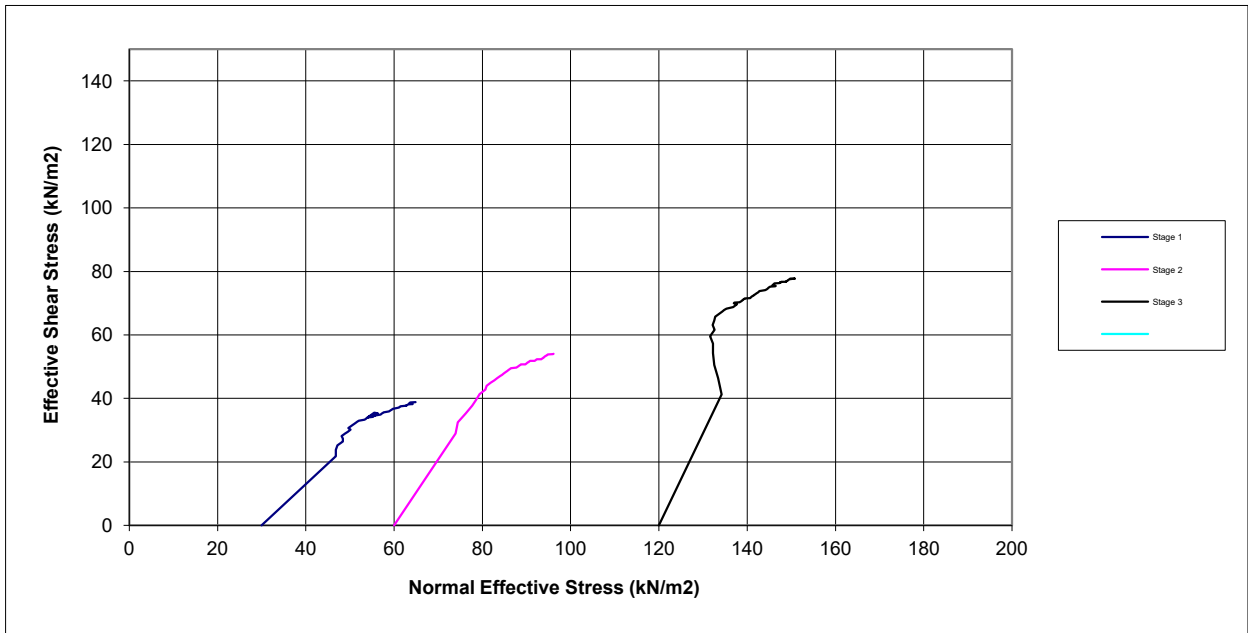
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	0
Depth	4.50-4.95
Date	14/03/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		0
Depth	m	4.50-4.95
Date		14/03/2017



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		
Depth	m	7.50-7.95
Date		06/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty stiff CLAY

Initial Specimen Conditions

Height	mm	203.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1724.46
Mass	g	3306.60
Dry Mass	g	2535.90
Density	Mg/m ³	1.92
Dry Density	Mg/m ³	1.47
Moisture Content	%	30
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	33
Density	Mg/m ³	2.09
Dry Density	Mg/m ³	1.57

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		
Depth	m	7.50-7.95
Date		06/03/2017

Test Setup

Date started		20/02/2017
Date Finished		05/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P3
Cell Number		C3

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	400.00
Final Pore Pressure	kPa	388.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	60.00	120.00	240.00
Cell Pressure	kPa	400.00	400.00	400.00
Back Pressure	kPa	340.00	280.00	160.00
Excess Pore Pressure	kPa	48.00	120.00	145.00
Pore Pressure at End	kPa	340.00	280.00	160.00
Consolidated Volume	cm ³	1673.66	1645.76	1614.56
Consolidated Height	mm	201.01	193.53	185.50
Consolidated Area	mm ²	8328.04	8504.49	8704.57
Vol. Compressibility	m ² /MN	0.08664	0.05954	0.11849
Consolidation Coef.	m ² /yr.	2.52793	0.97174	0.59310

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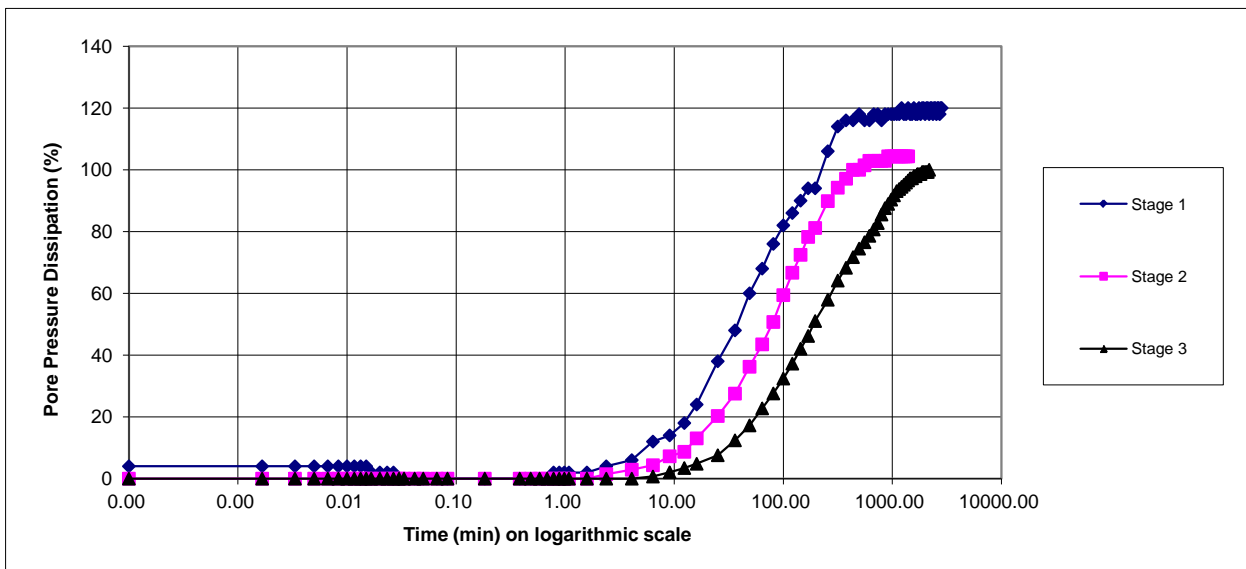
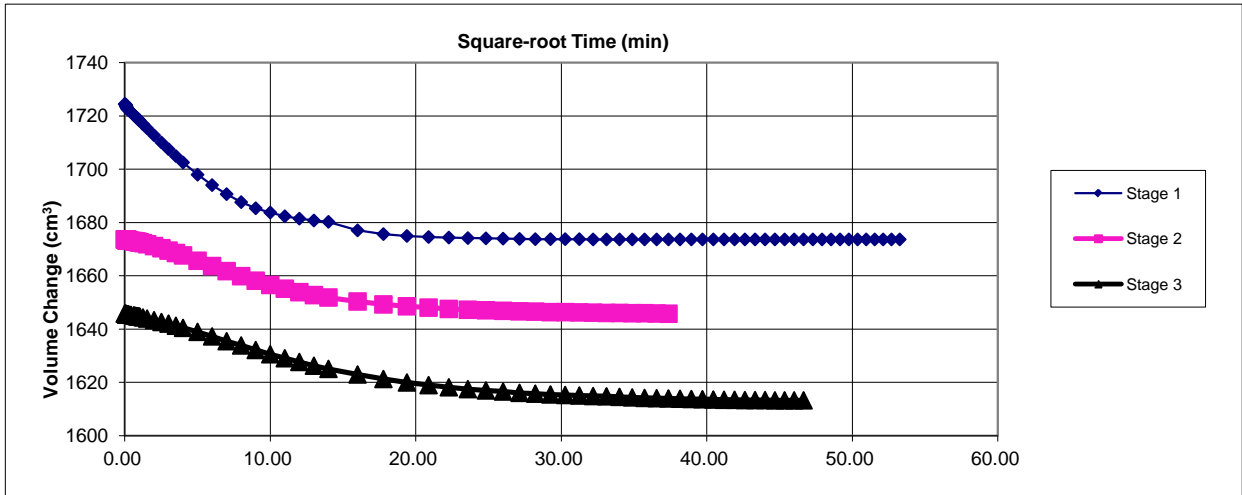
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	
Depth	m 7.50-7.95
Date	06/03/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	
Depth	m 7.50-7.95
Date	06/03/2017

Shearing

Initial Cell Pressure	kPa	400	400	400
Initial Pore Pressure	kPa	340	280	160
Rate of Strain	mm/min	0.0495	0.0183	0.0107
Max Deviator Stress				
Axial Strain		4.642	8.241	12.123
Axial Stress	kPa	81.755	134.28	206.67
Cor. Deviator stress	kPa	78.761	129.92	202.15
Effective Major Stress	kPa	118.761	217.92	360.15
Effective Minor Stress	kPa	41.000	88.00	158.00
Effective Stress Ratio		2.897	2.476	2.28
s'	kPa	79.880	152.96	259.07
t'	kPa	38.880	64.96	101.07
Max Effective Principle Stress Ratio				
Axial Strain		3.910	7.166	10.042
Axial Stress	kPa	78.921	131.662	203.319
Cor. Deviator stress	kPa	74.981	127.416	198.913
Effective Major Stress	kPa	113.981	211.416	350.913
Effective Minor Stress	kPa	39.000	84.000	152.000
Effective Stress Ratio		2.923	2.517	2.309
s'	kPa	76.491	147.708	251.457
t'	kPa	37.491	63.708	99.457
Shear Resistance Angle	degs	20.7		
Cohesion c'	kPa	11		

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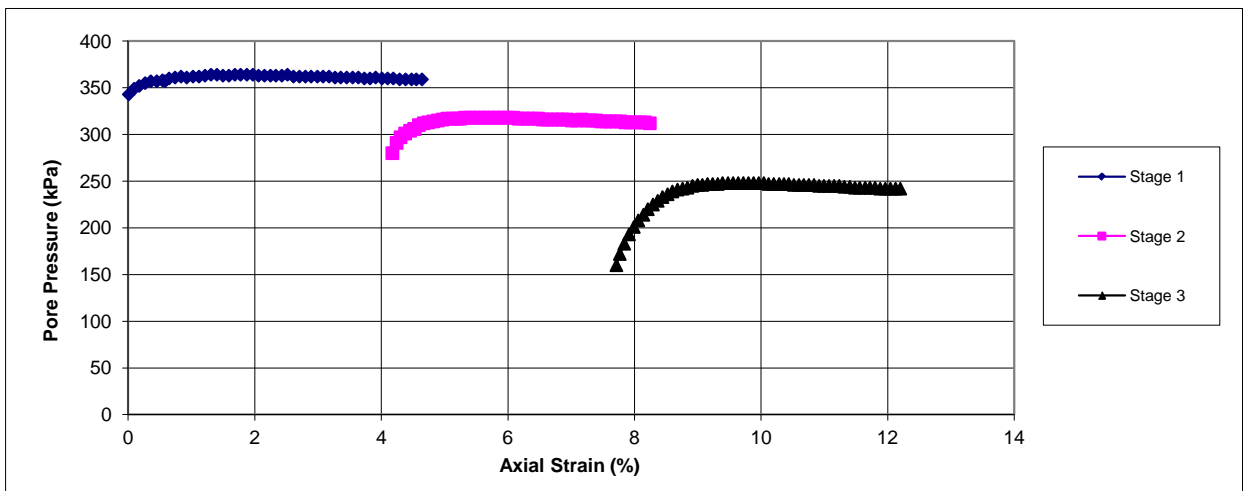
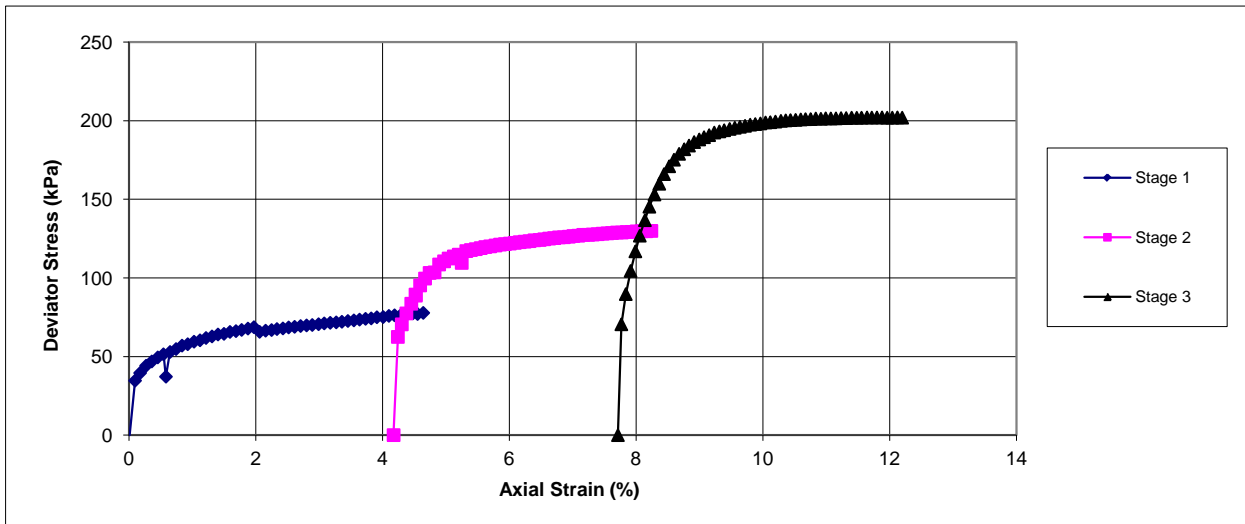
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		
Depth	m	7.50-7.95
Date		06/03/2017

Shearing Stage



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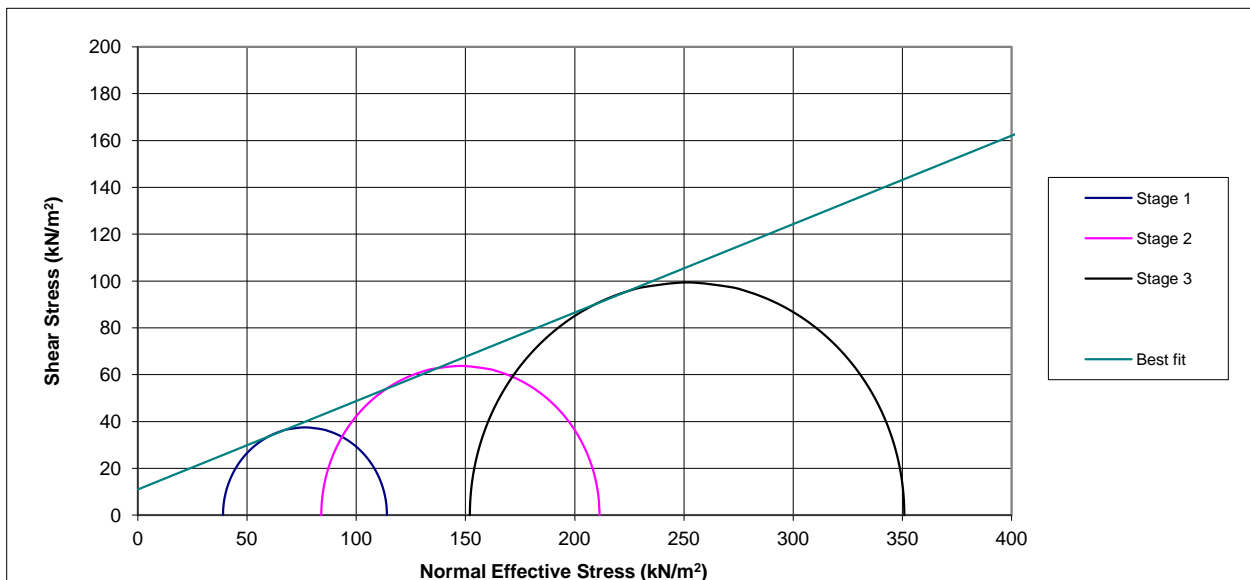
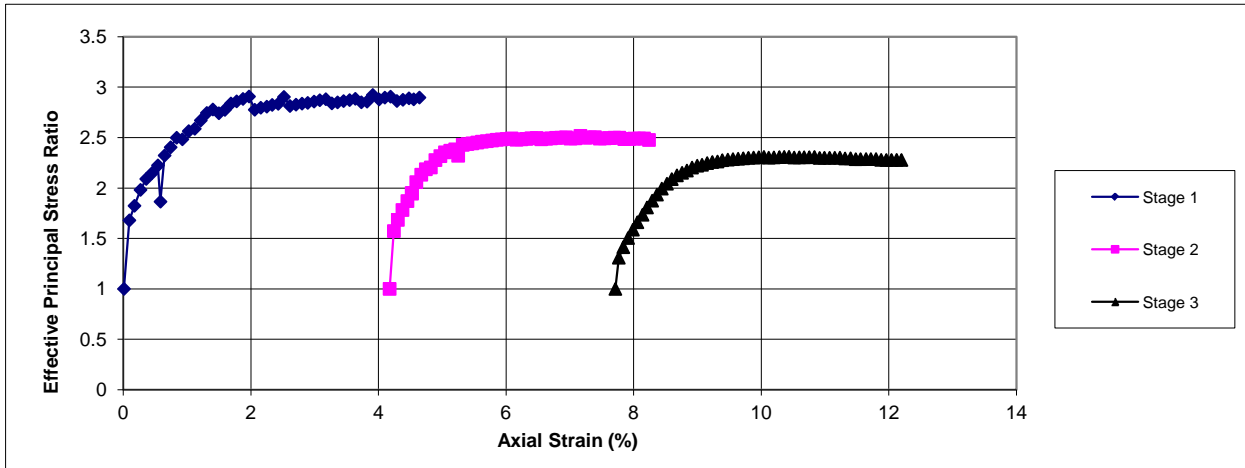
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	
Depth	7.50-7.95
Date	06/03/2017

Shearing Stage



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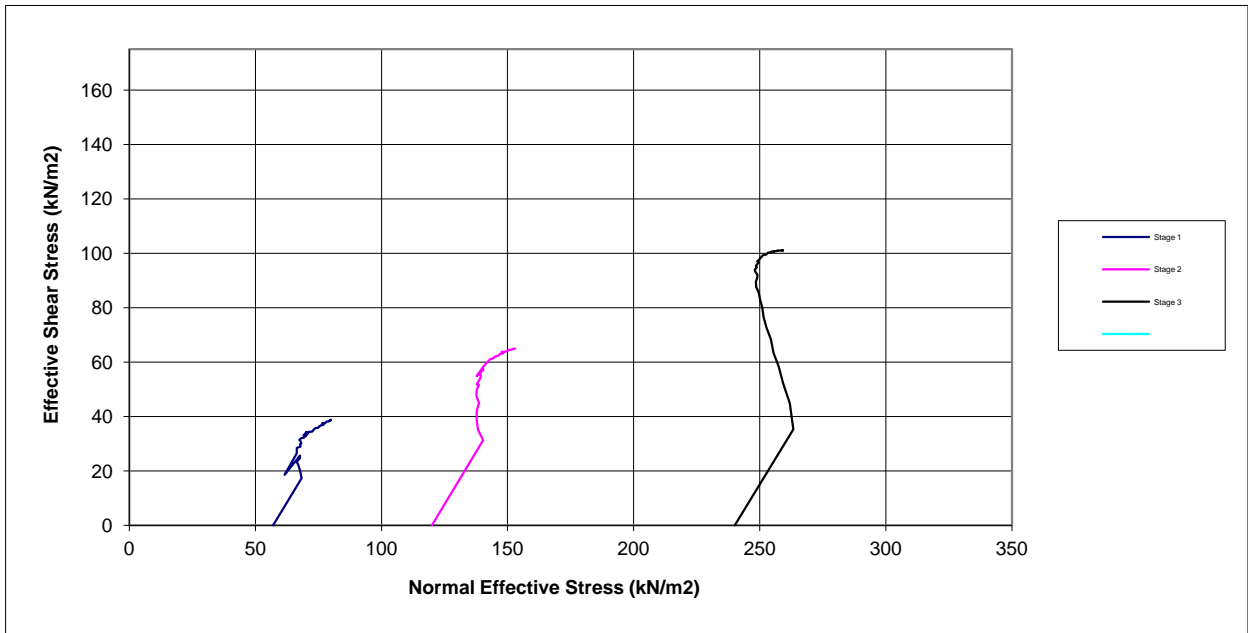
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH602
Sample No.	
Depth	7.50-7.95
Date	06/03/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH602
Sample No.		
Depth	m	7.50-7.95
Date		06/03/2017



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Northstowe Phase 2

Contract No

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Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH604
Sample No.		16
Depth	m	3.45
Date		12/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brownish silty firm CLAY

Initial Specimen Conditions

Height	mm	203.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1691.45
Mass	g	3196.30
Dry Mass	g	2598.30
Density	Mg/m ³	1.89
Dry Density	Mg/m ³	1.54
Moisture Content	%	23
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	24
Density	Mg/m ³	1.99
Dry Density	Mg/m ³	1.60

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH604
Sample No.		16
Depth	m	3.45
Date		12/04/2017

Test Setup

Date started		21/03/2017
Date Finished		11/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P10
Cell Number		C10

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	296.00
Final B Value		1.01

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	26.00	25.00	63.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1677.75	1656.35	1627.05
Consolidated Height	mm	202.45	194.77	186.03
Consolidated Area	mm ²	1677.75	1656.35	1627.05
Vol. Compressibility	m ² /MN	0.03000	0.04947	0.10025
Consolidation Coef.	m ² /yr.	2.32700	0.07736	0.04028

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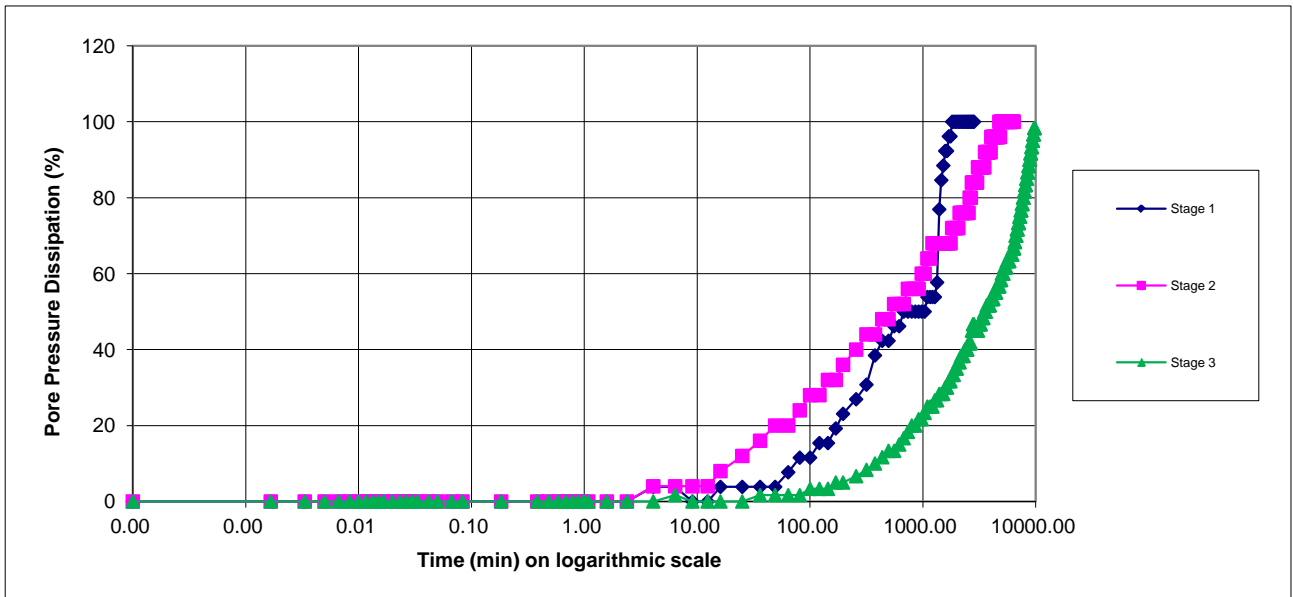
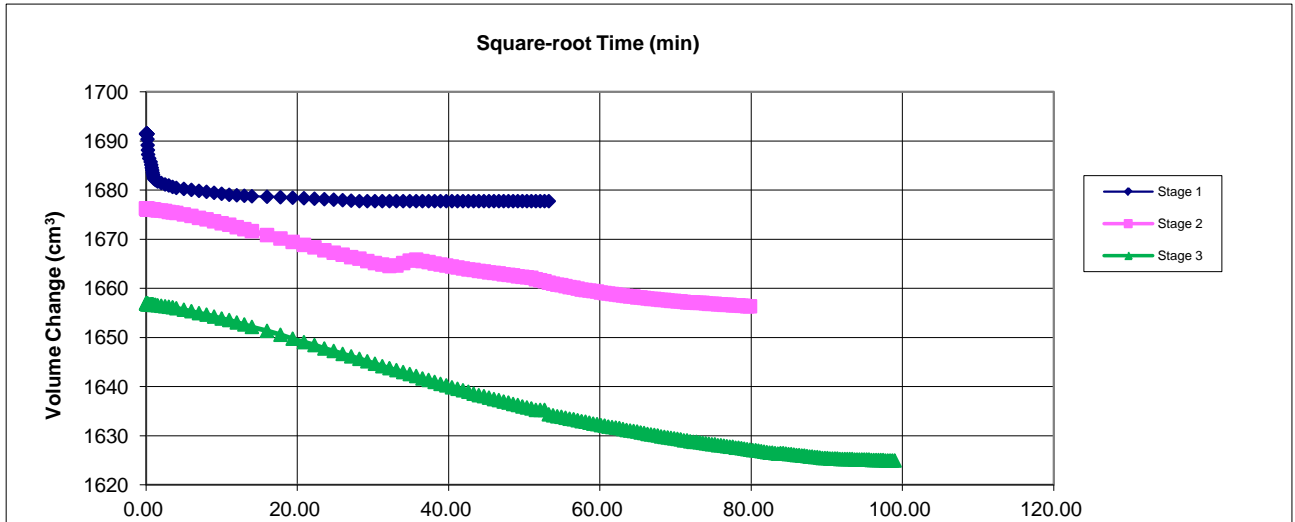
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH604
Sample No.		16
Depth	m	3.45
Date		12/04/2017

Consolidation Stage



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Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH604
Sample No.		16
Depth	m	3.45
Date		12/04/2017

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.0067	0.0002	0.0001
Max Deviator Stress				
Axial Strain		5.261	8.963	13.860
Axial Stress	kPa	65.848	86.02	123.88
Cor. Deviator stress	kPa	62.802	81.70	94.24
Effective Major Stress	kPa	87.802	121.70	164.24
Effective Minor Stress	kPa	26.000	40.00	70.00
Effective Stress Ratio		3.377	3.042	2.35
s'	kPa	56.901	80.85	117.12
t'	kPa	30.901	40.85	47.12
Max Effective Principle Stress Ratio				
Axial Strain		4.243	7.797	10.952
Axial Stress	kPa	62.973	83.867	118.994
Cor. Deviator stress	kPa	59.004	79.630	114.526
Effective Major Stress	kPa	83.004	117.630	176.526
Effective Minor Stress	kPa	24.000	38.000	62.000
Effective Stress Ratio		3.459	3.096	2.847
s'	kPa	53.502	77.815	119.263
t'	kPa	29.502	39.815	57.263
Shear Resistance Angle	degs	24.8		
Cohesion c'	kPa	8		

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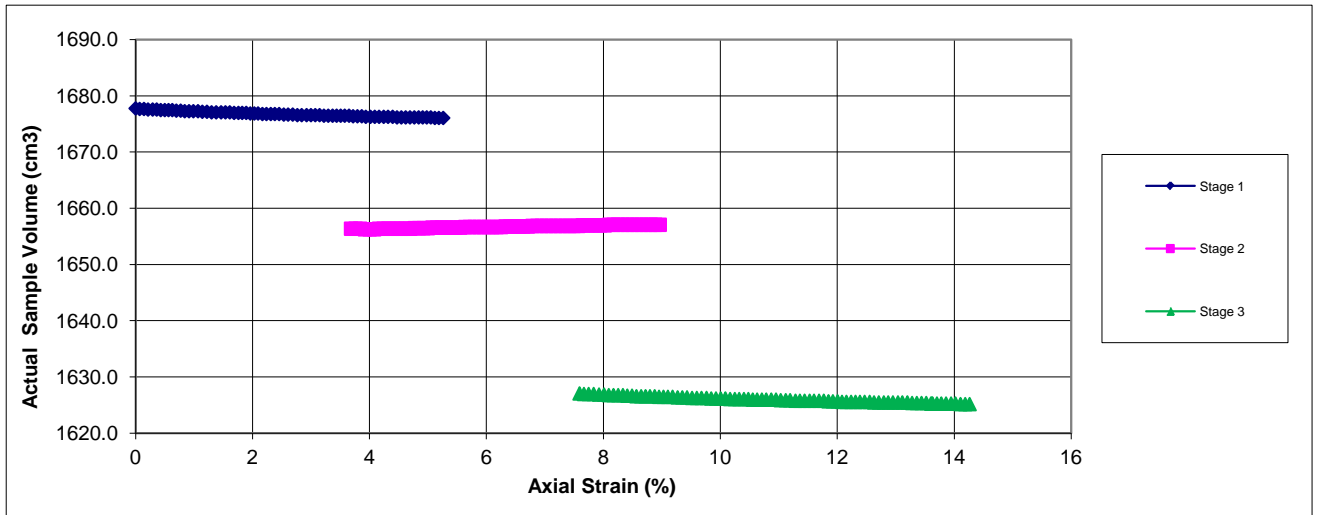
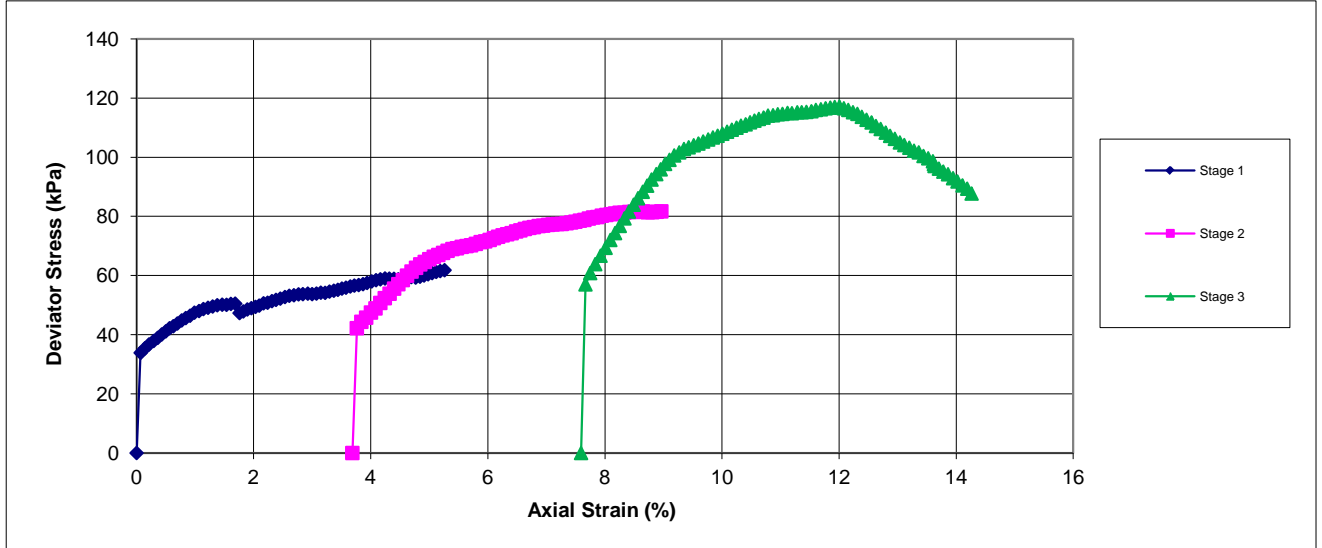
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH604
Sample No.	16
Depth	3.45 m
Date	12/04/2017

Shearing Stage



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Client Ref

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Northstowe Phase 2

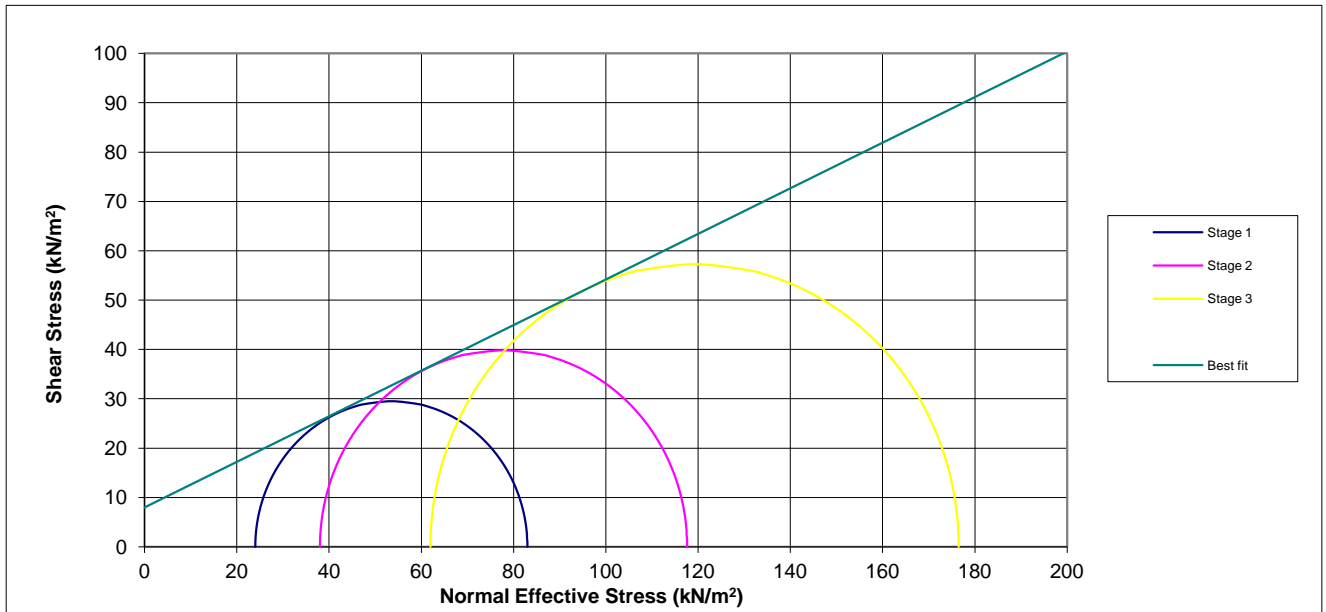
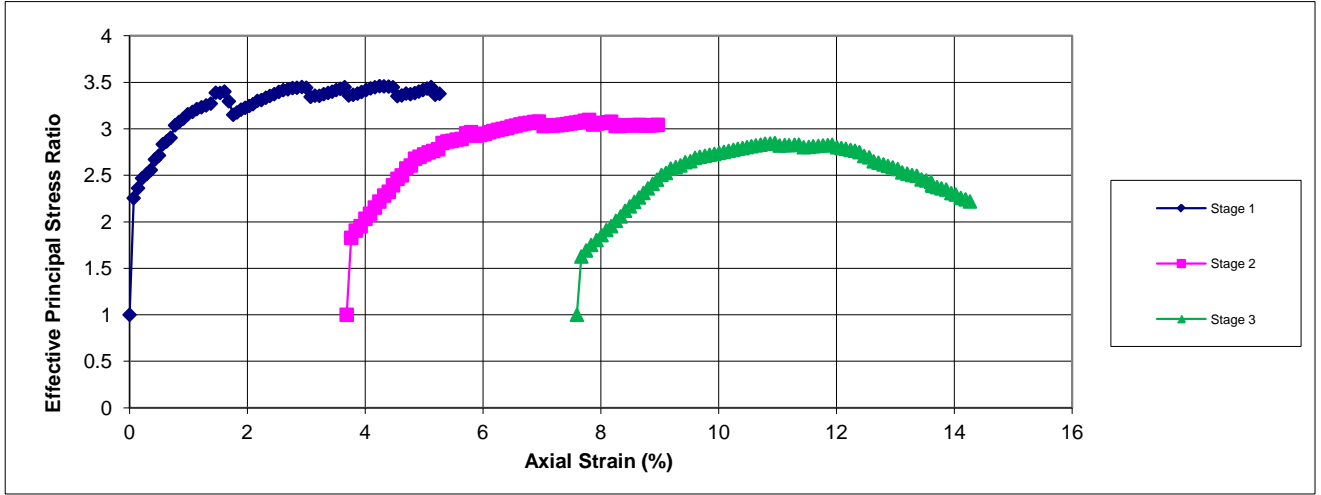


Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH604
Sample No.		16
Depth	m	3.45
Date		12/04/2017

Shearing Stage



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Contract No

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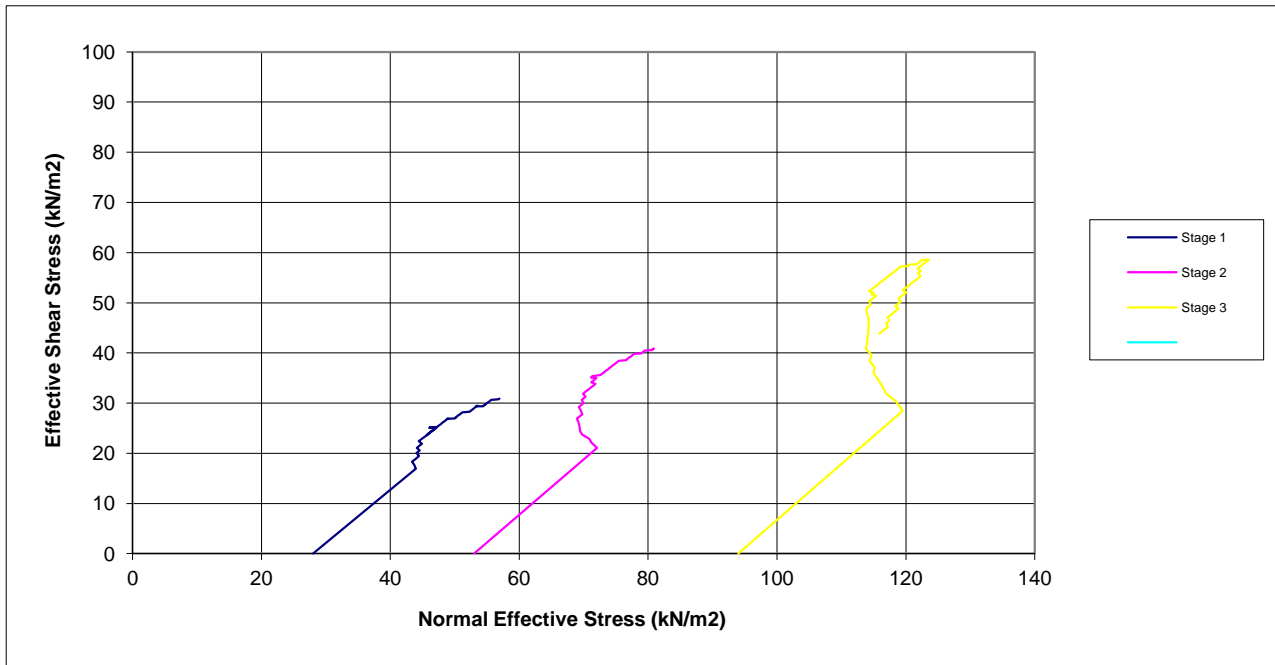
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH604
Sample No.		16
Depth	m	3.45
Date		12/04/2017

Shearing Stage



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Client Ref

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Contract No

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH604
Sample No.		16
Depth	m	3.45
Date		12/04/2017



Post Specimen

Specimen Split

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Client Ref

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH607
Sample No.		31
Depth	m	3.00-3.45
Date		11/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brown silty firm CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1732.95
Mass	g	3400.80
Dry Mass	g	2694.40
Density	Mg/m ³	1.96
Dry Density	Mg/m ³	1.55
Moisture Content	%	26
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	26
Density	Mg/m ³	2.12
Dry Density	Mg/m ³	1.68

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH607
Sample No.		31
Depth	m	3.00-3.45
Date		11/04/2017

Test Setup

Date started		05/04/2017
Date Finished		10/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P2
Cell Number		C2

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	500.00
Final Pore Pressure	kPa	490.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	500.00	500.00	500.00
Back Pressure	kPa	470.00	440.00	380.00
Excess Pore Pressure	kPa	20.00	36.00	71.00
Pore Pressure at End	kPa	470.00	440.00	380.00
Consolidated Volume	cm ³	1711.35	1677.65	1619.35
Consolidated Height	mm	203.15	194.68	185.72
Consolidated Area	mm ²	1711.35	1677.65	1619.35
Vol. Compressibility	m ² /MN	0.02652	0.02955	0.06220
Consolidation Coef.	m ² /yr.	0.79106	0.39760	0.08727

reg. 13

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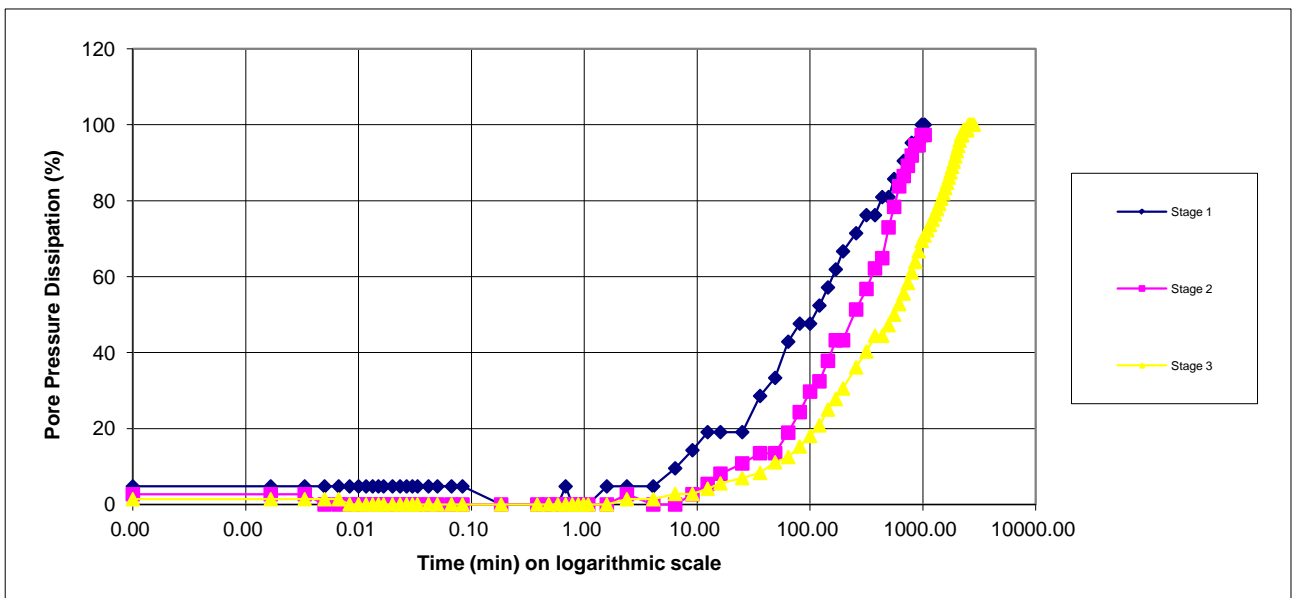
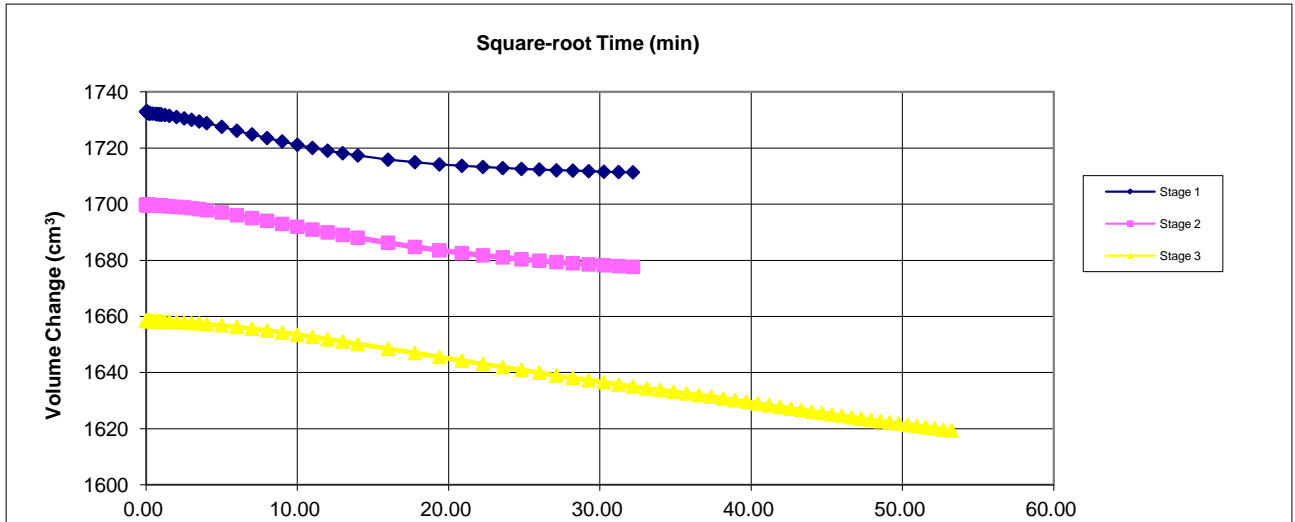
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH607
Sample No.		31
Depth	m	3.00-3.45
Date		11/04/2017

Consolidation Stage



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Northstowe Phase 2

Client Ref
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Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH607
Sample No.		31
Depth	m	3.00-3.45
Date		11/04/2017

Shearing

Initial Cell Pressure	kPa	500	500	500
Initial Pore Pressure	kPa	470	440	380
Rate of Strain	mm/min	0.0023	0.0011	0.0002
Max Deviator Stress				
Axial Strain		4.671	8.684	14.273
Axial Stress	kPa	51.657	94.85	171.10
Cor. Deviator stress	kPa	48.661	90.55	166.45
Effective Major Stress	kPa	77.661	149.55	278.45
Effective Minor Stress	kPa	30.000	59.00	112.00
Effective Stress Ratio		2.589	2.535	2.49
s'	kPa	53.830	104.27	195.22
t'	kPa	23.830	45.27	83.22
Max Effective Principle Stress Ratio				
Axial Strain		4.671	8.684	14.273
Axial Stress	kPa	51.657	94.846	171.103
Cor. Deviator stress	kPa	47.661	90.549	166.450
Effective Major Stress	kPa	77.661	149.549	278.450
Effective Minor Stress	kPa	30.000	59.000	112.000
Effective Stress Ratio		2.589	2.535	2.486
s'	kPa	53.830	104.274	195.225
t'	kPa	23.830	45.274	83.225
Shear Resistance Angle	degs	24.7		
Cohesion c'	kPa	1		

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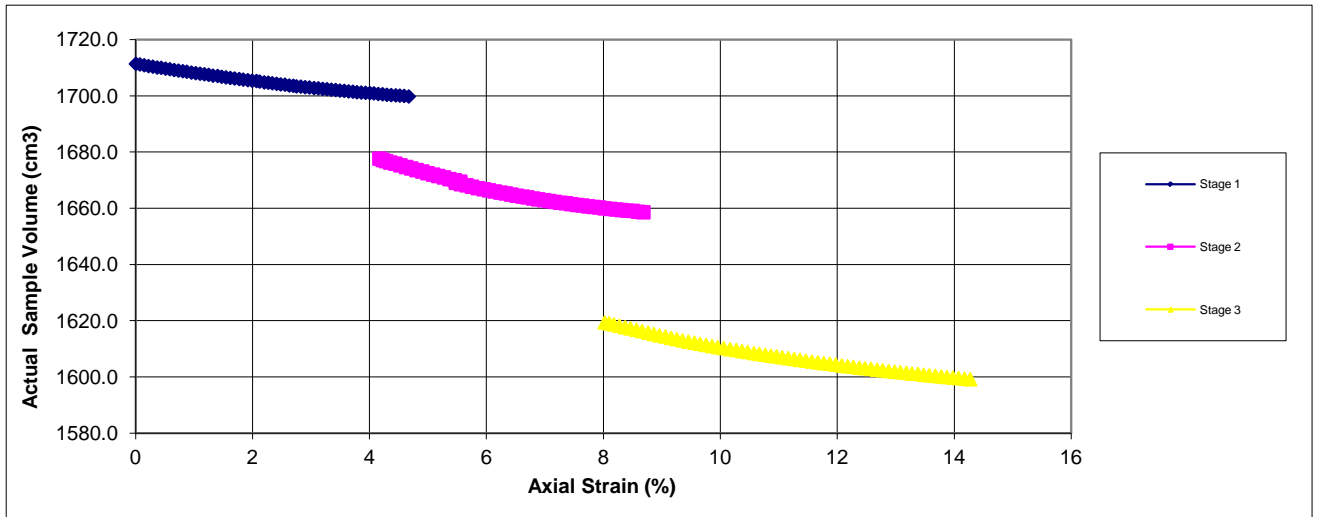
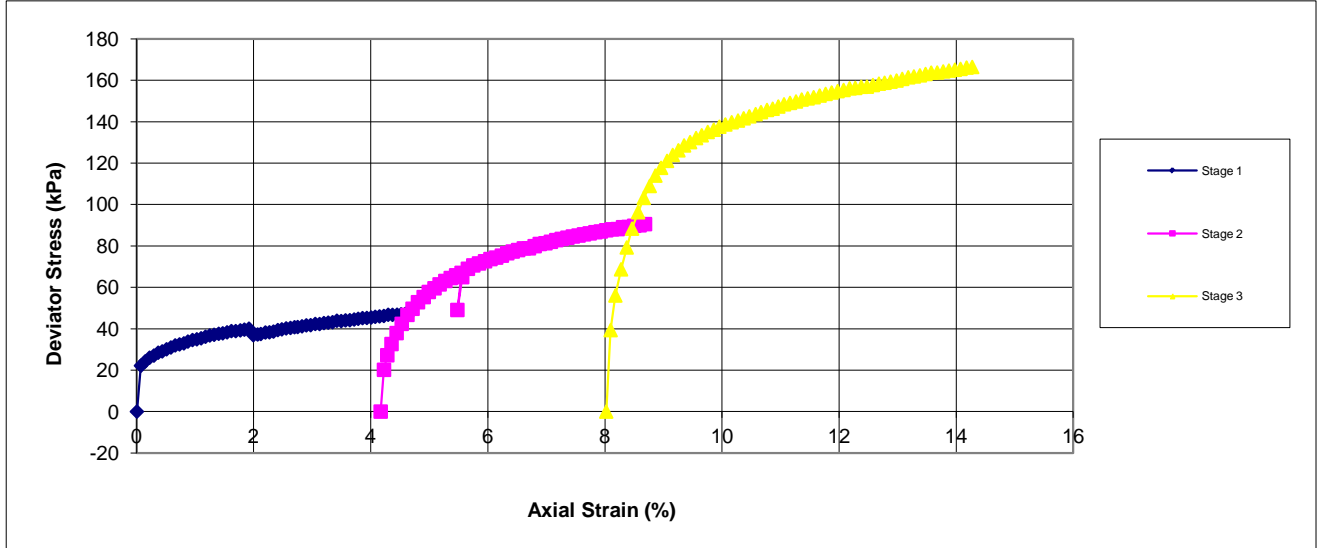
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH607
Sample No.	31
Depth	m
Date	3.00-3.45
	11/04/2017

Shearing Stage



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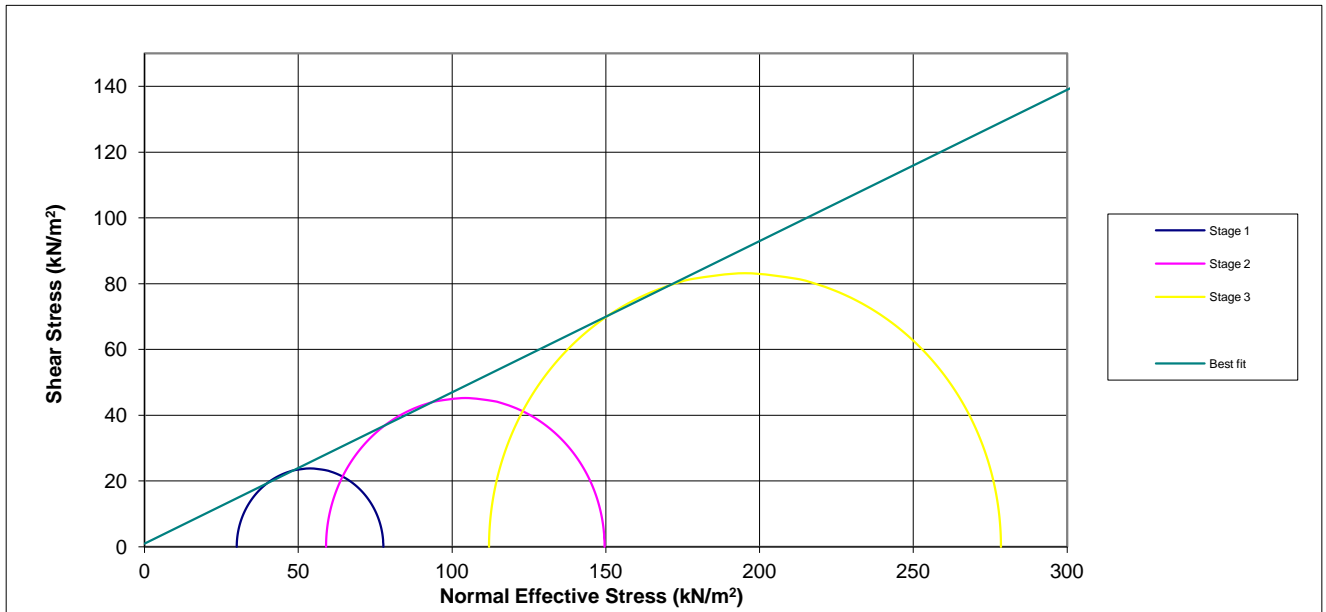
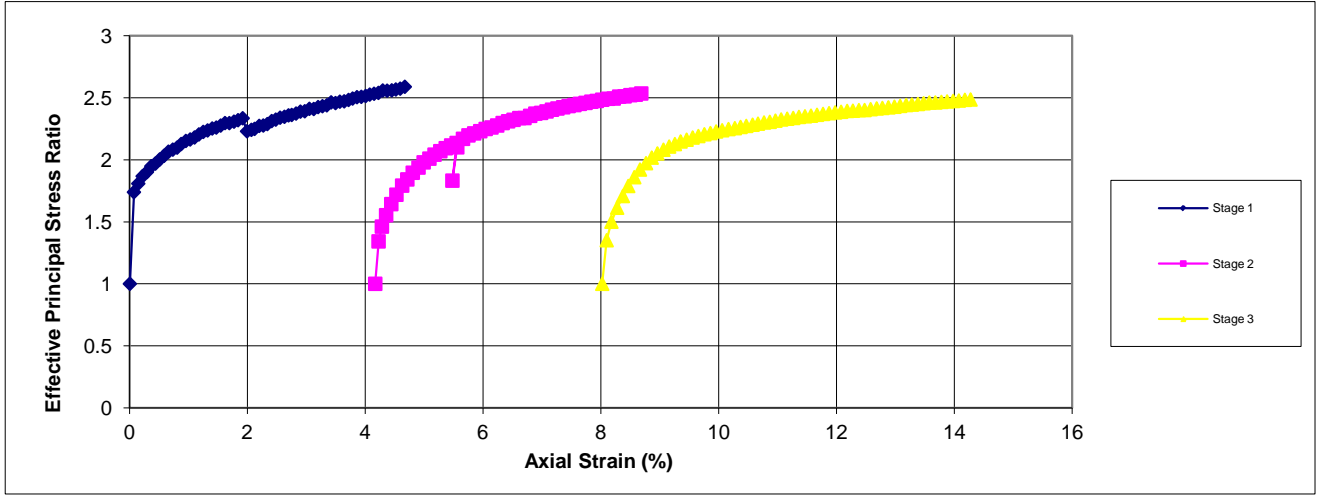
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH607
Sample No.		31
Depth	m	3.00-3.45
Date		11/04/2017

Shearing Stage



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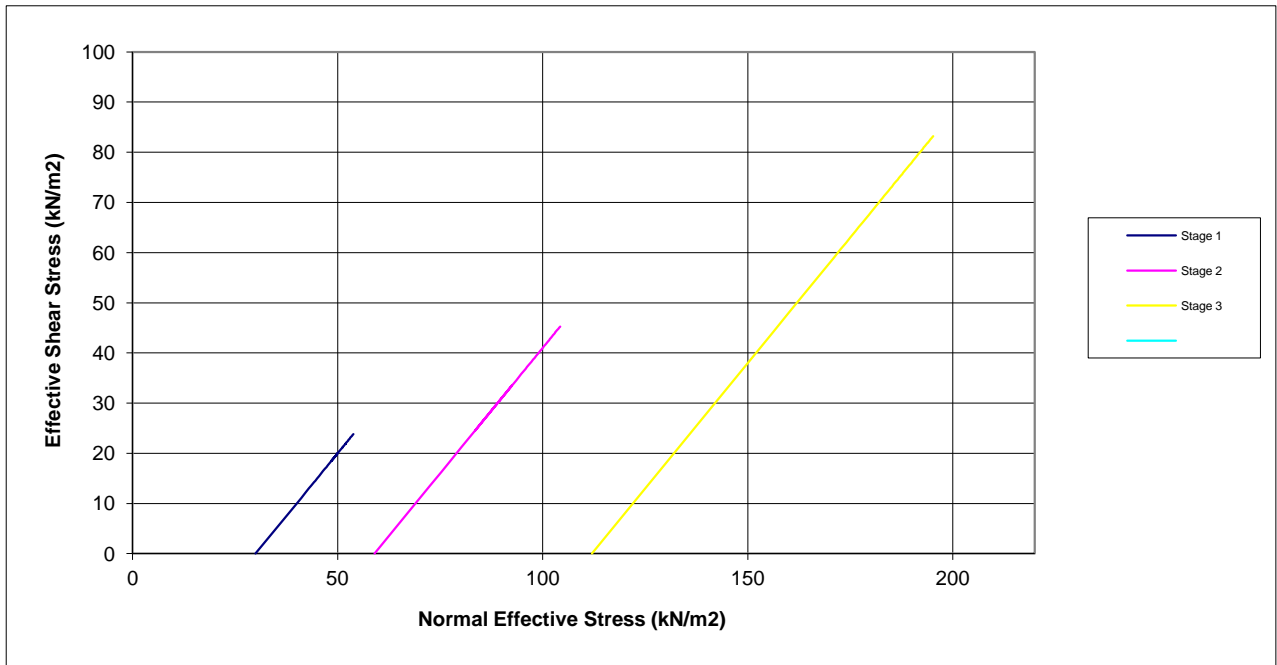
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH607
Sample No.		31
Depth	m	3.00-3.45
Date		11/04/2017

Shearing Stage



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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH607
Sample No.		31
Depth	m	3.00-3.45
Date		11/04/2017



Post Specimen



Specimen Split

reg. 13

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Date

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH608
Sample No.		23
Depth	m	6.00-6.45
Date		19/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Greyish brown silty CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1732.95
Mass	g	3345.20
Dry Mass	g	2406.60
Density	Mg/m ³	1.93
Dry Density	Mg/m ³	1.39
Moisture Content	%	39
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	30
Density	Mg/m ³	1.98
Dry Density	Mg/m ³	1.52

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH608
Sample No.		23
Depth	m	6.00-6.45
Date		19/03/2017

Test Setup

Date started		11/03/2017
Date Finished		18/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P1
Cell Number		C1

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	400.00
Final Pore Pressure	kPa	391.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	60.00	120.00	240.00
Cell Pressure	kPa	400.00	400.00	400.00
Back Pressure	kPa	340.00	280.00	160.00
Excess Pore Pressure	kPa	51.00	44.00	104.00
Pore Pressure at End	kPa	340.00	280.00	160.00
Consolidated Volume	cm ³	1678.15	1635.95	1585.85
Consolidated Height	mm	201.85	194.28	185.01
Consolidated Area	mm ²	1678.15	1635.95	1585.85
Vol. Compressibility	m ² /MN	0.09301	0.03801	0.12286
Consolidation Coef.	m ² /yr.	0.37334	0.25908	0.12477

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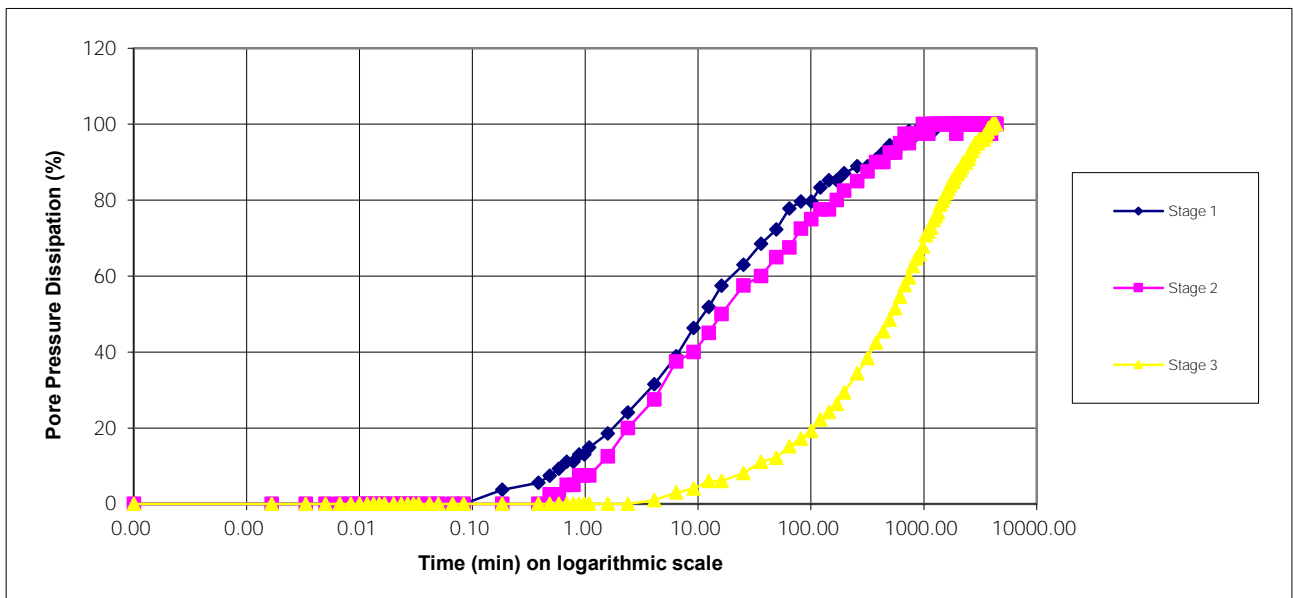
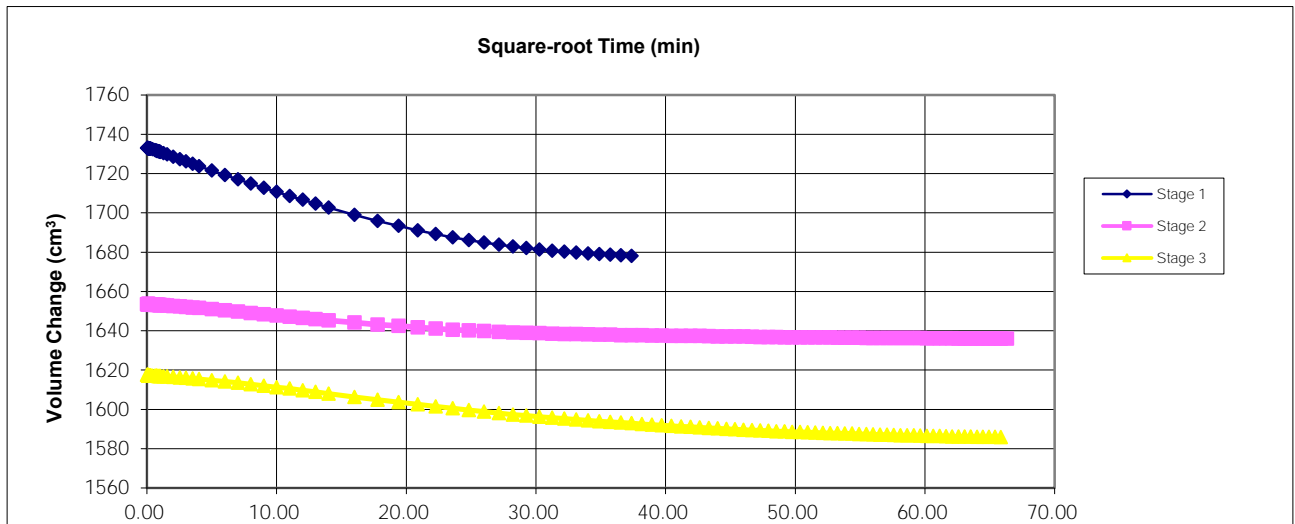
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH608
Sample No.	23
Depth	m 6.00-6.45
Date	19/03/2017

Consolidation Stage



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Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH608
Sample No.		23
Depth	m	6.00-6.45
Date		19/03/2017

Shearing

Initial Cell Pressure	kPa	400	400	400
Initial Pore Pressure	kPa	340	280	160
Rate of Strain	mm/min	0.0011	0.0007	0.0003
Max Deviator Stress				
Axial Strain		4.830	9.621	13.147
Axial Stress	kPa	120.510	194.42	338.14
Cor. Deviator stress	kPa	117.502	190.05	333.55
Effective Major Stress	kPa	176.502	310.05	573.55
Effective Minor Stress	kPa	60.000	120.00	240.00
Effective Stress Ratio		2.942	2.584	2.39
s'	kPa	118.251	215.02	406.78
t'	kPa	58.251	95.02	166.78
Max Effective Principle Stress Ratio				
Axial Strain		4.830	9.436	13.147
Axial Stress	kPa	120.510	193.103	338.140
Cor. Deviator stress	kPa	116.502	188.750	333.552
Effective Major Stress	kPa	176.502	308.750	573.552
Effective Minor Stress	kPa	60.000	120.000	240.000
Effective Stress Ratio		2.942	2.573	2.390
s'	kPa	118.251	214.375	406.776
t'	kPa	58.251	94.375	166.776
Shear Resistance Angle	degs	22.0		
Cohesion c'	kPa	16		

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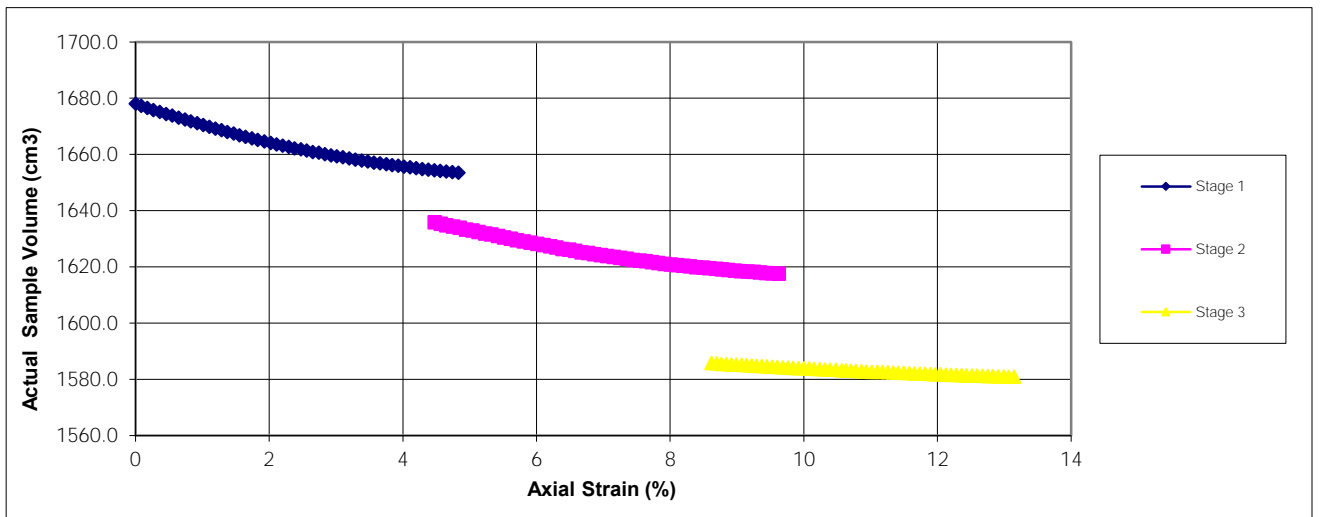
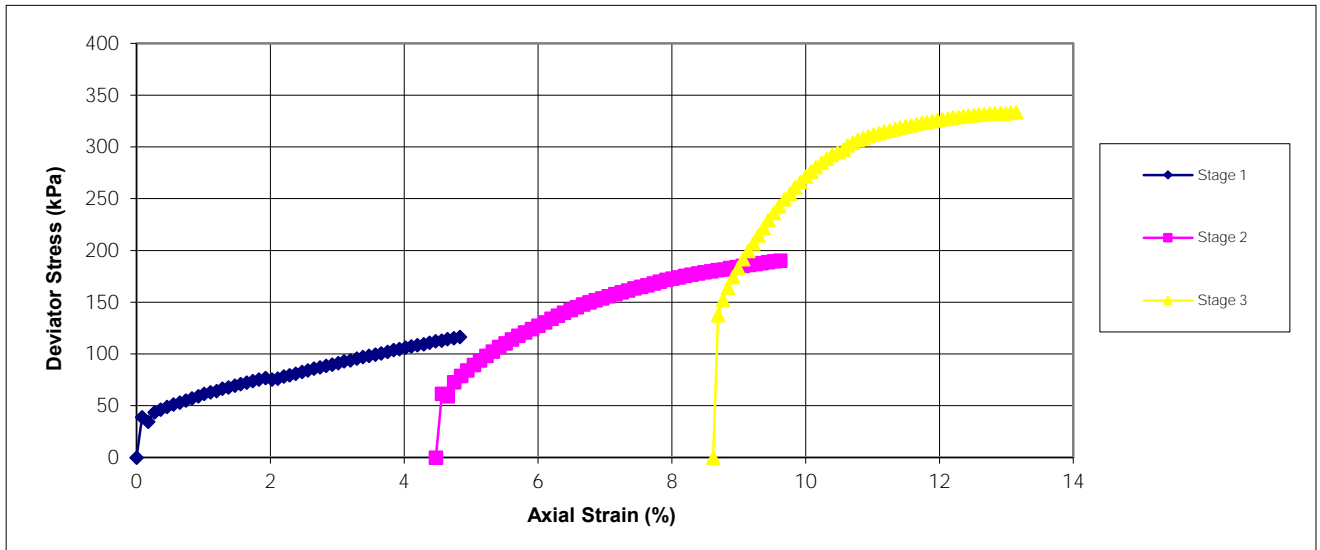
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH608
Sample No.		23
Depth	m	6.00-6.45
Date		19/03/2017

Shearing Stage



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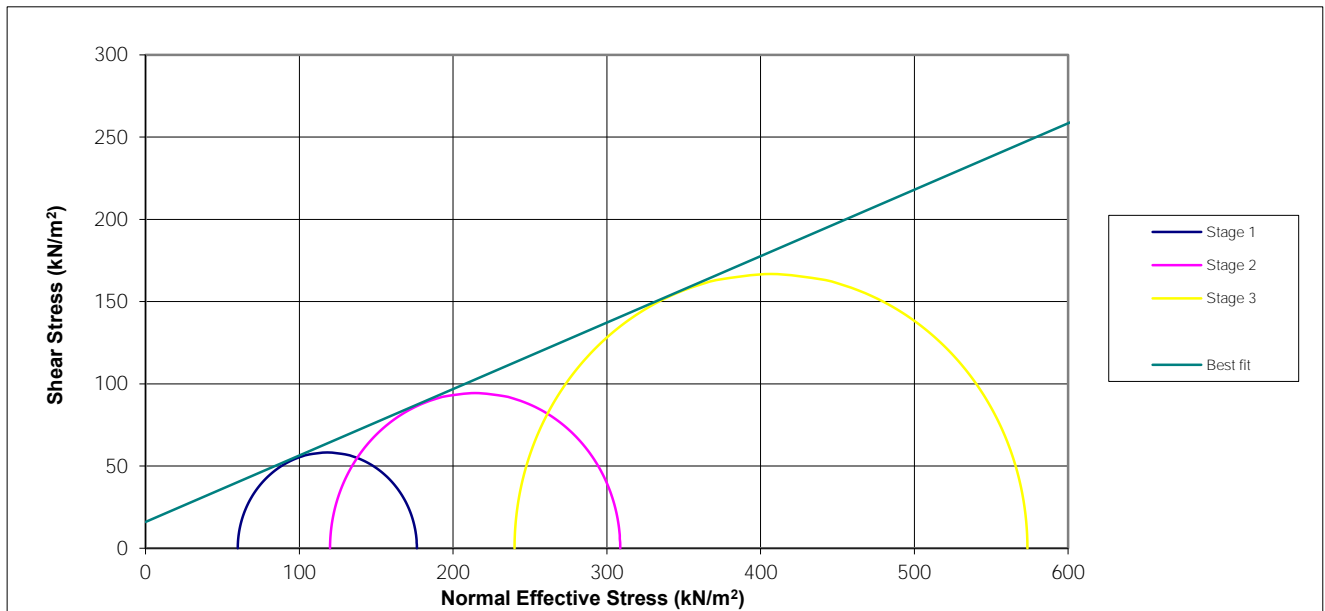
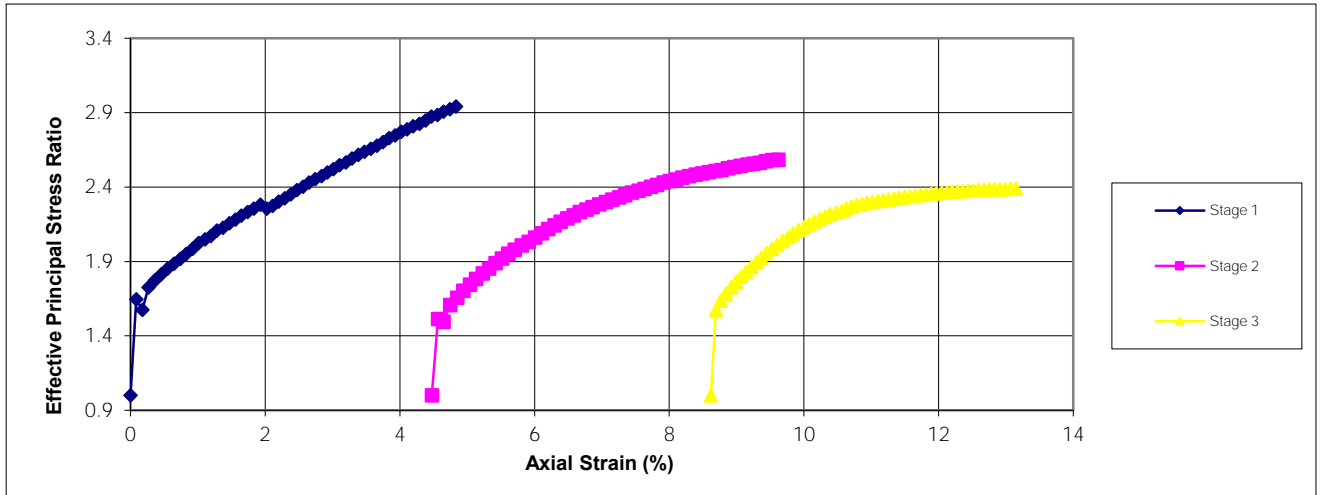
Contract No
34142

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH608
Sample No.	23
Depth	m 6.00-6.45
Date	19/03/2017

Shearing Stage



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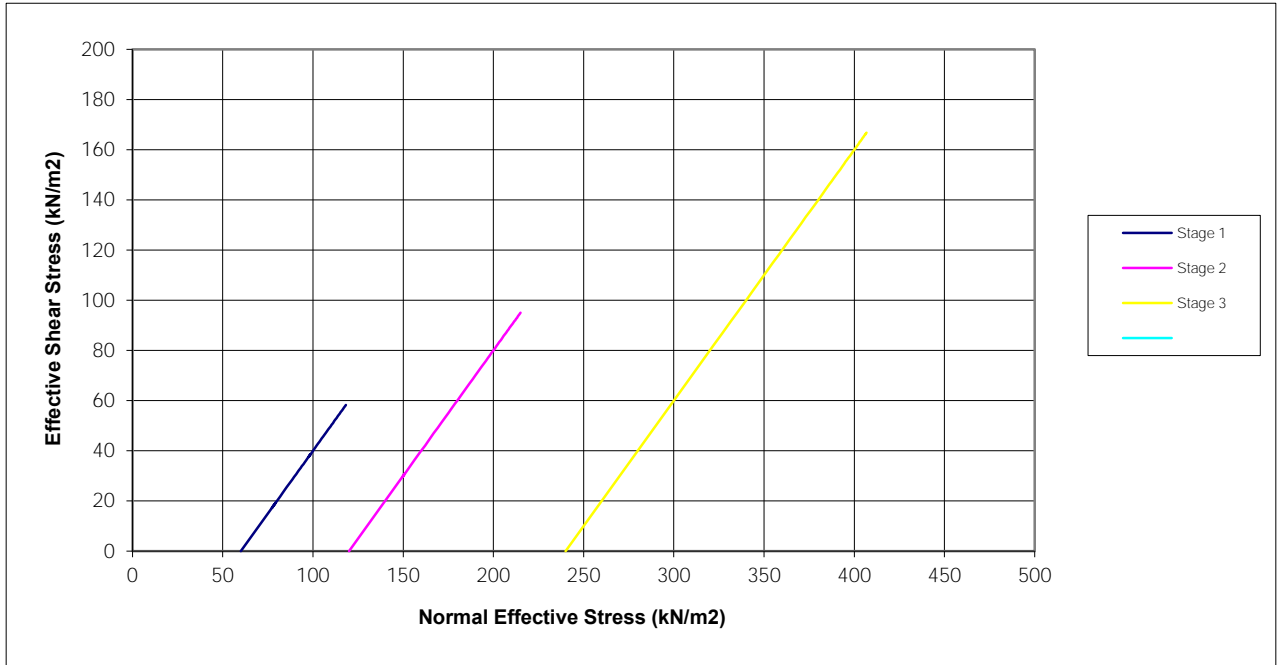
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH608
Sample No.		23
Depth	m	6.00-6.45
Date		19/03/2017

Shearing Stage



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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test
BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH608
Sample No.		23
Depth	m	6.00-6.45
Date		19/03/2017



Post Specimen



Specimen Split

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Checked and Approved By

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Client Ref

UA008426-01

Contract No

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45
Date		08/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brown silty firm CLAY

Initial Specimen Conditions

Height	mm	205.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1708.12
Mass	g	3335.90
Dry Mass	g	2529.30
Density	Mg/m ³	1.95
Dry Density	Mg/m ³	1.48
Moisture Content	%	32
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	33
Density	Mg/m ³	2.06
Dry Density	Mg/m ³	1.55

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Checked and Approved By

10/04/17
Date

Client Ref
UA008426-01

Contract No

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45

Test Setup

Date started		25/03/2017
Date Finished		07/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P7
Cell Number		C7

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	294.00
Final B Value		0.96

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	24.00	30.00	60.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1689.52	1662.45	1633.95
Consolidated Height	mm	204.26	197.23	190.01
Consolidated Area	mm ²	8271.80	8429.43	8599.90
Vol. Compressibility	m ² /MN	0.04033	0.06676	0.09524
Consolidation Coef.	m ² /yr.	1059.04343	0.14245	0.09005

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Northstowe Phase 2

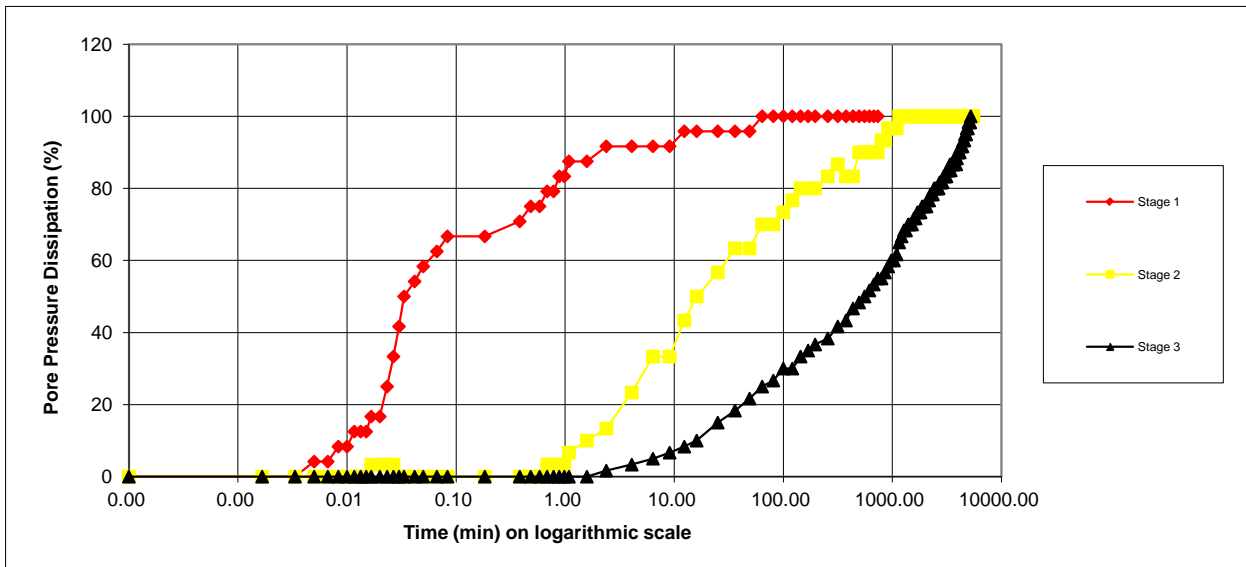
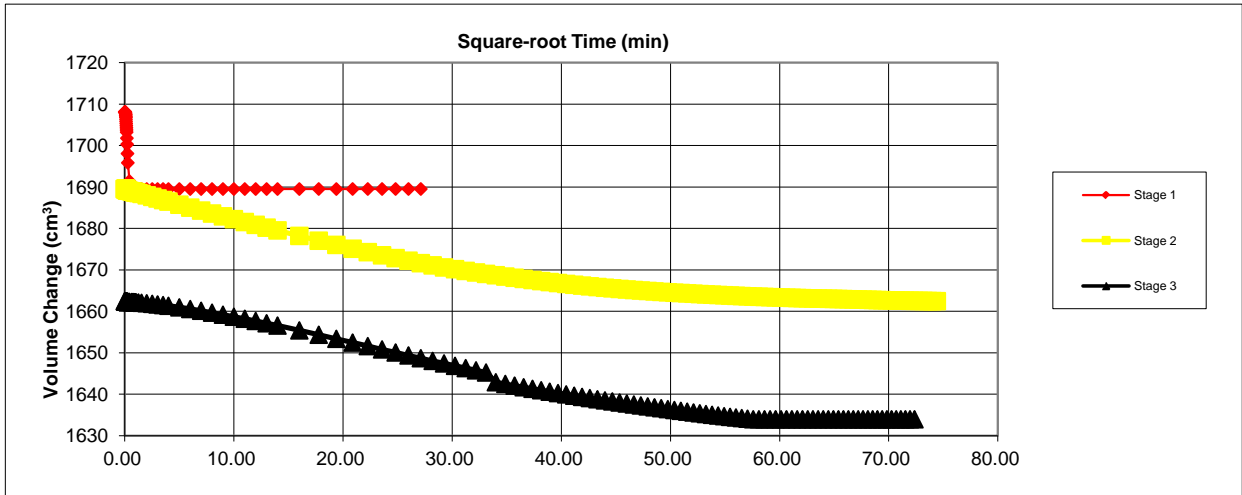
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45

Consolidation Stage



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Northstowe Phase 2

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	21.4913	0.0028	0.0017
Max Deviator Stress				
Axial Strain		4.377	8.152	9.782
Axial Stress	kPa	61.038	86.11	124.81
Cor. Deviator stress	kPa	58.059	81.75	120.41
Effective Major Stress	kPa	80.059	131.75	205.41
Effective Minor Stress	kPa	23.000	50.00	85.00
Effective Stress Ratio		3.481	2.635	2.42
s'	kPa	51.529	90.88	145.21
t'	kPa	28.529	40.88	60.21
Max Effective Principle Stress Ratio				
Axial Strain		3.799	6.855	9.782
Axial Stress	kPa	59.429	83.053	124.809
Cor. Deviator stress	kPa	55.494	78.832	120.410
Effective Major Stress	kPa	77.494	124.832	205.410
Effective Minor Stress	kPa	22.000	46.000	85.000
Effective Stress Ratio		3.522	2.714	2.417
s'	kPa	49.747	85.416	145.205
t'	kPa	27.747	39.416	60.205
Shear Resistance Angle	degs	19.6		
Cohesion c'	kPa	12		

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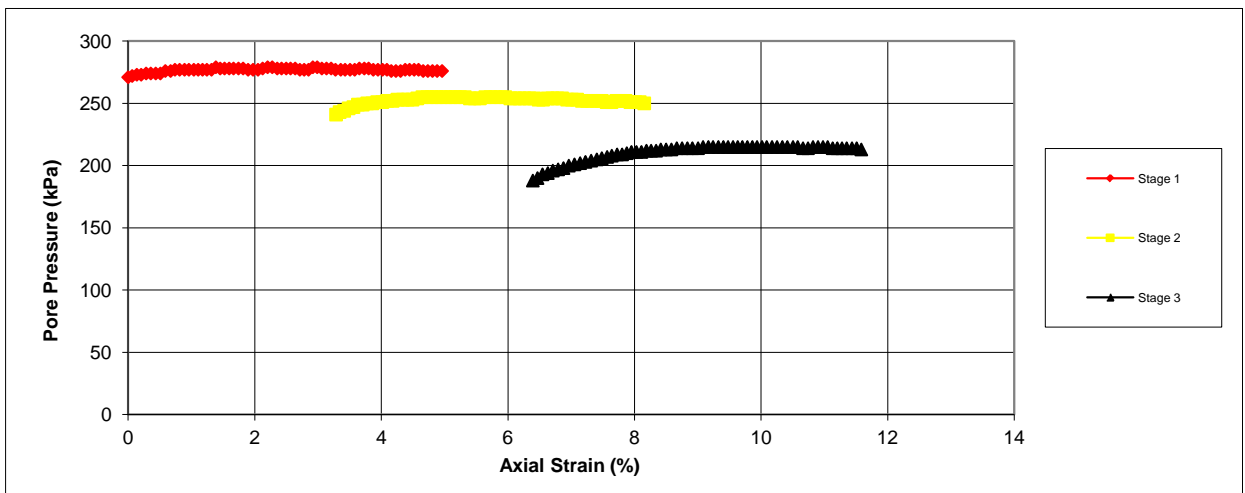
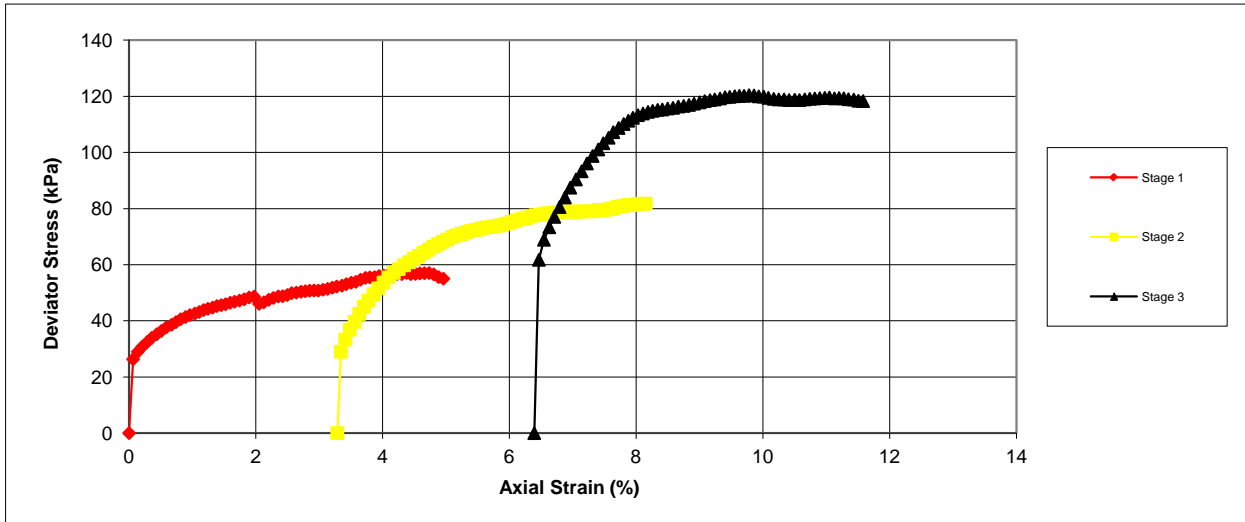
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Northstowe Phase 2

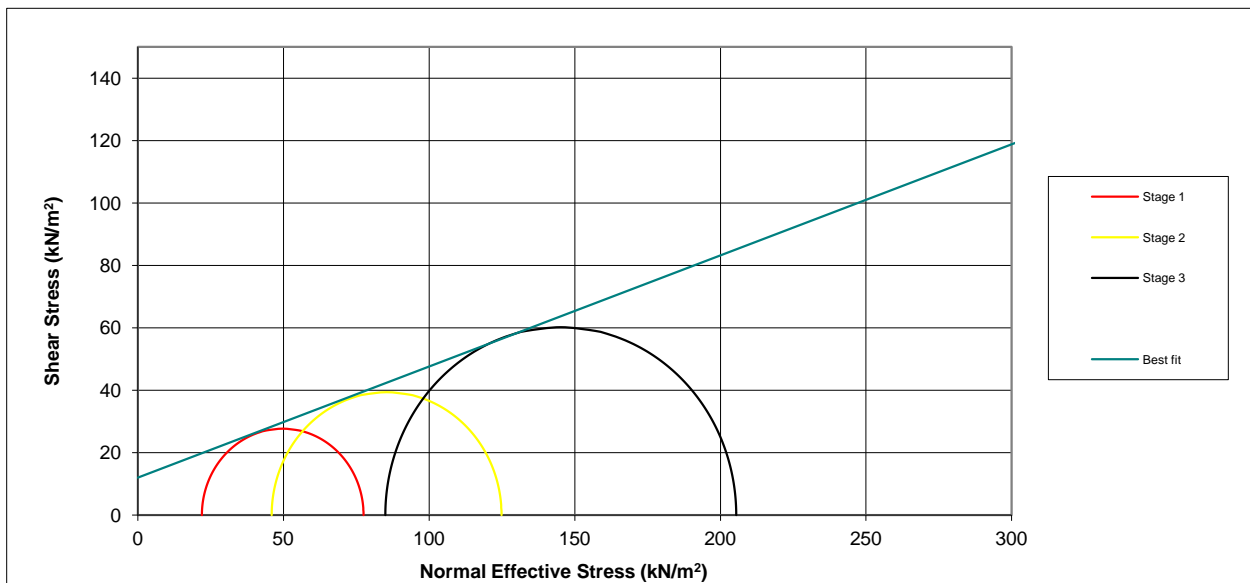
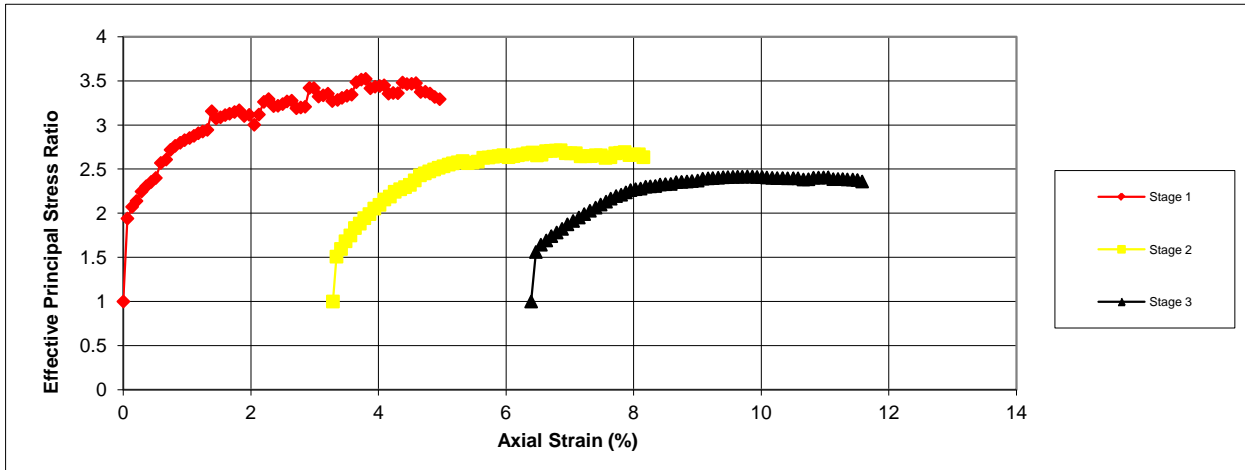
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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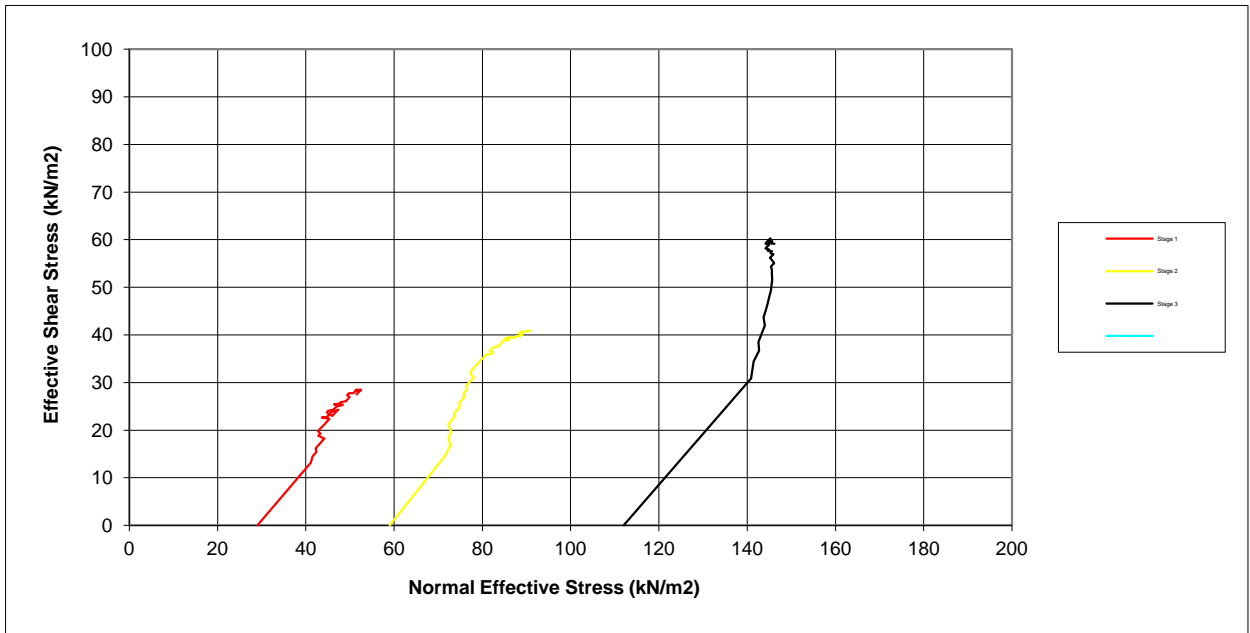
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Checked and Approved By

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Client Ref
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Northstowe Phase 2

Contract No

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		18
Depth	from(m)	3.00
Depth	to(m)	3.45



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Client Ref

UA008426-01

Northstowe Phase 2

Contract No

34142

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		8
Depth	m	3.5-4.00
Date		18/03/2017
Disturbed / Undisturbed		B

Description of Specimen

Dark brown sl fine gravely sl silty firm CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1699.79
Mass	g	3321.00
Dry Mass	g	2500.00
Density	Mg/m ³	1.95
Dry Density	Mg/m ³	1.47
Moisture Content	%	33
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	31
Density	Mg/m ³	2.35
Dry Density	Mg/m ³	1.79

reg. 13

Checked and Approved By

27/03/17

Date

Client Ref

UA008426-01

Contract No

34142

Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH609
Sample No.	8
Depth	3.5-4.00
Date	18/03/2017

Test Setup

Date started	11/03/2017
Date Finished	17/03/2017
Top Drain Used	y
Base Drain Used	y
Side Drains Used	y
Pressure System Number	P9
Cell Number	C9

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	400.00
Final Pore Pressure	kPa	390.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	60.00	120.00	240.00
Cell Pressure	kPa	400.00	400.00	400.00
Back Pressure	kPa	340.00	280.00	160.00
Excess Pore Pressure	kPa	50.00	62.00	151.00
Pore Pressure at End	kPa	340.00	280.00	160.00
Consolidated Volume	cm ³	1569.69	1490.19	1408.39
Consolidated Height	mm	198.80	193.73	182.81
Consolidated Area	mm ²	1569.69	1490.19	1408.39
Vol. Compressibility	m ² /MN	0.22511	0.09086	0.25048
Consolidation Coef.	m ² /yr.	0.30770	0.19398	0.04701

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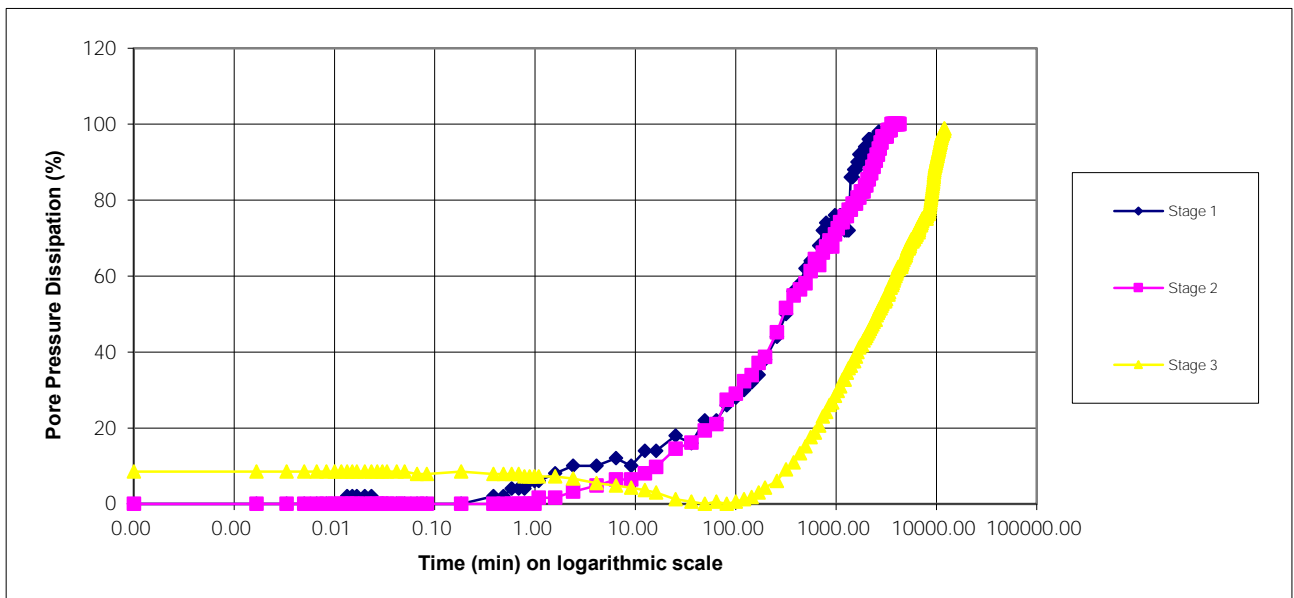
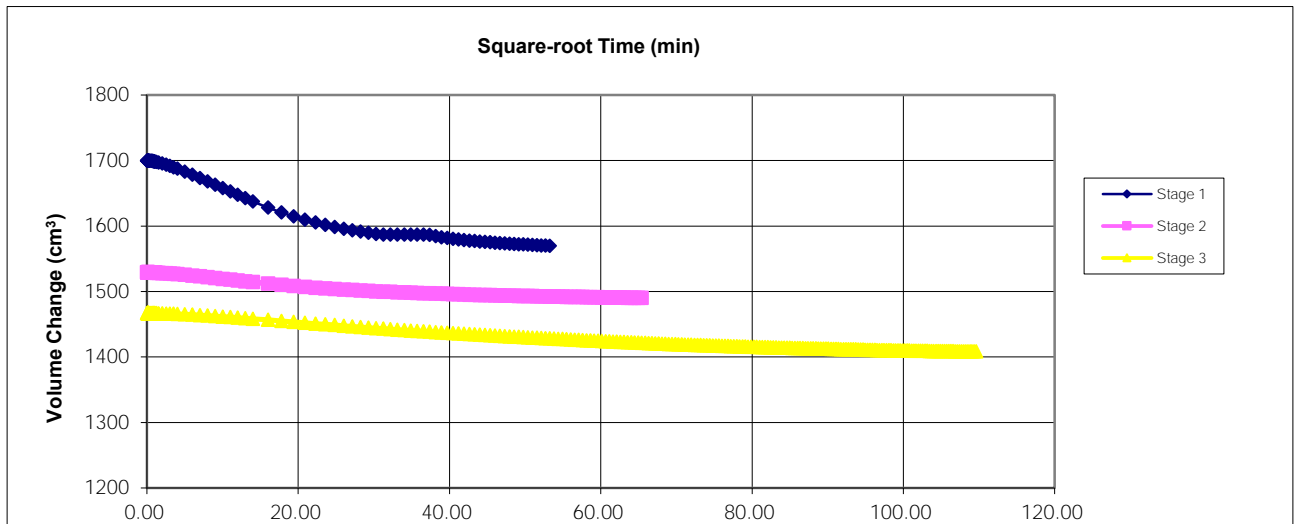
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH609
Sample No.	8
Depth	m 3.5-4.00
Date	18/03/2017

Consolidation Stage



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Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		8
Depth	m	3.5-4.00
Date		18/03/2017

Shearing

Initial Cell Pressure	kPa	400	400	400
Initial Pore Pressure	kPa	340	280	160
Rate of Strain	mm/min	0.0009	0.0005	0.0001
Max Deviator Stress				
Axial Strain		4.889	9.637	14.480
Axial Stress	kPa	75.539	124.30	219.30
Cor. Deviator stress	kPa	72.521	119.92	214.63
Effective Major Stress	kPa	131.521	239.92	452.63
Effective Minor Stress	kPa	60.000	120.00	238.00
Effective Stress Ratio		2.192	1.999	1.90
s'	kPa	95.761	179.96	345.31
t'	kPa	35.761	59.96	107.31
Max Effective Principle Stress Ratio				
Axial Strain		4.889	9.637	14.480
Axial Stress	kPa	75.539	124.296	219.302
Cor. Deviator stress	kPa	71.521	119.919	214.625
Effective Major Stress	kPa	131.521	239.919	452.625
Effective Minor Stress	kPa	60.000	120.000	238.000
Effective Stress Ratio		2.192	1.999	1.902
s'	kPa	95.761	179.960	345.313
t'	kPa	35.761	59.960	107.313
Shear Resistance Angle	degs	17.0		
Cohesion c'	kPa	7		

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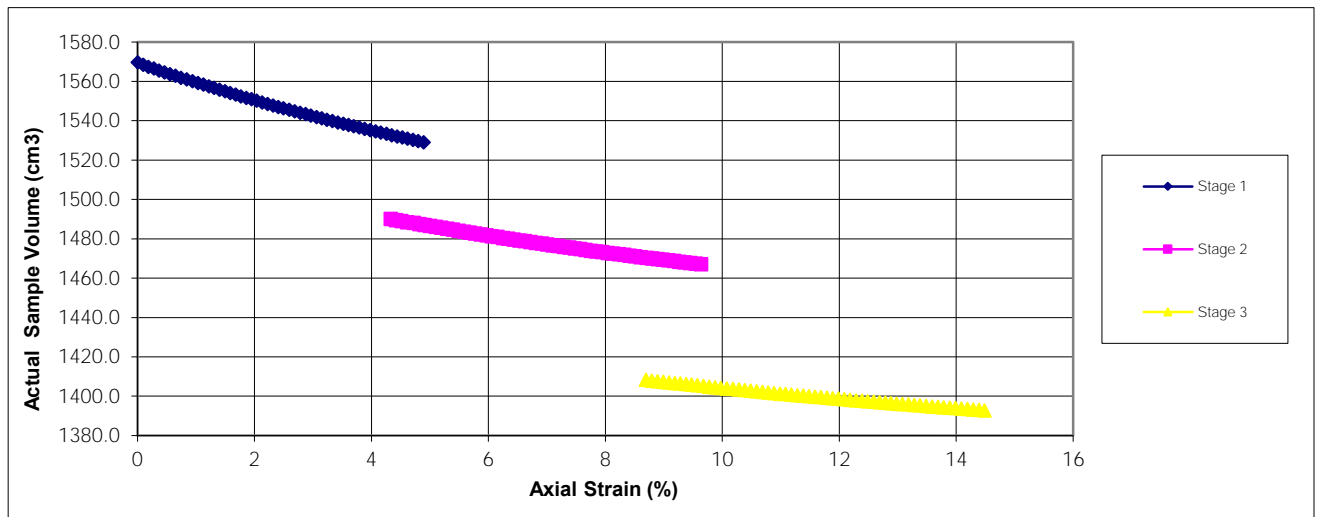
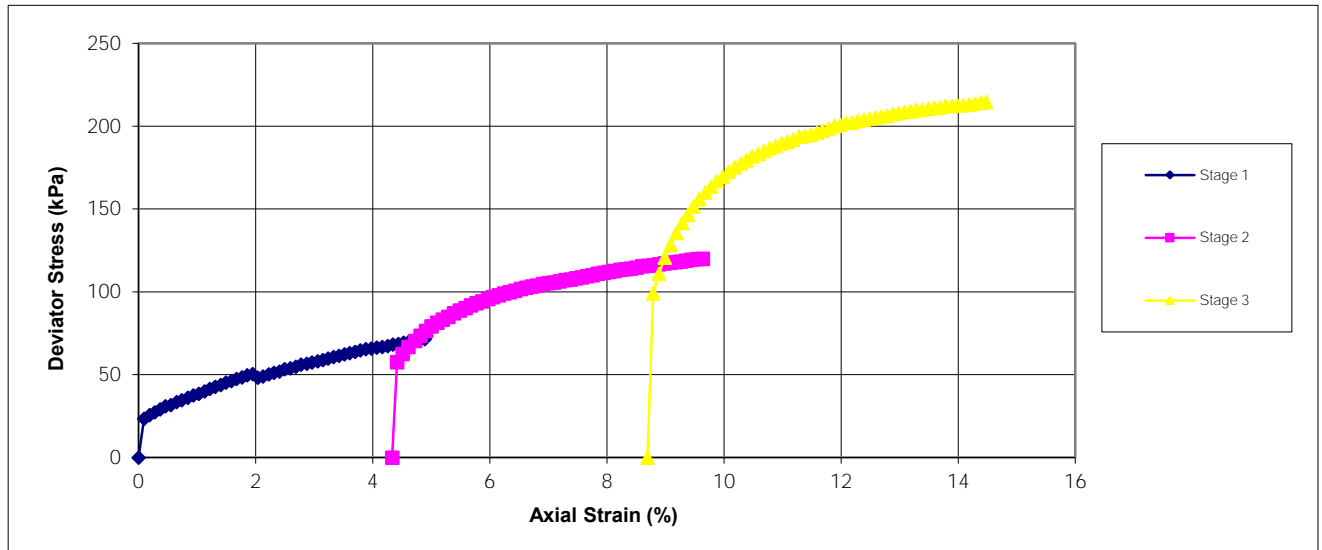
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		8
Depth	m	3.5-4.00
Date		18/03/2017

Shearing Stage



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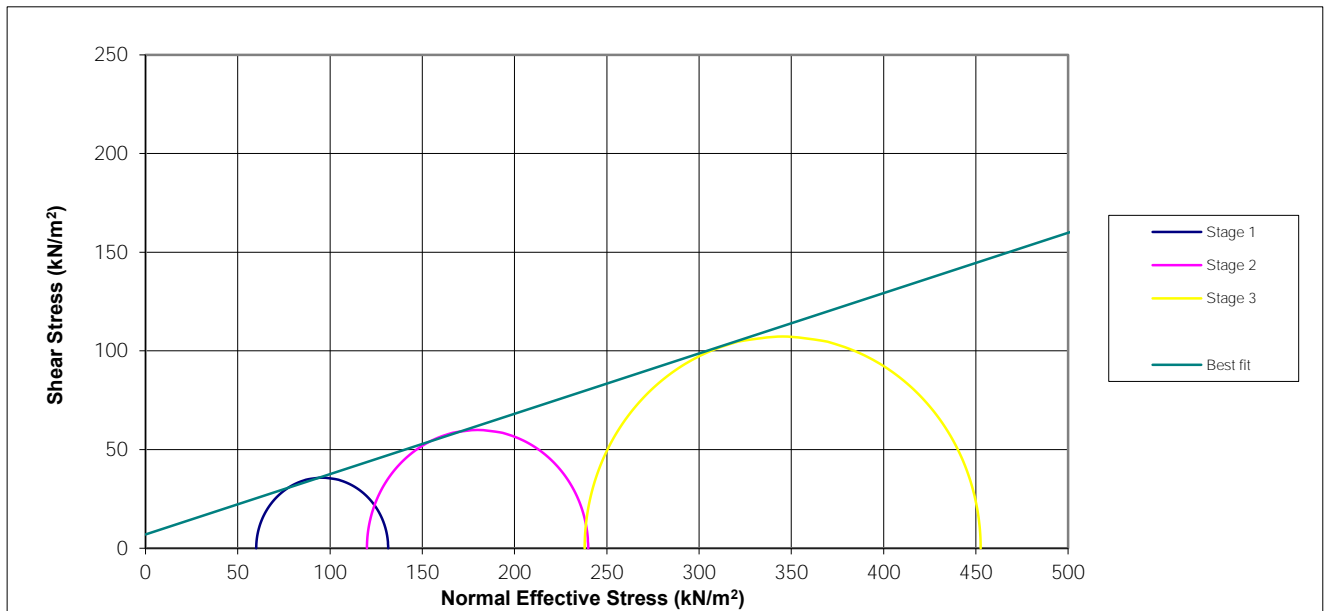
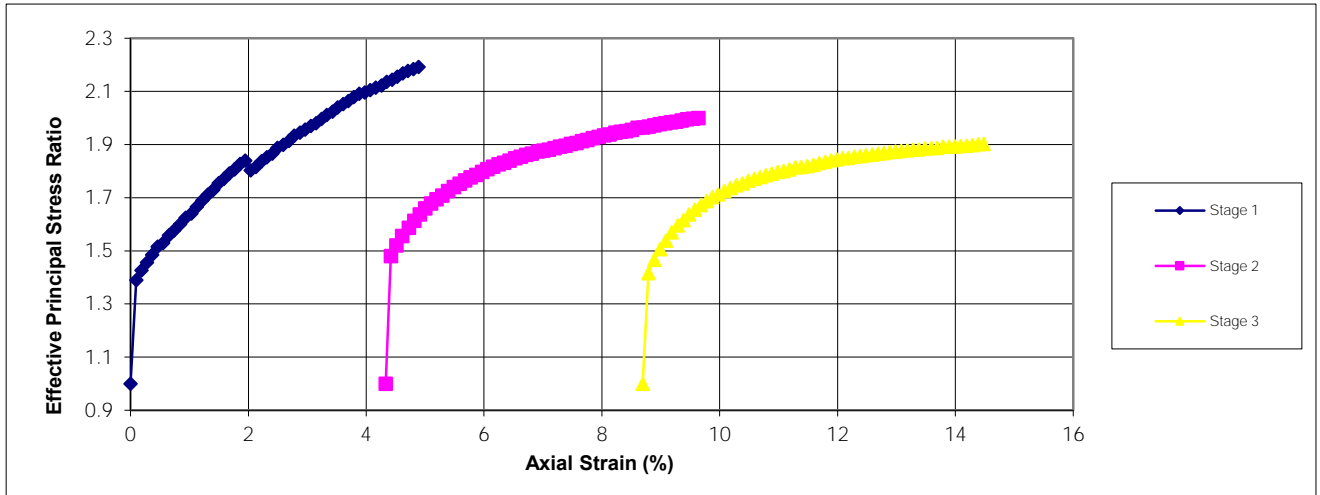
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH609
Sample No.	8
Depth	3.5-4.00
Date	18/03/2017

Shearing Stage



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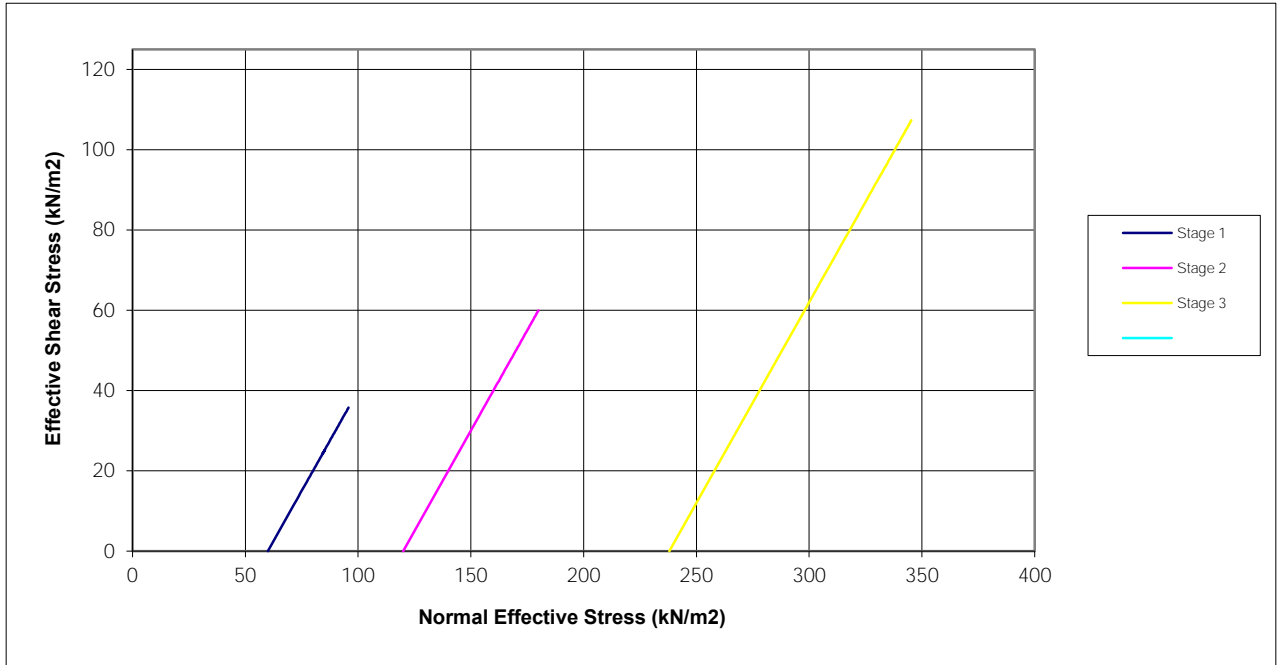
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		8
Depth	m	3.5-4.00
Date		18/03/2017

Shearing Stage



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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty CLAY

Initial Specimen Conditions

Height	mm	205.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1741.45
Mass	g	3288.20
Dry Mass	g	2662.00
Density	Mg/m ³	1.89
Dry Density	Mg/m ³	1.53
Moisture Content	%	24
Specific Gravity	kN/m ³	2.65
(assumed/measured)		assumed

Final Specimen Conditions

Moisture Content	%	27
Density	Mg/m ³	2.07
Dry Density	Mg/m ³	1.63

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017

Test Setup

Date started		25.03.2017
Date Finished		06.04.2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P3
Cell Number		C3

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	400.00
Final Pore Pressure	kPa	400.00
Final B Value		1.07

Consolidation

Effective Pressure	kPa	60.00	120.00	240.00
Cell Pressure	kPa	400.00	400.00	400.00
Back Pressure	kPa	340.00	280.00	160.00
Excess Pore Pressure	kPa	60.00	59.00	120.00
Pore Pressure at End	kPa	340.00	280.00	160.00
Consolidated Volume	cm ³	1715.05	1679.85	1634.25
Consolidated Height	mm	203.96	197.59	189.16
Consolidated Area	mm ²	1715.05	1679.85	1634.25
Vol. Compressibility	m ² /MN	0.04459	0.06983	0.16132
Consolidation Coef.	m ² /yr.	2.69927	0.15589	0.11386

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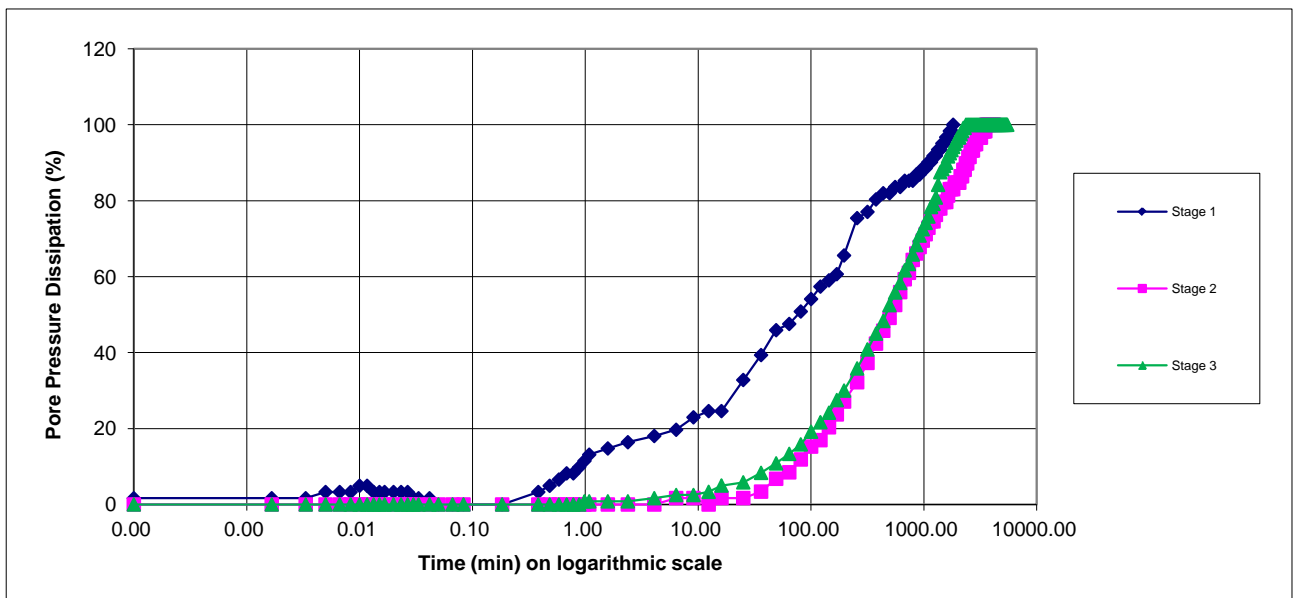
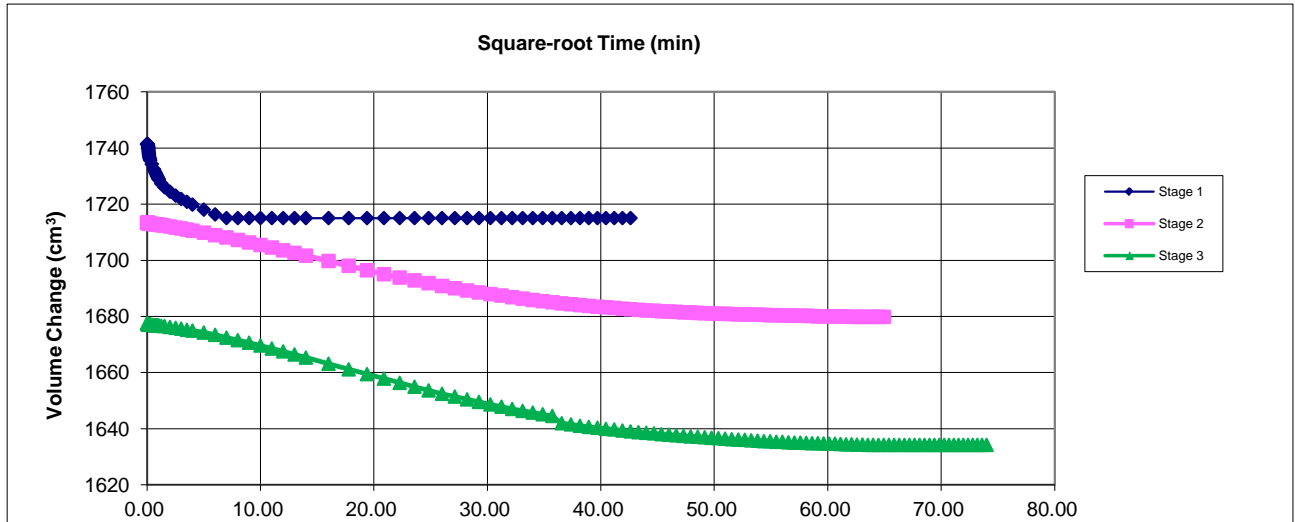
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017

Consolidation Stage



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Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017

Shearing

Initial Cell Pressure	kPa	400	400	400
Initial Pore Pressure	kPa	340	280	160
Rate of Strain	mm/min	0.0077	0.0004	0.0003
Max Deviator Stress				
Axial Strain		4.530	7.758	9.784
Axial Stress	kPa	84.430	110.92	183.07
Cor. Deviator stress	kPa	81.444	106.69	178.68
Effective Major Stress	kPa	121.444	167.49	297.18
Effective Minor Stress	kPa	41.000	60.80	118.50
Effective Stress Ratio		2.962	2.755	2.51
s'	kPa	81.222	114.14	207.84
t'	kPa	40.222	53.34	89.34
Max Effective Principle Stress Ratio				
Axial Strain		4.393	7.459	10.027
Axial Stress	kPa	83.614	110.611	182.949
Cor. Deviator stress	kPa	79.639	106.406	178.545
Effective Major Stress	kPa	119.639	165.606	295.545
Effective Minor Stress	kPa	40.000	59.200	117.000
Effective Stress Ratio		2.991	2.797	2.526
s'	kPa	79.819	112.403	206.272
t'	kPa	39.819	53.203	89.272
Shear Resistance Angle	degs	23.0		
Cohesion c'	kPa	10		

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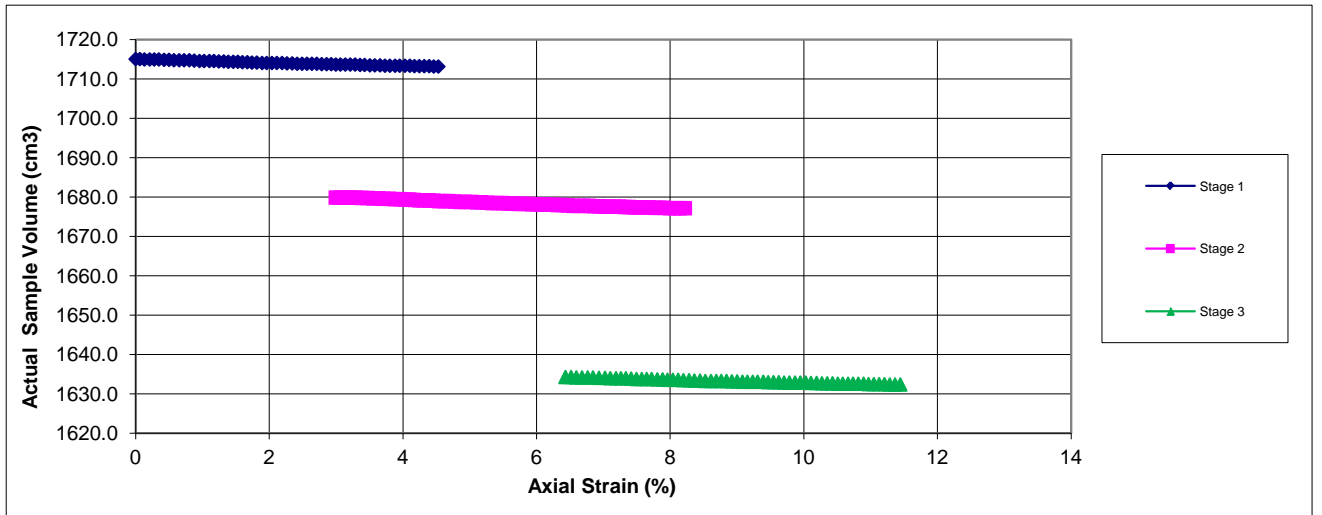
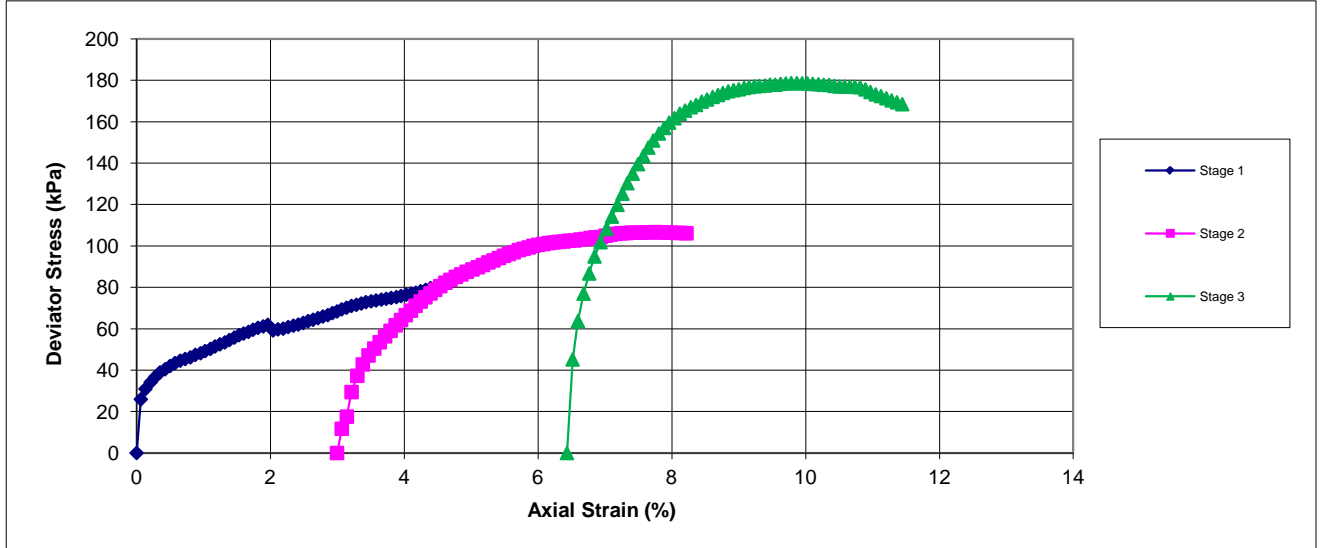
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017

Shearing Stage



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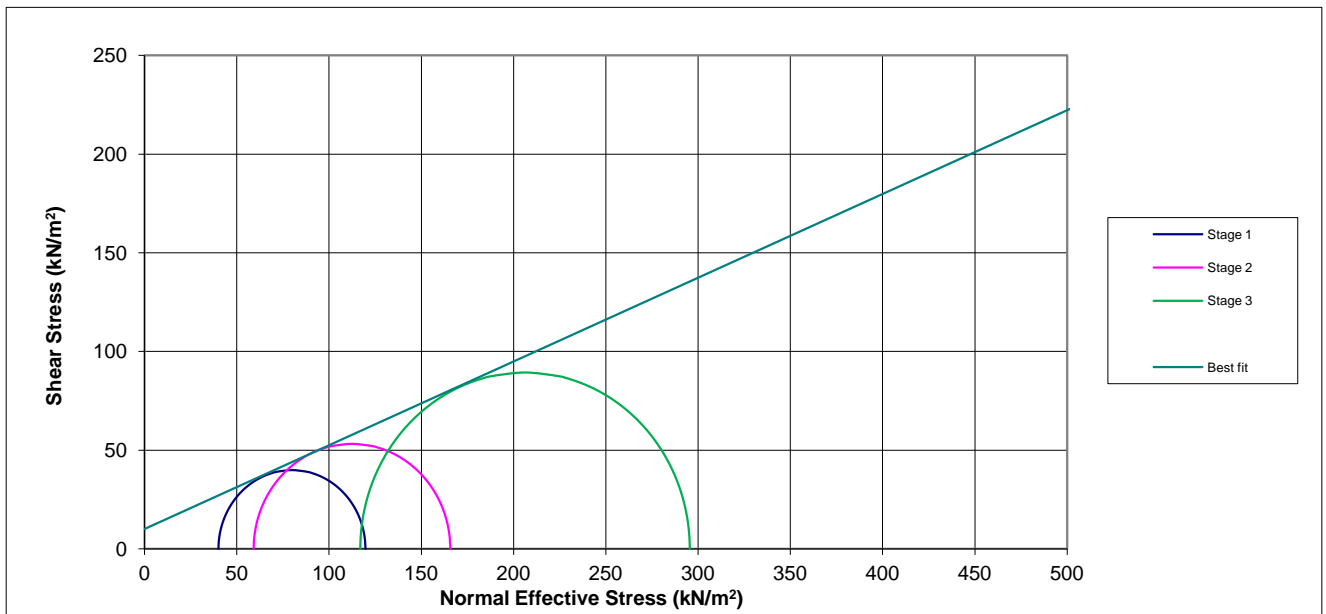
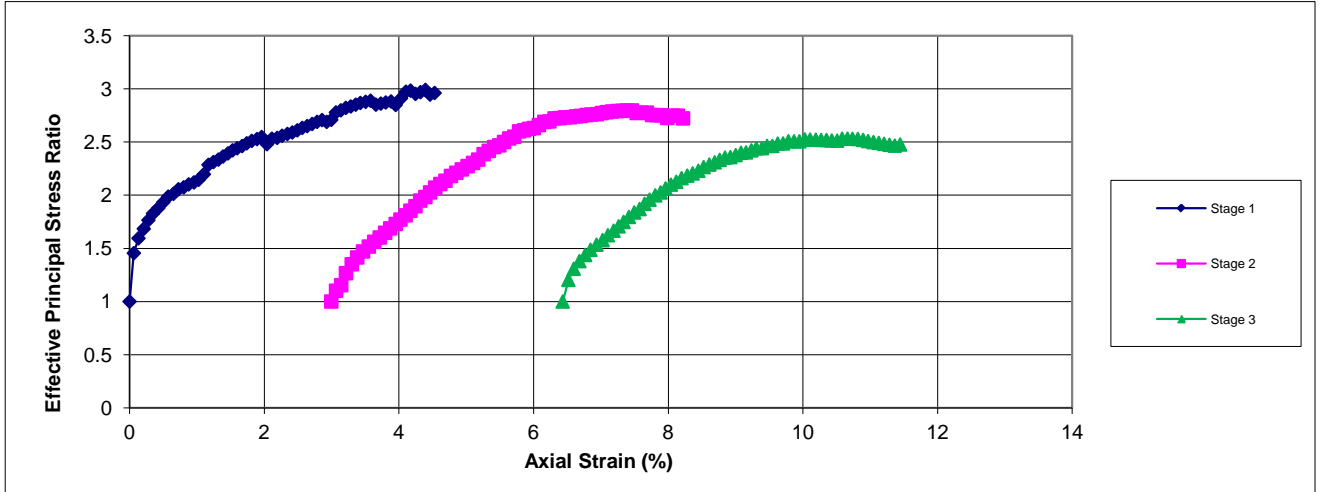
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017

Shearing Stage



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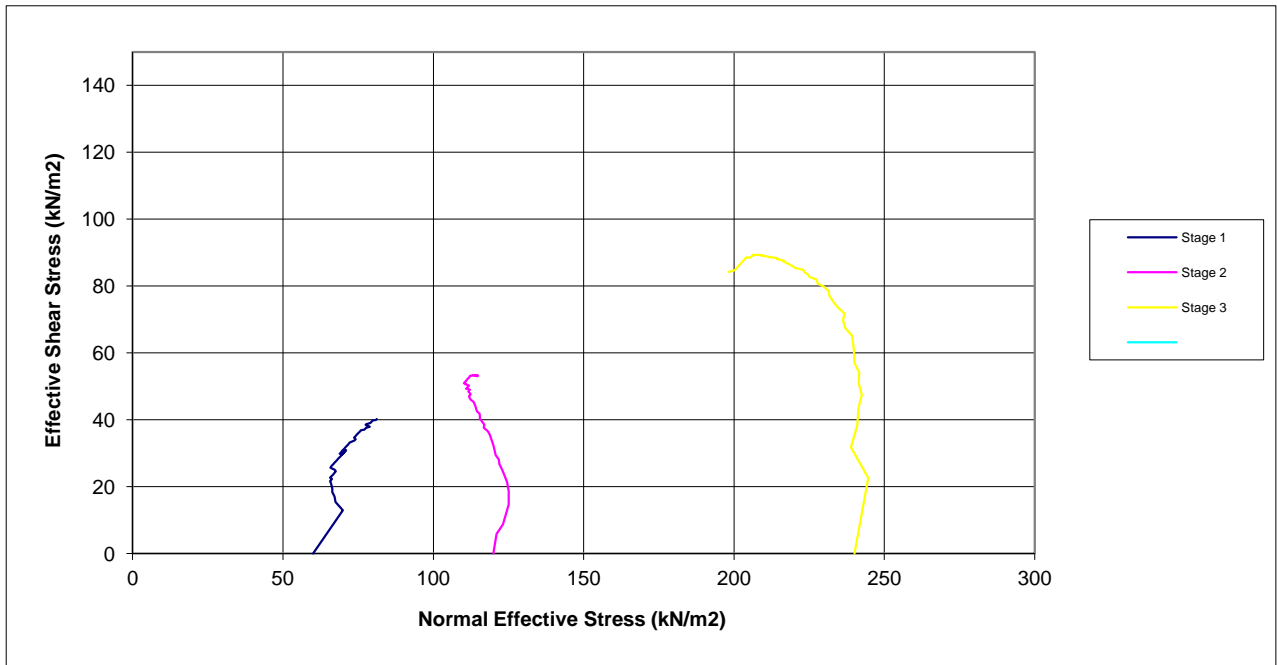
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017

Shearing Stage



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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH609
Sample No.		20
Depth	m	9.00-9.45
Date		07.04.2017



Post Specimen

Specimen Split

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH610
Sample No.	8
Depth	3
Date	18/03/2017
Disturbed / Undisturbed	Undisturbed

Description of Specimen

Grey sl silty sl gravely firm CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1699.79
Mass	g	3284.80
Dry Mass	g	2581.00
Density	Mg/m ³	1.93
Dry Density	Mg/m ³	1.52
Moisture Content	%	27
Specific Gravity	kN/m ³	2.65
(assumed/measured)		assumed

Final Specimen Conditions

Moisture Content	%	27
Density	Mg/m ³	1.95
Dry Density	Mg/m ³	1.53

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH610
Sample No.	8
Depth	3 m
Date	18/03/2017

Test Setup

Date started	11/03/2017
Date Finished	17/03/2017
Top Drain Used	y
Base Drain Used	y
Side Drains Used	y
Pressure System Number	P2
Cell Number	C2

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	287.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	17.00	14.00	39.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1697.99	1696.59	1687.69
Consolidated Height	mm	203.93	196.70	187.56
Consolidated Area	mm ²	1697.99	1696.59	1687.69
Vol. Compressibility	m ² /MN	0.00392	0.00344	0.02295
Consolidation Coef.	m ² /yr.	0.13075	0.07247	0.01926

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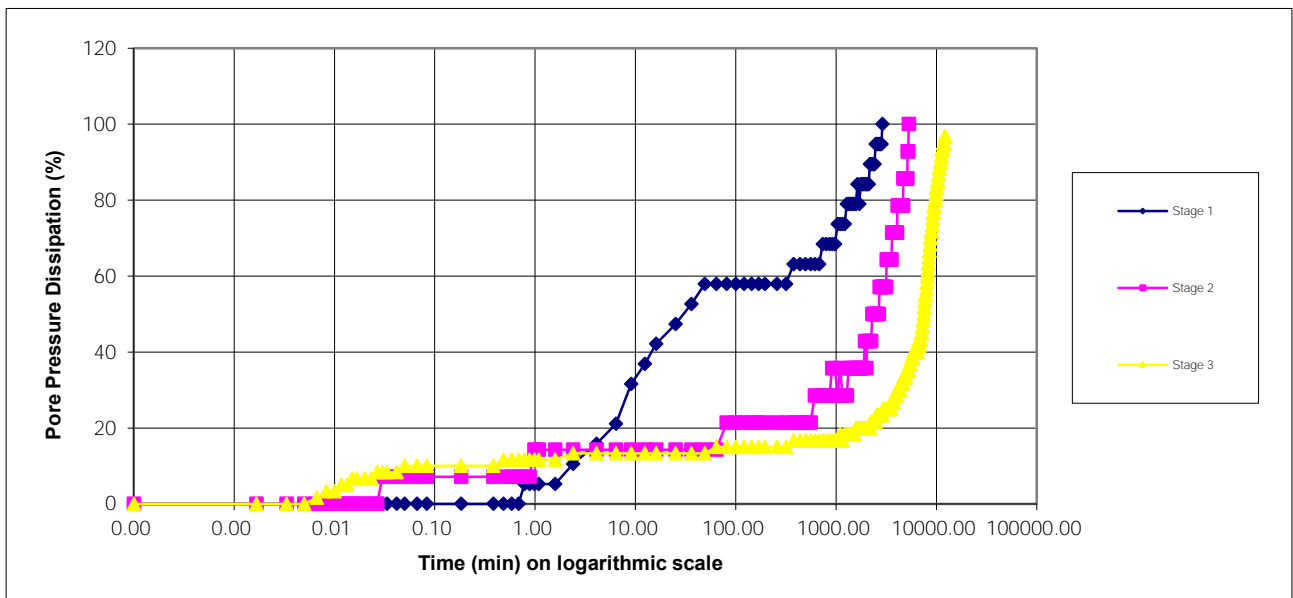
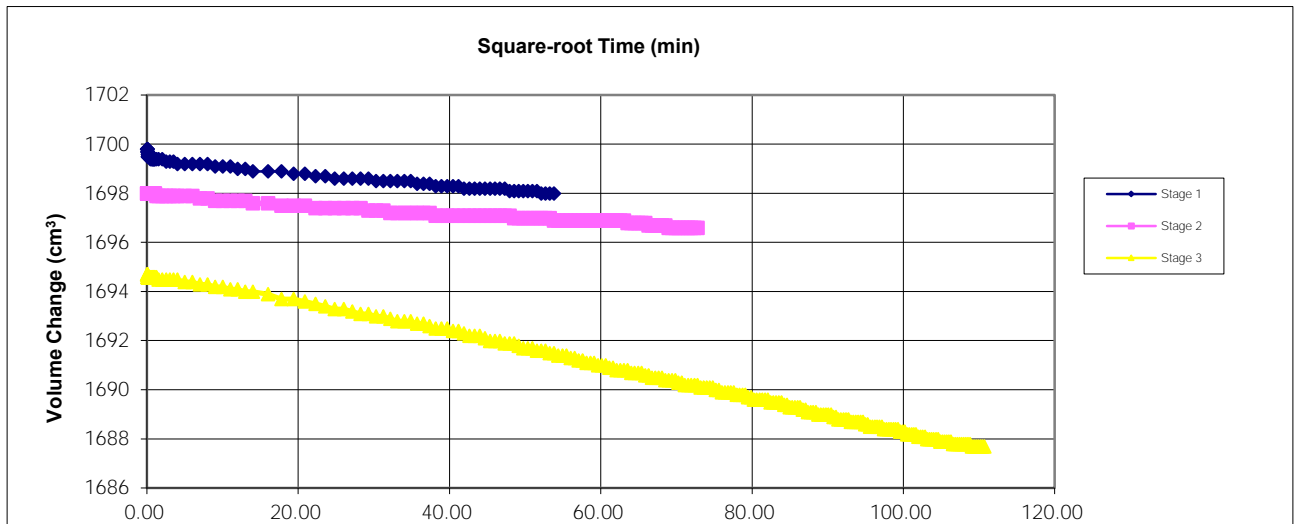
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH610
Sample No.	8
Depth	3 m
Date	18/03/2017

Consolidation Stage



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Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		8
Depth	m	3
Date		18/03/2017

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.0004	0.0002	0.0001
Max Deviator Stress				
Axial Strain		3.697	8.939	10.117
Axial Stress	kPa	56.419	61.01	80.49
Cor. Deviator stress	kPa	53.491	56.69	76.08
Effective Major Stress	kPa	82.491	116.69	196.08
Effective Minor Stress	kPa	30.000	60.00	120.00
Effective Stress Ratio		2.750	1.945	1.63
s'	kPa	56.245	88.34	158.04
t'	kPa	26.245	28.34	38.04
Max Effective Principle Stress Ratio				
Axial Strain		1.510	8.939	10.117
Axial Stress	kPa	46.628	61.012	80.494
Cor. Deviator stress	kPa	46.469	56.688	76.076
Effective Major Stress	kPa	76.469	116.688	196.076
Effective Minor Stress	kPa	30.000	60.000	120.000
Effective Stress Ratio		2.549	1.945	1.634
s'	kPa	53.235	88.344	158.038
t'	kPa	23.235	28.344	38.038
Shear Resistance Angle	degs	8.0		
Cohesion c'	kPa	16		

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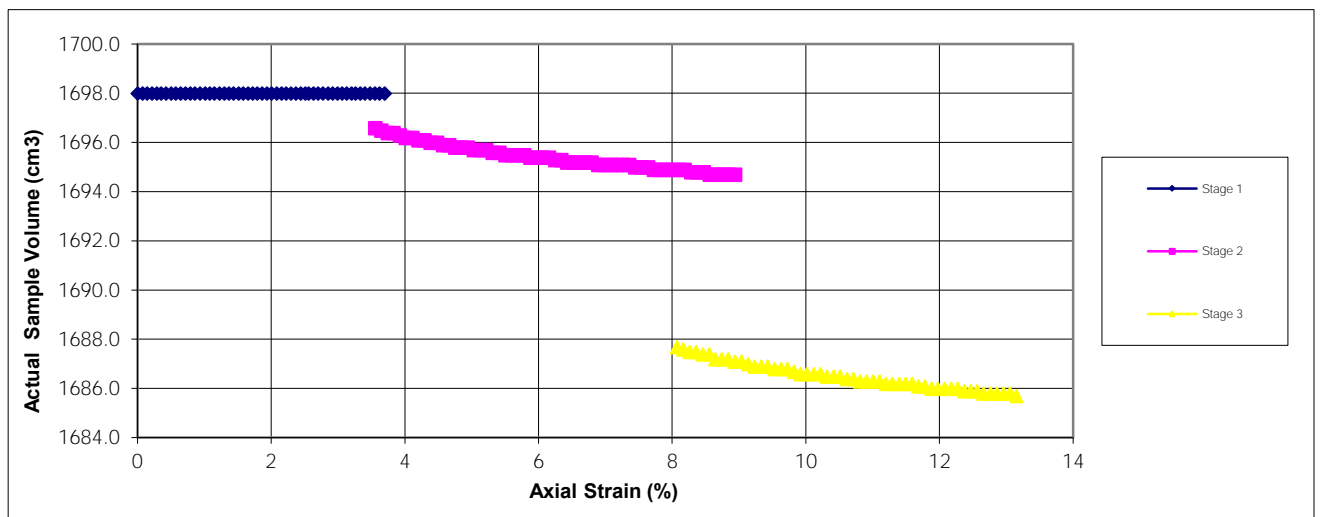
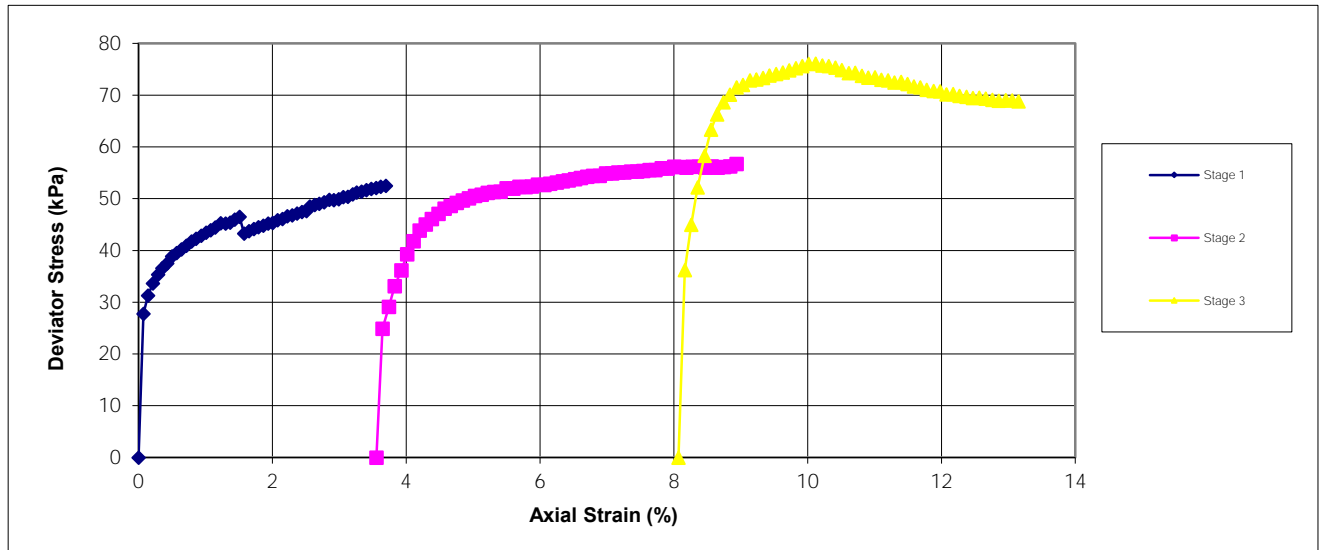
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH610
Sample No.	8
Depth	3 m
Date	18/03/2017

Shearing Stage



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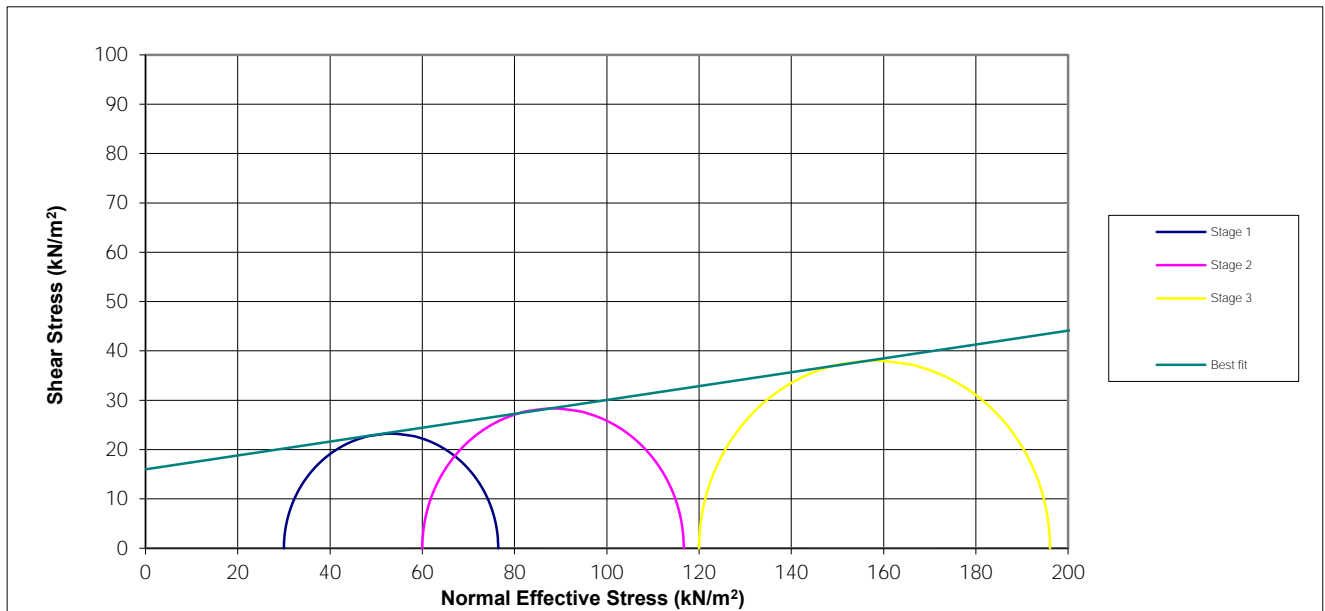
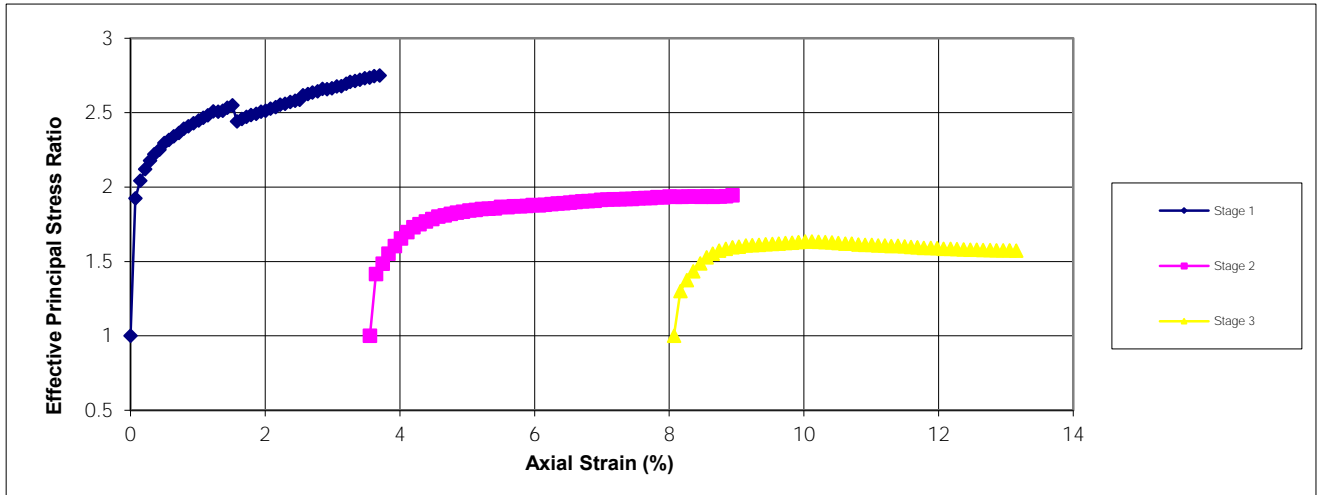
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH610
Sample No.	8
Depth	3 m
Date	18/03/2017

Shearing Stage



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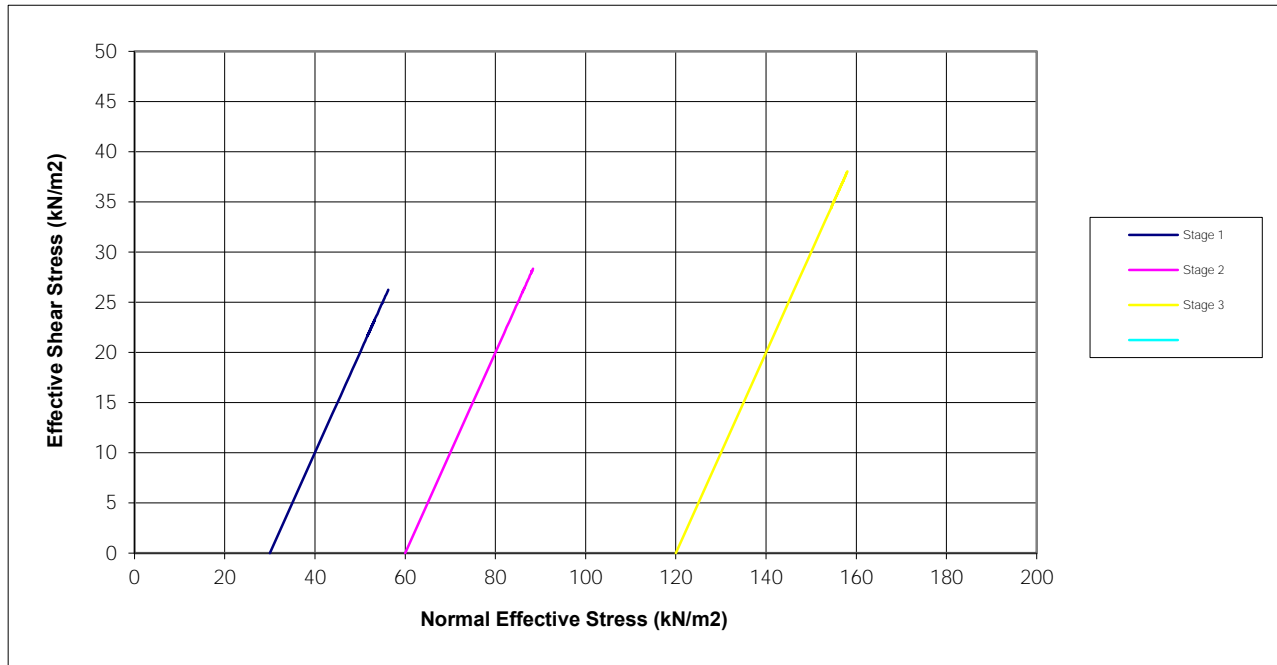
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH610
Sample No.	8
Depth	3
Date	18/03/2017

Shearing Stage



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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brown silt firm CLAY

Initial Specimen Conditions

Height	mm	203.00
Diameter	mm	102.00
Area	mm ²	8171.28
Volume	cm ³	1658.77
Mass	g	3455.10
Dry Mass	g	2896.10
Density	Mg/m ³	2.08
Dry Density	Mg/m ³	1.75
Moisture Content	%	19
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	17
Density	Mg/m ³	2.10
Dry Density	Mg/m ³	1.78

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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017

Test Setup

Date started		25/03/2017
Date Finished		05/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P6
Cell Number		C6

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	400.00
Final Pore Pressure	kPa	400.00
Final B Value		0.98

Consolidation

Effective Pressure	kPa	50.00	100.00	150.00
Cell Pressure	kPa	400.00	400.00	400.00
Back Pressure	kPa	350.00	300.00	250.00
Excess Pore Pressure	kPa	50.00	50.00	50.00
Pore Pressure at End	kPa	350.00	300.00	250.00
Consolidated Volume	cm ³	1640.37	1633.47	1623.17
Consolidated Height	mm	202.25	194.47	186.30
Consolidated Area	mm ²	1640.37	1633.47	1623.17
Vol. Compressibility	m ² /MN	0.03169	0.01402	0.02522
Consolidation Coef.	m ² /yr.	6.25185	0.30873	0.22565

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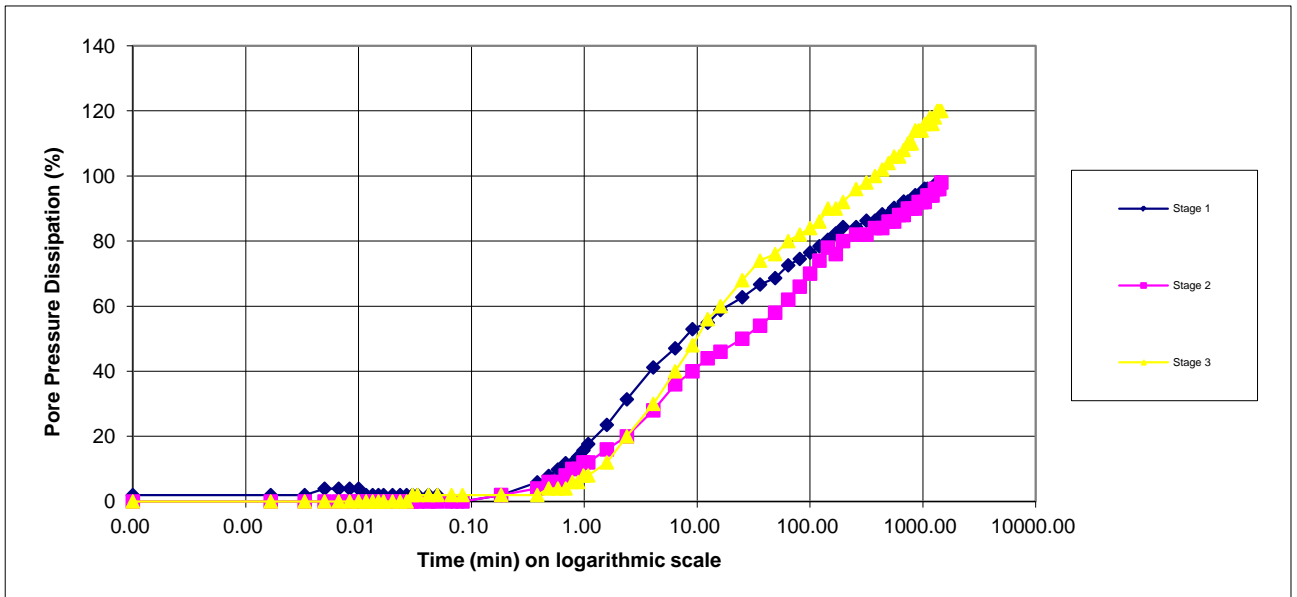
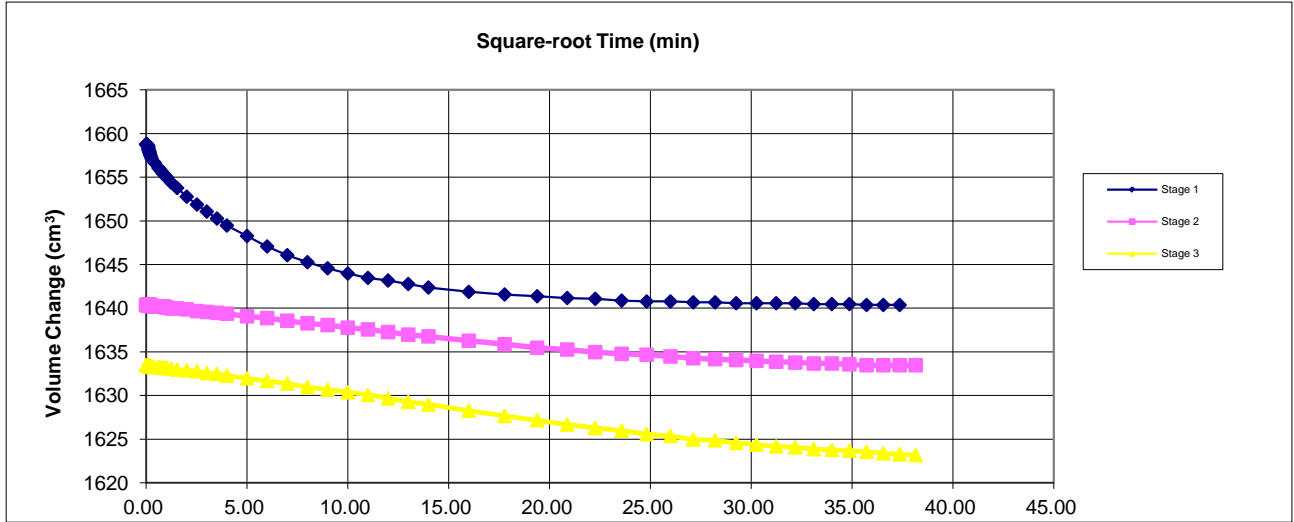
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017

Consolidation Stage



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Consolidated Drained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017

Shearing

Initial Cell Pressure	kPa	400	400	400
Initial Pore Pressure	kPa	350	300	250
Rate of Strain	mm/min	0.0184	0.0009	0.0006
Max Deviator Stress				
Axial Strain		4.702	8.692	13.538
Axial Stress	kPa	137.703	216.12	303.40
Cor. Deviator stress	kPa	134.695	211.80	298.77
Effective Major Stress	kPa	183.695	311.80	448.77
Effective Minor Stress	kPa	50.000	100.00	150.00
Effective Stress Ratio		3.674	3.118	2.99
s'	kPa	116.847	205.90	299.38
t'	kPa	66.847	105.90	149.38
Max Effective Principle Stress Ratio				
Axial Strain		3.797	8.311	13.538
Axial Stress	kPa	133.199	215.974	303.399
Cor. Deviator stress	kPa	129.259	211.690	298.767
Effective Major Stress	kPa	179.259	311.690	448.767
Effective Minor Stress	kPa	50.000	100.000	150.000
Effective Stress Ratio		3.585	3.117	2.992
s'	kPa	114.630	205.845	299.383
t'	kPa	64.630	105.845	149.383
Shear Resistance Angle	degs	27.3		
Cohesion c'	kPa	14		

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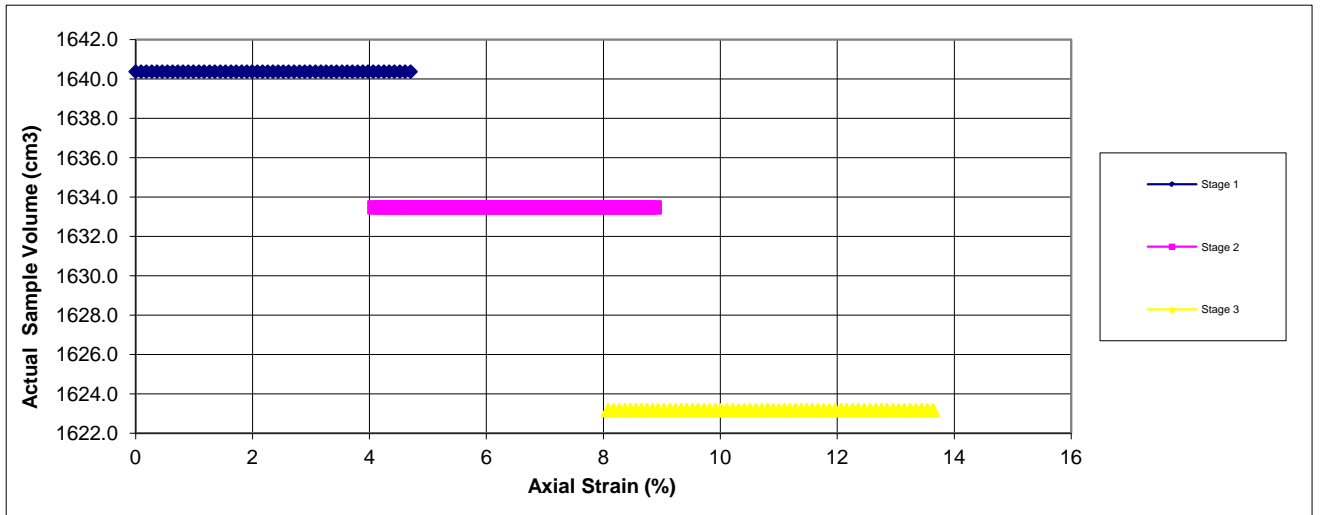
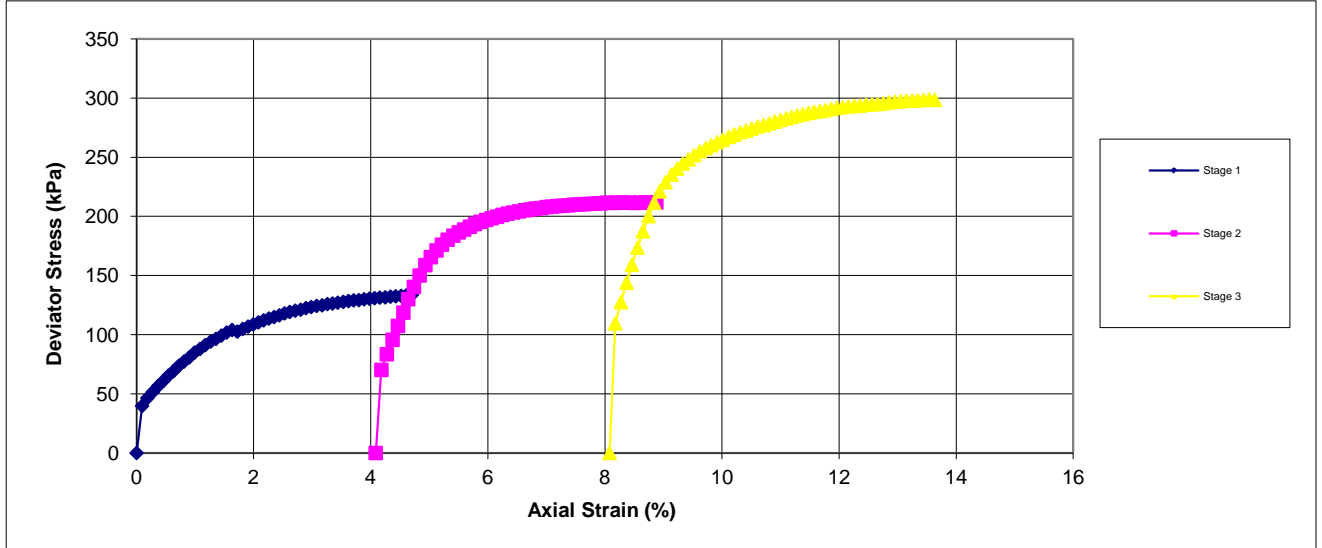
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017

Shearing Stage



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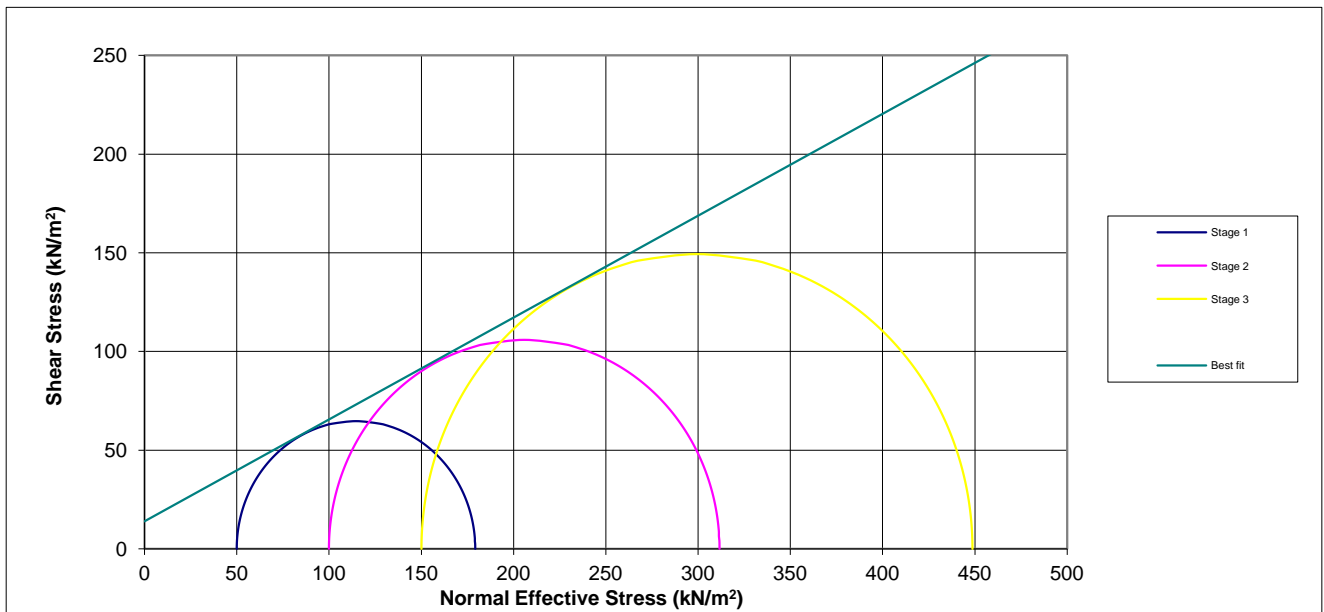
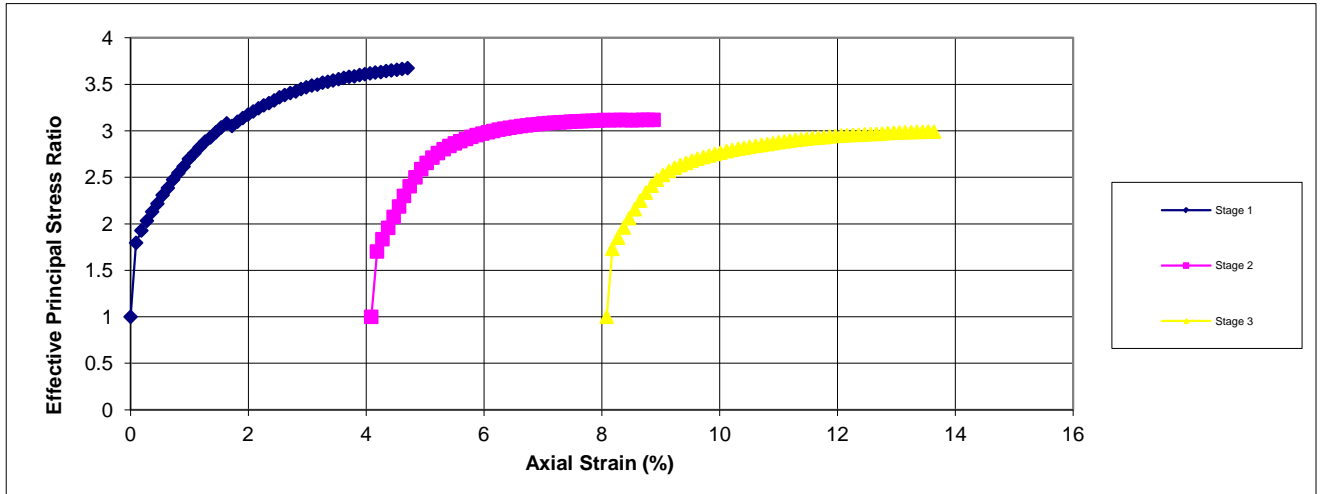
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017

Shearing Stage



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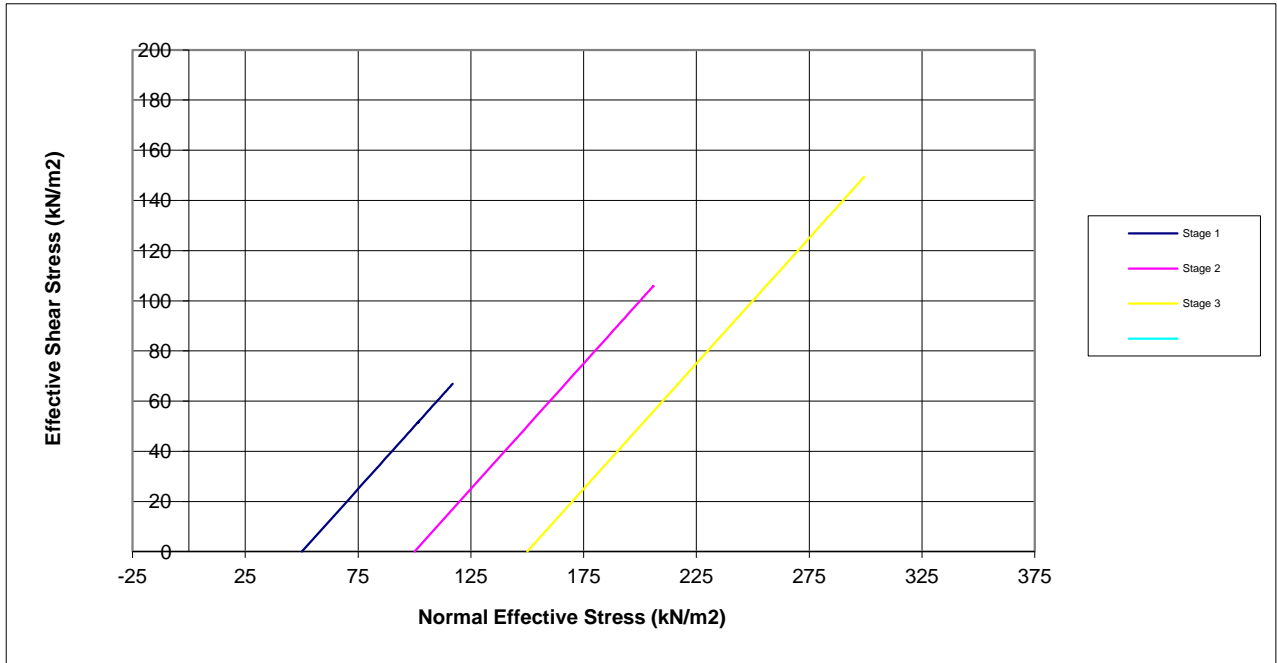
Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017

Shearing Stage



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Northstowe Phase 2

Consolidated Drained Triaxial Compression Test BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH610
Sample No.		13
Depth	m	5.00-5.45
Date		06/04/2017



Post Specimen



Specimen Split

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH613
Sample No.		32
Depth	from(m)	3.00
Depth	to(m)	3.45
Date		07/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brownish grey silty firm CLAY

Initial Specimen Conditions

Height	mm	205.00
Diameter	mm	105.00
Area	mm ²	8659.01
Volume	cm ³	1775.10
Mass	g	3350.60
Dry Mass	g	2662.40
Density	Mg/m ³	1.89
Dry Density	Mg/m ³	1.50
Moisture Content	%	26
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	28
Density	Mg/m ³	1.98
Dry Density	Mg/m ³	1.55

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH613
Sample No.		32
Depth	from(m)	3.00
Depth	to(m)	3.45

Test Setup

Date started		25/03/2017
Date Finished		06/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P5
Cell Number		C5

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	294.00
Final B Value		0.97

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	24.00	29.00	68.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1767.70	1748.19	1718.03
Consolidated Height	mm	204.72	197.72	188.23
Consolidated Area	mm ²	8634.95	8841.98	9127.84
Vol. Compressibility	m ² /MN	0.01544	0.04599	0.09585
Consolidation Coef.	m ² /yr.	87.05686	0.14248	0.08502

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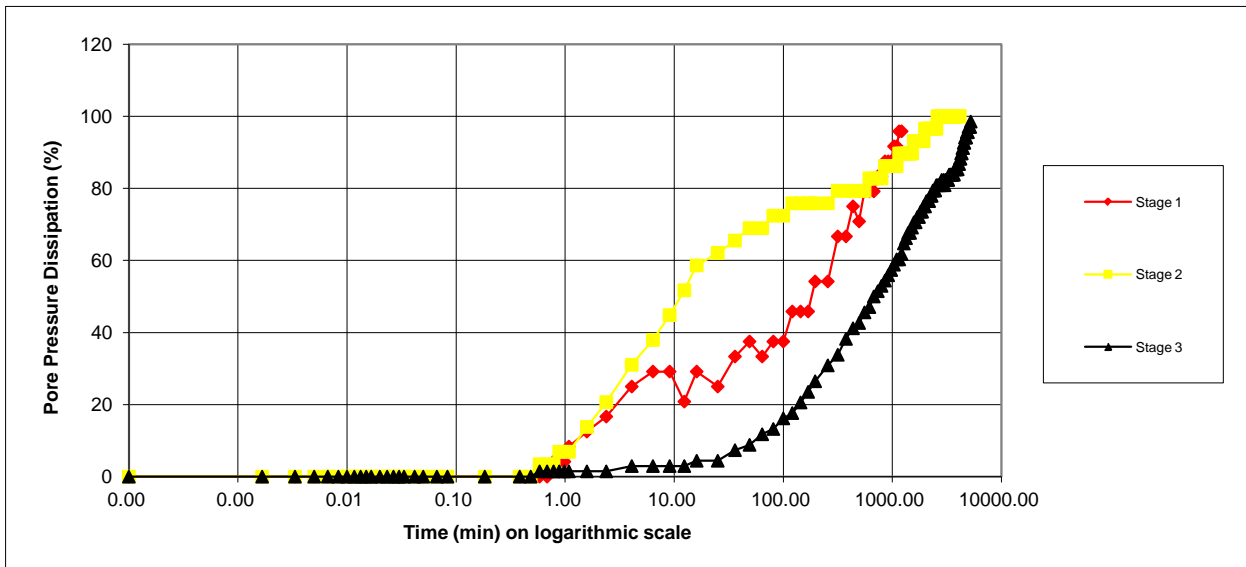
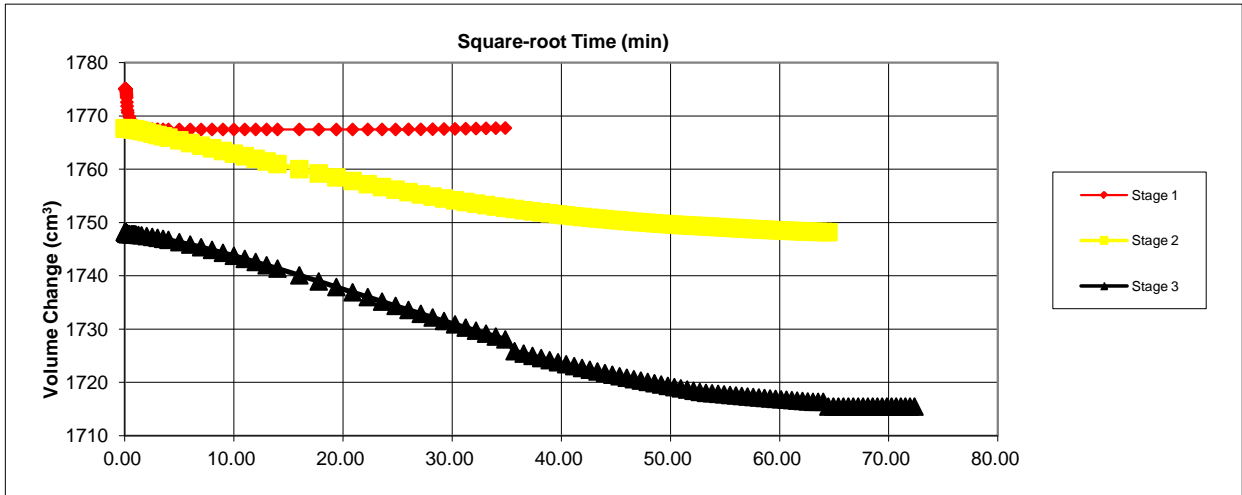
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH613
Sample No.		32
Depth	from(m)	3.00
Depth	to(m)	3.45

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH613
Sample No.		32
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	1.7038	0.0027	0.0015
Max Deviator Stress				
Axial Strain		4.372	8.434	11.990
Axial Stress	kPa	61.796	79.31	130.14
Cor. Deviator stress	kPa	58.826	74.94	121.63
Effective Major Stress	kPa	82.826	113.94	209.63
Effective Minor Stress	kPa	25.000	39.00	88.00
Effective Stress Ratio		3.313	2.922	2.38
s'	kPa	53.913	76.47	148.81
t'	kPa	28.913	37.47	60.81
Max Effective Principle Stress Ratio				
Axial Strain		3.204	8.434	11.677
Axial Stress	kPa	60.645	79.311	129.558
Cor. Deviator stress	kPa	56.762	74.941	125.066
Effective Major Stress	kPa	77.762	113.941	214.066
Effective Minor Stress	kPa	21.000	39.000	89.000
Effective Stress Ratio		3.703	2.922	2.405
s'	kPa	49.381	76.470	151.533
t'	kPa	28.381	37.470	62.533
Shear Resistance Angle	degs	20.0		
Cohesion c'	kPa	12		

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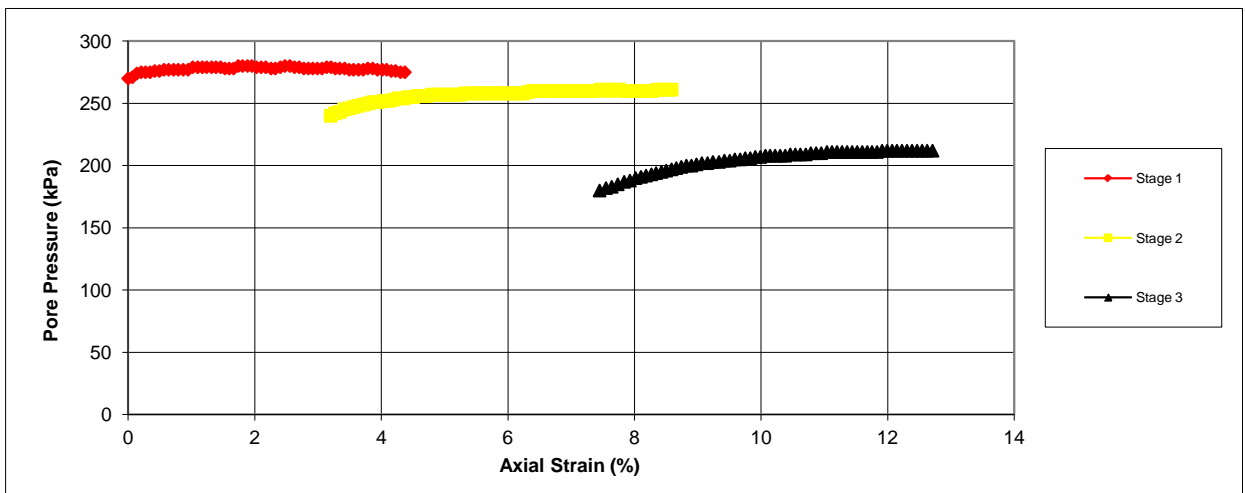
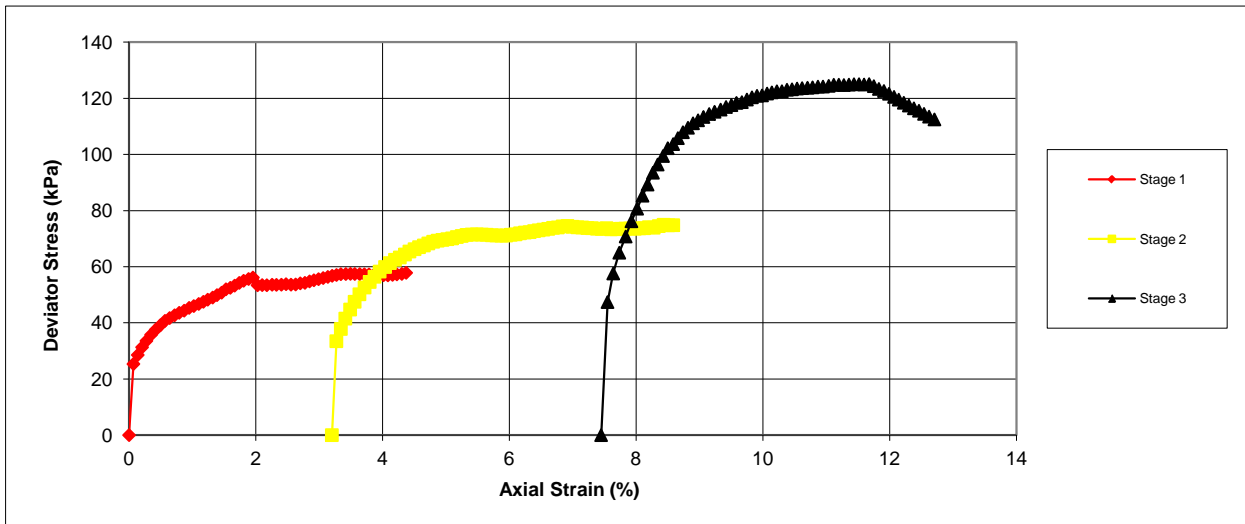
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH613
Sample No.		32
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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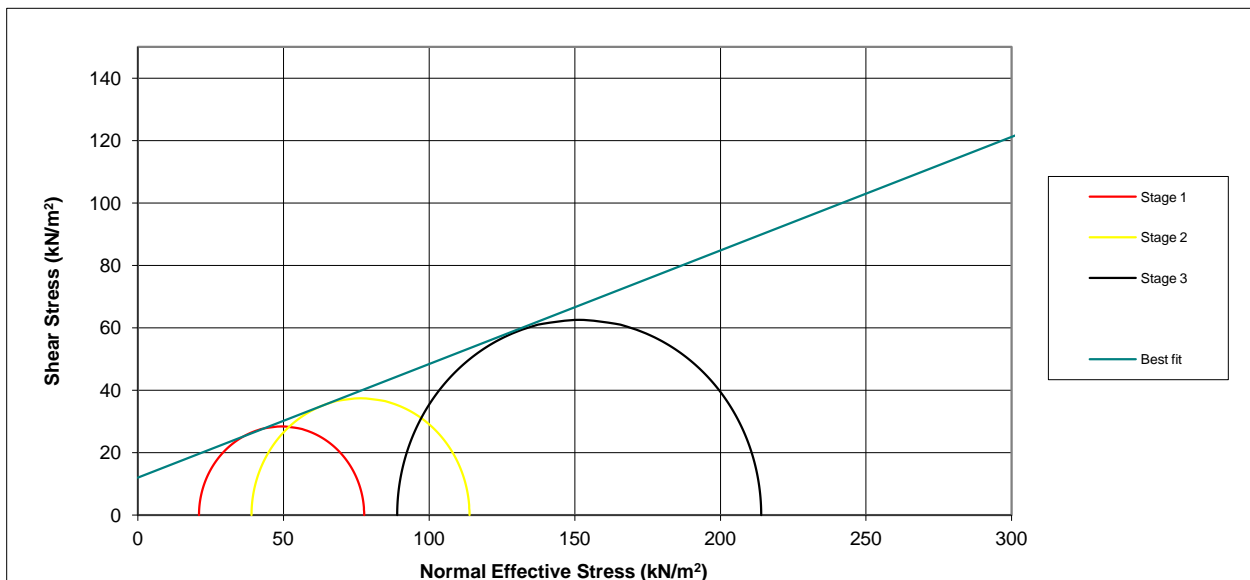
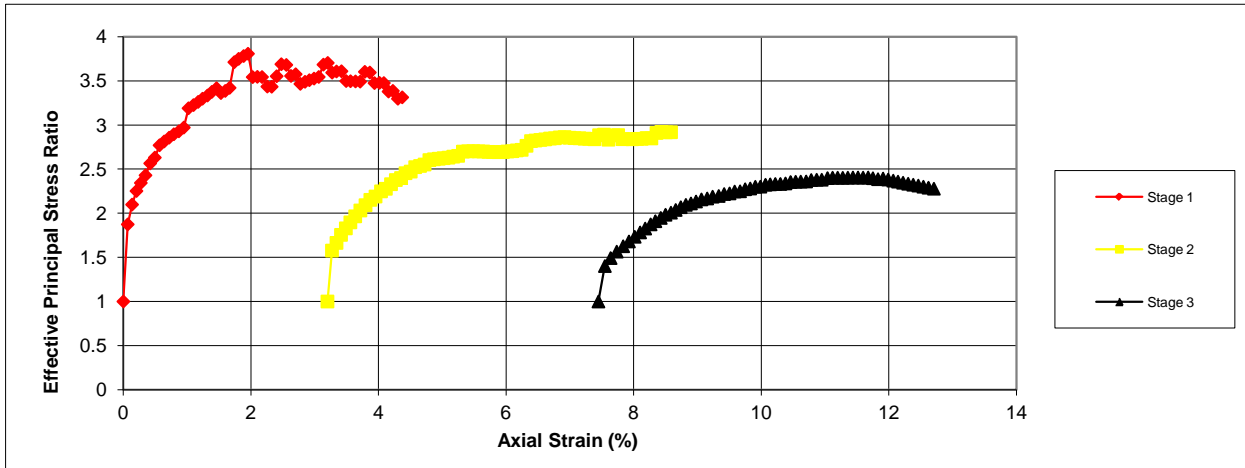
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH613	
Sample No.	32	
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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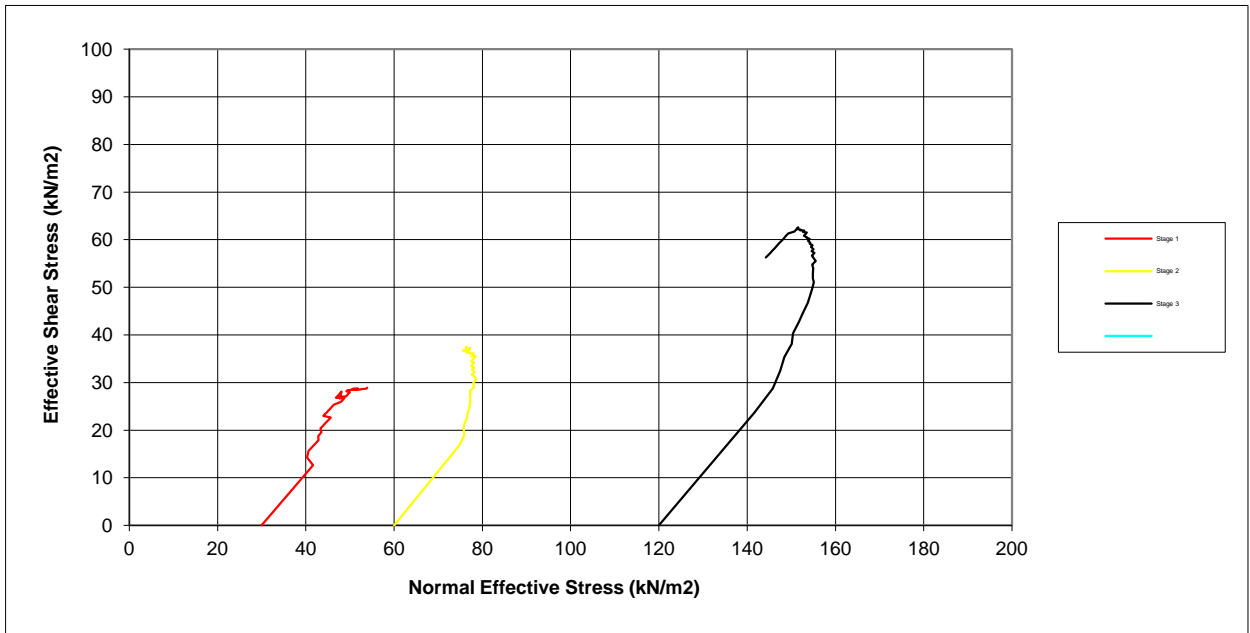
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH613
Sample No.		32
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH613
Sample No.		32
Depth	from(m)	3.00
Depth	to(m)	3.45



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45
Date		11/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Greyish brown sl silty stiff CLAY

Initial Specimen Conditions

Height	mm	206.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1749.94
Mass	g	3380.70
Dry Mass	g	2920.00
Density	Mg/m ³	1.93
Dry Density	Mg/m ³	1.67
Moisture Content	%	16
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	17
Density	Mg/m ³	2.13
Dry Density	Mg/m ³	1.82

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45

Test Setup

Date started		20/03/2017
Date Finished		10/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P4
Cell Number		C4

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	600.00
Final Pore Pressure	kPa	600.00
Final B Value		1.01

Consolidation

Effective Pressure	kPa	120.00	240.00	480.00
Cell Pressure	kPa	600.00	600.00	600.00
Back Pressure	kPa	480.00	360.00	120.00
Excess Pore Pressure	kPa	120.00	121.00	283.00
Pore Pressure at End	kPa	480.00	360.00	120.00
Consolidated Volume	cm ³	1648.34	1629.98	1608.27
Consolidated Height	mm	202.01	198.09	187.31
Consolidated Area	mm ²	8166.06	8228.65	8586.66
Vol. Compressibility	m ² /MN	0.12096	0.03094	0.11099
Consolidation Coef.	m ² /yr.	2.23080	1.51834	0.05828

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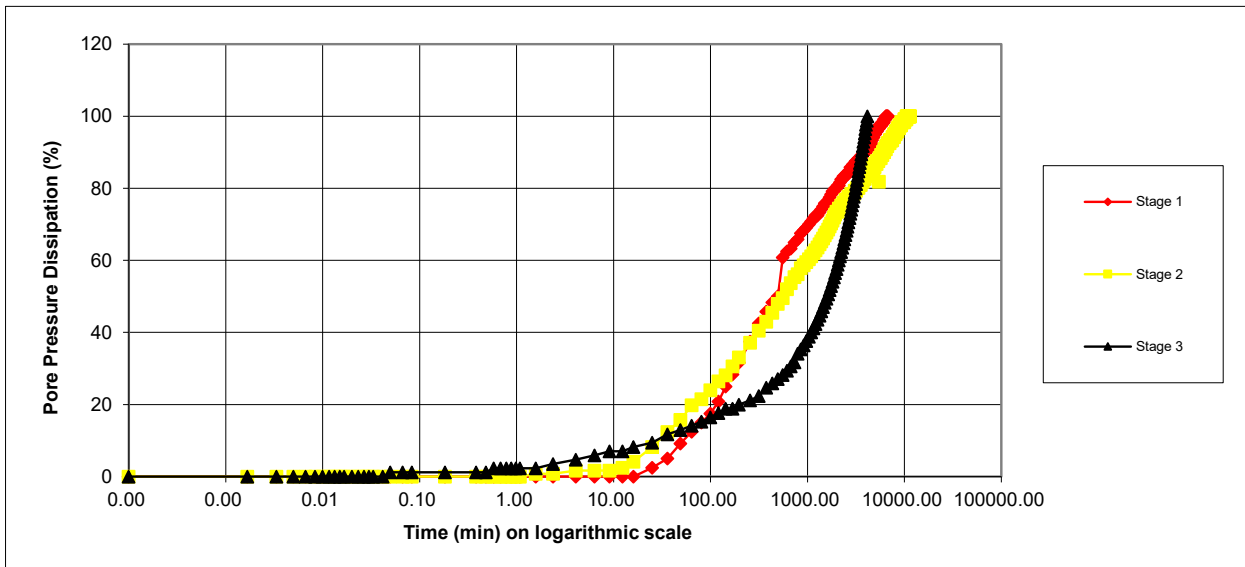
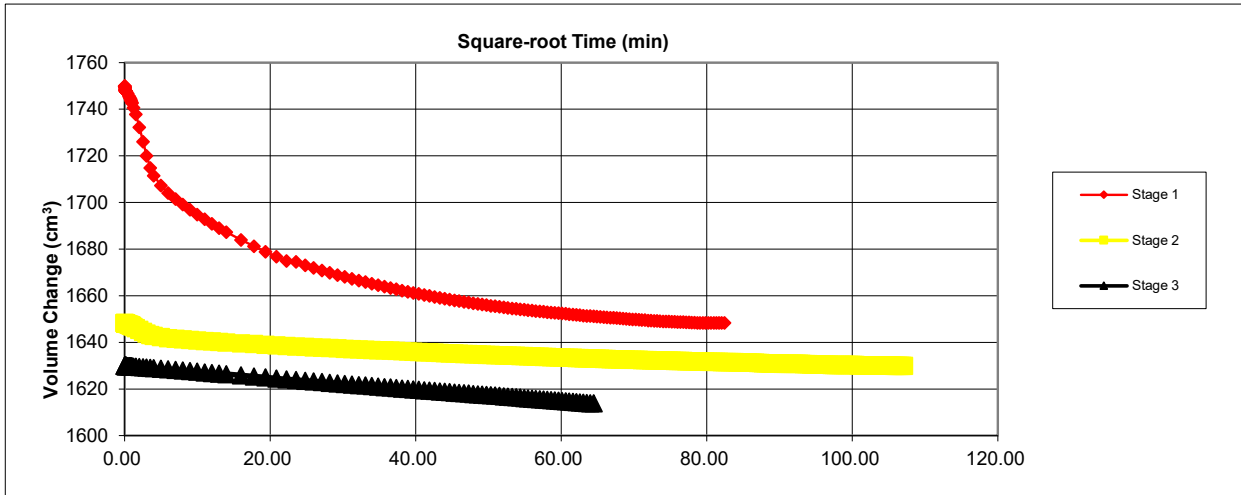
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1201	
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1201	
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45

Shearing

Initial Cell Pressure	kPa	600	600	600
Initial Pore Pressure	kPa	480	360	120
Rate of Strain	mm/min	0.0439	0.0293	0.0011
Max Deviator Stress				
Axial Strain		4.178	7.123	12.229
Axial Stress	kPa	99.506	140.48	199.44
Cor. Deviator stress	kPa	96.546	136.24	194.90
Effective Major Stress	kPa	156.546	256.24	440.90
Effective Minor Stress	kPa	61.000	120.00	246.00
Effective Stress Ratio		2.566	2.135	1.79
s'	kPa	108.773	188.12	343.45
t'	kPa	47.773	68.12	97.45
Max Effective Principle Stress Ratio				
Axial Strain		1.955	7.123	12.229
Axial Stress	kPa	92.449	140.479	199.437
Cor. Deviator stress	kPa	92.245	136.237	194.903
Effective Major Stress	kPa	148.245	256.237	440.903
Effective Minor Stress	kPa	56.000	120.000	246.000
Effective Stress Ratio		2.647	2.135	1.792
s'	kPa	102.123	188.119	343.452
t'	kPa	46.123	68.119	97.452
Shear Resistance Angle	degs	12.0		
Cohesion c'	kPa	27		

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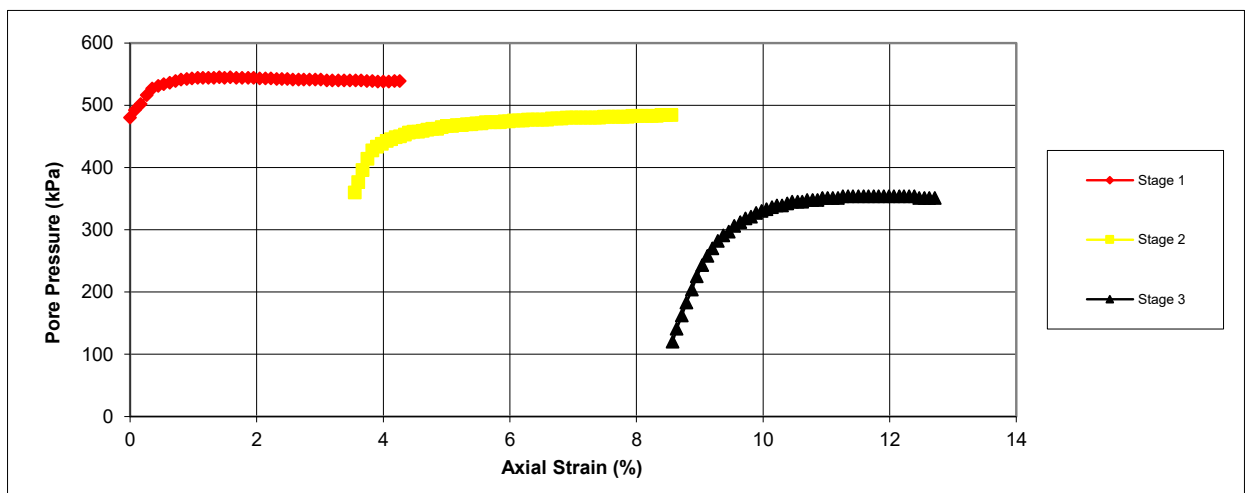
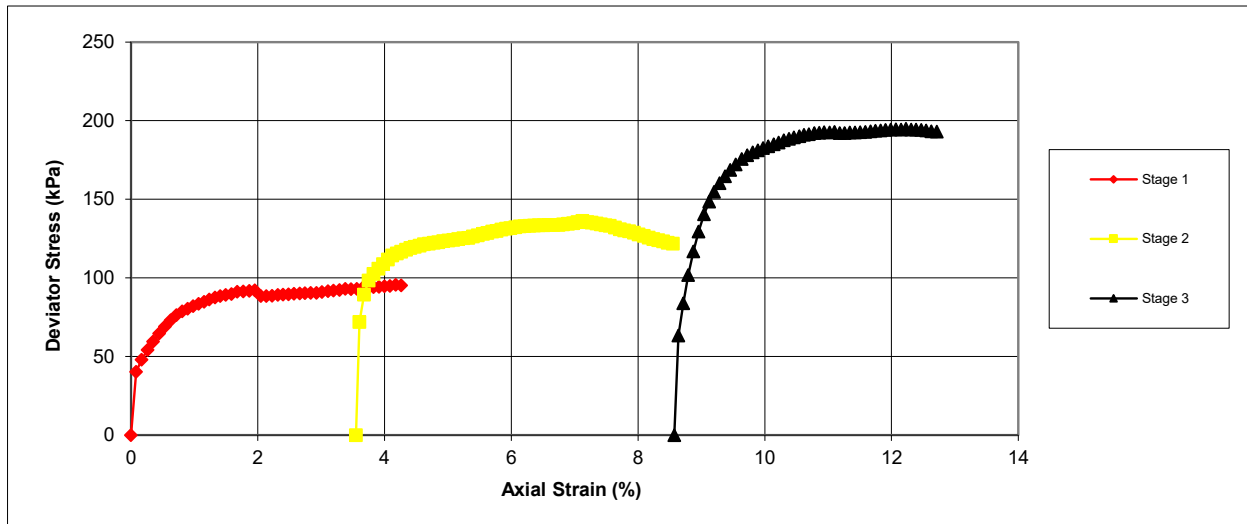
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45

Shearing Stage



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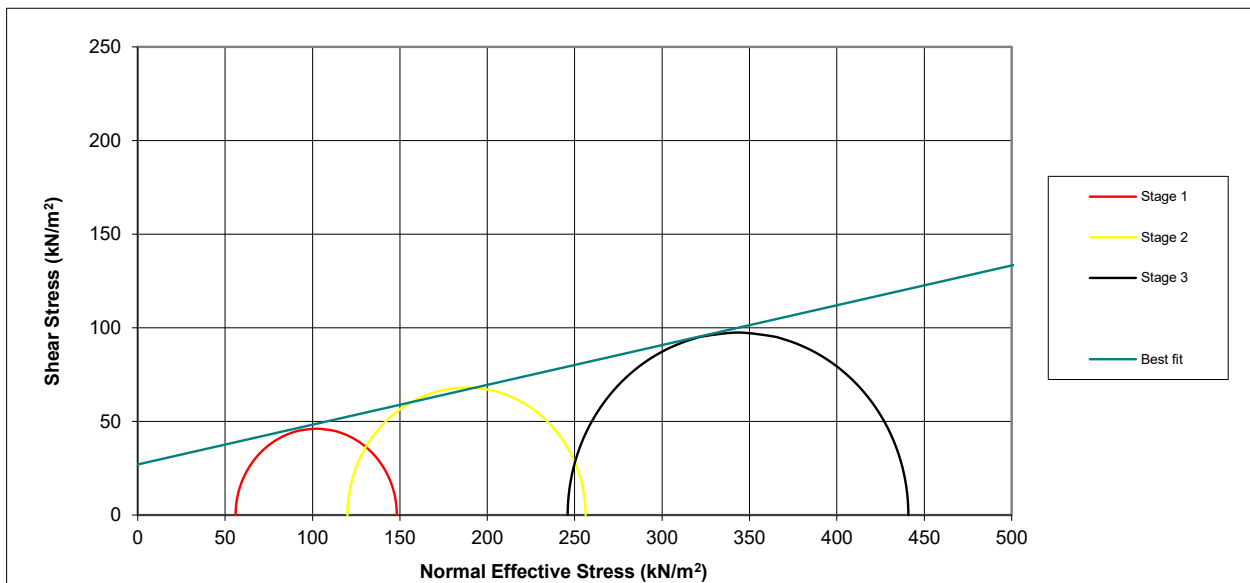
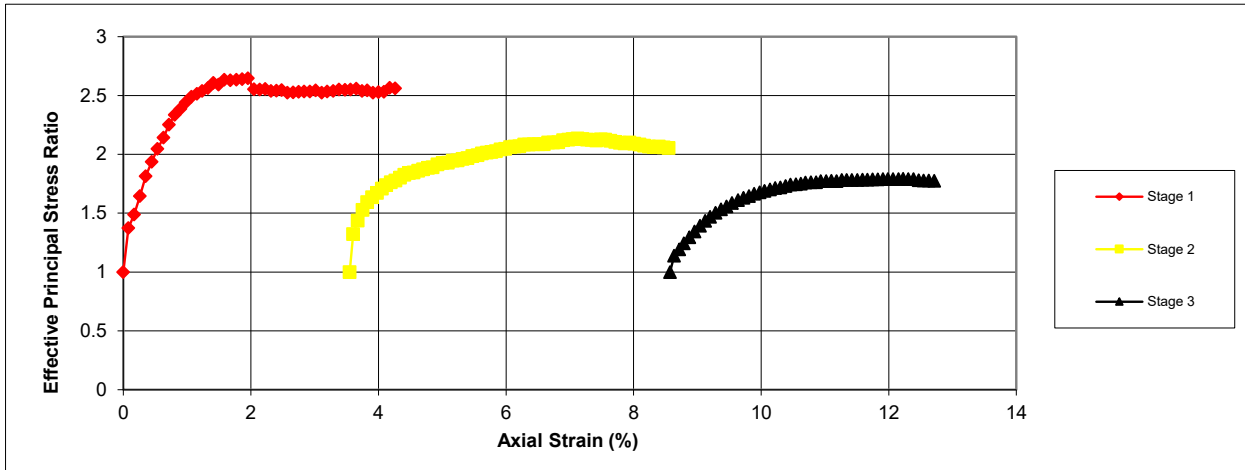
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1201	
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45

Shearing Stage



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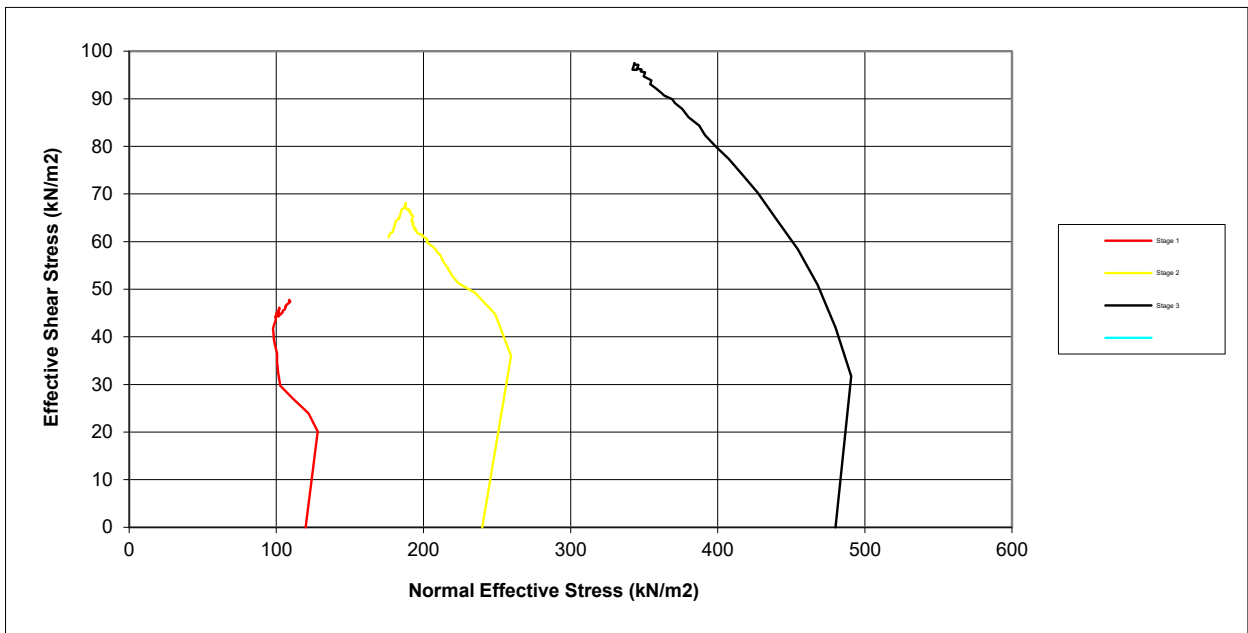
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		
Depth	from(m)	12.00
Depth	to(m)	12.45



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		6
Depth	m	18.00-18.45
Date		22/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty firm CLAY

Initial Specimen Conditions

Height	mm	206.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1716.45
Mass	g	3577.40
Dry Mass	g	2987.90
Density	Mg/m ³	2.08
Dry Density	Mg/m ³	1.74
Moisture Content	%	20
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	21
Density	Mg/m ³	2.30
Dry Density	Mg/m ³	1.91

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		6
Depth	m	18.00-18.45
Date		22/03/2017

Test Setup

Date started		10/03/2017
Date Finished		21/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P6
Cell Number		C6

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	750.00
Final Pore Pressure	kPa	740.00
Final B Value		0.96

Consolidation

Effective Pressure	kPa	180.00	360.00	720.00
Cell Pressure	kPa	750.00	750.00	750.00
Back Pressure	kPa	570.00	390.00	30.00
Excess Pore Pressure	kPa	170.00	207.00	410.00
Pore Pressure at End	kPa	570.00	390.00	30.00
Consolidated Volume	cm ³	1629.55	1593.15	1567.85
Consolidated Height	mm	202.52	198.16	192.98
Consolidated Area	mm ²	8051.06	8040.50	8125.04
Vol. Compressibility	m ² /MN	0.08882	0.05728	0.52935
Consolidation Coef.	m ² /yr.	0.07931	0.08245	0.04645

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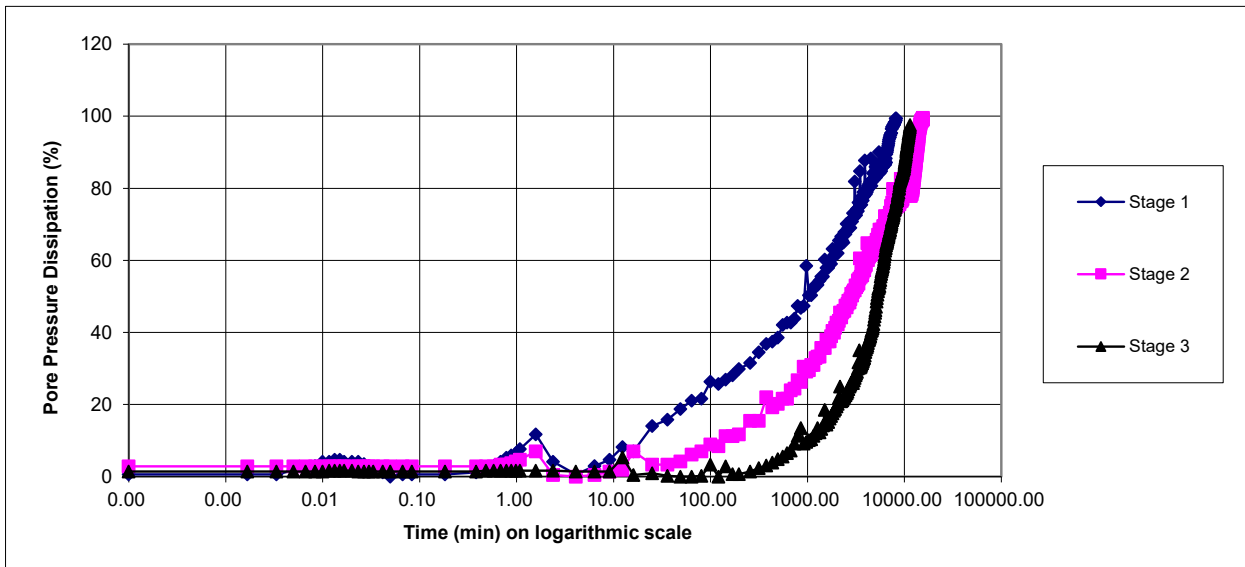
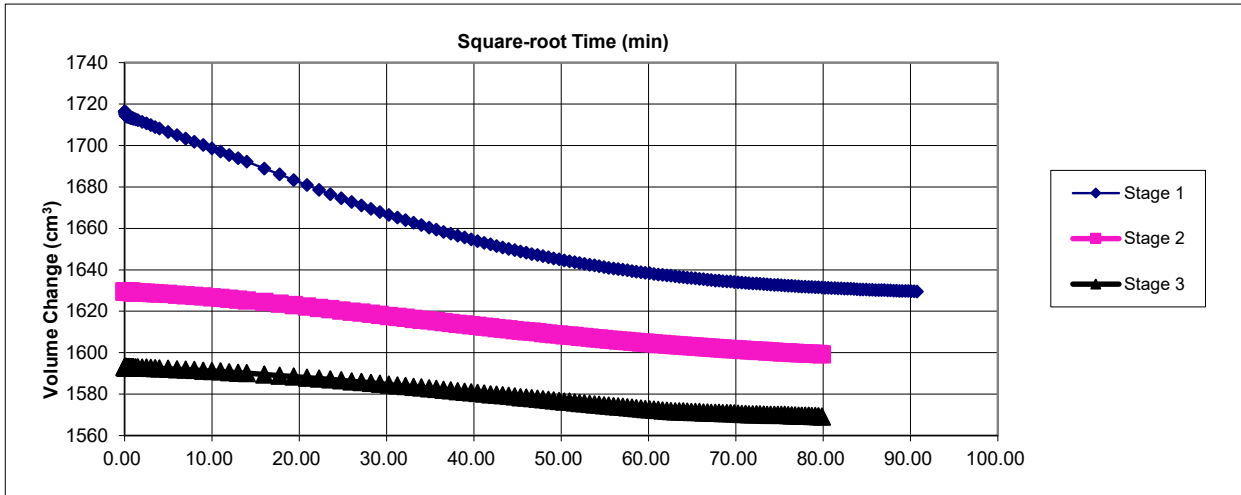
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1201
Sample No.	6
Depth	18.00-18.45
Date	22/03/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		6
Depth	m	18.00-18.45
Date		22/03/2017

Shearing

Initial Cell Pressure	kPa	750	750	750
Initial Pore Pressure	kPa	570	390	30
Rate of Strain	mm/min	0.0016	0.0016	0.0009
Max Deviator Stress				
Axial Strain		3.639	5.371	7.950
Axial Stress	kPa	129.765	156.85	218.40
Cor. Deviator stress	kPa	126.842	152.79	214.11
Effective Major Stress	kPa	248.842	361.79	574.11
Effective Minor Stress	kPa	123.000	209.00	360.00
Effective Stress Ratio		2.023	1.731	1.59
s'	kPa	185.921	285.39	467.05
t'	kPa	62.921	76.39	107.05
Max Effective Principle Stress Ratio				
Axial Strain		2.597	5.225	7.411
Axial Stress	kPa	124.635	156.234	216.210
Cor. Deviator stress	kPa	120.790	152.184	211.952
Effective Major Stress	kPa	236.790	358.184	551.952
Effective Minor Stress	kPa	116.000	206.000	340.000
Effective Stress Ratio		2.041	1.739	1.623
s'	kPa	176.395	282.092	445.976
t'	kPa	60.395	76.092	105.976
Shear Resistance Angle	degs	10.0		
Cohesion c'	kPa	30		

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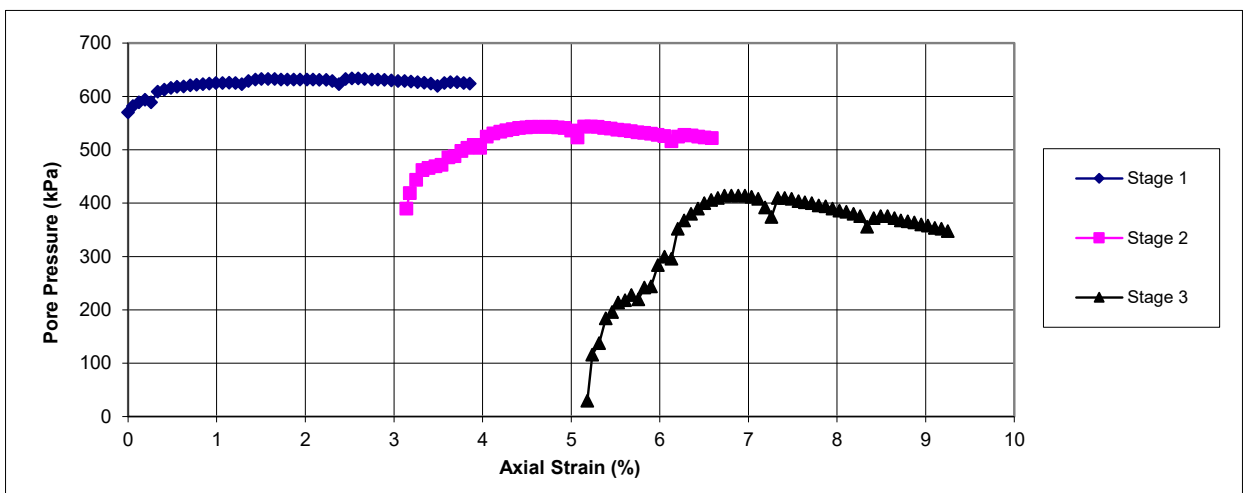
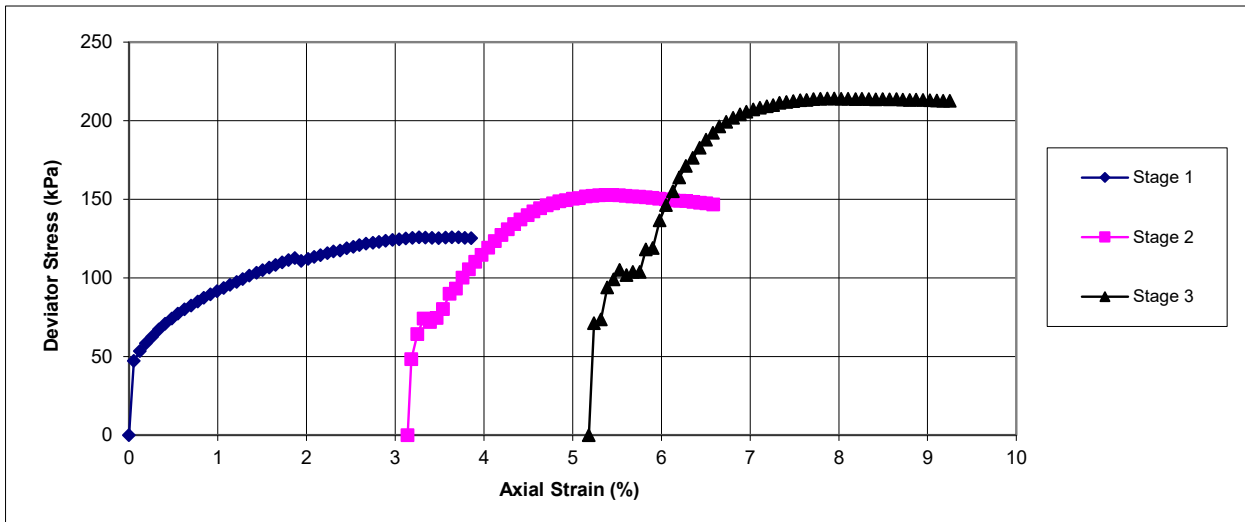
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		6
Depth	m	18.00-18.45
Date		22/03/2017

Shearing Stage



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Northstowe Phase 2

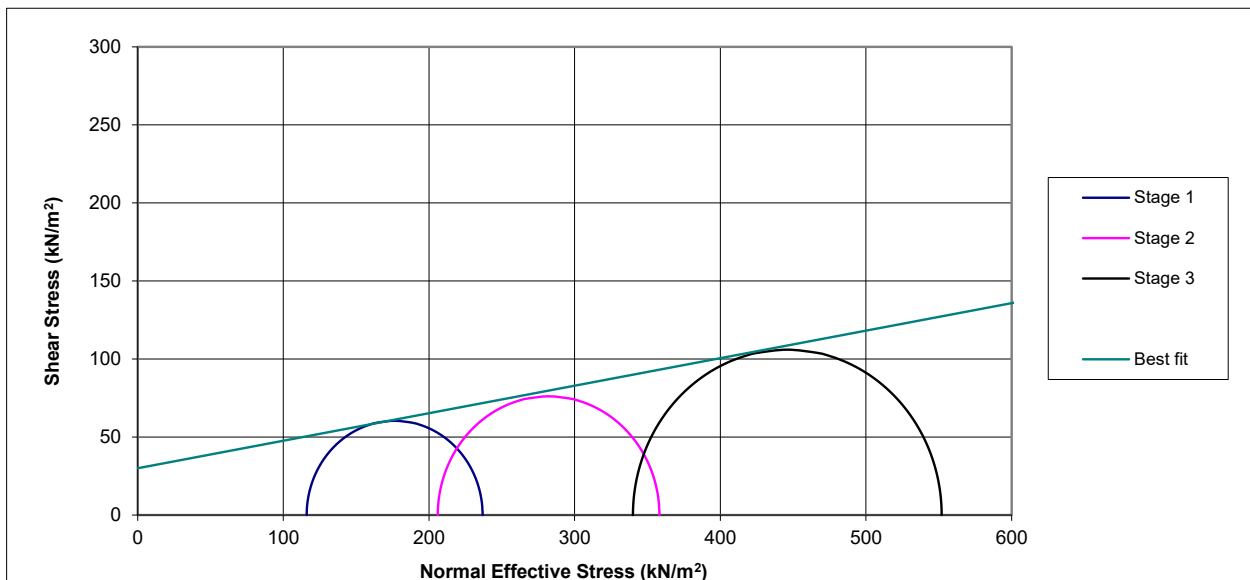
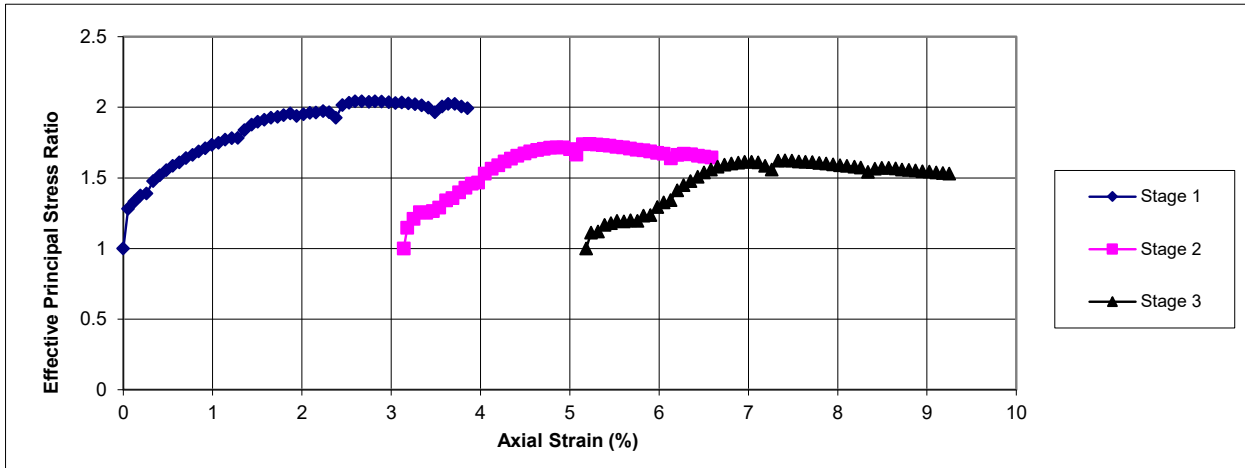
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		6
Depth	m	18.00-18.45
Date		22/03/2017

Shearing Stage



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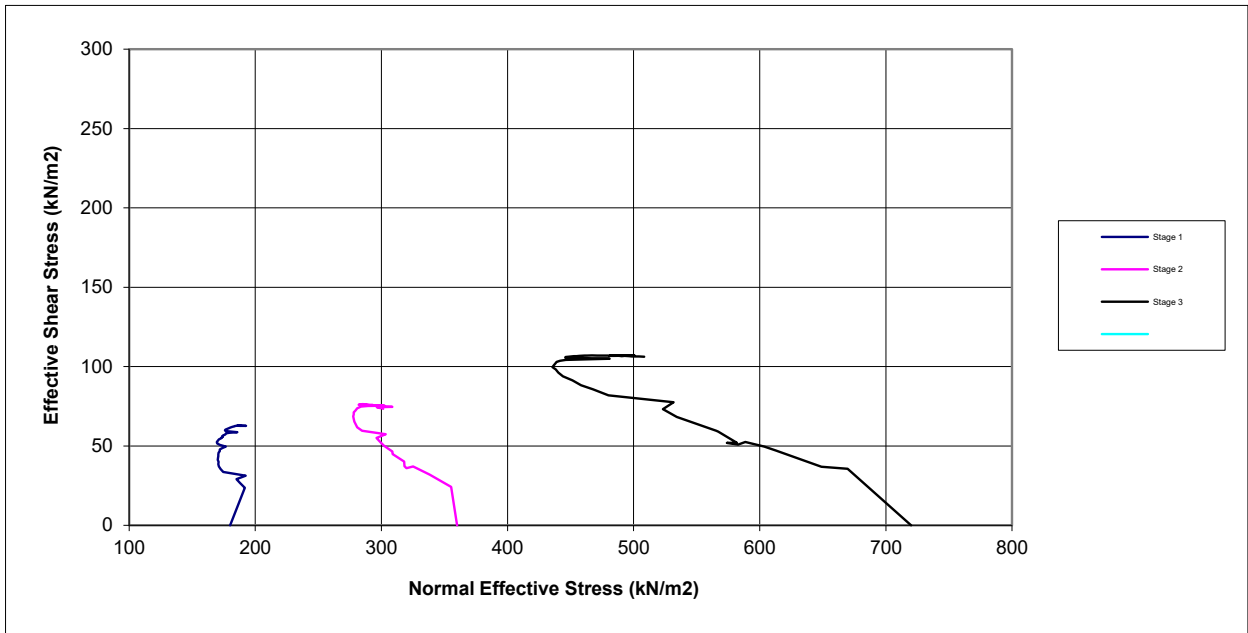
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1201
Sample No.	6
Depth	18.00-18.45
Date	22/03/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1201
Sample No.		6
Depth	m	18.00-18.45
Date		22/03/2017



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45
Date		00/01/1900
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Dark grey sl mottled brown silty firm CLAY
--

Initial Specimen Conditions

Height	mm	197.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1641.46
Mass	g	3128.10
Dry Mass	g	2393.30
Density	Mg/m ³	1.91
Dry Density	Mg/m ³	1.46
Moisture Content	%	31
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	28
Density	Mg/m ³	2.09
Dry Density	Mg/m ³	1.63

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45

Test Setup

Date started		21/03/2017
Date Finished		00/01/1900
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P8
Cell Number		C8

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	400.00
Final Pore Pressure	kPa	401.00
Final B Value		1.04

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	400.00	400.00	400.00
Back Pressure	kPa	370.00	340.00	280.00
Excess Pore Pressure	kPa	31.00	36.00	60.00
Pore Pressure at End	kPa	370.00	340.00	280.00
Consolidated Volume	cm ³	1543.46	1506.56	1469.66
Consolidated Height	mm	193.08	188.53	179.46
Consolidated Area	mm ²	8000.65	7992.32	8190.55
Vol. Compressibility	m ² /MN	0.16136	0.07032	0.08747
Consolidation Coef.	m ² /yr.	0.22461	0.07000	0.06486

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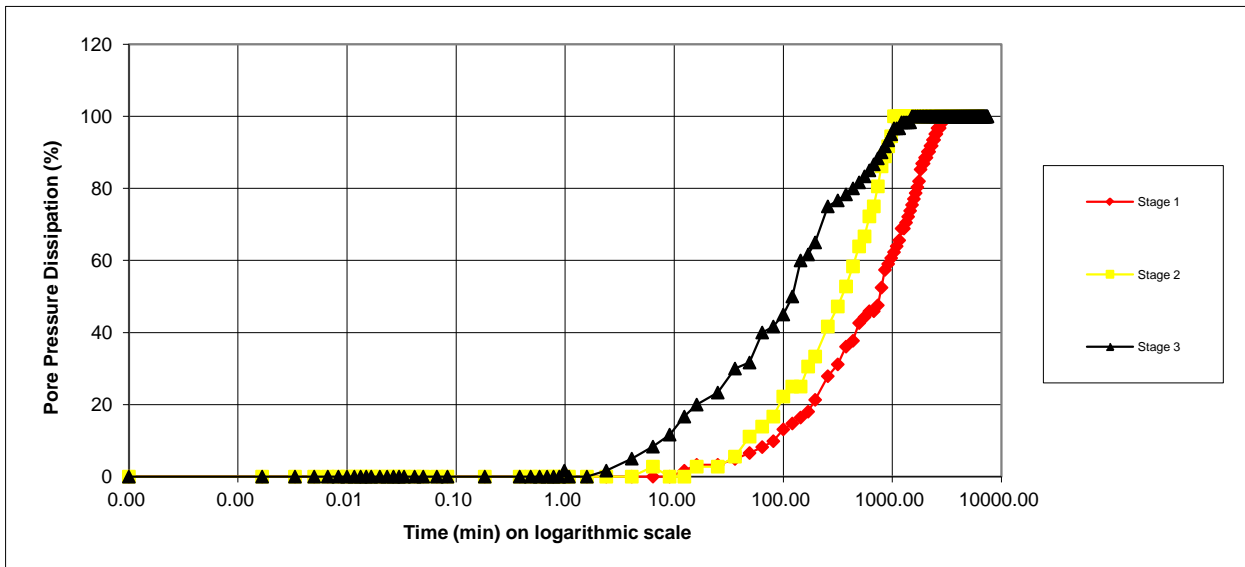
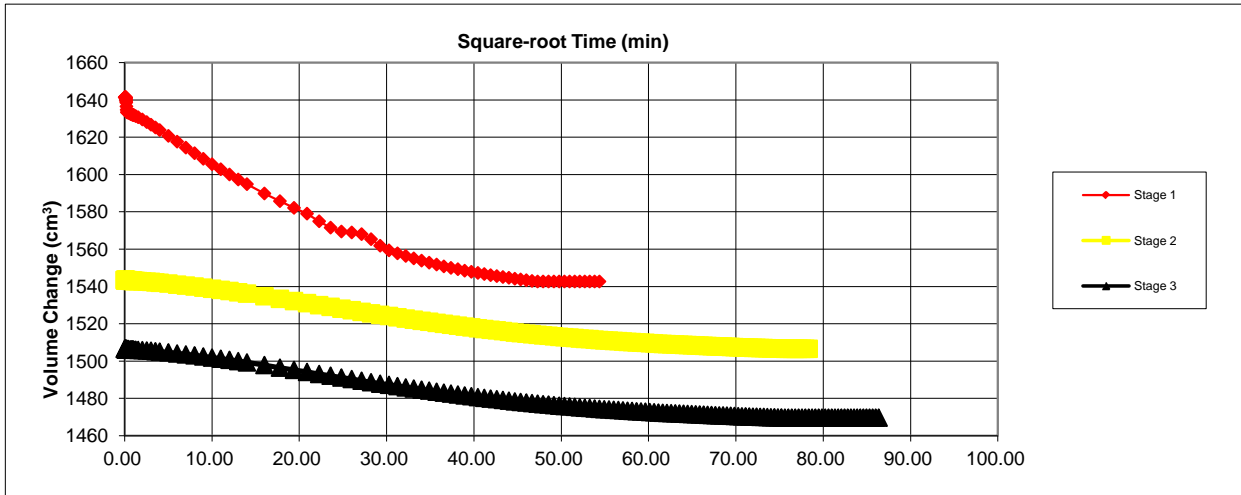
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing

Initial Cell Pressure	kPa	400	400	400
Initial Pore Pressure	kPa	370	340	280
Rate of Strain	mm/min	0.0043	0.0013	0.0012
Max Deviator Stress				
Axial Strain		4.874	6.708	10.344
Axial Stress	kPa	74.170	102.93	164.24
Cor. Deviator stress	kPa	71.153	98.73	159.80
Effective Major Stress	kPa	79.153	112.73	195.00
Effective Minor Stress	kPa	9.000	14.00	35.20
Effective Stress Ratio		8.795	8.052	5.54
s'	kPa	44.077	63.36	115.10
t'	kPa	35.077	49.36	79.90
Max Effective Principle Stress Ratio				
Axial Strain		1.854	5.912	10.032
Axial Stress	kPa	67.336	101.820	164.107
Cor. Deviator stress	kPa	67.048	97.698	159.693
Effective Major Stress	kPa	72.048	111.698	194.093
Effective Minor Stress	kPa	5.000	14.000	34.400
Effective Stress Ratio		14.410	7.978	5.642
s'	kPa	38.524	62.849	114.247
t'	kPa	33.524	48.849	79.847
Shear Resistance Angle	degs	36.5		
Cohesion c'	kPa	14		

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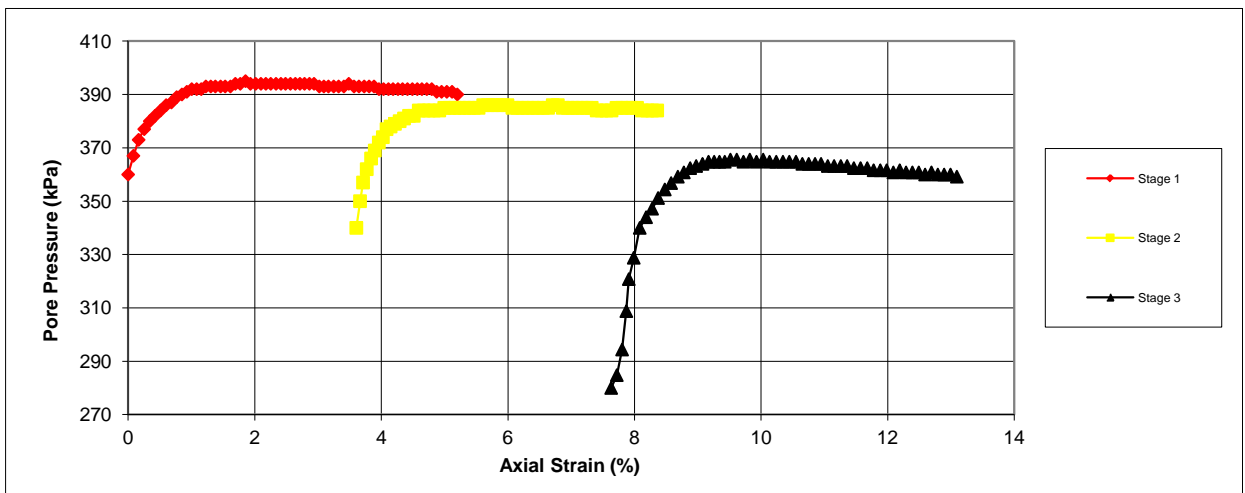
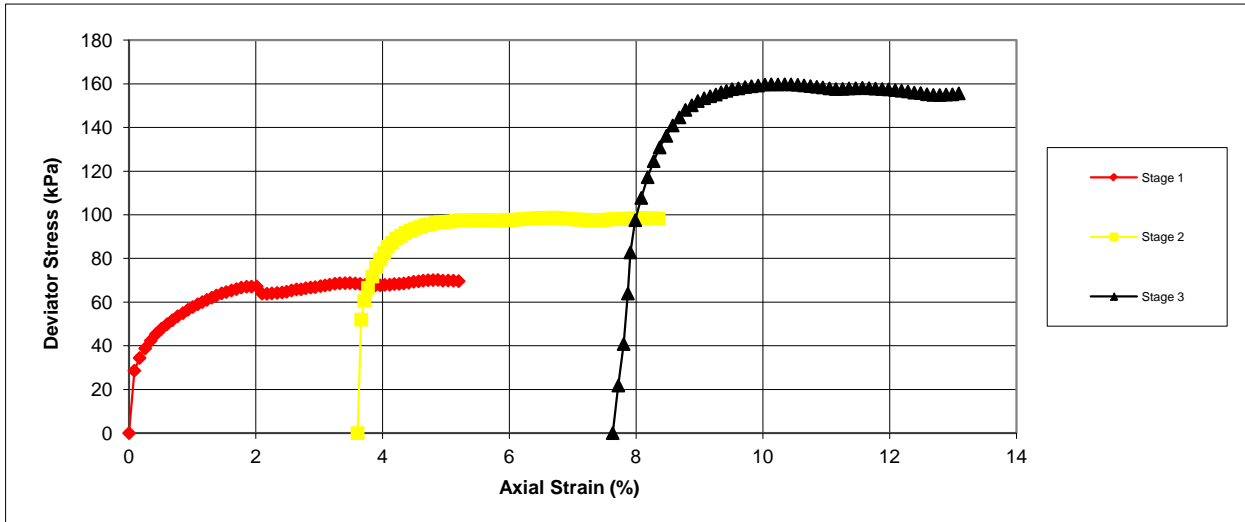
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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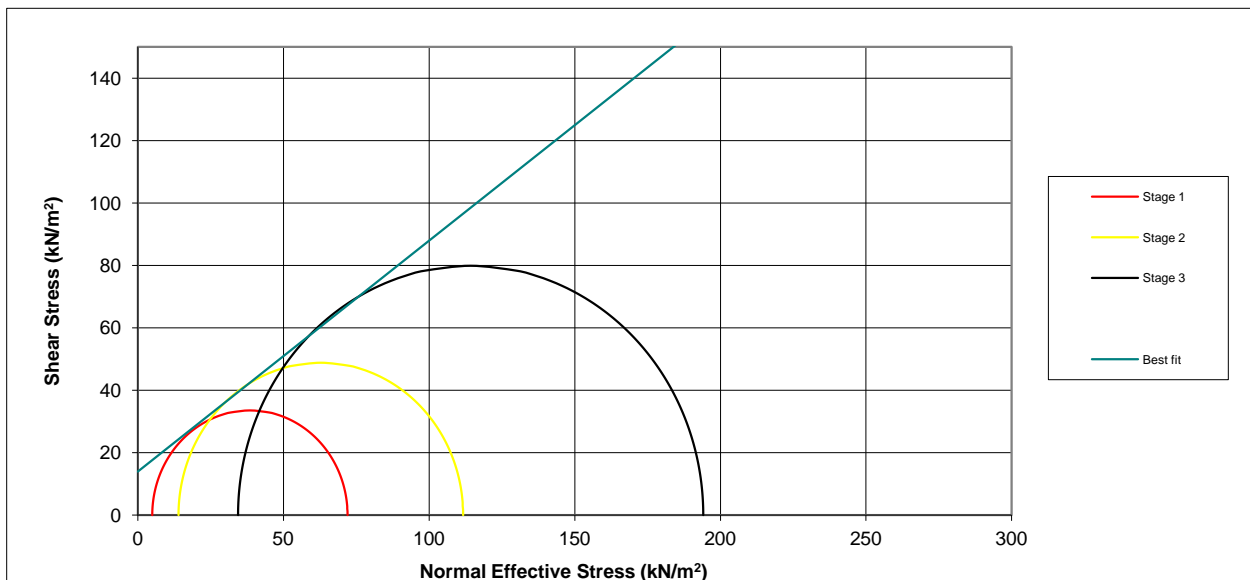
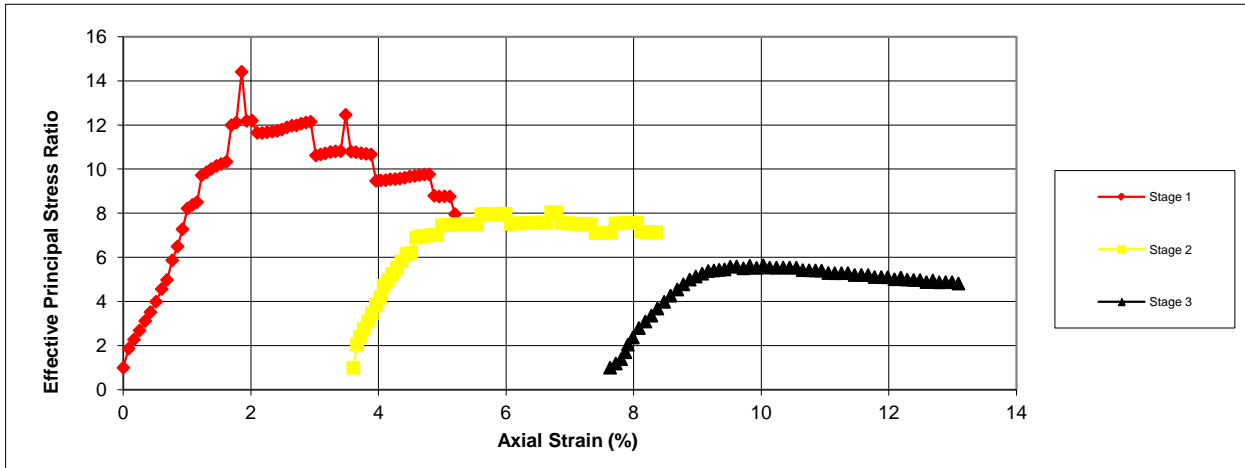
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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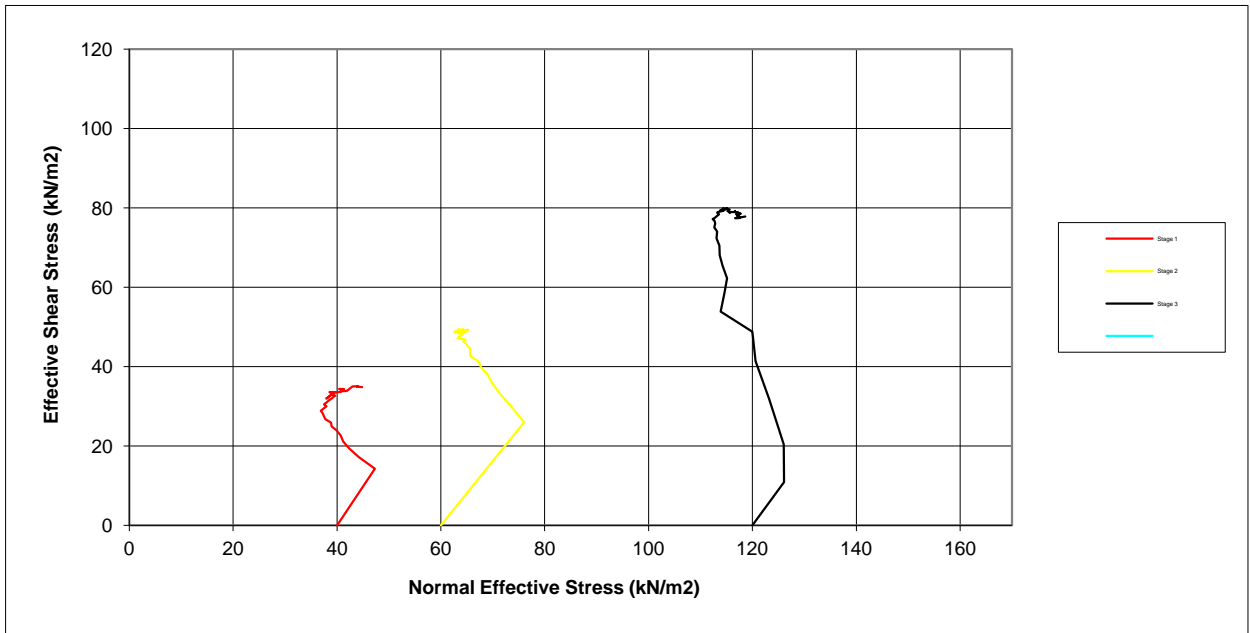
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		6
Depth	from(m)	3.00
Depth	to(m)	3.45



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		7
Depth	m	6.00-6.45
Date		13/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey sl silty stiff CLAY

Initial Specimen Conditions

Height	mm	203.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1691.45
Mass	g	3373.50
Dry Mass	g	2749.00
Density	Mg/m ³	1.99
Dry Density	Mg/m ³	1.63
Moisture Content	%	23
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	23
Density	Mg/m ³	2.04
Dry Density	Mg/m ³	1.65

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		7
Depth	m	6.00-6.45
Date		13/04/2017

Test Setup

Date started		08/04/2017
Date Finished		12/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P6
Cell Number		C6

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	292.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	60.00	120.00	240.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	240.00	180.00	60.00
Excess Pore Pressure	kPa	52.00	66.00	130.00
Pore Pressure at End	kPa	240.00	180.00	60.00
Consolidated Volume	cm ³	1677.15	1669.85	1661.25
Consolidated Height	mm	202.43	197.65	192.74
Consolidated Area	mm ²	8285.33	8448.46	8619.14
Vol. Compressibility	m ² /MN	0.03523	0.02418	0.08584
Consolidation Coef.	m ² /yr.	0.53614	0.41988	0.37860

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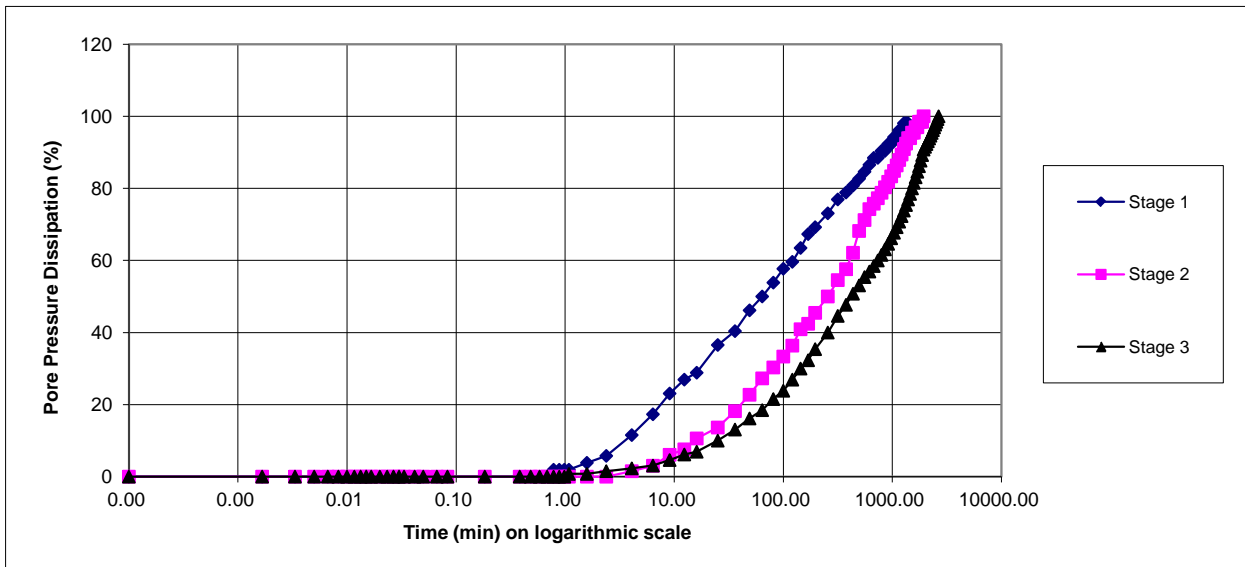
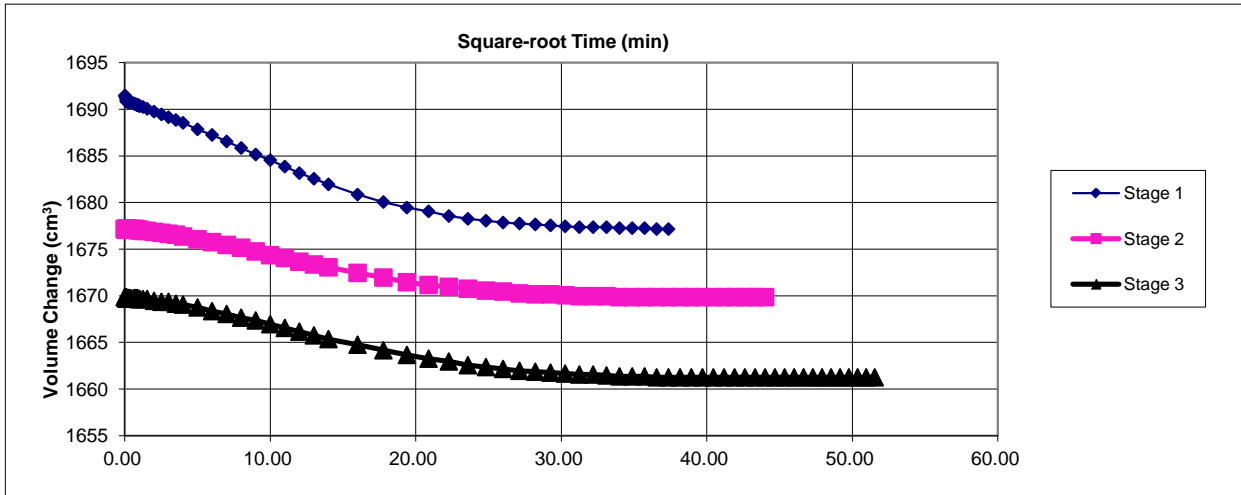
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1202
Sample No.	7
Depth	6.00-6.45
Date	13/04/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		7
Depth	m	6.00-6.45
Date		13/04/2017

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	240	180	60
Rate of Strain	mm/min	0.0108	0.0082	0.0072
Max Deviator Stress				
Axial Strain		3.305	5.758	9.123
Axial Stress	kPa	87.180	151.15	234.82
Cor. Deviator stress	kPa	84.282	147.05	230.46
Effective Major Stress	kPa	131.282	256.05	422.46
Effective Minor Stress	kPa	48.000	109.00	192.00
Effective Stress Ratio		2.735	2.349	2.20
s'	kPa	89.641	182.52	307.23
t'	kPa	41.641	73.52	115.23
Max Effective Principle Stress Ratio				
Axial Strain		3.231	5.611	8.397
Axial Stress	kPa	86.195	149.086	226.867
Cor. Deviator stress	kPa	82.303	144.996	222.550
Effective Major Stress	kPa	129.303	251.996	407.550
Effective Minor Stress	kPa	47.000	107.000	185.000
Effective Stress Ratio		2.751	2.355	2.203
s'	kPa	88.152	179.498	296.275
t'	kPa	41.152	72.498	111.275
Shear Resistance Angle	degs	19.5		
Cohesion c'	kPa	13		

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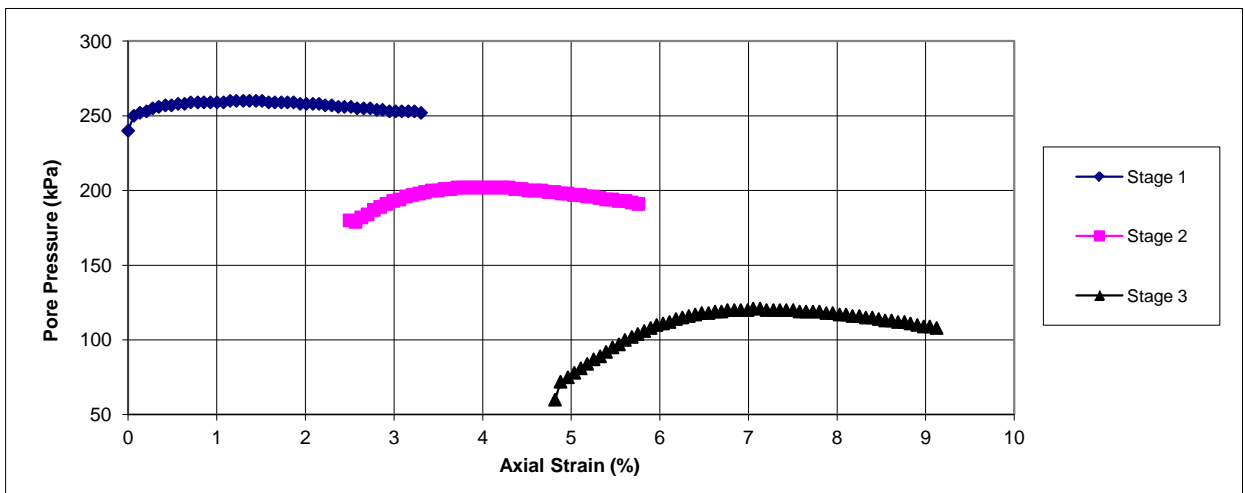
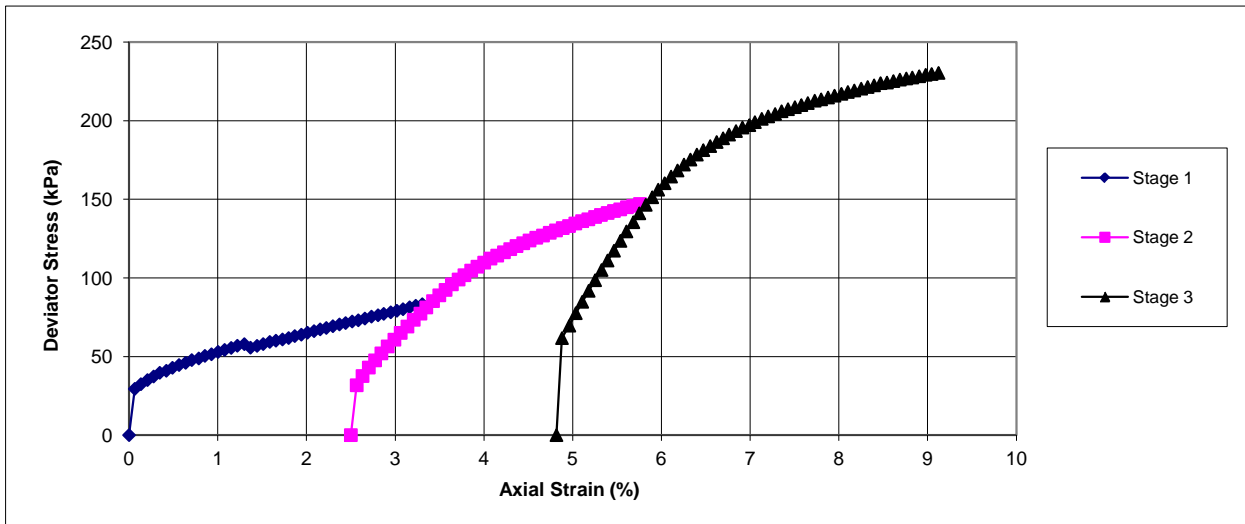
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		7
Depth	m	6.00-6.45
Date		13/04/2017

Shearing Stage



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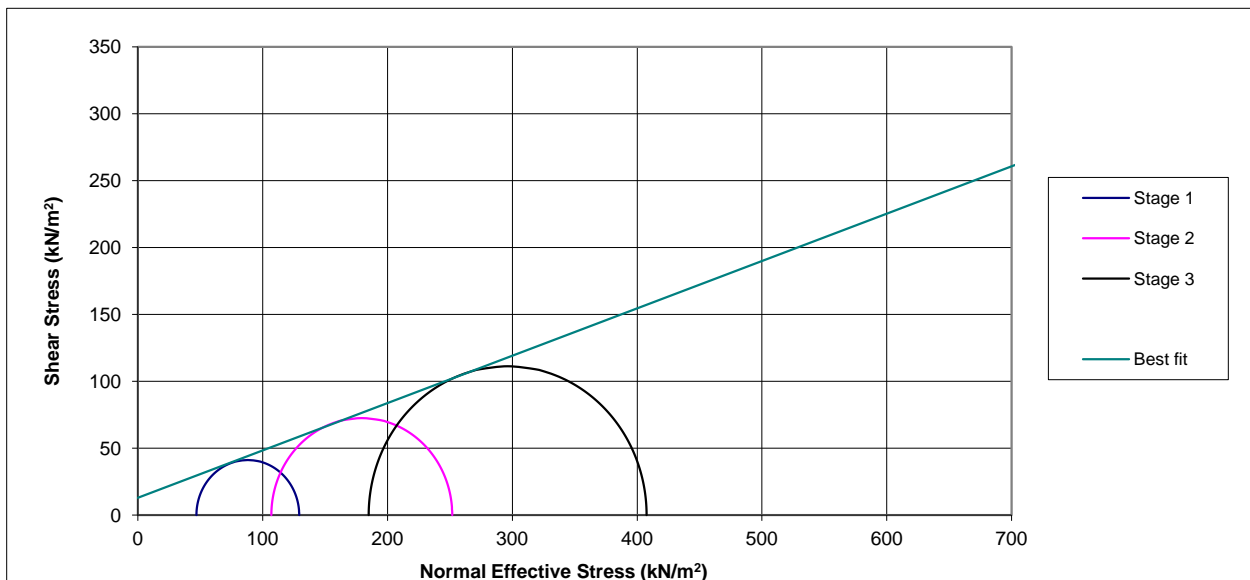
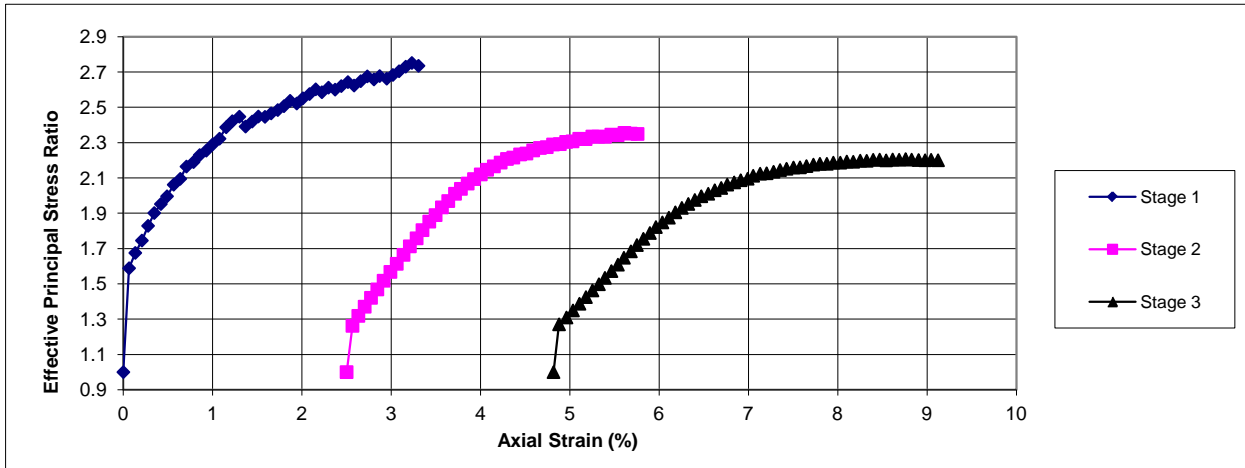
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		7
Depth	m	6.00-6.45
Date		13/04/2017

Shearing Stage



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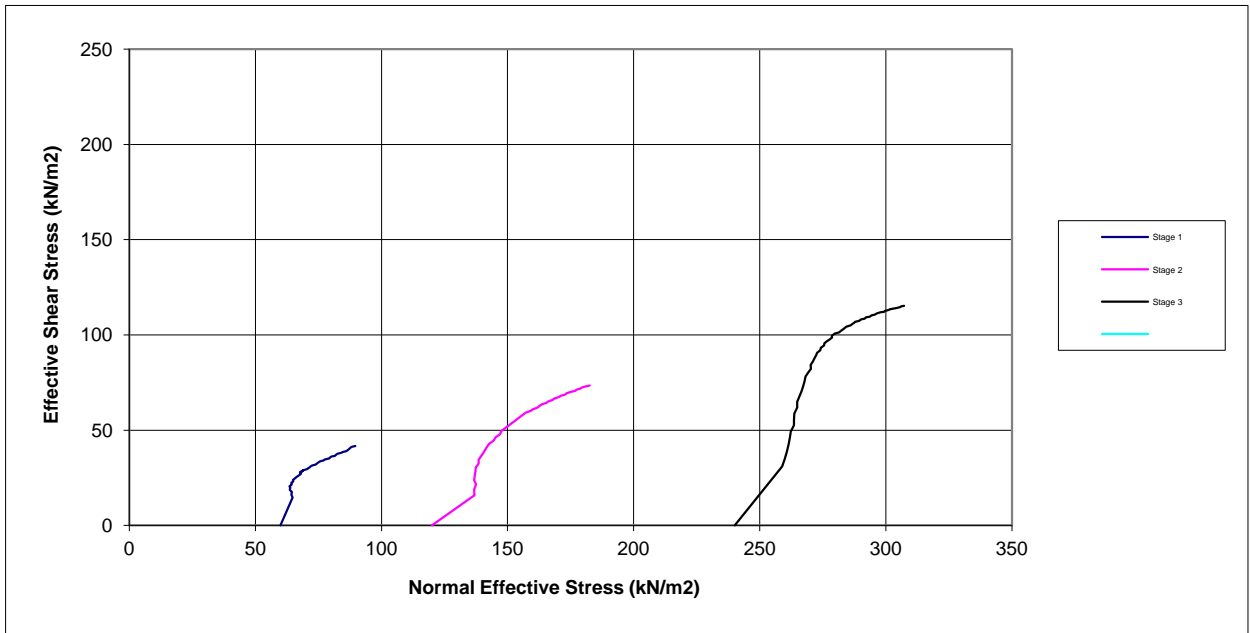
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1202
Sample No.	7
Depth	6.00-6.45
Date	13/04/2017

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		7
Depth	m	6.00-6.45
Date		13/04/2017



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		8
Depth	m	9.00-9.45
Date		12/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brown silty stiff CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1699.79
Mass	g	3418.90
Dry Mass	g	2685.80
Density	Mg/m ³	2.01
Dry Density	Mg/m ³	1.58
Moisture Content	%	27
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	23
Density	Mg/m ³	2.05
Dry Density	Mg/m ³	1.67

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		8
Depth	m	9.00-9.45
Date		12/04/2017

Test Setup

Date started		03/04/2017
Date Finished		11/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P1
Cell Number		C1

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	500.00
Final Pore Pressure	kPa	489.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	90.00	180.00	360.00
Cell Pressure	kPa	500.00	500.00	500.00
Back Pressure	kPa	410.00	320.00	140.00
Excess Pore Pressure	kPa	79.00	118.00	219.00
Pore Pressure at End	kPa	410.00	320.00	140.00
Consolidated Volume	cm ³	1658.29	1634.69	1607.49
Consolidated Height	mm	202.34	196.25	187.43
Consolidated Area	mm ²	8196.67	8329.80	8577.04
Vol. Compressibility	m ² /MN	0.05955	0.04447	0.11885
Consolidation Coef.	m ² /yr.	2.83335	0.83772	0.36318

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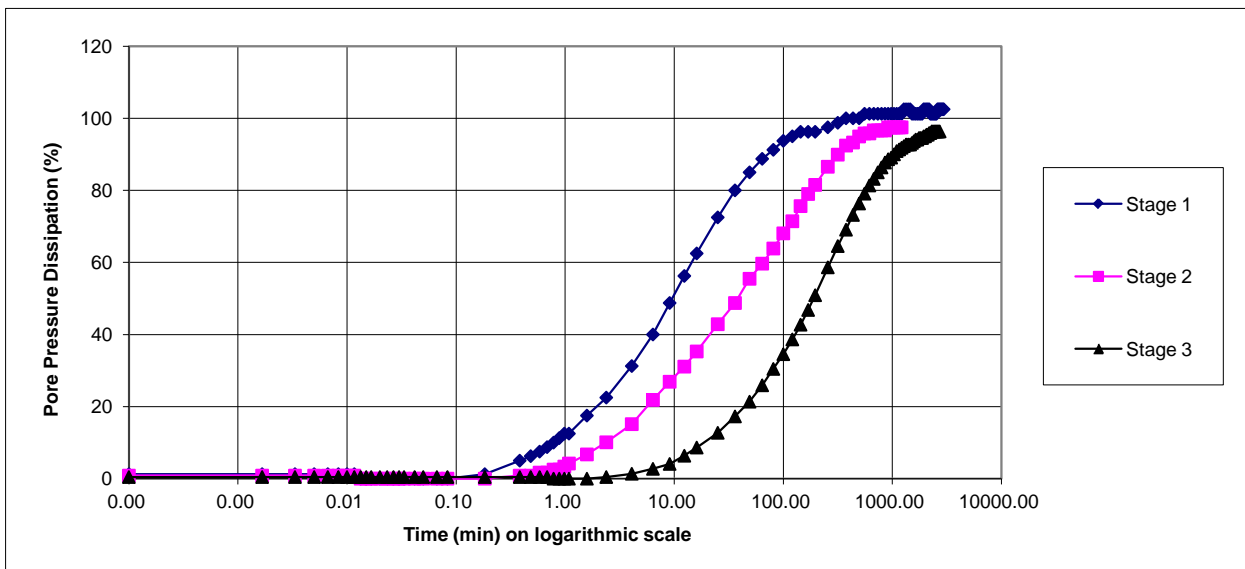
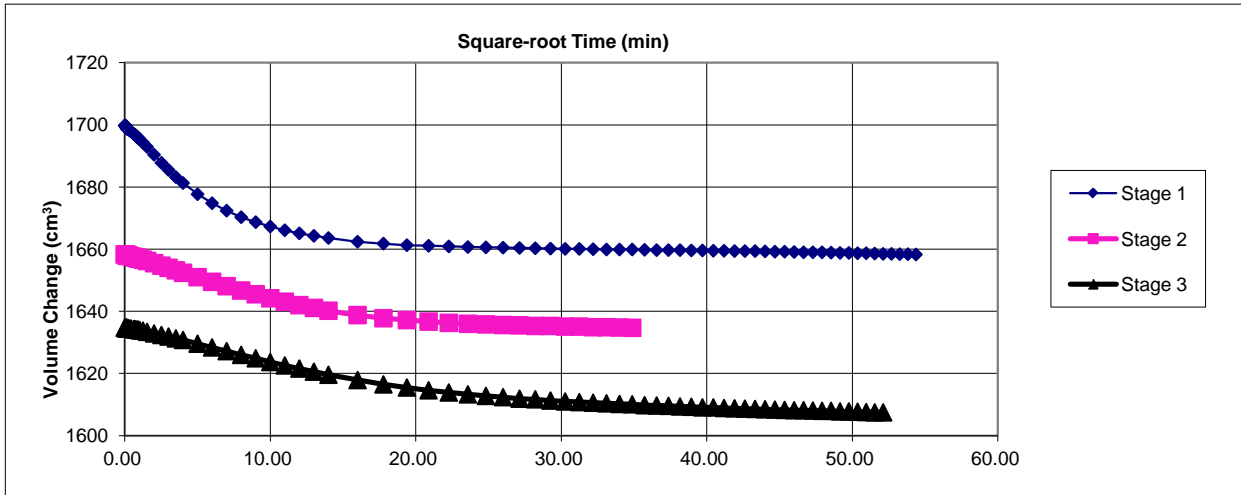
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1202
Sample No.	8
Depth	9.00-9.45 m
Date	12/04/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		8
Depth	m	9.00-9.45
Date		12/04/2017

Shearing

Initial Cell Pressure	kPa	500	500	500
Initial Pore Pressure	kPa	410	320	140
Rate of Strain	mm/min	0.0570	0.0163	0.0068
Max Deviator Stress				
Axial Strain		4.176	7.829	11.769
Axial Stress	kPa	191.609	474.36	702.36
Cor. Deviator stress	kPa	188.645	470.04	697.84
Effective Major Stress	kPa	275.645	666.04	992.84
Effective Minor Stress	kPa	88.000	196.00	295.00
Effective Stress Ratio		3.132	3.398	3.37
s'	kPa	181.822	431.02	643.92
t'	kPa	93.822	235.02	348.92
Max Effective Principle Stress Ratio				
Axial Strain		4.107	7.024	9.224
Axial Stress	kPa	190.343	451.295	623.840
Cor. Deviator stress	kPa	186.385	447.056	619.474
Effective Major Stress	kPa	273.385	633.056	870.474
Effective Minor Stress	kPa	87.000	186.000	251.000
Effective Stress Ratio		3.142	3.404	3.468
s'	kPa	180.192	409.528	560.737
t'	kPa	93.192	223.528	309.737
Shear Resistance Angle	degs	34.9		
Cohesion c'	kPa	-12		

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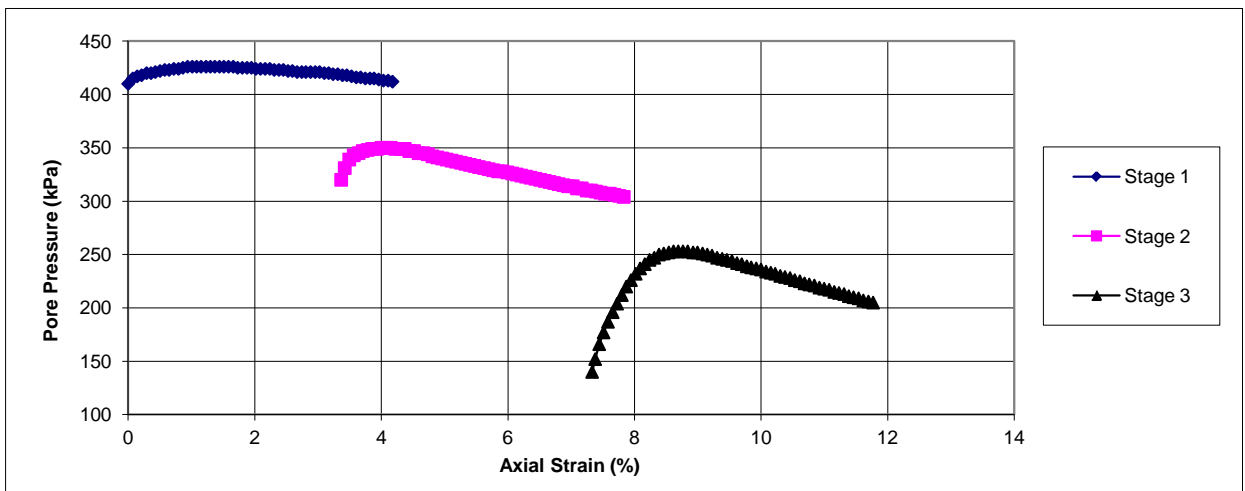
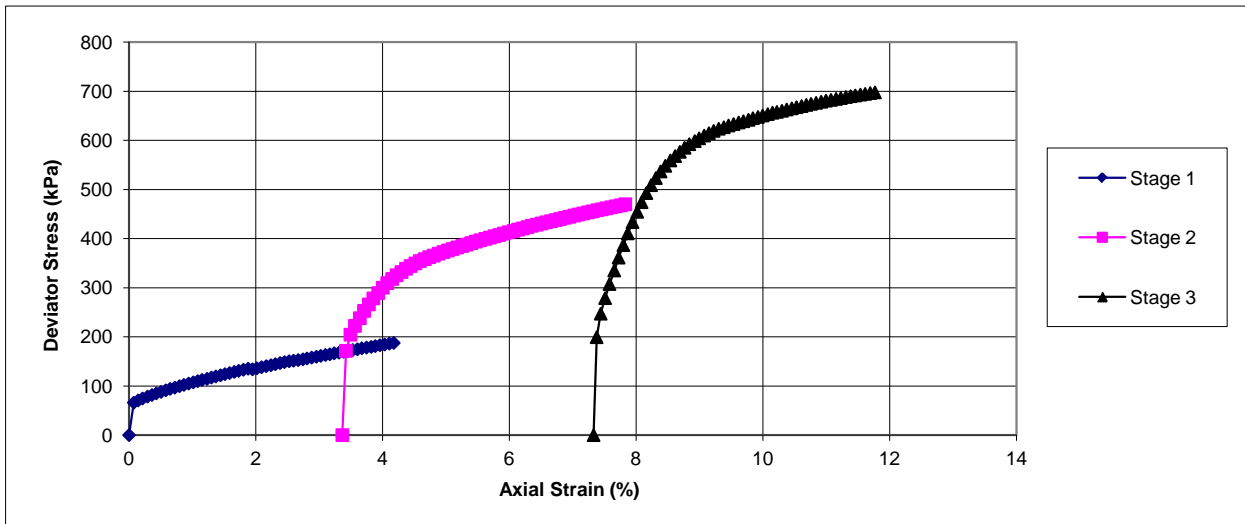
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		8
Depth	m	9.00-9.45
Date		12/04/2017

Shearing Stage



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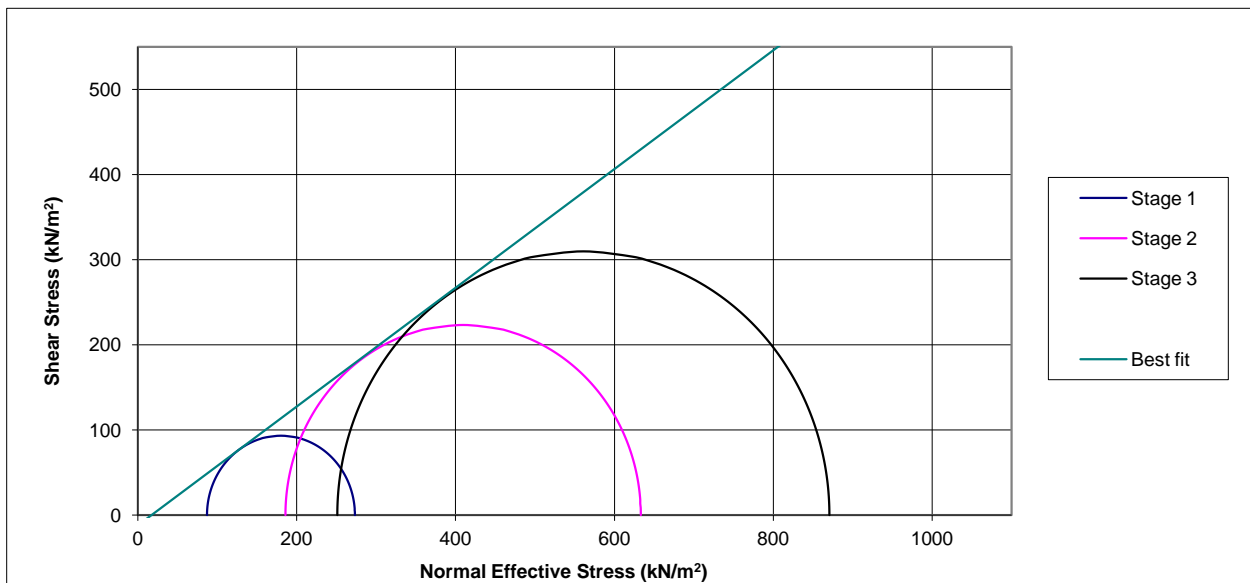
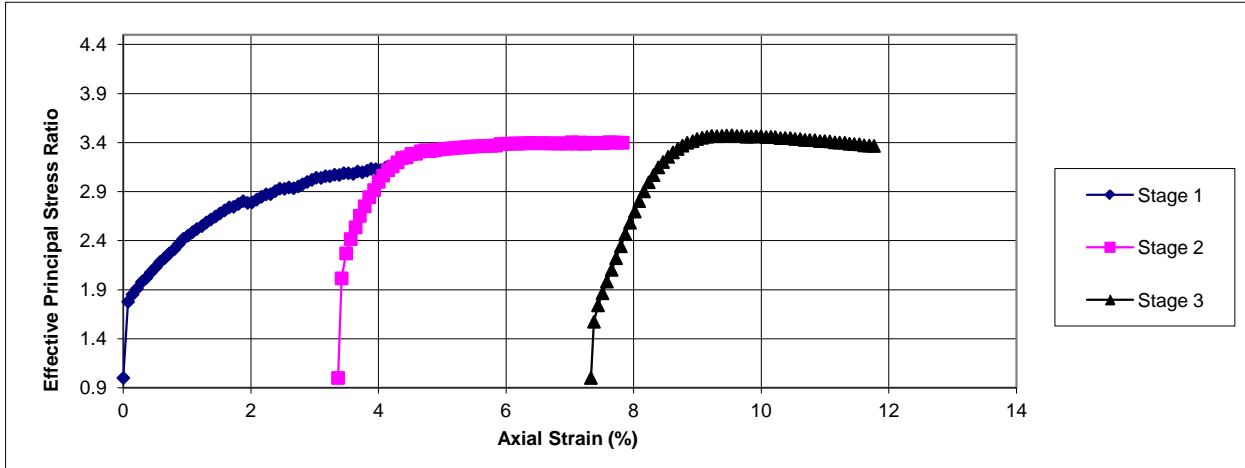
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1202
Sample No.	8
Depth	9.00-9.45
Date	12/04/2017

Shearing Stage



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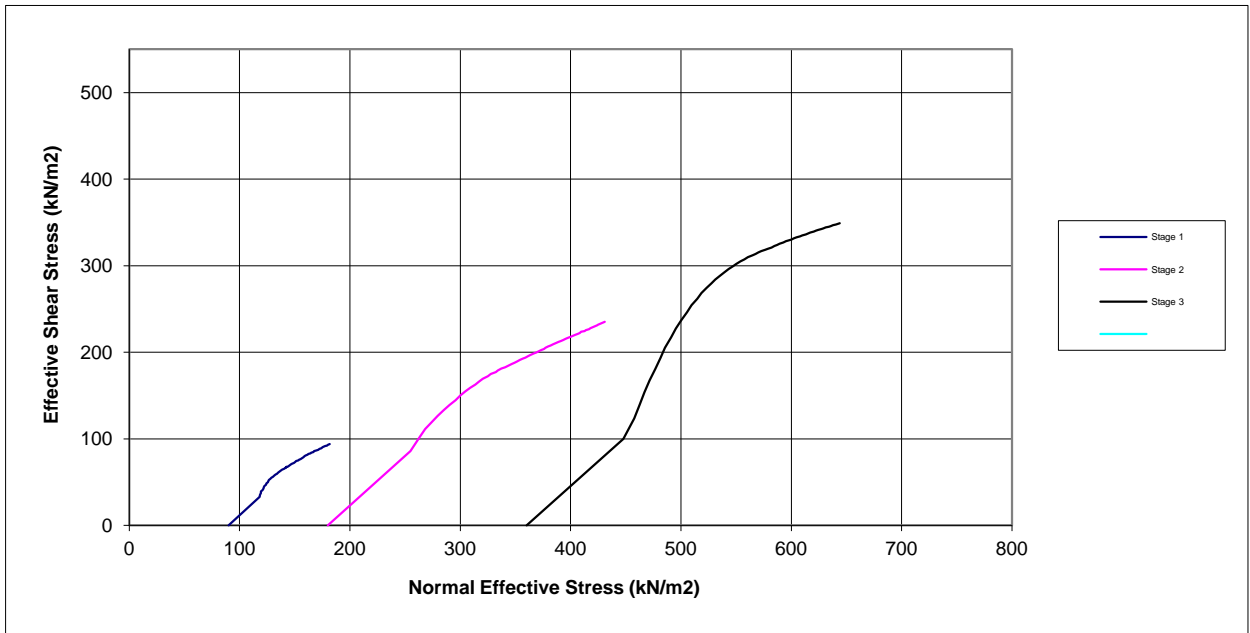
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		8
Depth	m	9.00-9.45
Date		12/04/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		8
Depth	m	9.00-9.45
Date		12/04/2017



reg. 13

Checked and Approved By

11/04/17

Date

Client Ref

UA008426-01

Northstowe Phase 2

Contract No

34142

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		52
Depth	m	12.00-12.45
Date		15/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty stiff CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1699.79
Mass	g	3081.70
Dry Mass	g	2500.00
Density	Mg/m ³	1.81
Dry Density	Mg/m ³	1.47
Moisture Content	%	23
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	24
Density	Mg/m ³	1.97
Dry Density	Mg/m ³	1.59

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13/04/17

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Contract No

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		52
Depth	m	12.00-12.45
Date		15/04/2017

Test Setup

Date started		05/04/2017
Date Finished		14/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P12
Cell Number		C12

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	600.00
Final Pore Pressure	kPa	589.00
Final B Value		1.01

Consolidation

Effective Pressure	kPa	120.00	240.00	480.00
Cell Pressure	kPa	600.00	600.00	600.00
Back Pressure	kPa	480.00	360.00	120.00
Excess Pore Pressure	kPa	109.00	136.00	274.00
Pore Pressure at End	kPa	480.00	360.00	120.00
Consolidated Volume	cm ³	1645.19	1615.29	1576.49
Consolidated Height	mm	201.82	195.97	191.22
Consolidated Area	mm ²	8153.86	8243.32	8245.35
Vol. Compressibility	m ² /MN	0.06692	0.05048	0.20017
Consolidation Coef.	m ² /yr.	0.20943	0.06742	0.02145

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Northstowe Phase 2

Contract No

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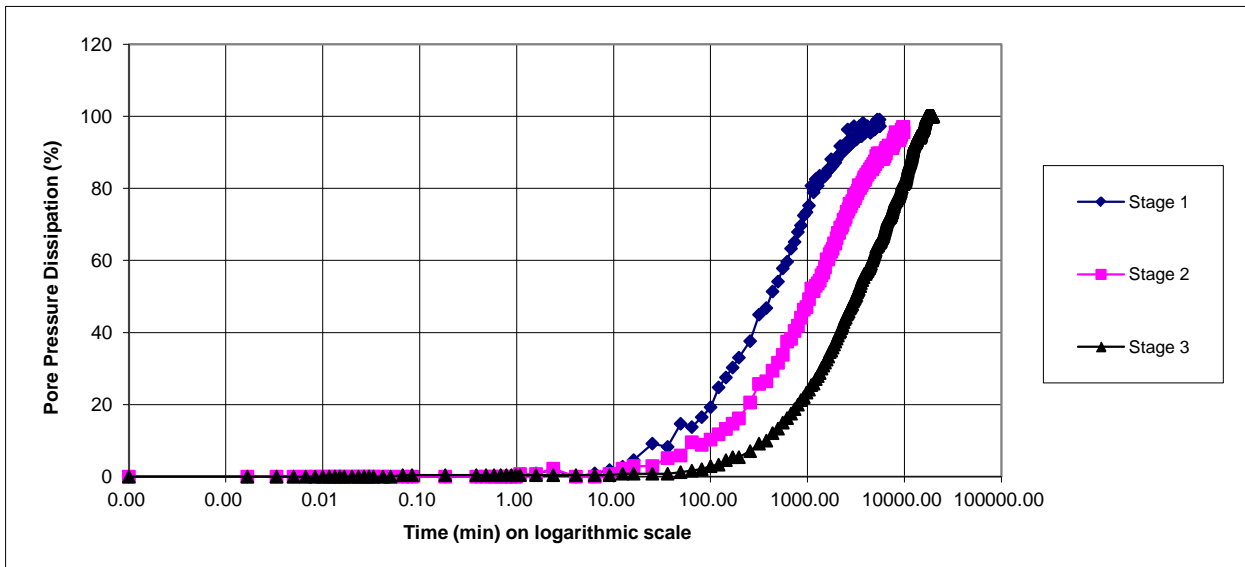
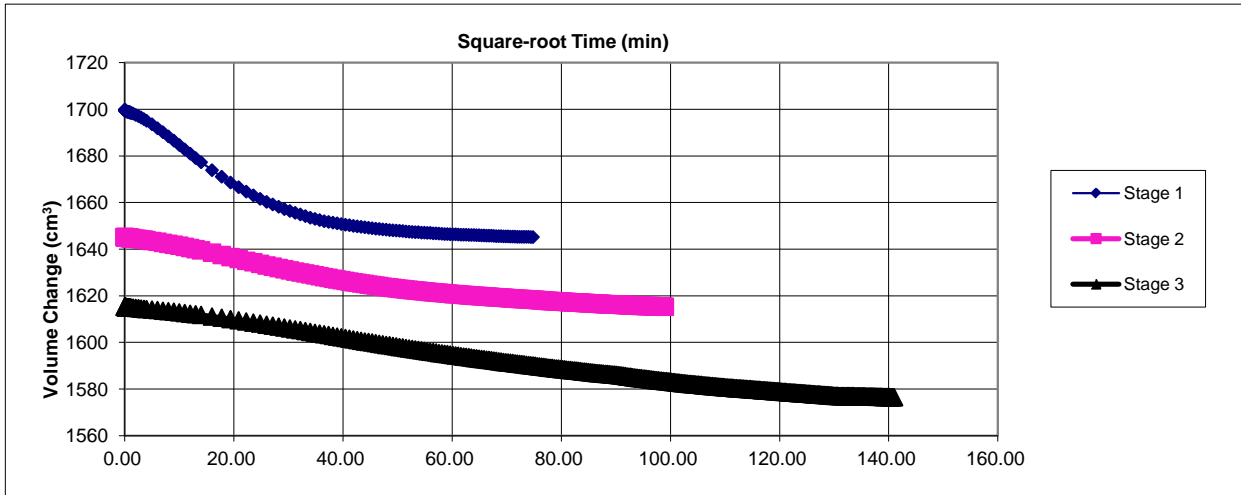
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1202
Sample No.	52
Depth	12.00-12.45
Date	15/04/2017

Consolidation Stage



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Northstowe Phase 2

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		52
Depth	m	12.00-12.45
Date		15/04/2017

Shearing

Initial Cell Pressure	kPa	600	600	600
Initial Pore Pressure	kPa	480	360	120
Rate of Strain	mm/min	0.0042	0.0013	0.0004
Max Deviator Stress				
Axial Strain		3.959	5.328	8.055
Axial Stress	kPa	197.527	278.12	430.31
Cor. Deviator stress	kPa	194.580	274.06	426.01
Effective Major Stress	kPa	254.580	384.06	673.01
Effective Minor Stress	kPa	61.000	110.00	247.00
Effective Stress Ratio		4.173	3.491	2.72
s'	kPa	157.790	247.03	460.00
t'	kPa	96.790	137.03	213.00
Max Effective Principle Stress Ratio				
Axial Strain		1.858	4.879	8.275
Axial Stress	kPa	193.302	274.139	430.152
Cor. Deviator stress	kPa	189.514	270.126	425.842
Effective Major Stress	kPa	234.514	377.126	672.842
Effective Minor Stress	kPa	45.000	107.000	247.000
Effective Stress Ratio		5.211	3.525	2.724
s'	kPa	139.757	242.063	459.921
t'	kPa	94.757	135.063	212.921
Shear Resistance Angle	degs	21.0		
Cohesion c'	kPa	50		

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Northstowe Phase 2

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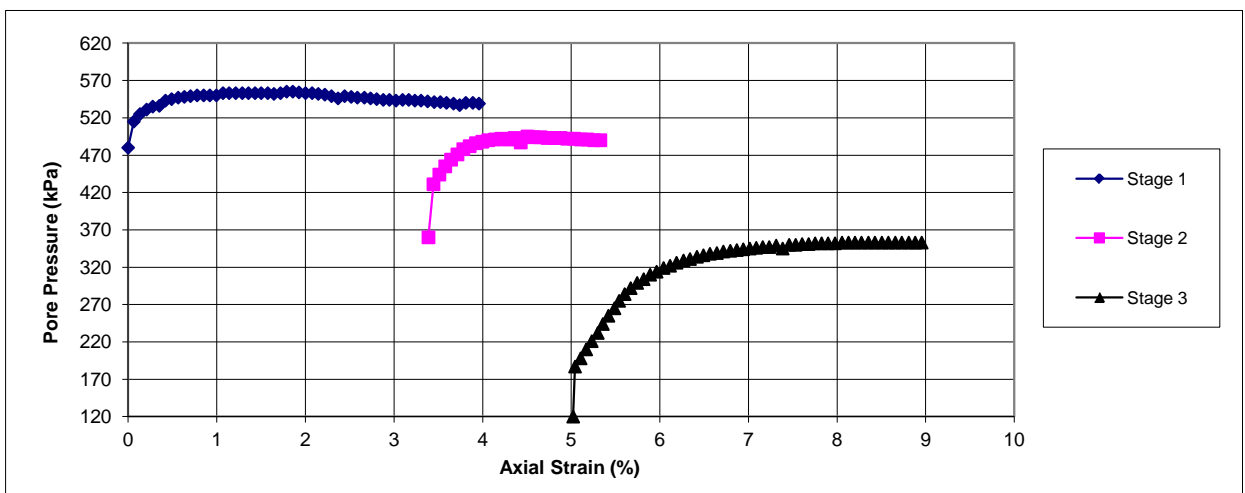
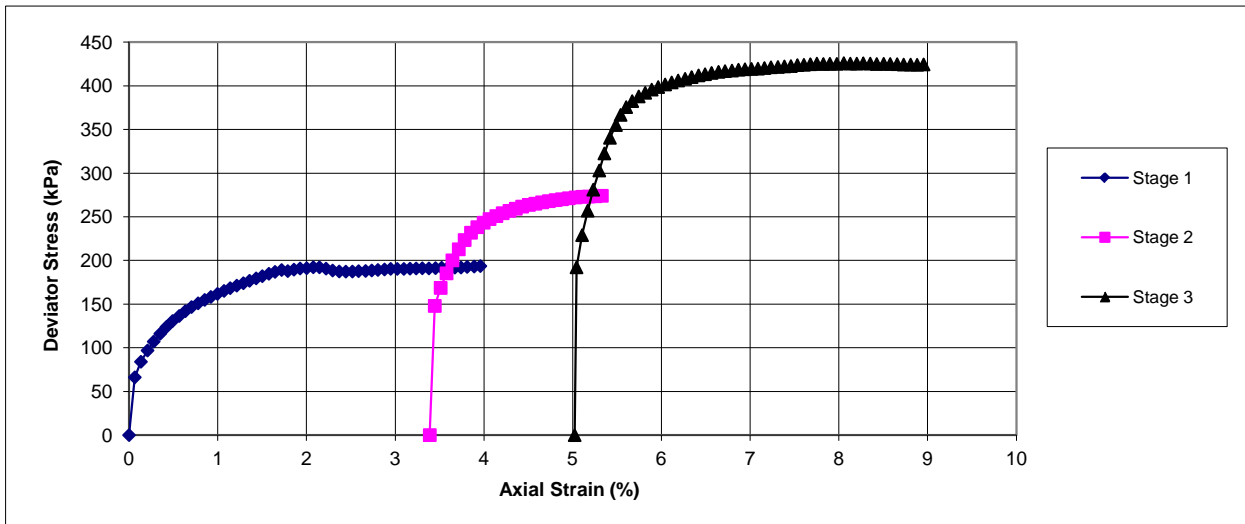
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		52
Depth	m	12.00-12.45
Date		15/04/2017

Shearing Stage



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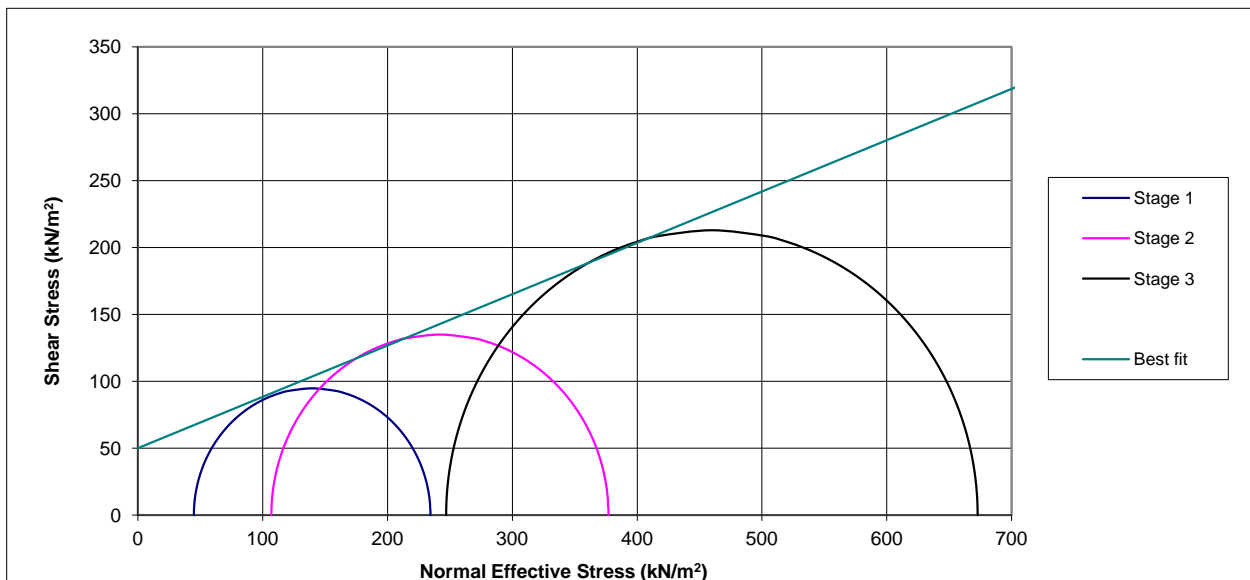
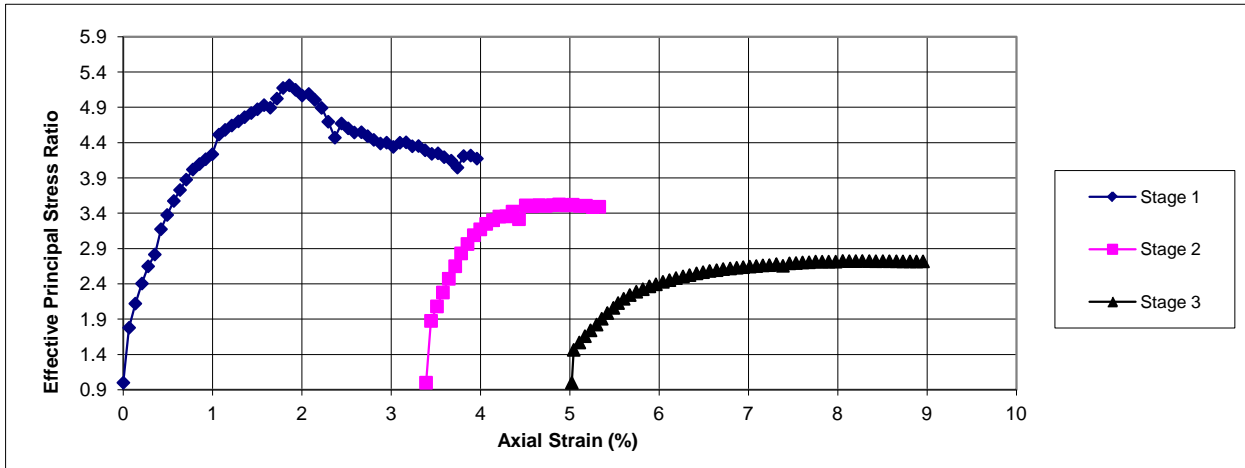
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		52
Depth	m	12.00-12.45
Date		15/04/2017

Shearing Stage



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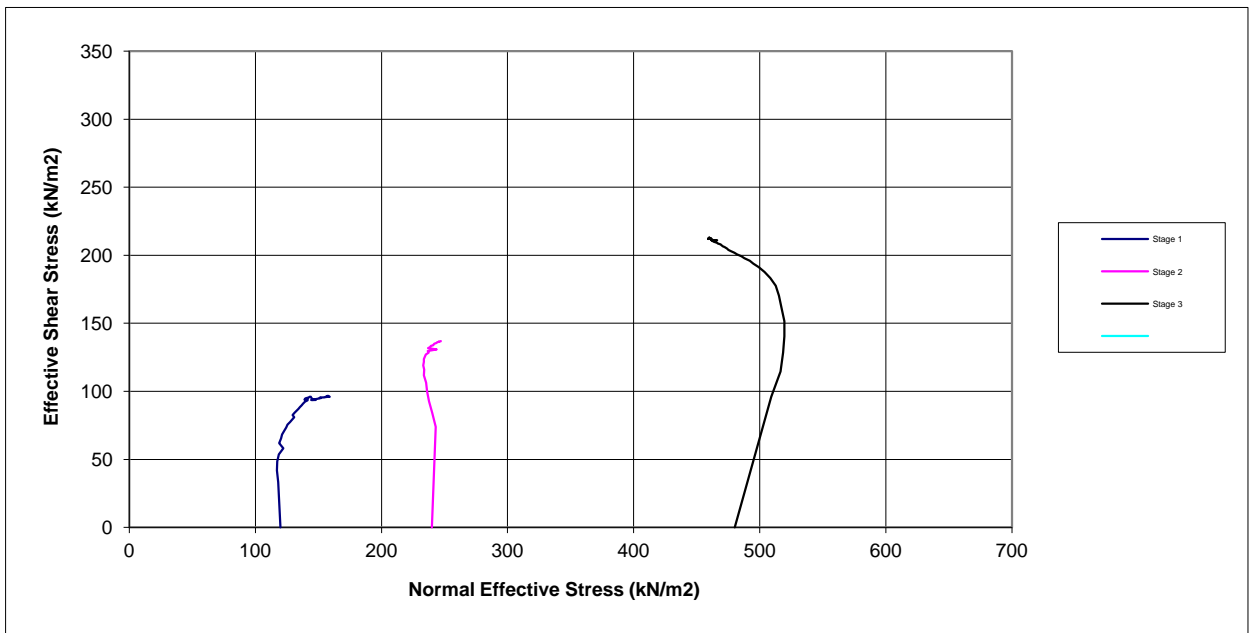
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1202
Sample No.	52
Depth	12.00-12.45
Date	15/04/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		52
Depth	m	12.00-12.45
Date		15/04/2017



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Checked and Approved By

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Client Ref

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Northstowe Phase 2

Contract No

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1203
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45
Date		08/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty stiff CLAY

Initial Specimen Conditions

Height	mm	206.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1749.94
Mass	g	3149.10
Dry Mass	g	2252.90
Density	Mg/m ³	1.80
Dry Density	Mg/m ³	1.29
Moisture Content	%	40
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	40
Density	Mg/m ³	1.87
Dry Density	Mg/m ³	1.34

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Northstowe Phase 2

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1203
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Test Setup

Date started		20/02/2017
Date Finished		07/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P6
Cell Number		C6

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	298.00
Final B Value		1.04

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	28.00	30.00	60.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1701.54	1699.54	1684.88
Consolidated Height	mm	204.10	198.68	190.09
Consolidated Area	mm ²	8338.23	8554.08	8863.57
Vol. Compressibility	m ² /MN	0.10244	0.00490	0.04792
Consolidation Coef.	m ² /yr.	1.51834	0.43575	0.13734

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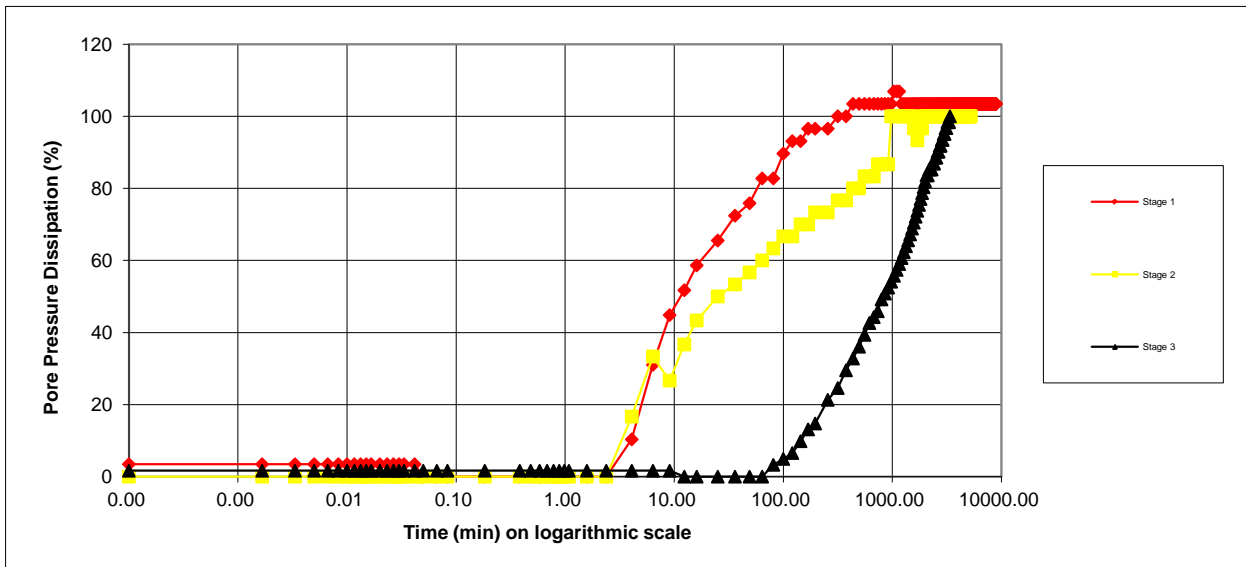
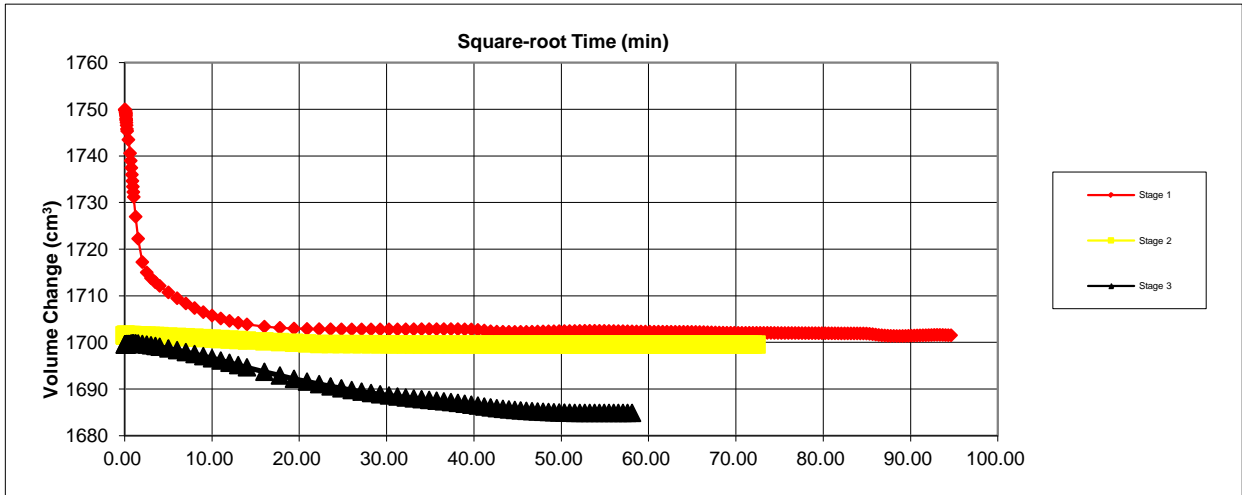
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1203	
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Consolidation Stage



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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1203	
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.0302	0.0084	0.0025
Max Deviator Stress				
Axial Strain		3.121	6.688	10.182
Axial Stress	kPa	87.628	106.70	125.29
Cor. Deviator stress	kPa	84.748	102.50	120.87
Effective Major Stress	kPa	95.748	136.50	186.87
Effective Minor Stress	kPa	12.000	34.00	66.00
Effective Stress Ratio		7.979	4.015	2.83
s'	kPa	53.874	85.25	126.44
t'	kPa	41.874	51.25	60.44
Max Effective Principle Stress Ratio				
Axial Strain		1.769	4.780	9.162
Axial Stress	kPa	79.202	98.616	125.156
Cor. Deviator stress	kPa	79.018	94.618	120.803
Effective Major Stress	kPa	87.018	121.618	182.803
Effective Minor Stress	kPa	8.000	27.000	62.000
Effective Stress Ratio		10.877	4.504	2.948
s'	kPa	47.509	74.309	122.401
t'	kPa	39.509	47.309	60.401
Shear Resistance Angle	degs	16.0		
Cohesion c'	kPa	28		

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Northstowe Phase 2

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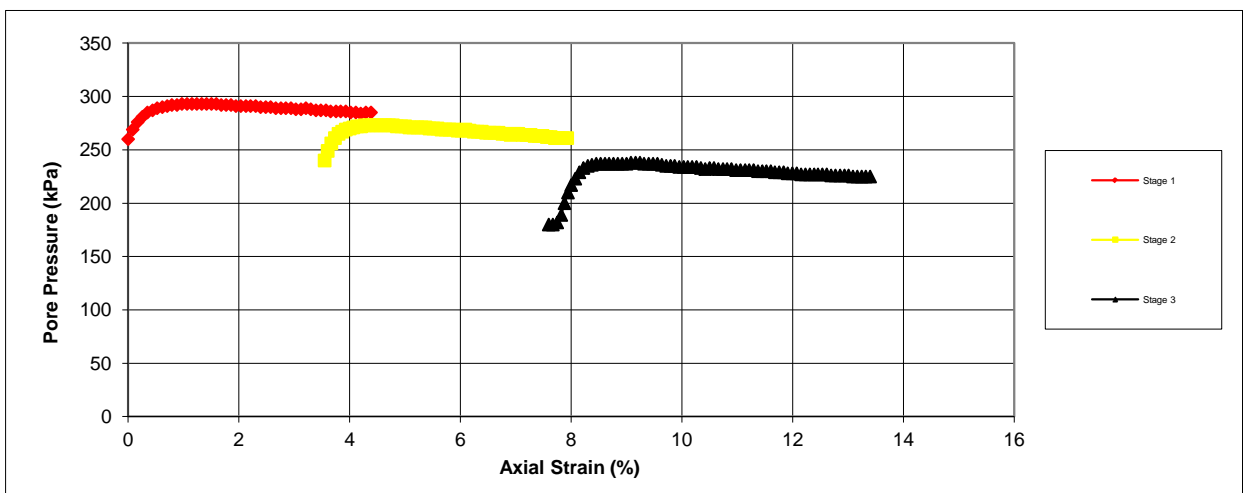
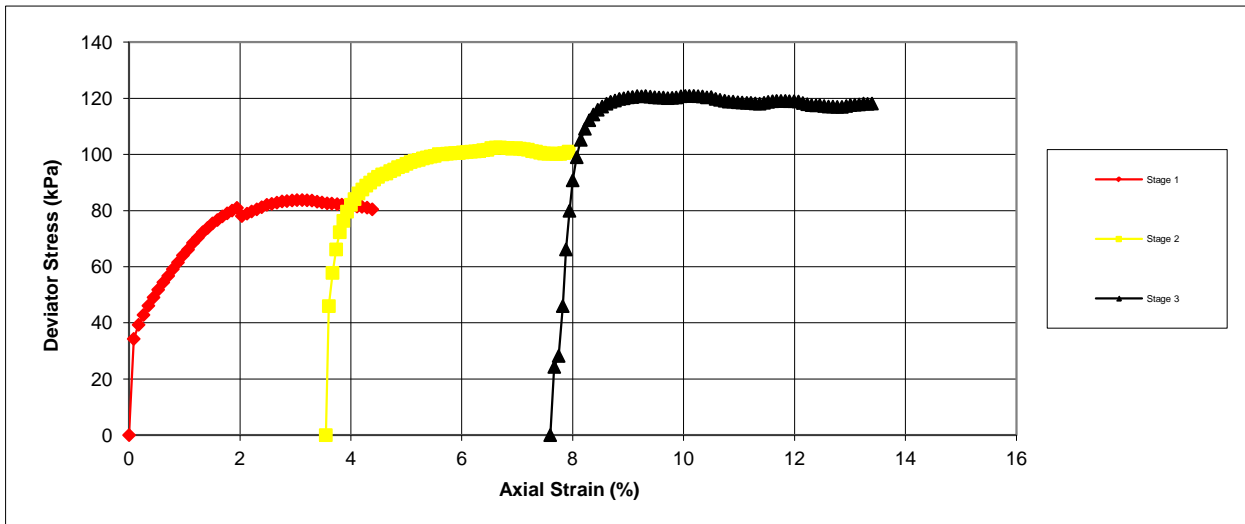
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1203
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Northstowe Phase 2

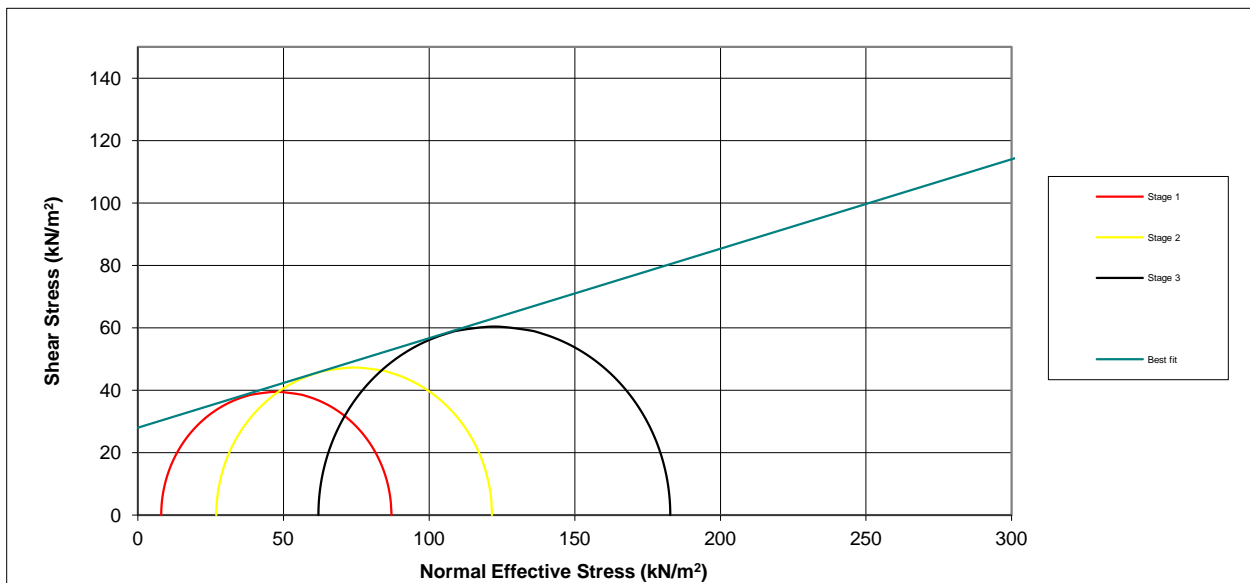
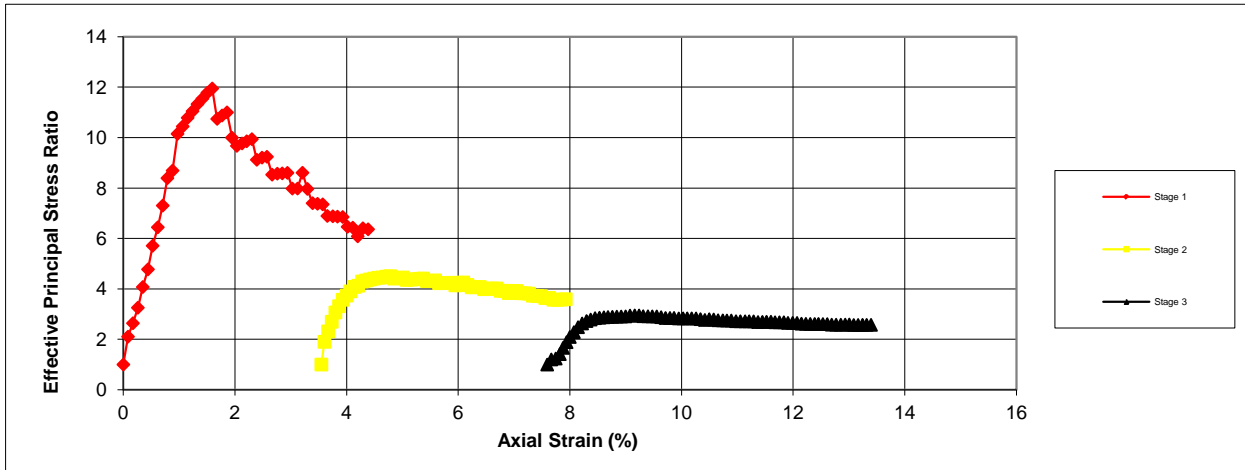
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1203	
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Northstowe Phase 2

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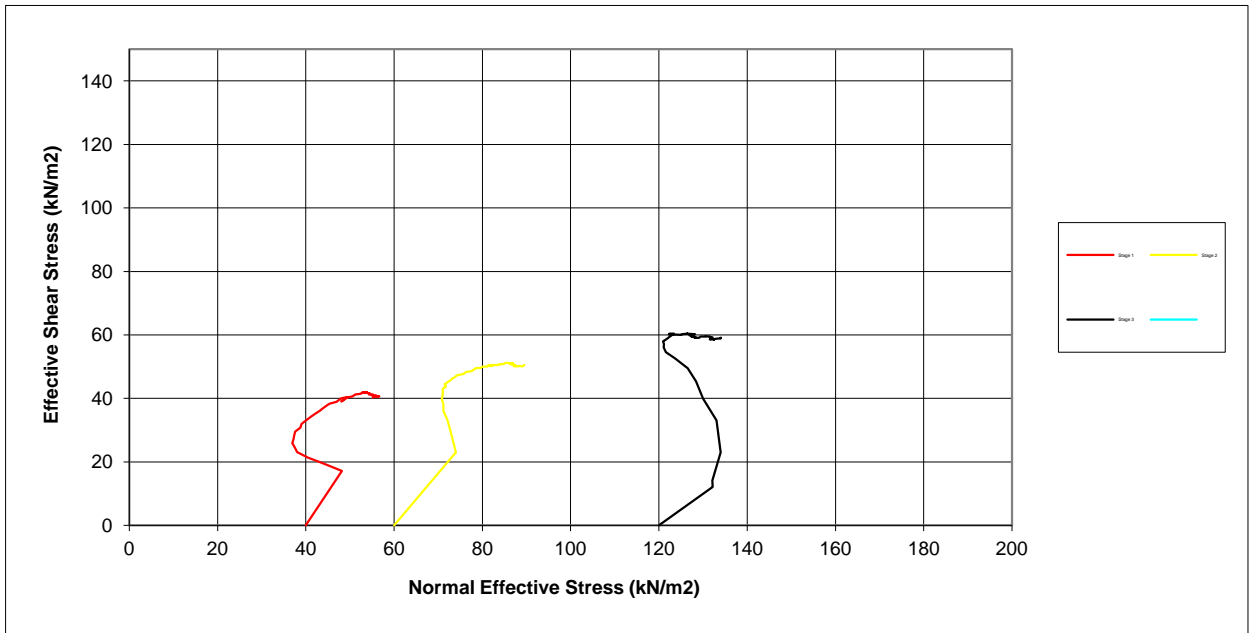
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1203
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Checked and Approved By

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Northstowe Phase 2

Contract No

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1203
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45



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Northstowe Phase 2

Contract No

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		33
Depth	m	17.00-17.45
Date		23/03/2017
Disturbed / Undisturbed		U

Description of Specimen

Dark Blueish Grey sl gravelly stiff Clay
--

Initial Specimen Conditions

Height	mm	200.00
Diameter	mm	100.00
Area	mm ²	7853.98
Volume	cm ³	1570.80
Mass	g	2915.60
Dry Mass	g	2356.50
Density	Mg/m ³	1.86
Dry Density	Mg/m ³	1.50
Moisture Content	%	24
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	20
Density	Mg/m ³	2.03
Dry Density	Mg/m ³	1.69

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UA008426-01

Contract No

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		33
Depth	m	17.00-17.45
Date		23/03/2017

Test Setup

Date started		11/03/2017
Date Finished		22/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P12
Cell Number		C12

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	800.00
Final Pore Pressure	kPa	741.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	180.00	360.00	720.00
Cell Pressure	kPa	800.00	800.00	800.00
Back Pressure	kPa	620.00	440.00	80.00
Excess Pore Pressure	kPa	175.00	210.00	440.00
Pore Pressure at End	kPa	620.00	440.00	80.00
Consolidated Volume	cm ³	1473.90	1430.30	1395.10
Consolidated Height	mm	195.89	189.76	182.54
Consolidated Area	mm ²	7530.98	7538.90	7643.73
Vol. Compressibility	m ² /MN	0.09950	0.06723	0.30763
Consolidation Coef.	m ² /yr.	0.03537	0.02021	0.01390

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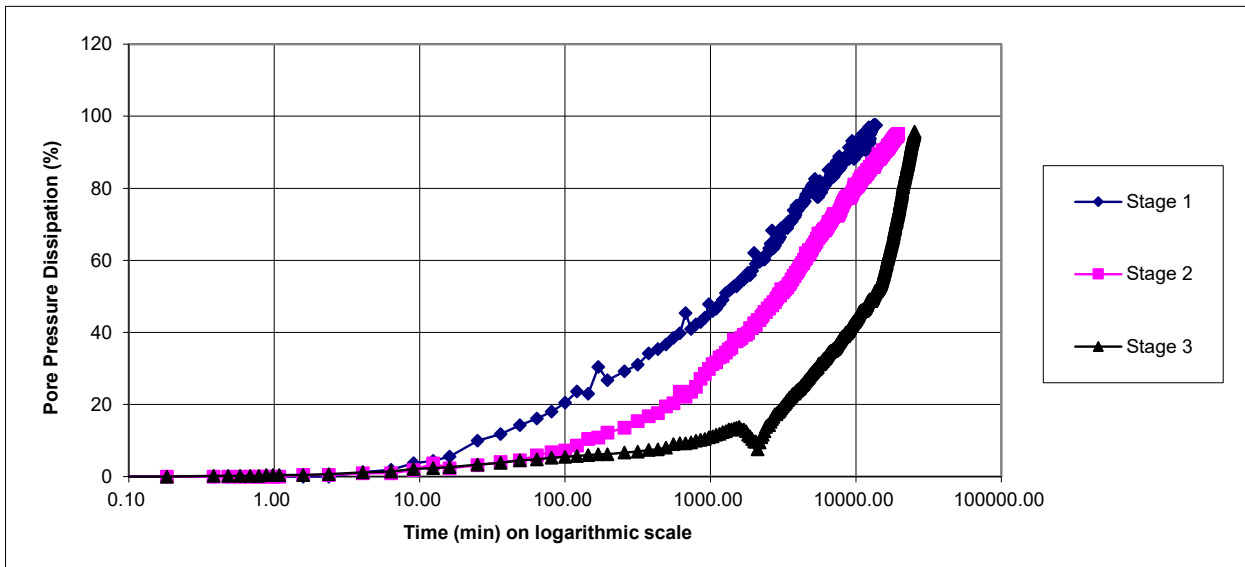
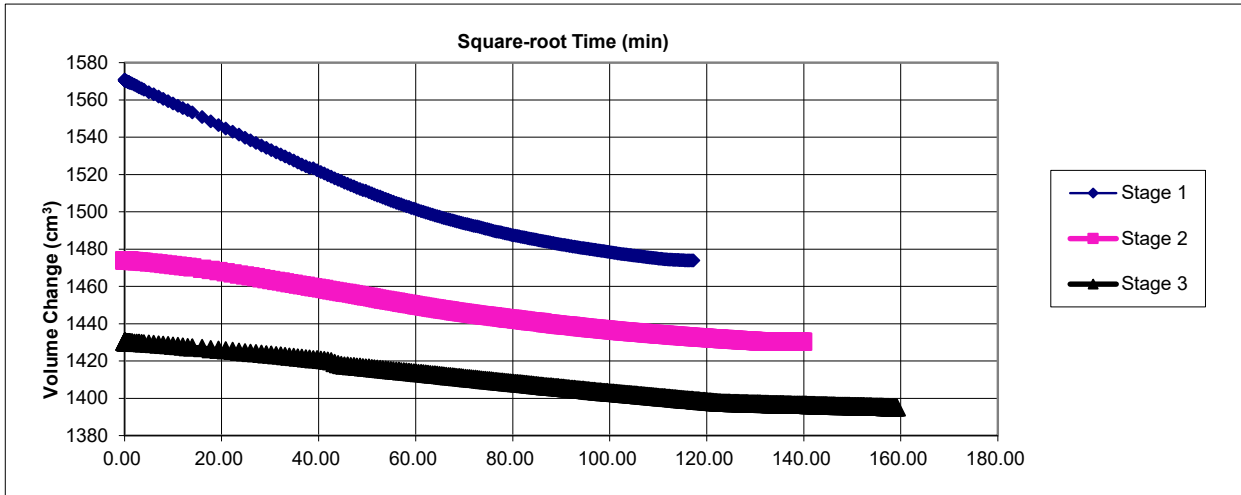
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	33
Depth	17.00-17.45
Date	23/03/2017

Consolidation Stage



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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		33
Depth	m	17.00-17.45
Date		23/03/2017

Shearing

Initial Cell Pressure	kPa	800	800	800
Initial Pore Pressure	kPa	620	440	80
Rate of Strain	mm/min	0.0007	0.0004	0.0003
Max Deviator Stress				
Axial Strain		5.457	7.272	9.830
Axial Stress	kPa	178.214	292.52	563.33
Cor. Deviator stress	kPa	175.137	288.23	558.90
Effective Major Stress	kPa	263.137	505.23	1135.90
Effective Minor Stress	kPa	89.000	217.00	577.00
Effective Stress Ratio		2.957	2.328	1.97
s'	kPa	176.068	361.12	856.45
t'	kPa	87.068	144.12	279.45
Max Effective Principle Stress Ratio				
Axial Strain		4.559	7.504	11.457
Axial Stress	kPa	175.498	291.988	549.638
Cor. Deviator stress	kPa	171.490	287.675	545.110
Effective Major Stress	kPa	259.490	503.675	1103.110
Effective Minor Stress	kPa	88.000	216.000	558.000
Effective Stress Ratio		2.949	2.332	1.977
s'	kPa	173.745	359.838	830.555
t'	kPa	85.745	143.838	272.555
Shear Resistance Angle	degs	16.1		
Cohesion c'	kPa	46		

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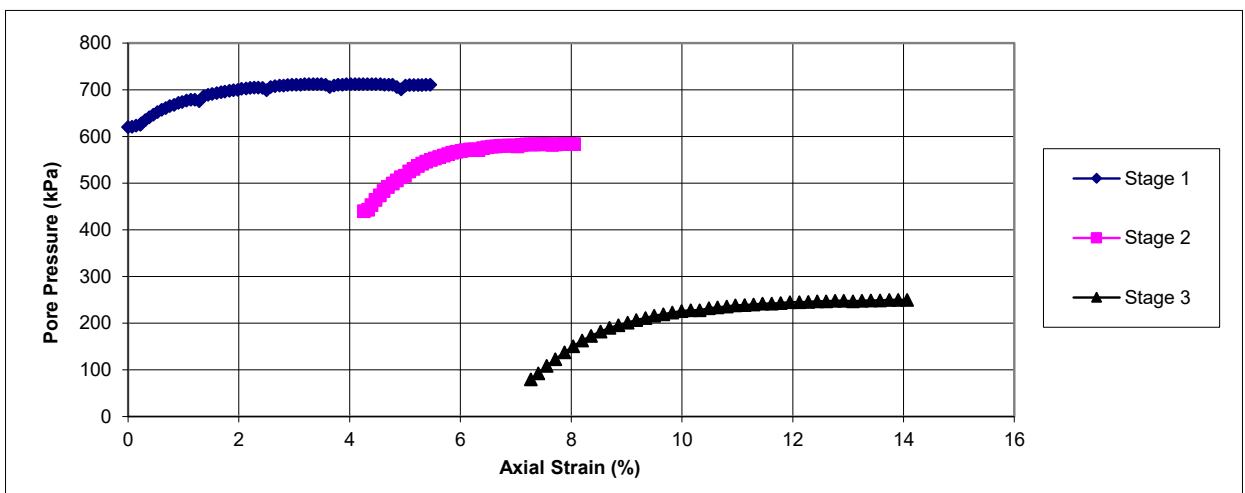
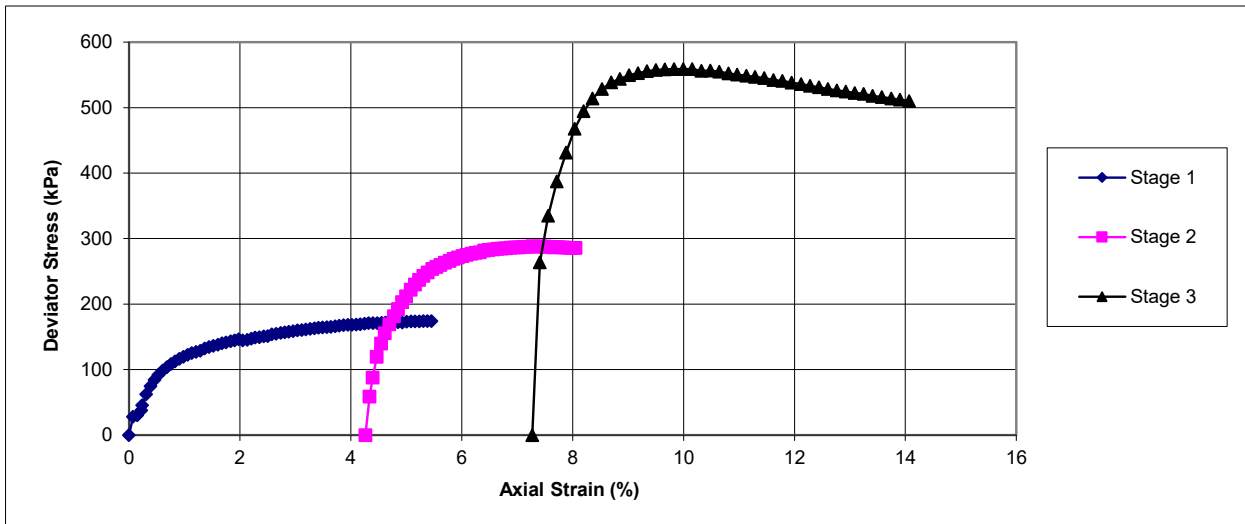
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		33
Depth	m	17.00-17.45
Date		23/03/2017

Shearing Stage



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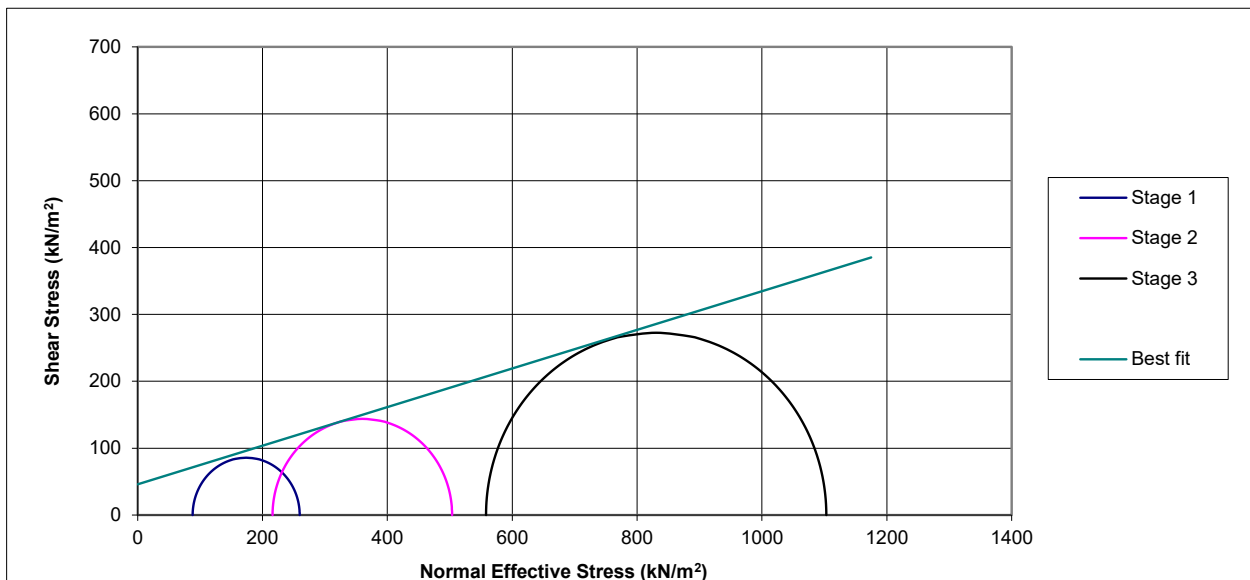
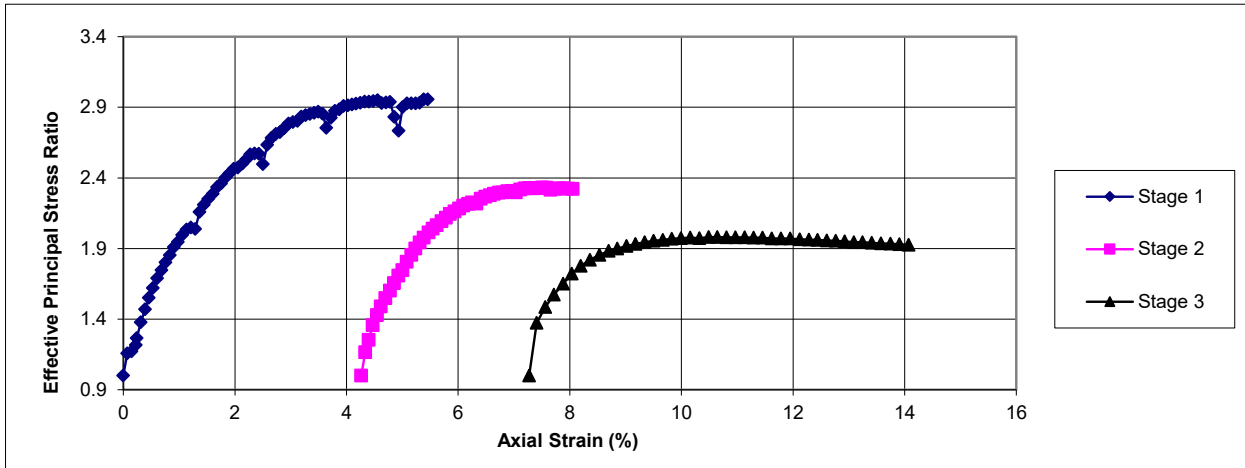
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	33
Depth	17.00-17.45
Date	23/03/2017

Shearing Stage



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Northstowe Phase 2

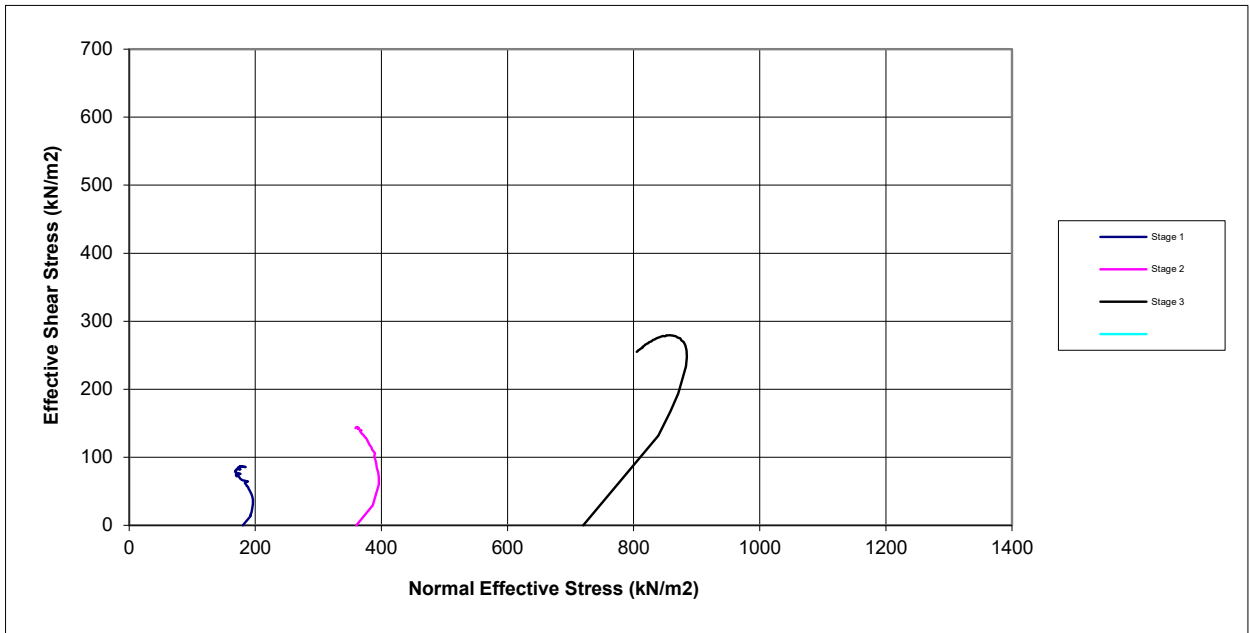
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	33
Depth	17.00-17.45
Date	23/03/2017

Shearing Stage



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Checked and Approved By

27/03/17
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Client Ref
UA008426-01
Contract No

Northstowe Phase 2

34142

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		33
Depth	m	17.00-17.45
Date		23/03/2017



reg. 13

Checked and Approved By

27/03/17

Date

Client Ref

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Northstowe Phase 2

Contract No

34142

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45
Date		00/01/1900
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Greyish brown sl silty stiff CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1732.95
Mass	g	2990.60
Dry Mass	g	2399.70
Density	Mg/m ³	1.73
Dry Density	Mg/m ³	1.38
Moisture Content	%	25
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	23
Density	Mg/m ³	1.81
Dry Density	Mg/m ³	1.47

reg. 13

Checked and Approved By

14/03/17
Date

Client Ref
UA008426-01

Contract No

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Test Setup

Date started		03/03/2017
Date Finished		00/01/1900
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P10
Cell Number		C10

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	300.00
Final B Value		0.98

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	30.00	30.00	63.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1703.85	1684.85	1636.35
Consolidated Height	mm	202.86	196.00	186.31
Consolidated Area	mm ²	8399.77	8596.48	8784.45
Vol. Compressibility	m ² /MN	0.06219	0.04646	0.15992
Consolidation Coef.	m ² /yr.	0.92191	0.47299	0.15302

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Northstowe Phase 2

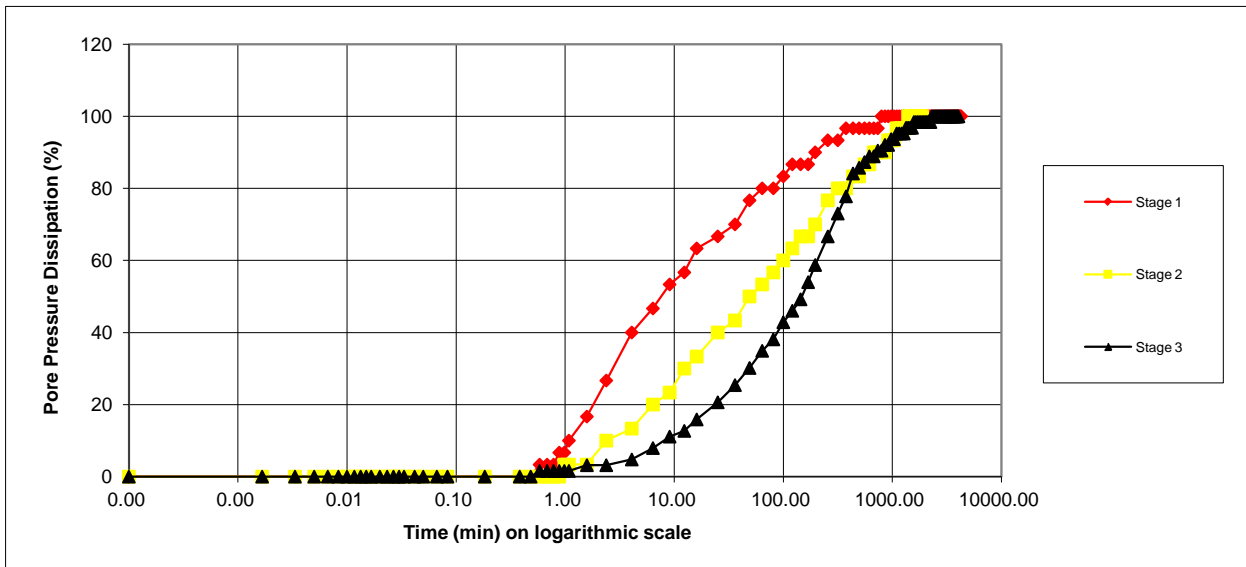
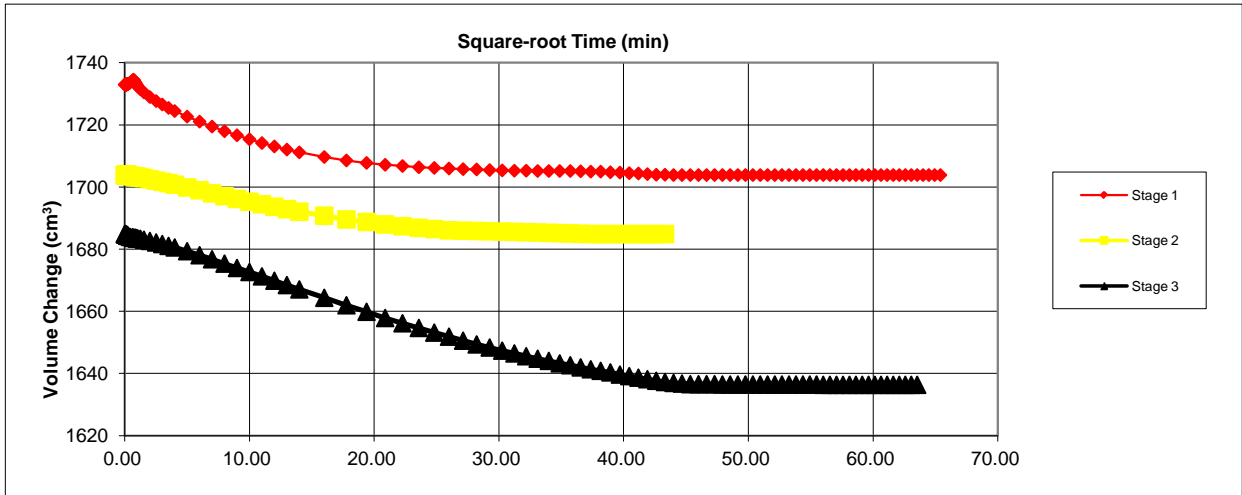
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204	
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204	
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.0182	0.0090	0.0028
Max Deviator Stress				
Axial Strain		4.964	7.579	10.749
Axial Stress	kPa	48.198	67.31	101.44
Cor. Deviator stress	kPa	45.180	63.02	96.99
Effective Major Stress	kPa	74.180	111.02	177.99
Effective Minor Stress	kPa	30.000	48.00	81.00
Effective Stress Ratio		2.473	2.313	2.20
s'	kPa	52.090	79.51	129.49
t'	kPa	22.090	31.51	48.49
Max Effective Principle Stress Ratio				
Axial Strain		1.957	7.421	12.515
Axial Stress	kPa	44.471	66.715	100.670
Cor. Deviator stress	kPa	44.177	62.442	96.119
Effective Major Stress	kPa	70.177	109.442	173.119
Effective Minor Stress	kPa	26.000	47.000	77.000
Effective Stress Ratio		2.699	2.329	2.248
s'	kPa	48.089	78.221	125.060
t'	kPa	22.089	31.221	48.060
Shear Resistance Angle	degs	20.5		
Cohesion c'	kPa	5		

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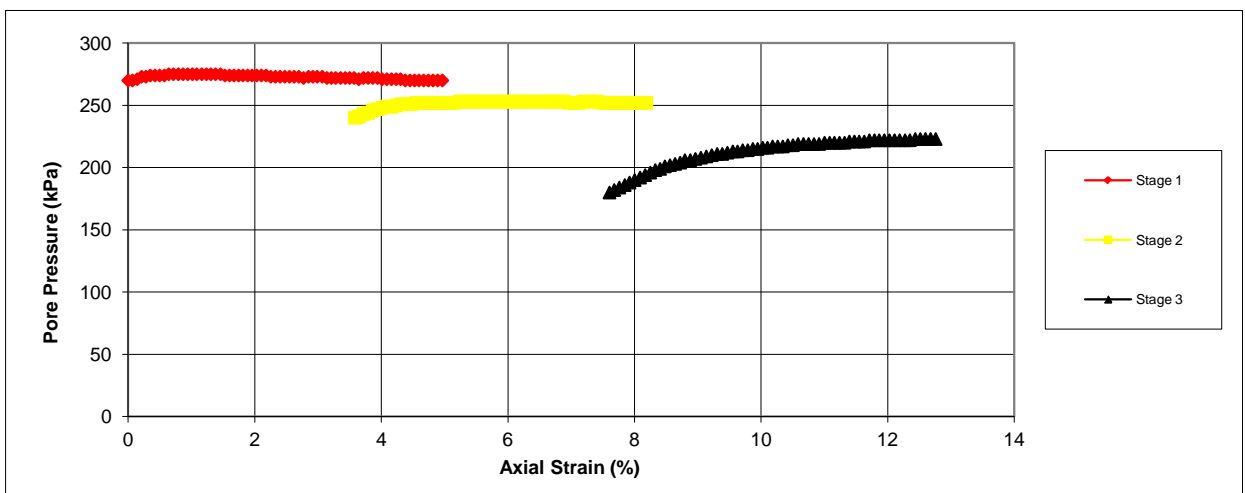
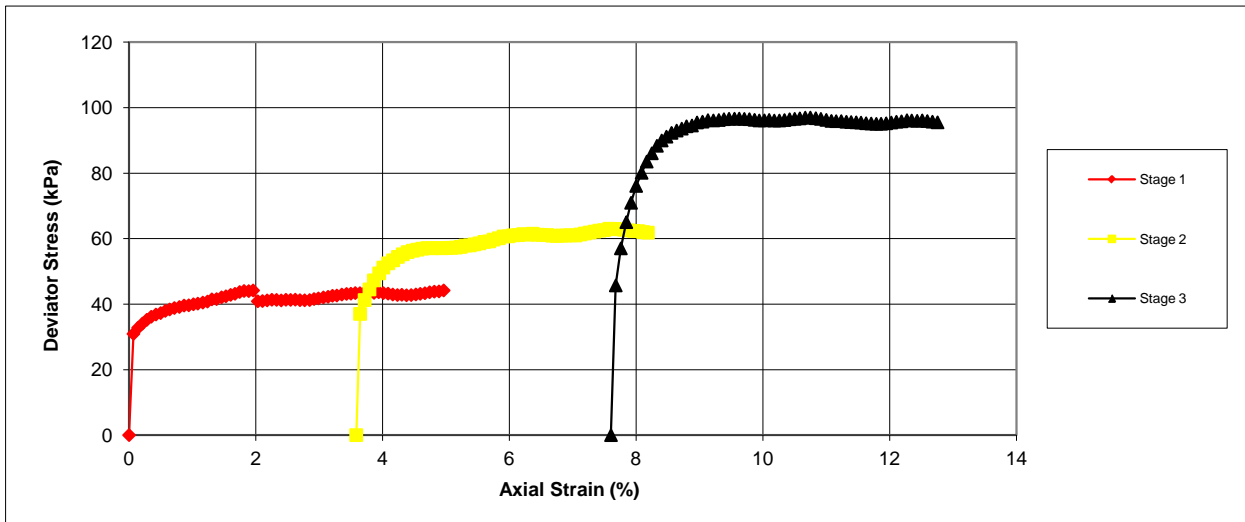
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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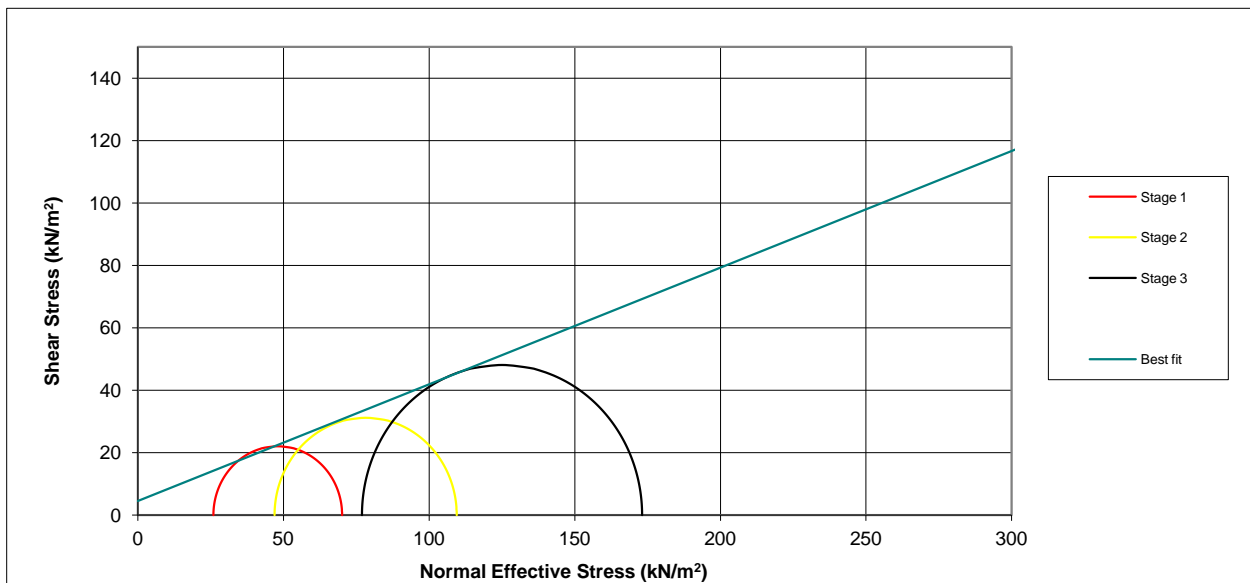
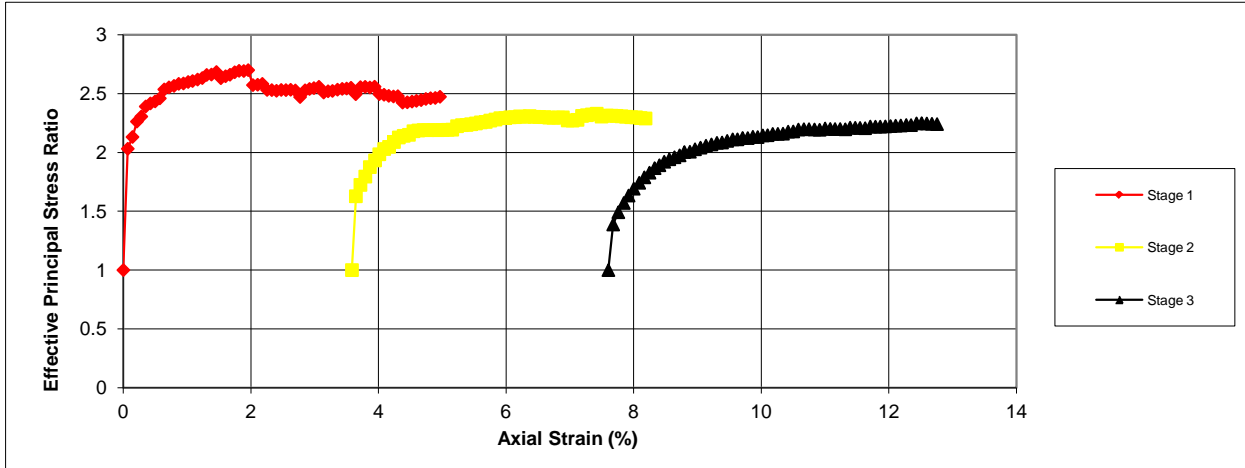
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204	
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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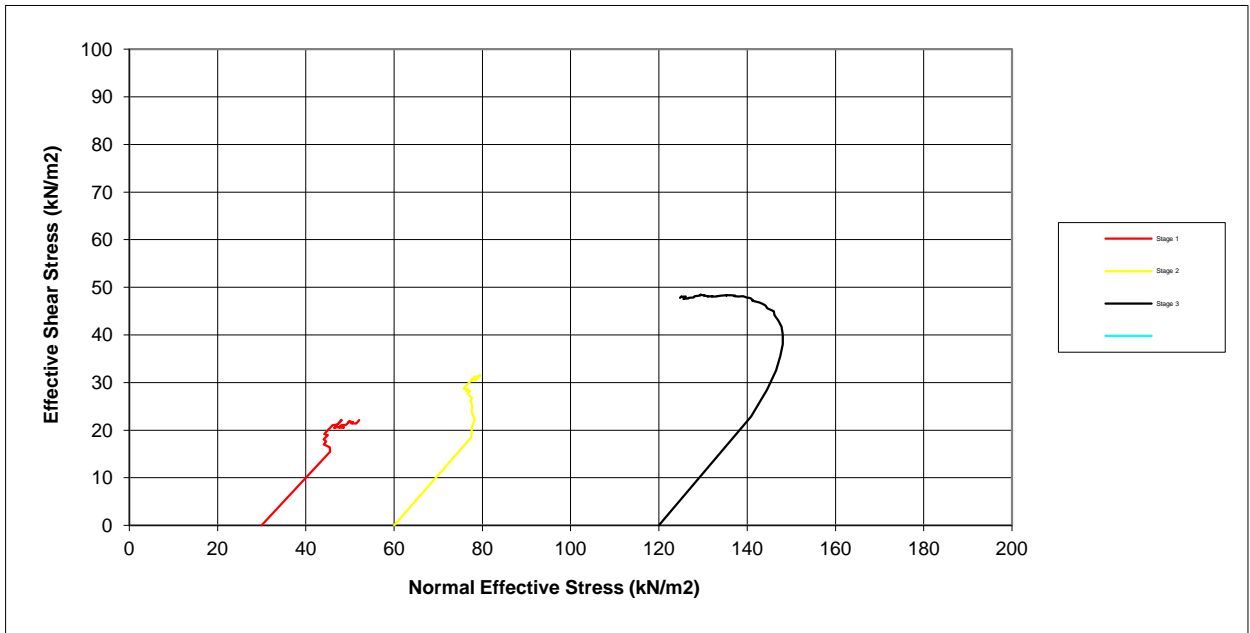
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		
Depth	from(m)	3.00
Depth	to(m)	3.45



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		14
Depth	m	5
Date		12/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Dark grey silty firm CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	92.00
Area	mm ²	6647.61
Volume	cm ³	1356.11
Mass	g	2806.40
Dry Mass	g	2283.30
Density	Mg/m ³	2.07
Dry Density	Mg/m ³	1.68
Moisture Content	%	23
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	27
Density	Mg/m ³	2.25
Dry Density	Mg/m ³	1.78

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	14
Depth	5 m
Date	12/04/2017

Test Setup

Date started	25/03/2017
Date Finished	11/04/2017
Top Drain Used	y
Base Drain Used	y
Side Drains Used	y
Pressure System Number	P4
Cell Number	C4

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	500.00
Final Pore Pressure	kPa	490.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	50.00	100.00	200.00
Cell Pressure	kPa	500.00	500.00	500.00
Back Pressure	kPa	450.00	400.00	300.00
Excess Pore Pressure	kPa	40.00	59.00	120.00
Pore Pressure at End	kPa	450.00	400.00	300.00
Consolidated Volume	cm ³	1330.21	1310.11	1286.21
Consolidated Height	mm	202.70	196.33	187.48
Consolidated Area	mm ²	6562.97	6673.49	6861.08
Vol. Compressibility	m ² /MN	0.04244	0.03778	0.06081
Consolidation Coef.	m ² /yr.	1.45338	0.32913	0.02316

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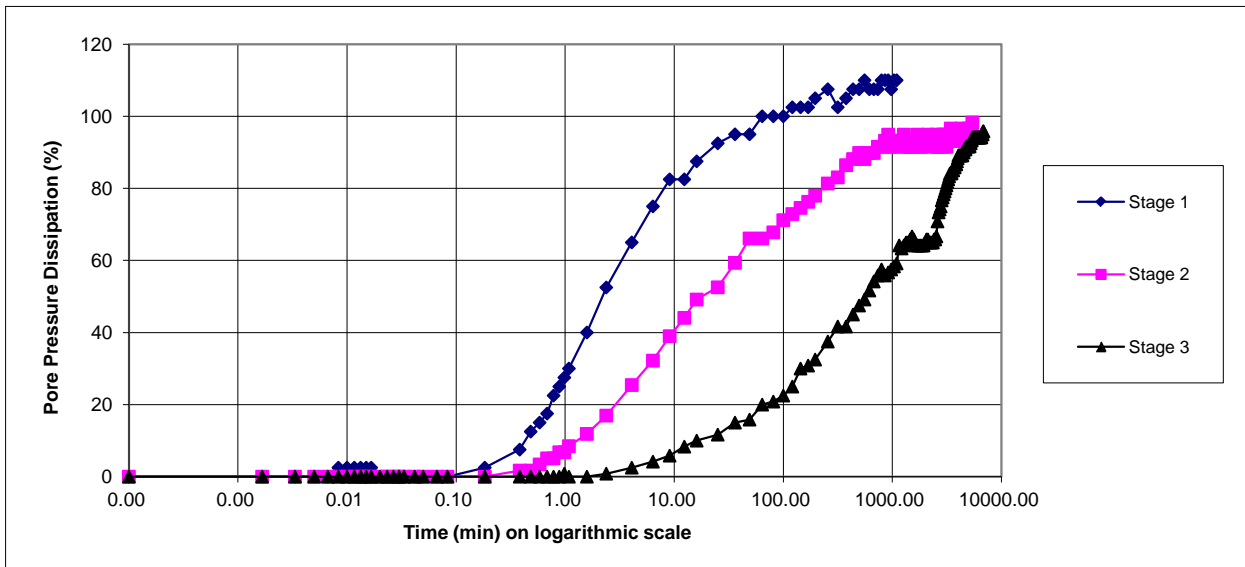
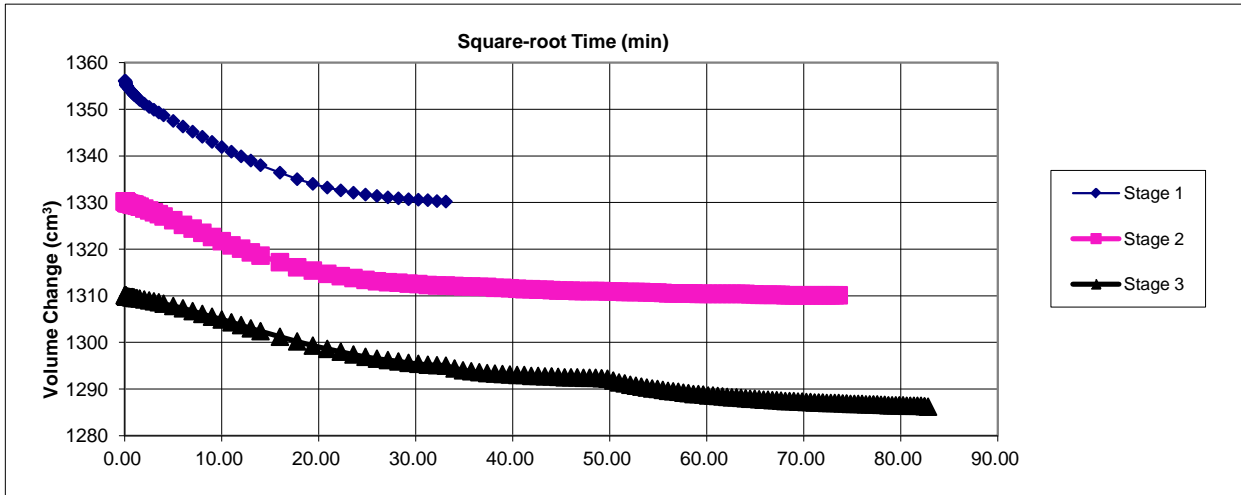
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	14
Depth	5 m
Date	12/04/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	14
Depth	5 m
Date	12/04/2017

Shearing

Initial Cell Pressure	kPa	500	500	500
Initial Pore Pressure	kPa	450	400	300
Rate of Strain	mm/min	0.0367	0.0080	0.0005
Max Deviator Stress				
Axial Strain		4.312	8.297	11.682
Axial Stress	kPa	139.677	263.92	395.45
Cor. Deviator stress	kPa	136.646	259.44	390.82
Effective Major Stress	kPa	171.646	336.44	510.82
Effective Minor Stress	kPa	36.000	77.00	120.00
Effective Stress Ratio		4.768	4.369	4.26
s'	kPa	103.823	206.72	315.41
t'	kPa	67.823	129.72	195.41
Max Effective Principle Stress Ratio				
Axial Strain		3.591	5.644	9.858
Axial Stress	kPa	126.332	213.785	362.842
Cor. Deviator stress	kPa	122.362	209.621	358.331
Effective Major Stress	kPa	154.362	269.621	463.331
Effective Minor Stress	kPa	32.000	60.000	105.000
Effective Stress Ratio		4.824	0.000	4.413
s'	kPa	93.181	164.810	284.165
t'	kPa	61.181	104.810	179.165
Shear Resistance Angle	degs	38.0		
Cohesion c'	kPa	5		

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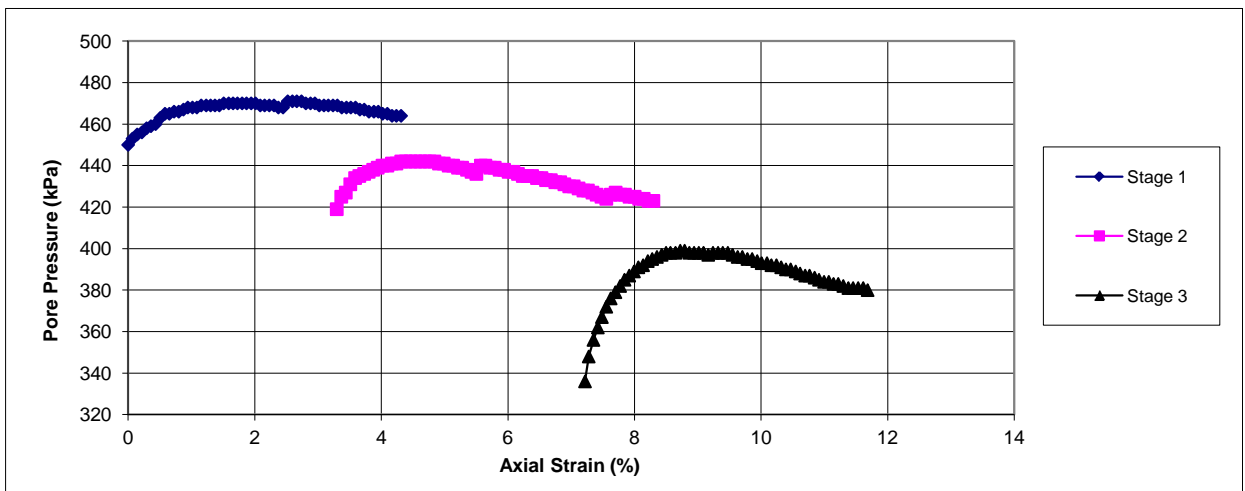
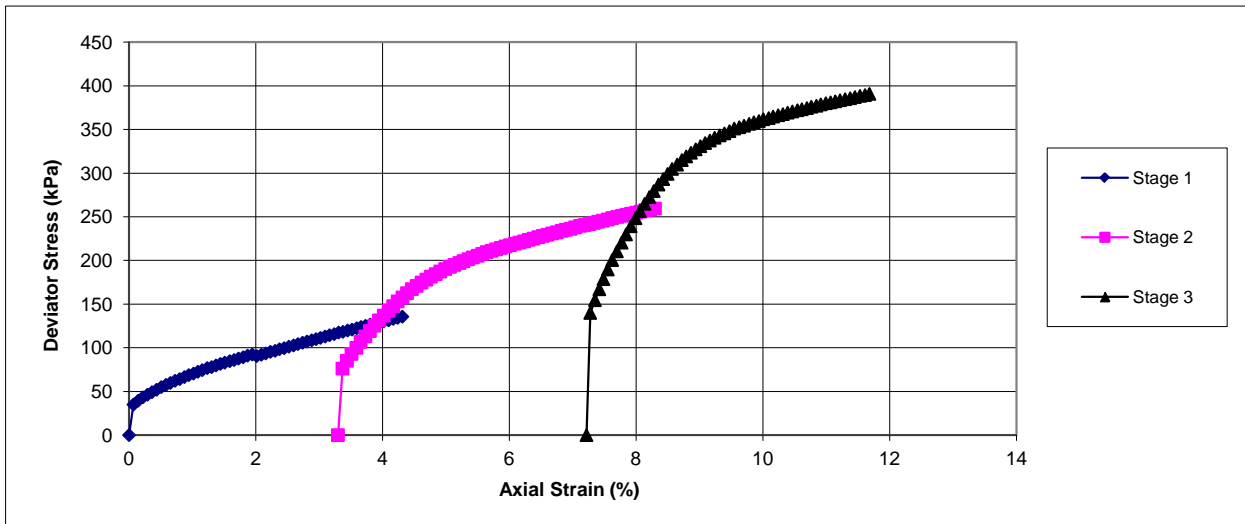
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		14
Depth	m	5
Date		12/04/2017

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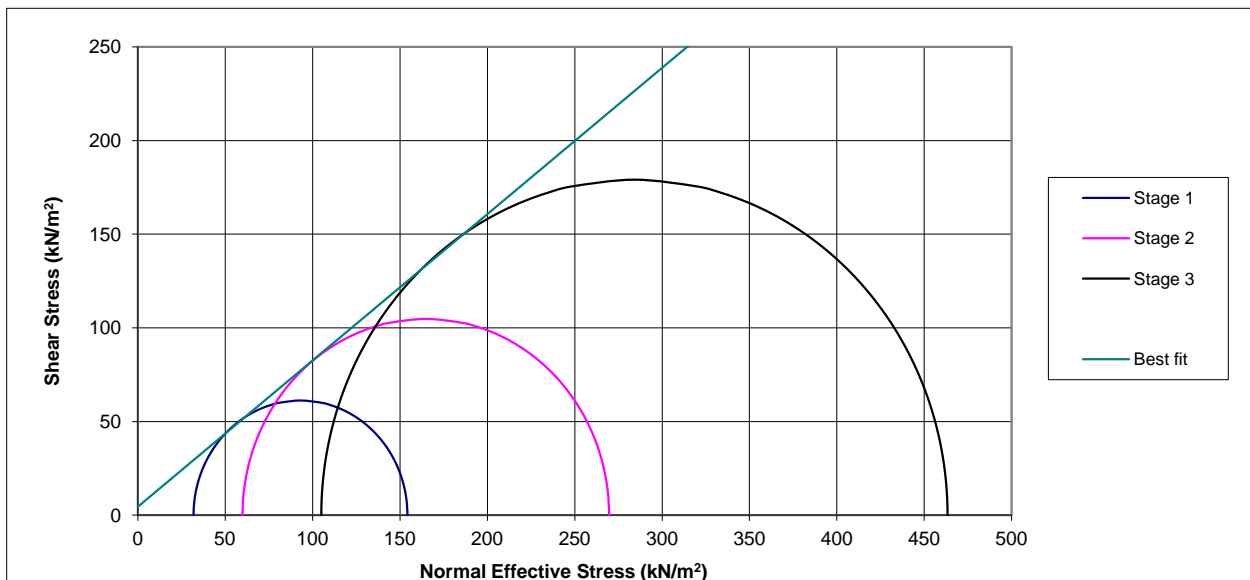
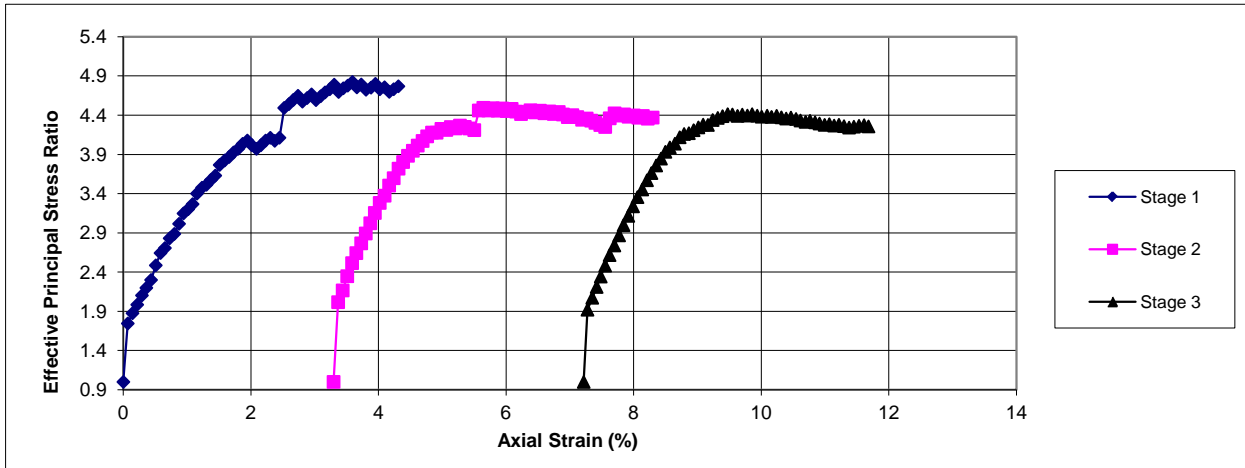
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	14
Depth	5 m
Date	12/04/2017

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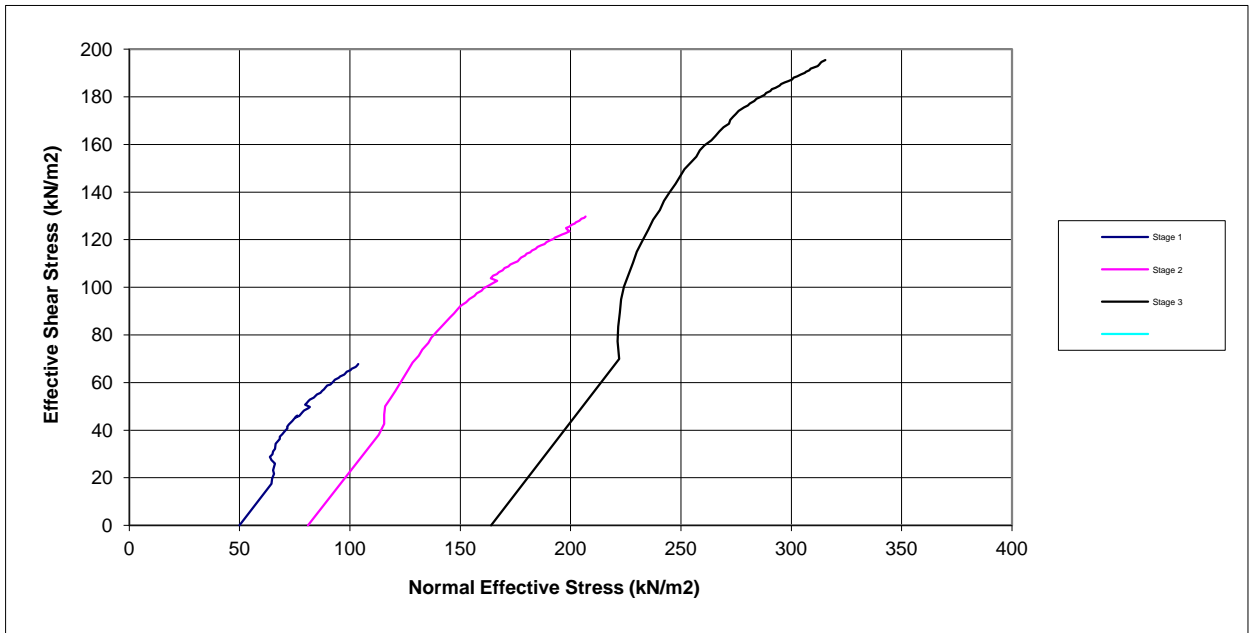
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1204
Sample No.	14
Depth	5 m
Date	12/04/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1204
Sample No.		14
Depth	m	5
Date		12/04/2017



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		5
Depth	m	6.00-6.45
Date		14/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty stiff CLAY

Initial Specimen Conditions

Height	mm	203.00
Diameter	mm	103.00
Area	mm ²	8332.29
Volume	cm ³	1691.45
Mass	g	3378.30
Dry Mass	g	2730.00
Density	Mg/m ³	2.00
Dry Density	Mg/m ³	1.61
Moisture Content	%	24
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	25
Density	Mg/m ³	2.10
Dry Density	Mg/m ³	1.68

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		5
Depth	m	6.00-6.45
Date		14/04/2017

Test Setup

Date started		05/04/2017
Date Finished		13/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P11
Cell Number		C11

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	500.00
Final Pore Pressure	kPa	490.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	60.00	120.00	240.00
Cell Pressure	kPa	500.00	500.00	500.00
Back Pressure	kPa	440.00	380.00	260.00
Excess Pore Pressure	kPa	50.00	60.00	120.00
Pore Pressure at End	kPa	440.00	380.00	260.00
Consolidated Volume	cm ³	1665.55	1645.45	1621.55
Consolidated Height	mm	201.96	195.53	186.92
Consolidated Area	mm ²	8247.23	8415.62	8675.50
Vol. Compressibility	m ² /MN	0.03480	0.03176	0.05586
Consolidation Coef.	m ² /yr.	1.82171	0.41254	0.02903

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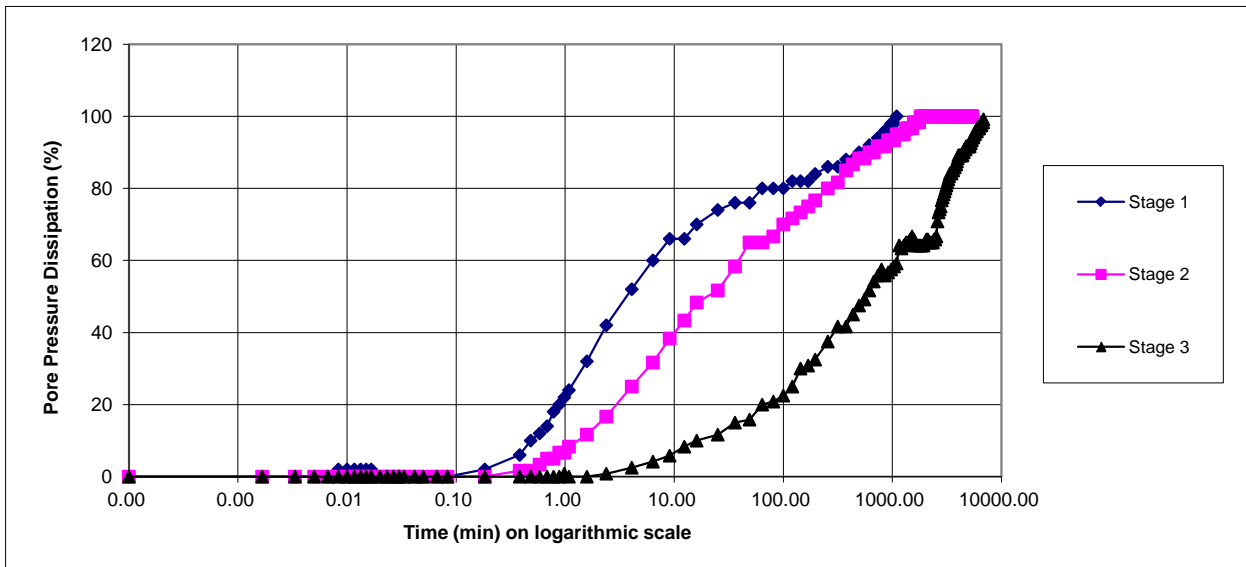
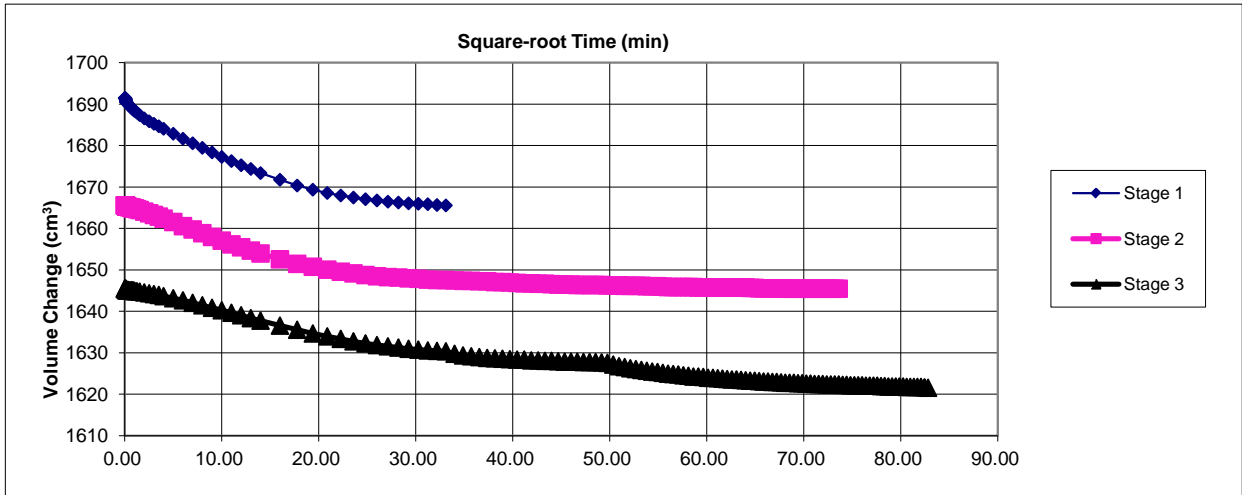
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		5
Depth	m	6.00-6.45
Date		14/04/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		5
Depth	m	6.00-6.45
Date		14/04/2017

Shearing

Initial Cell Pressure	kPa	500	500	500
Initial Pore Pressure	kPa	440	380	260
Rate of Strain	mm/min	0.0366	0.0080	0.0005
Max Deviator Stress				
Axial Strain		4.328	8.330	11.723
Axial Stress	kPa	111.133	223.89	312.70
Cor. Deviator stress	kPa	108.158	219.51	308.19
Effective Major Stress	kPa	153.158	336.51	498.19
Effective Minor Stress	kPa	46.000	117.00	190.00
Effective Stress Ratio		3.330	2.876	2.62
s'	kPa	99.579	226.76	344.09
t'	kPa	53.579	109.76	154.09
Max Effective Principle Stress Ratio				
Axial Strain		3.605	5.665	9.894
Axial Stress	kPa	100.519	181.379	286.933
Cor. Deviator stress	kPa	96.598	177.283	282.527
Effective Major Stress	kPa	138.598	277.283	457.527
Effective Minor Stress	kPa	42.000	100.000	175.000
Effective Stress Ratio		3.300	0.000	2.614
s'	kPa	90.299	188.641	316.264
t'	kPa	48.299	88.641	141.264
Shear Resistance Angle	degs	24.5		
Cohesion c'	kPa	11		

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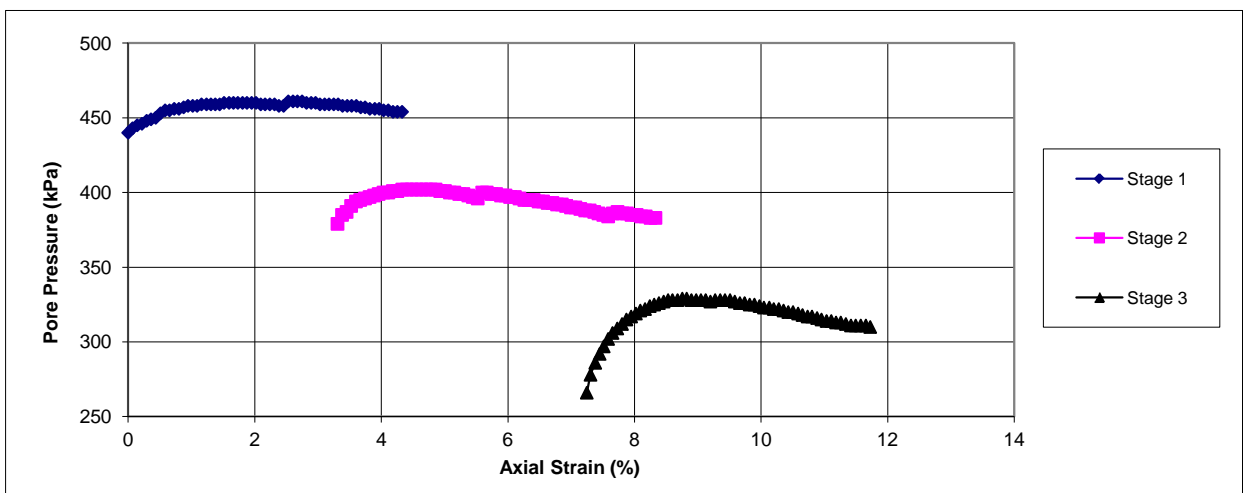
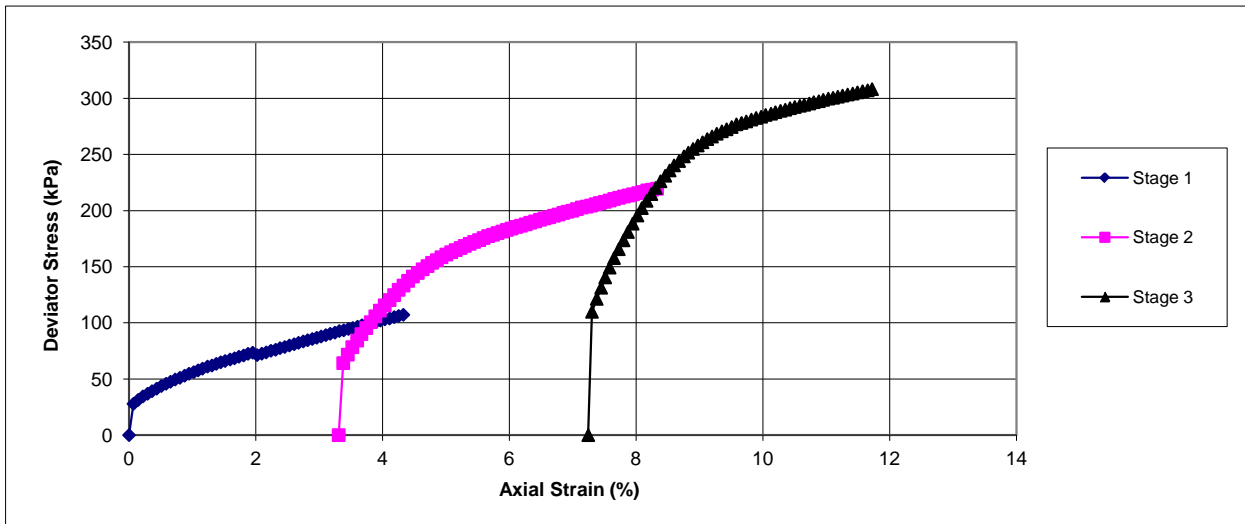
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		5
Depth	m	6.00-6.45
Date		14/04/2017

Shearing Stage



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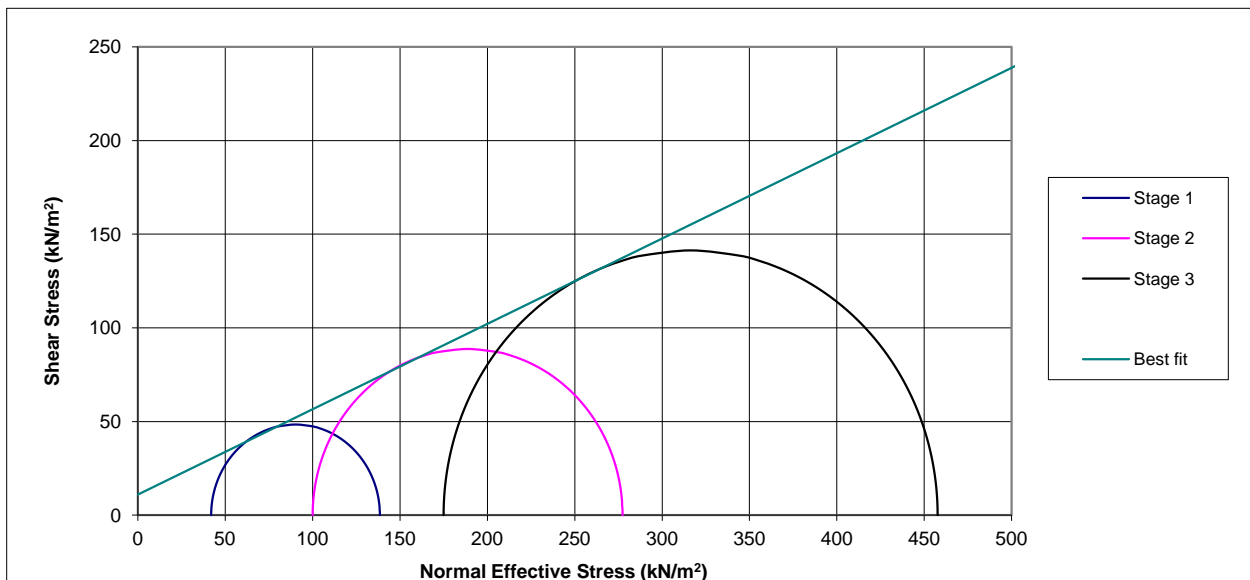
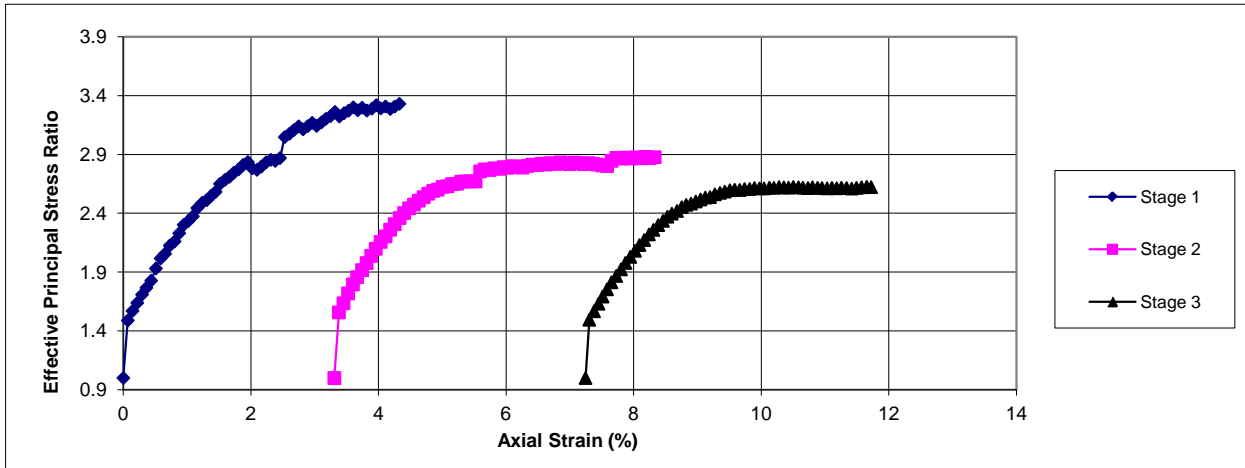
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		5
Depth	m	6.00-6.45
Date		14/04/2017

Shearing Stage



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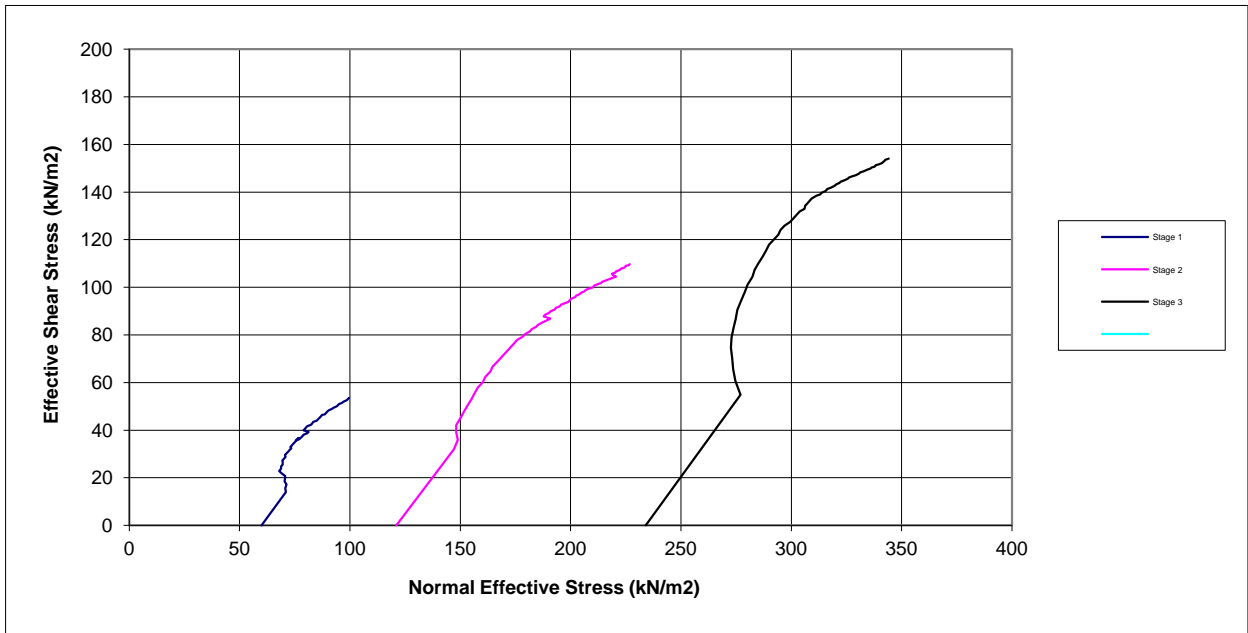
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1205
Sample No.	5
Depth	6.00-6.45
Date	14/04/2017

Shearing Stage



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Specimen Details

Borehole		BH1205
Sample No.		5
Depth	m	6.00-6.45
Date		14/04/2017



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey Slightly Silty stiff CLAY

Initial Specimen Conditions

Height	mm	205.00
Diameter	mm	105.00
Area	mm ²	8659.01
Volume	cm ³	1775.10
Mass	g	3387.90
Dry Mass	g	2627.90
Density	Mg/m ³	1.91
Dry Density	Mg/m ³	1.48
Moisture Content	%	29
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	29
Density	Mg/m ³	2.13
Dry Density	Mg/m ³	1.65

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BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017

Test Setup

Date started		20/02/2017
Date Finished		11/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P8
Cell Number		C8

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	700.00
Final Pore Pressure	kPa	696.00
Final B Value		0.99

Consolidation

Effective Pressure	kPa	150.00	300.00	600.00
Cell Pressure	kPa	700.00	700.00	700.00
Back Pressure	kPa	550.00	400.00	100.00
Excess Pore Pressure	kPa	146.00	189.00	362.00
Pore Pressure at End	kPa	550.00	400.00	100.00
Consolidated Volume	cm ³	1688.80	1644.10	1595.70
Consolidated Height	mm	201.68	195.37	187.50
Consolidated Area	mm ²	8378.36	8416.61	8511.95
Vol. Compressibility	m ² /MN	0.08839	0.06617	0.29439
Consolidation Coef.	m ² /yr.	0.03838	0.02193	0.01488

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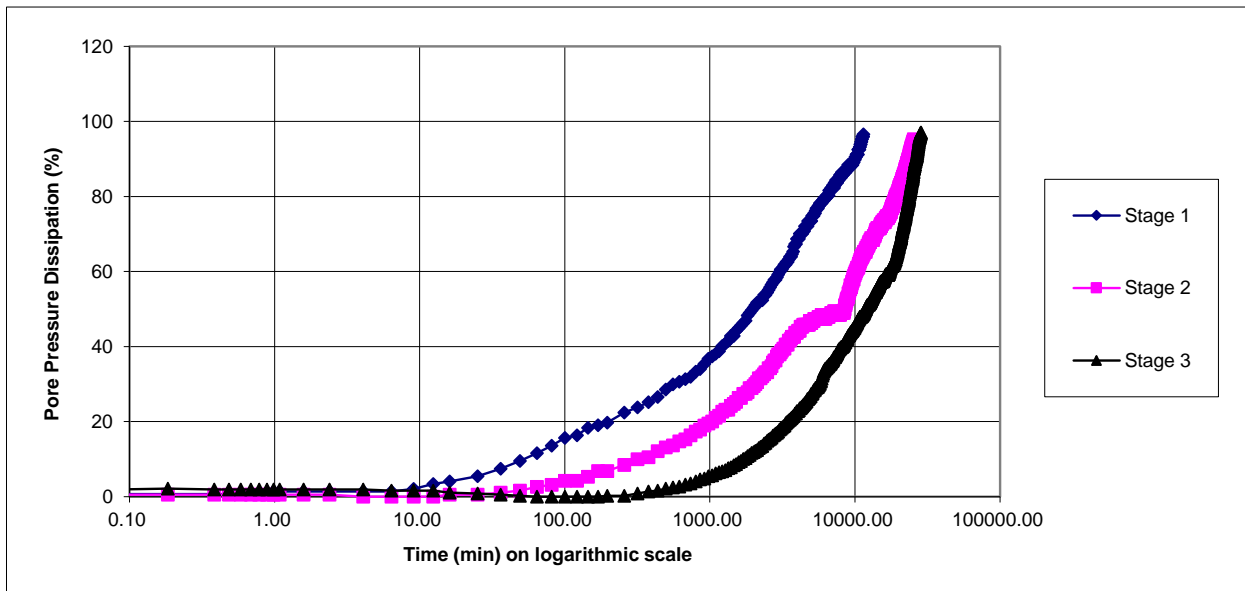
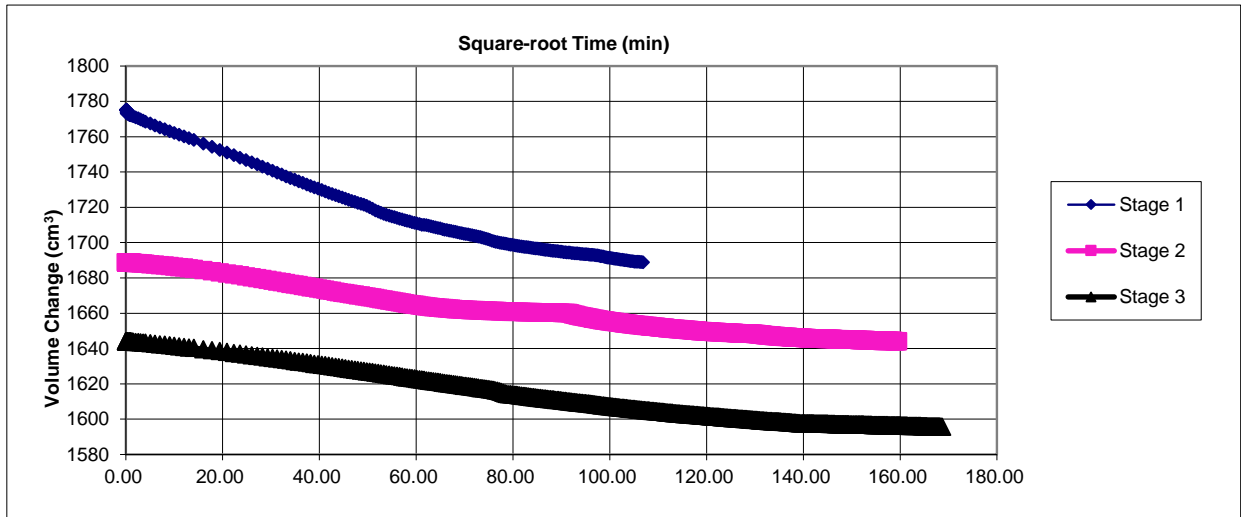
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017

Consolidation Stage



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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017

Shearing

Initial Cell Pressure	kPa	700	700	700
Initial Pore Pressure	kPa	550	400	100
Rate of Strain	mm/min	0.0007	0.0004	0.0003
Max Deviator Stress				
Axial Strain		4.715	7.152	9.874
Axial Stress	kPa	136.017	218.20	346.61
Cor. Deviator stress	kPa	133.022	213.96	342.22
Effective Major Stress	kPa	189.022	331.96	562.22
Effective Minor Stress	kPa	57.000	118.00	220.00
Effective Stress Ratio		3.316	2.813	2.56
s'	kPa	123.011	224.98	391.11
t'	kPa	66.011	106.98	171.11
Max Effective Principle Stress Ratio				
Axial Strain		3.823	6.625	9.874
Axial Stress	kPa	134.536	216.384	346.612
Cor. Deviator stress	kPa	130.608	212.200	342.225
Effective Major Stress	kPa	185.608	326.200	562.225
Effective Minor Stress	kPa	55.000	114.000	220.000
Effective Stress Ratio		3.375	2.861	2.556
s'	kPa	120.304	220.100	391.112
t'	kPa	65.304	106.100	171.112
Shear Resistance Angle	degs	22.9		
Cohesion c'	kPa	21		

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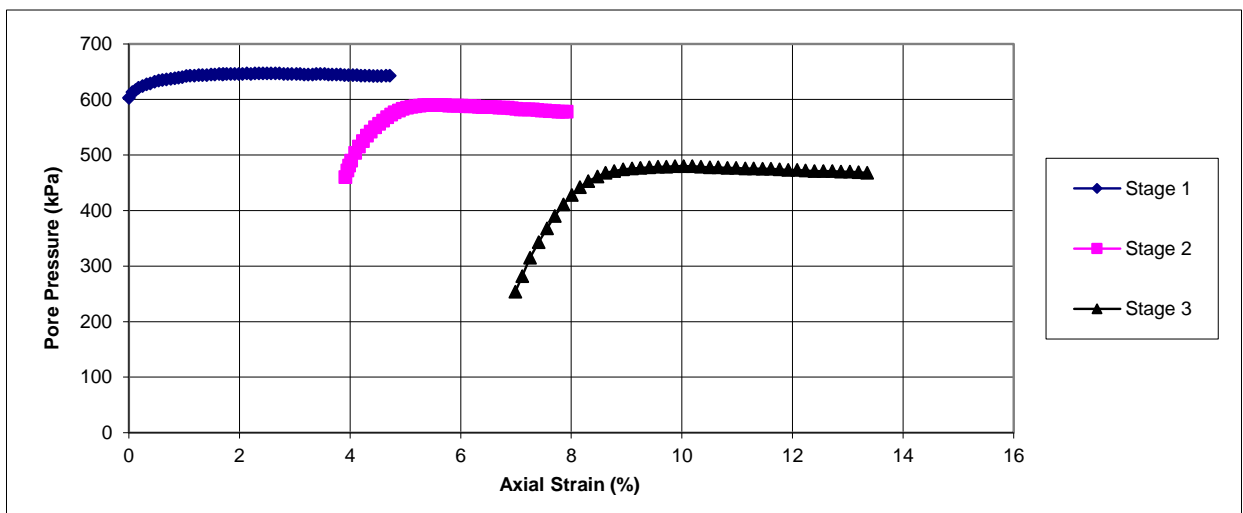
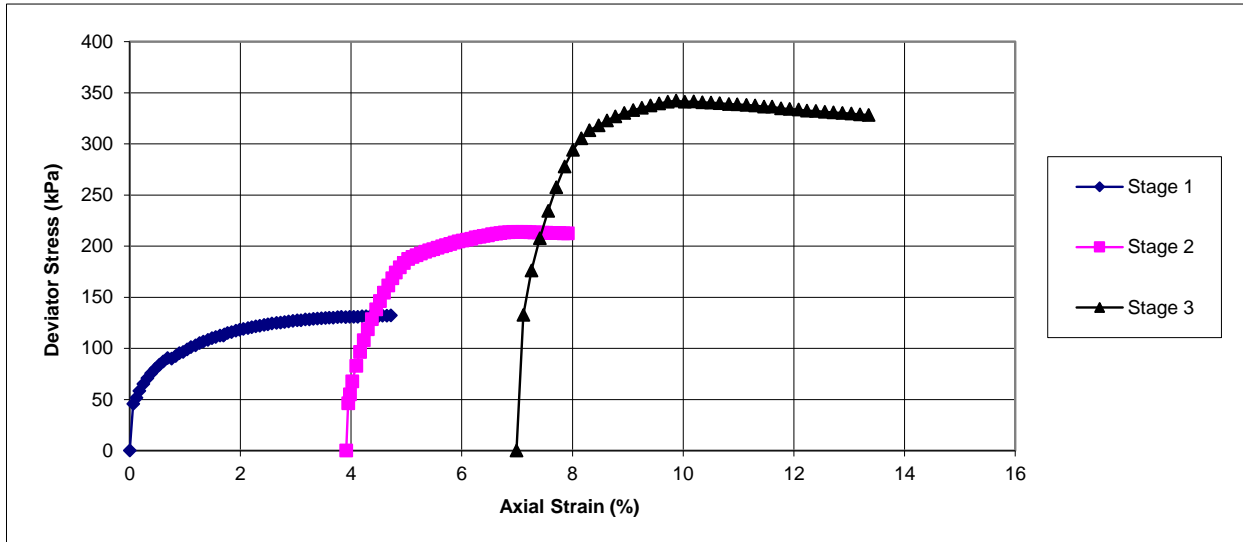
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017

Shearing Stage



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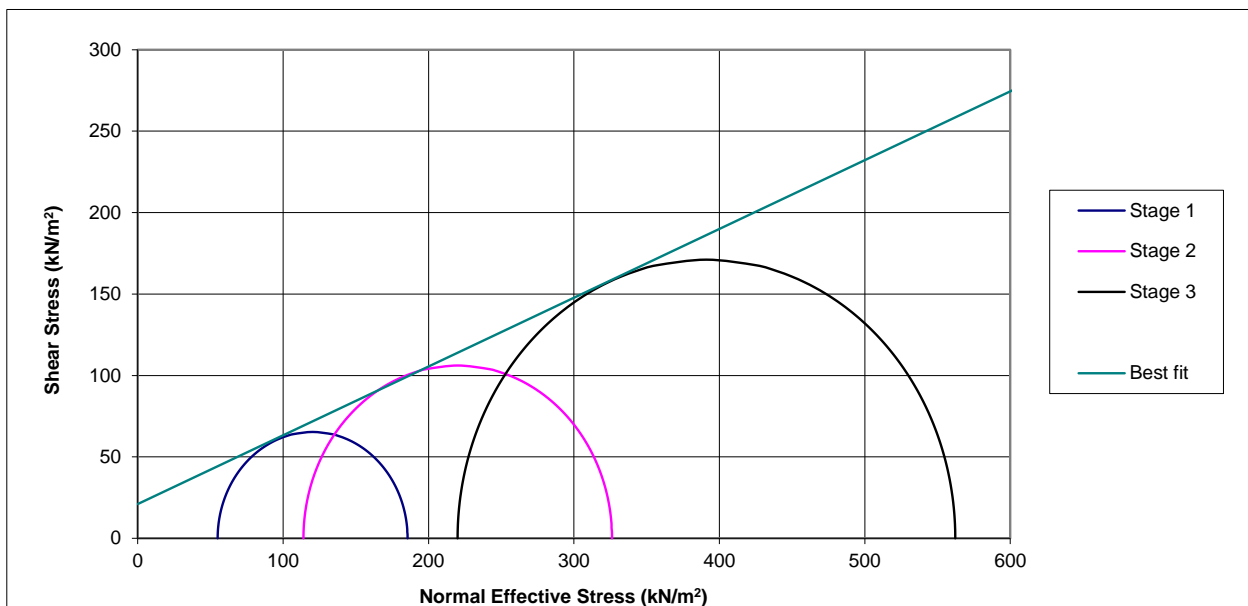
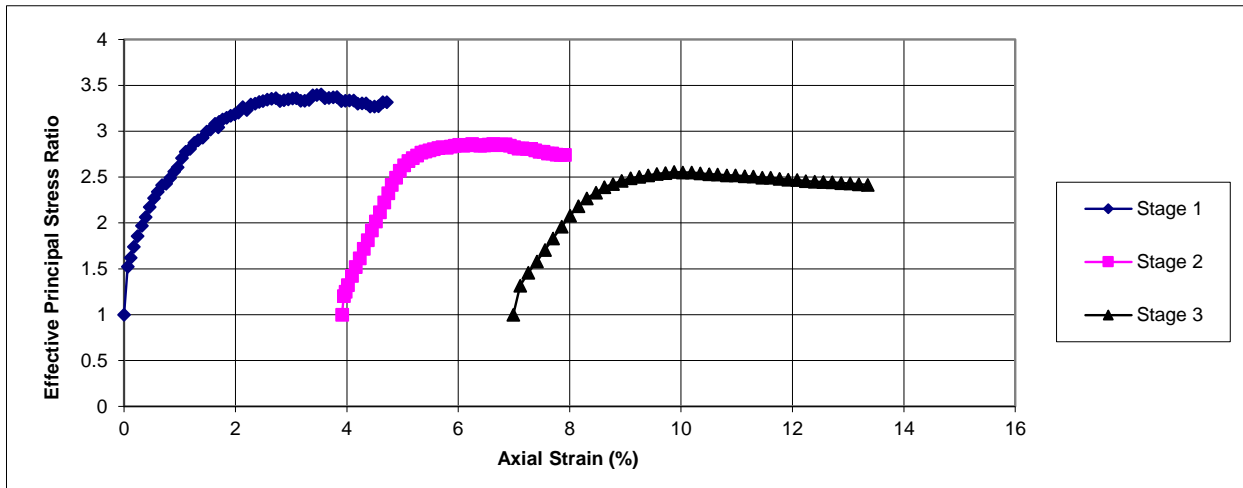
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017

Shearing Stage



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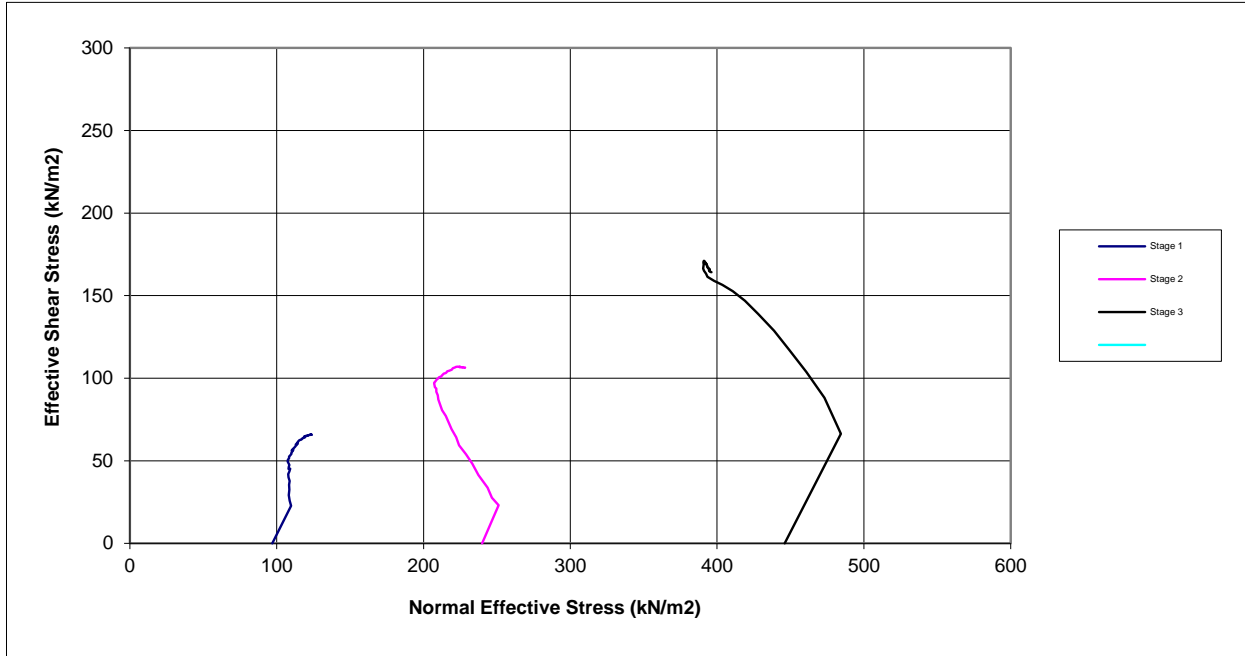
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1202
Sample No.		
Depth	m	15.00-15.45
Date		12/03/2017



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		34
Depth	m	18.00-18.45
Date		13/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty stiff CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1732.95
Mass	g	3336.50
Dry Mass	g	2680.00
Density	Mg/m ³	1.93
Dry Density	Mg/m ³	1.55
Moisture Content	%	24
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	25
Density	Mg/m ³	2.11
Dry Density	Mg/m ³	1.68

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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		34
Depth	m	18.00-18.45
Date		13/04/2017

Test Setup

Date started		05/04/2017
Date Finished		12/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P14
Cell Number		C14

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	750.00
Final Pore Pressure	kPa	737.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	180.00	360.00	720.00
Cell Pressure	kPa	750.00	750.00	750.00
Back Pressure	kPa	570.00	390.00	30.00
Excess Pore Pressure	kPa	167.00	226.00	395.00
Pore Pressure at End	kPa	570.00	390.00	30.00
Consolidated Volume	cm ³	1667.05	1625.25	1594.45
Consolidated Height	mm	201.41	196.00	190.81
Consolidated Area	mm ²	8279.51	8293.38	8357.13
Vol. Compressibility	m ² /MN	0.06672	0.06429	0.63170
Consolidation Coef.	m ² /yr.	0.31371	0.09793	0.01597

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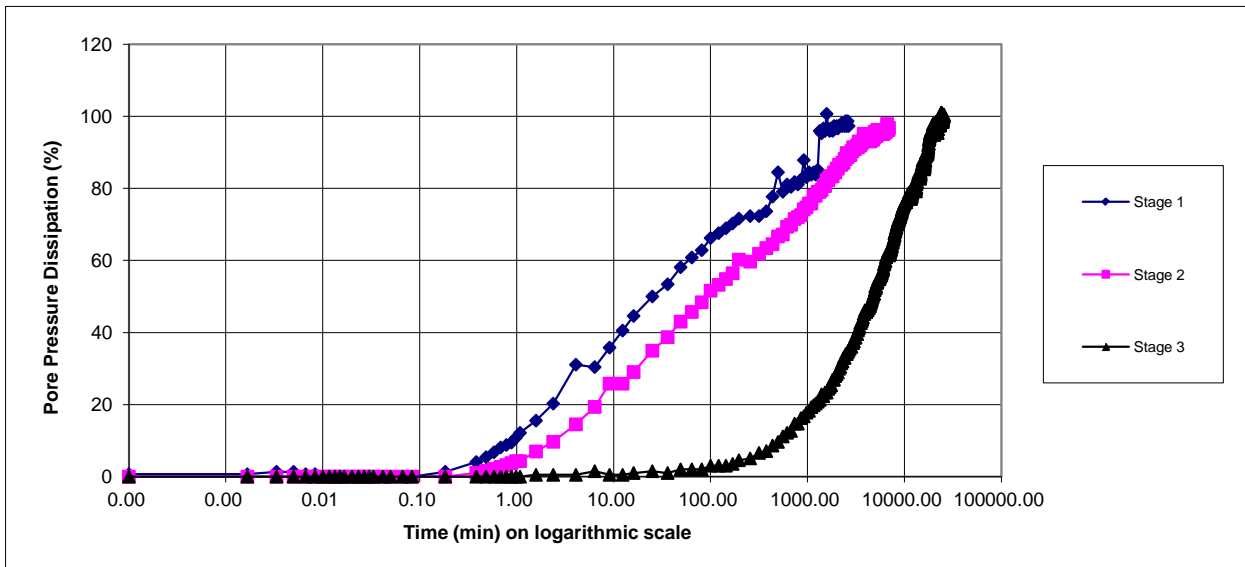
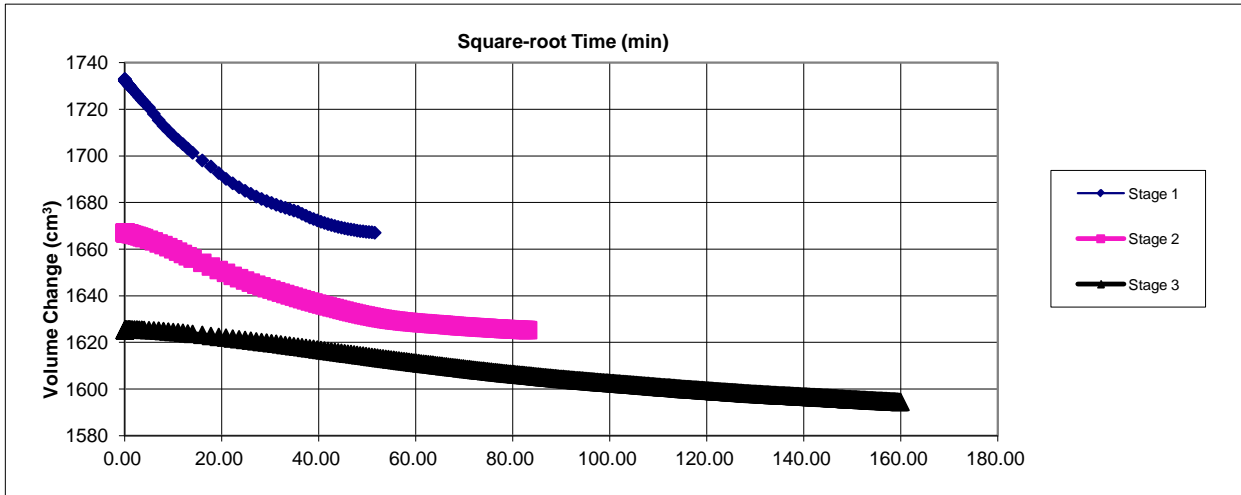
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		34
Depth	m	18.00-18.45
Date		13/04/2017

Consolidation Stage



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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		34
Depth	m	18.00-18.45
Date		13/04/2017

Shearing

Initial Cell Pressure	kPa	750	750	750
Initial Pore Pressure	kPa	570	390	30
Rate of Strain	mm/min	0.0062	0.0019	0.0003
Max Deviator Stress				
Axial Strain		0.879	4.546	6.860
Axial Stress	kPa	104.179	191.07	259.19
Cor. Deviator stress	kPa	105.088	187.10	254.97
Effective Major Stress	kPa	231.088	484.10	705.97
Effective Minor Stress	kPa	127.000	297.00	451.00
Effective Stress Ratio		1.820	1.630	1.57
s'	kPa	179.044	390.55	578.48
t'	kPa	52.044	93.55	127.48
Max Effective Principle Stress Ratio				
Axial Strain		0.879	4.770	6.860
Axial Stress	kPa	104.179	190.754	259.186
Cor. Deviator stress	kPa	104.088	186.757	254.967
Effective Major Stress	kPa	231.088	481.757	705.967
Effective Minor Stress	kPa	127.000	295.000	451.000
Effective Stress Ratio		1.820	1.633	1.565
s'	kPa	179.044	388.378	578.484
t'	kPa	52.044	93.378	127.484
Shear Resistance Angle	degs	11.0		
Cohesion c'	kPa	19		

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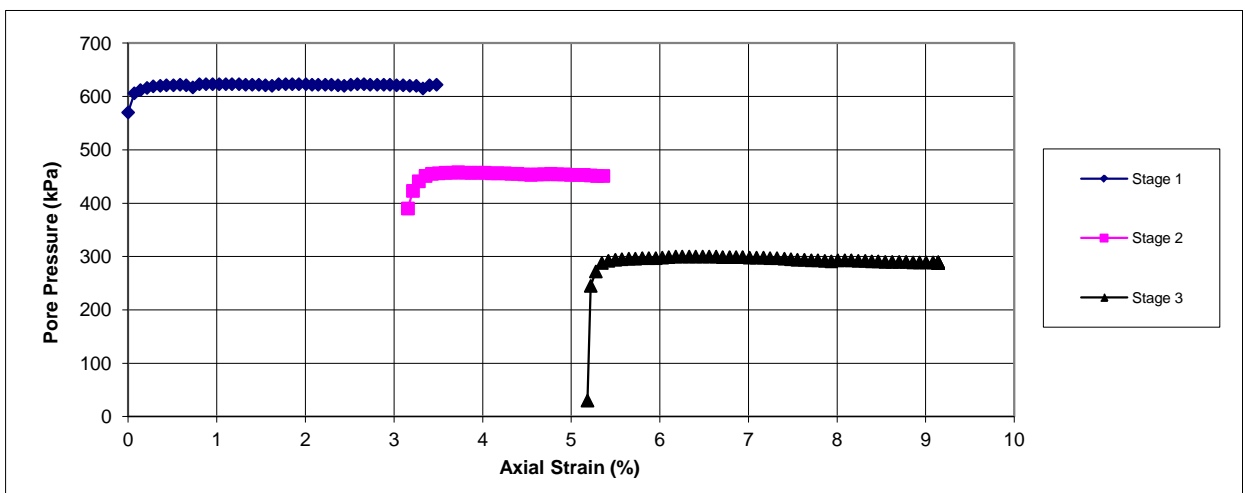
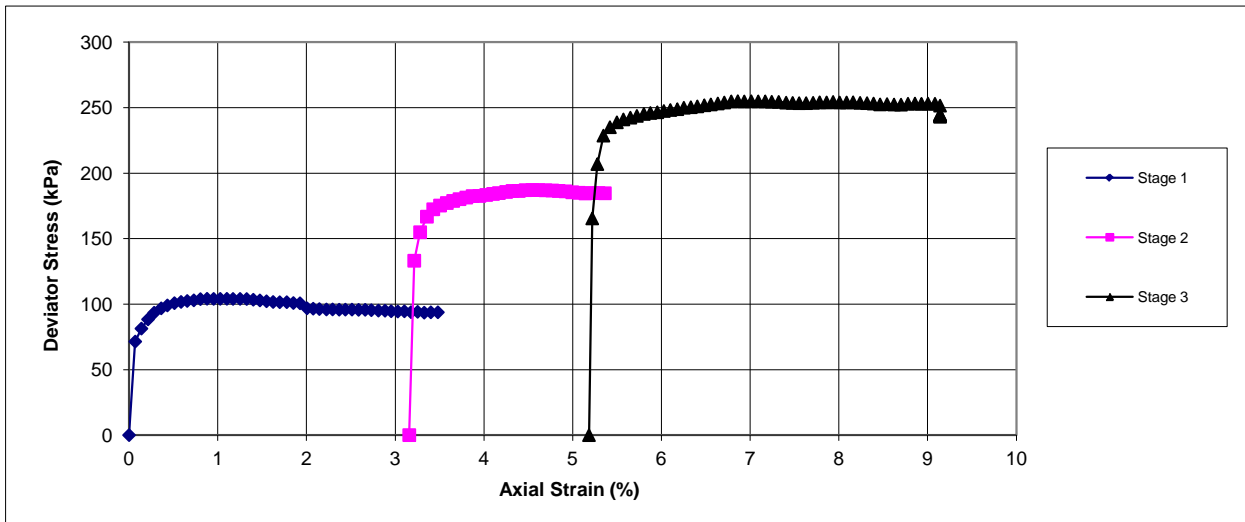
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		34
Depth	m	18.00-18.45
Date		13/04/2017

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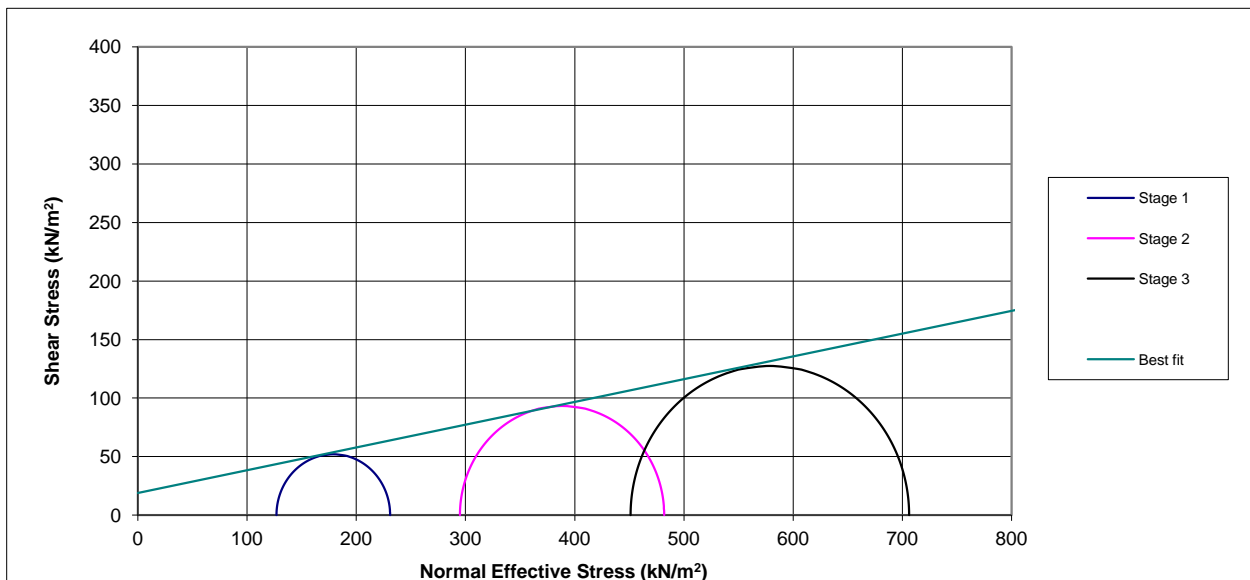
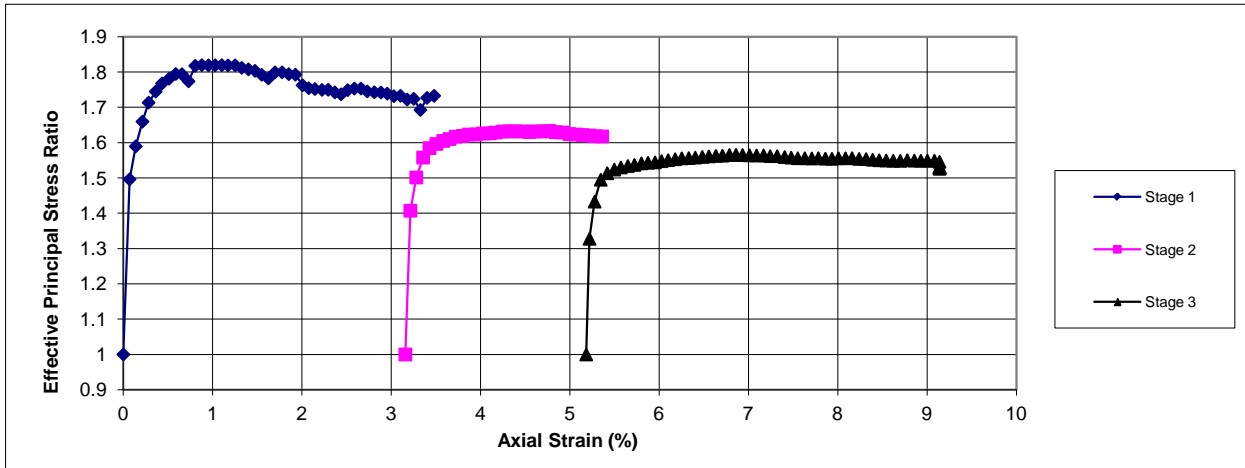
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		34
Depth	m	18.00-18.45
Date		13/04/2017

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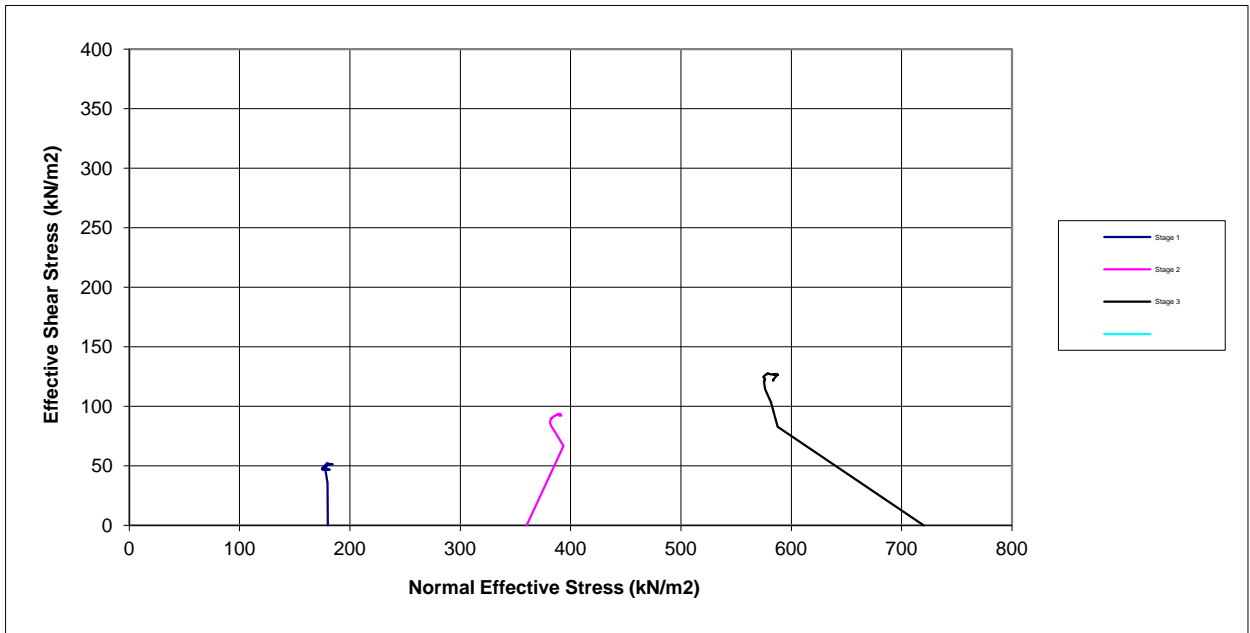
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1205
Sample No.	34
Depth	18.00-18.45
Date	13/04/2017

Shearing Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1205
Sample No.		34
Depth	m	18.00-18.45
Date		13/04/2017



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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	
Date		08/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Grey silty CLAY

Initial Specimen Conditions

Height	mm	205.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1741.45
Mass	g	3033.60
Dry Mass	g	2427.70
Density	Mg/m ³	1.74
Dry Density	Mg/m ³	1.39
Moisture Content	%	25
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	26
Density	Mg/m ³	1.82
Dry Density	Mg/m ³	1.45

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	

Test Setup

Date started		21/03/2017
Date Finished		07/04/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P9
Cell Number		C9

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	293.00
Final B Value		0.98

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	23.00	29.00	72.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1712.25	1703.65	1672.65
Consolidated Height	mm	203.85	196.95	184.20
Consolidated Area	mm ²	8399.91	8650.21	9081.50
Vol. Compressibility	m ² /MN	0.06210	0.02093	0.10109
Consolidation Coef.	m ² /yr.	0.89843	0.49578	0.22461

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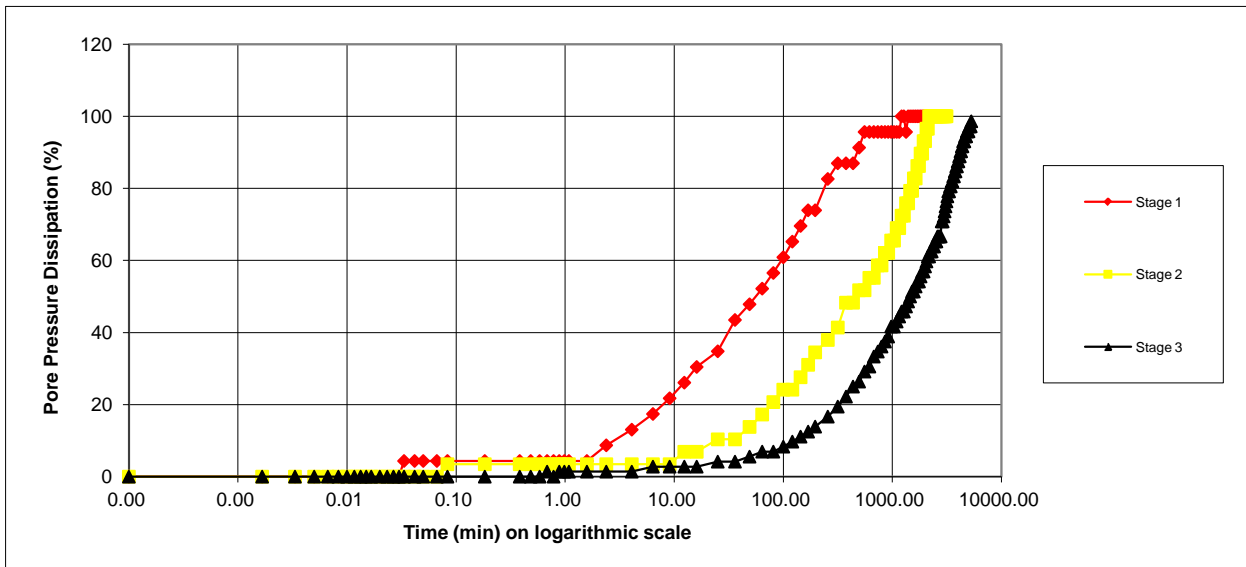
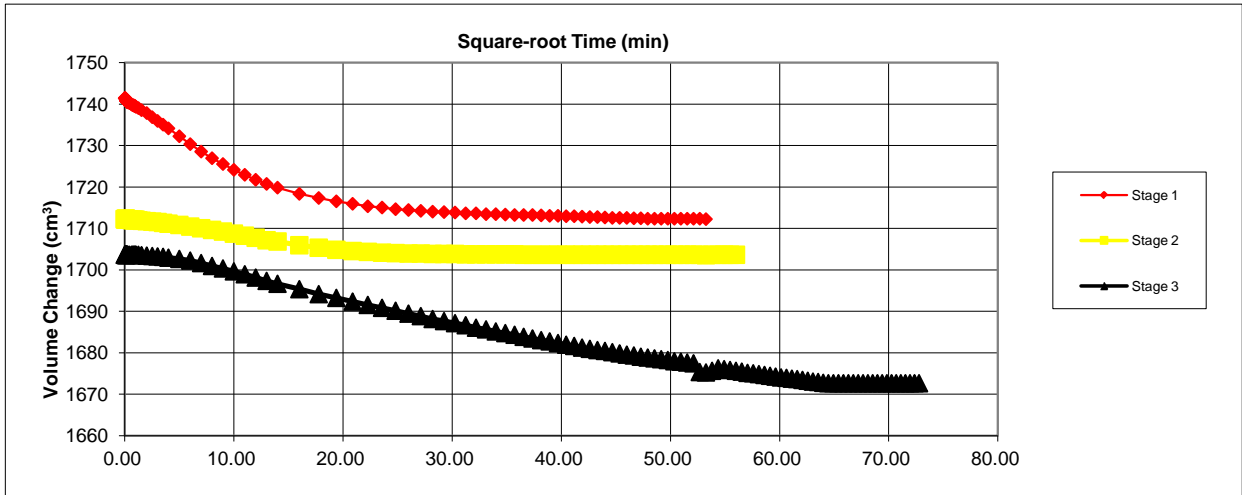
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.0178	0.0095	0.0040
Max Deviator Stress				
Axial Strain		4.709	9.118	11.429
Axial Stress	kPa	51.049	63.63	106.51
Cor. Deviator stress	kPa	48.050	59.18	102.03
Effective Major Stress	kPa	69.050	95.18	179.03
Effective Minor Stress	kPa	22.000	36.00	77.00
Effective Stress Ratio		3.139	2.644	2.33
s'	kPa	45.525	65.59	128.01
t'	kPa	23.525	29.59	51.01
Max Effective Principle Stress Ratio				
Axial Strain		1.992	5.183	11.429
Axial Stress	kPa	43.404	58.169	106.513
Cor. Deviator stress	kPa	43.197	54.129	102.026
Effective Major Stress	kPa	59.197	80.129	179.026
Effective Minor Stress	kPa	16.000	26.000	77.000
Effective Stress Ratio		3.700	3.082	2.325
s'	kPa	37.598	53.065	128.013
t'	kPa	21.598	27.065	51.013
Shear Resistance Angle	degs	18.5		
Cohesion c'	kPa	11		

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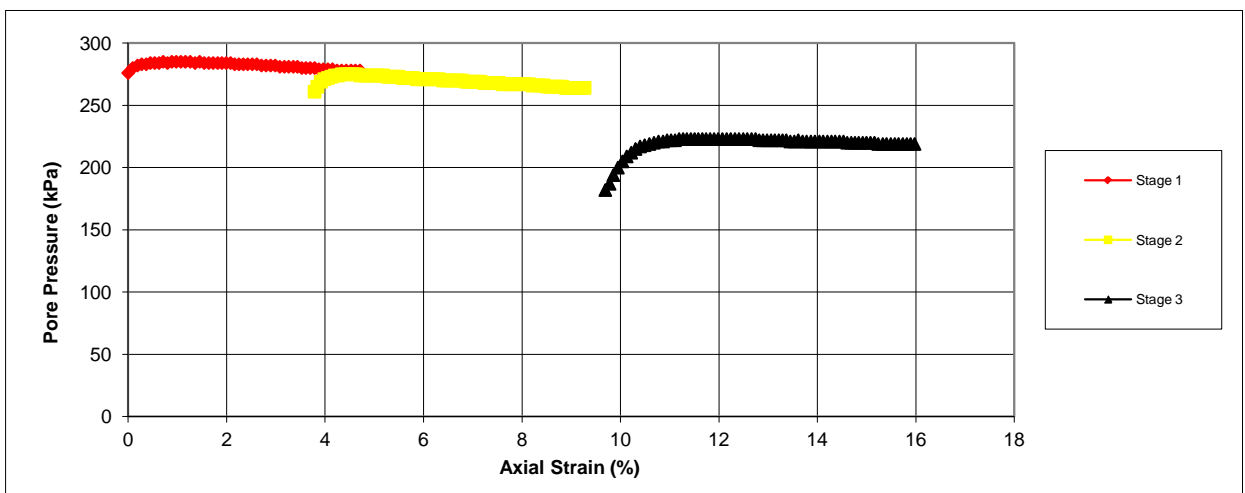
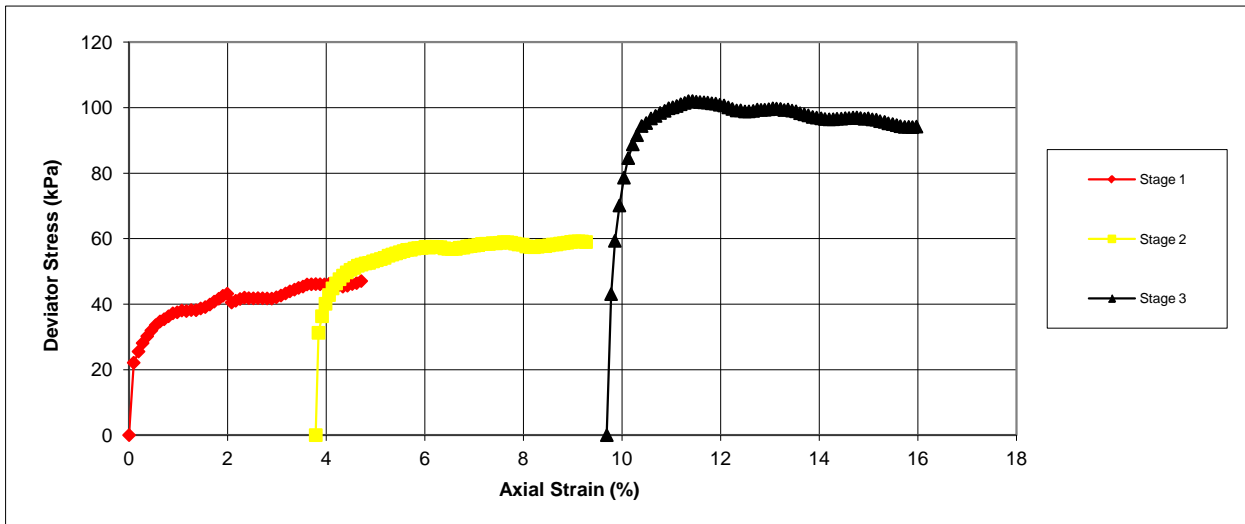
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	

Shearing Stage



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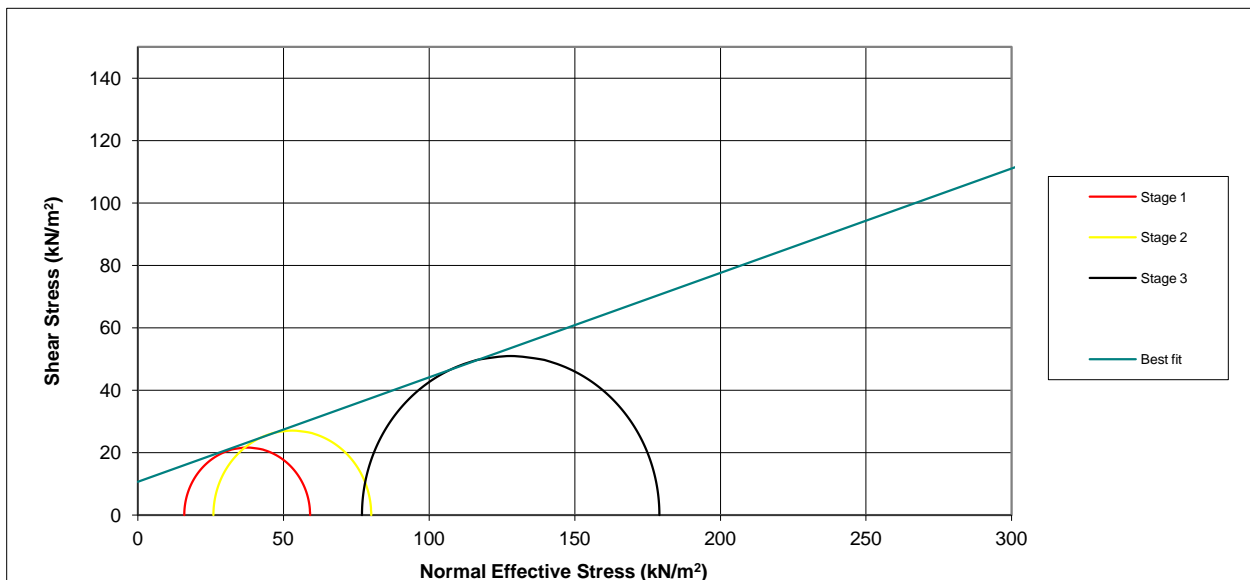
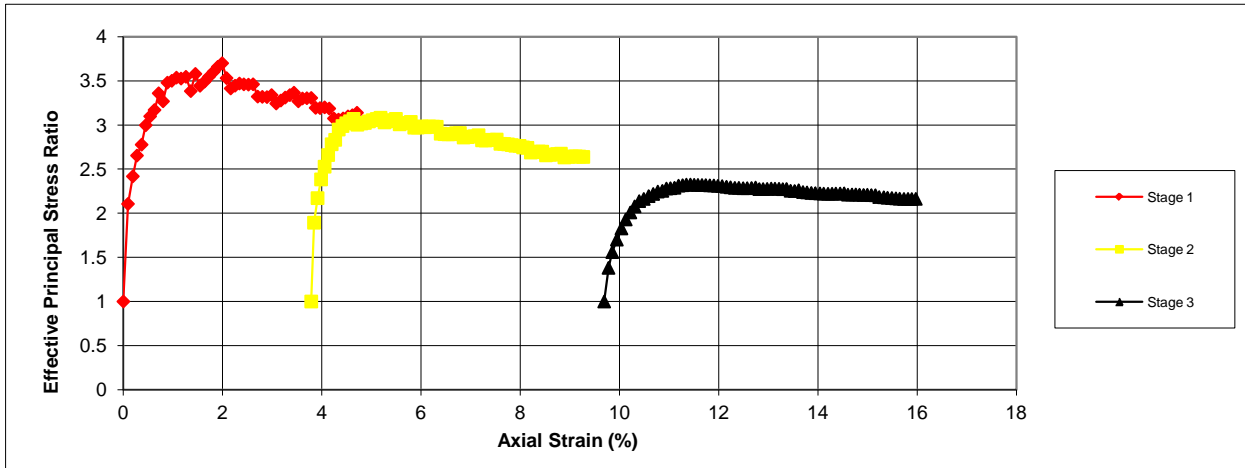
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	

Shearing Stage



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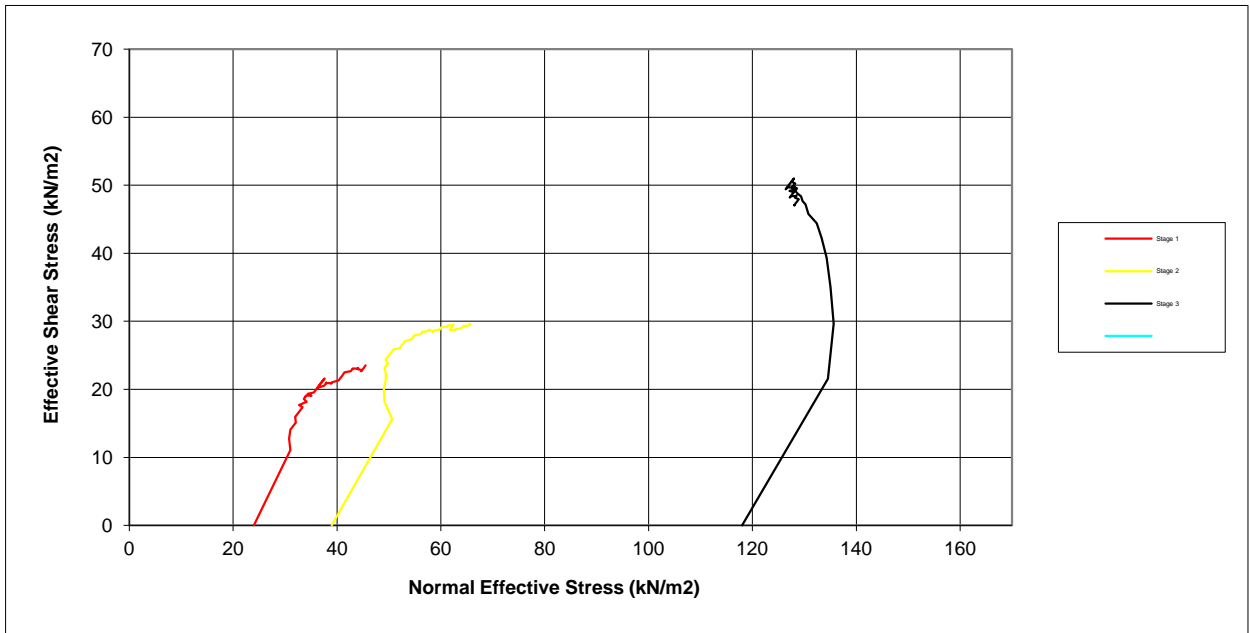
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	

Shearing Stage



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BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		11
Depth	from(m)	3.00
Depth	to(m)	



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		16
Depth	m	5
Date		19/03/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Dark grey sl silty sl shell fragments firm CLAY

Initial Specimen Conditions

Height	mm	202.00
Diameter	mm	102.00
Area	mm ²	8171.28
Volume	cm ³	1650.60
Mass	g	3210.30
Dry Mass	g	2318.00
Density	Mg/m ³	1.94
Dry Density	Mg/m ³	1.40
Moisture Content	%	38
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	27
Density	Mg/m ³	1.85
Dry Density	Mg/m ³	1.46

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Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	16
Depth	5 m
Date	19/03/2017

Test Setup

Date started	11/03/2017
Date Finished	18/03/2017
Top Drain Used	y
Base Drain Used	y
Side Drains Used	y
Pressure System Number	P3
Cell Number	C3

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	300.00
Final Pore Pressure	kPa	293.00
Final B Value		1.01

Consolidation

Effective Pressure	kPa	30.00	60.00	120.00
Cell Pressure	kPa	300.00	300.00	300.00
Back Pressure	kPa	270.00	240.00	180.00
Excess Pore Pressure	kPa	23.00	30.00	70.00
Pore Pressure at End	kPa	270.00	240.00	180.00
Consolidated Volume	cm ³	1623.00	1610.30	1587.10
Consolidated Height	mm	200.87	194.19	186.49
Consolidated Area	mm ²	8080.19	8292.41	8510.67
Vol. Compressibility	m ² /MN	0.06193	0.03260	0.08004
Consolidation Coef.	m ² /yr.	0.53646	0.26446	0.10668

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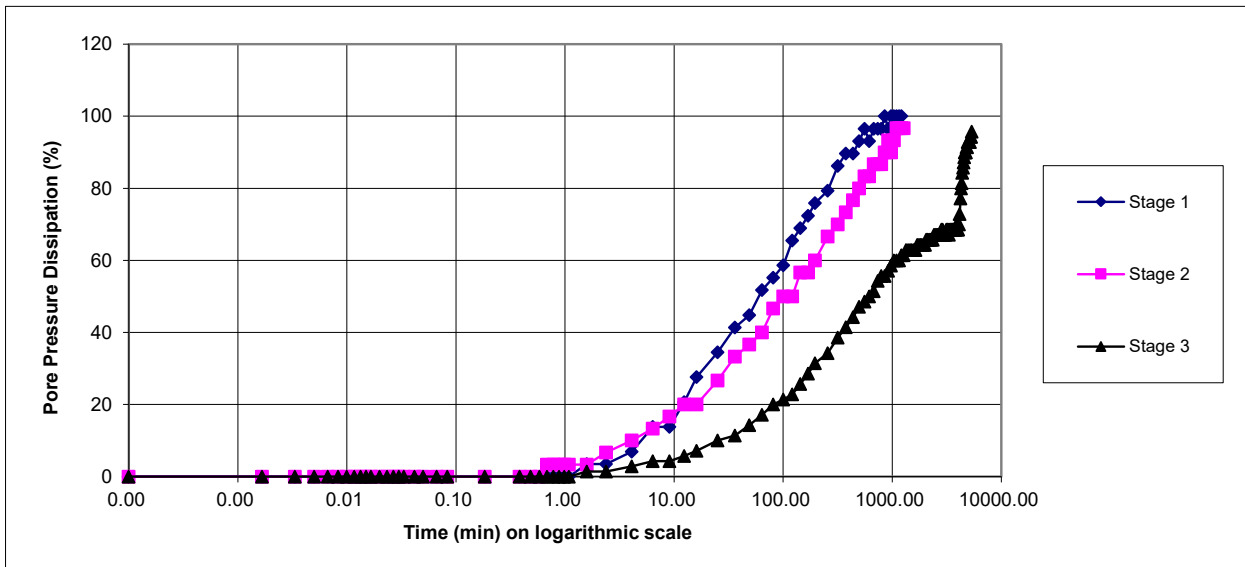
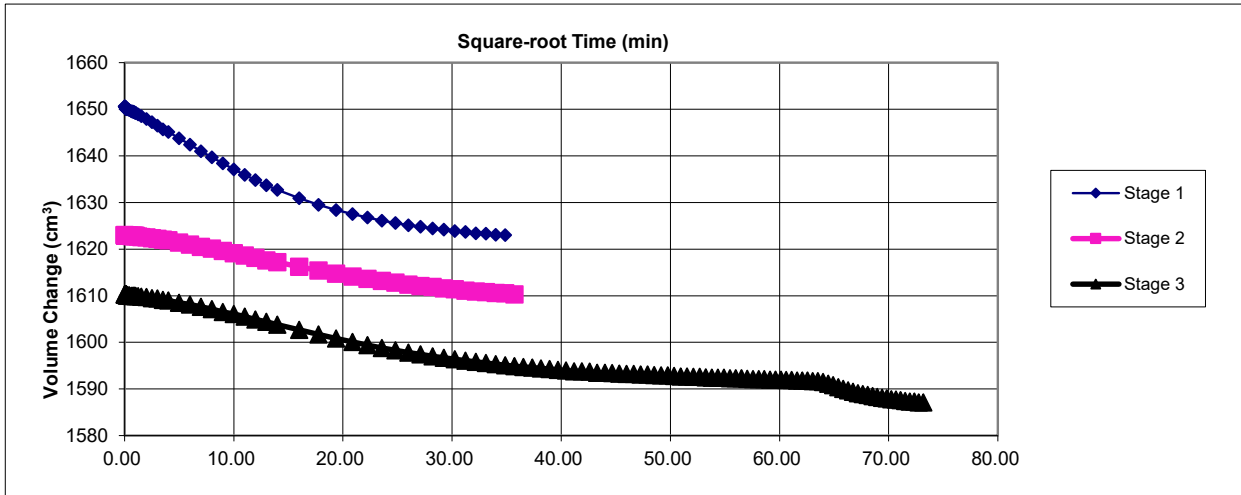
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	16
Depth	5 m
Date	19/03/2017

Consolidation Stage



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Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		16
Depth	m	5
Date		19/03/2017

Shearing

Initial Cell Pressure	kPa	300	300	300
Initial Pore Pressure	kPa	270	240	180
Rate of Strain	mm/min	0.0109	0.0052	0.0020
Max Deviator Stress				
Axial Strain		3.908	7.471	12.712
Axial Stress	kPa	84.911	117.02	166.86
Cor. Deviator stress	kPa	81.963	112.72	162.28
Effective Major Stress	kPa	106.963	154.72	235.28
Effective Minor Stress	kPa	26.000	42.00	73.00
Effective Stress Ratio		4.114	3.684	3.22
s'	kPa	66.482	98.36	154.14
t'	kPa	40.482	56.36	81.14
Max Effective Principle Stress Ratio				
Axial Strain		1.882	5.071	10.997
Axial Stress	kPa	74.194	107.205	163.571
Cor. Deviator stress	kPa	73.901	103.167	159.091
Effective Major Stress	kPa	93.901	140.167	229.091
Effective Minor Stress	kPa	20.000	37.000	70.000
Effective Stress Ratio		4.695	3.788	3.273
s'	kPa	56.950	88.583	149.545
t'	kPa	36.950	51.583	79.545
Shear Resistance Angle	degs	27.0		
Cohesion c'	kPa	12		

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Checked and Approved By

27/03/17

Date

Client Ref

UA008426-01

Northstowe Phase 2

Contract No

24142

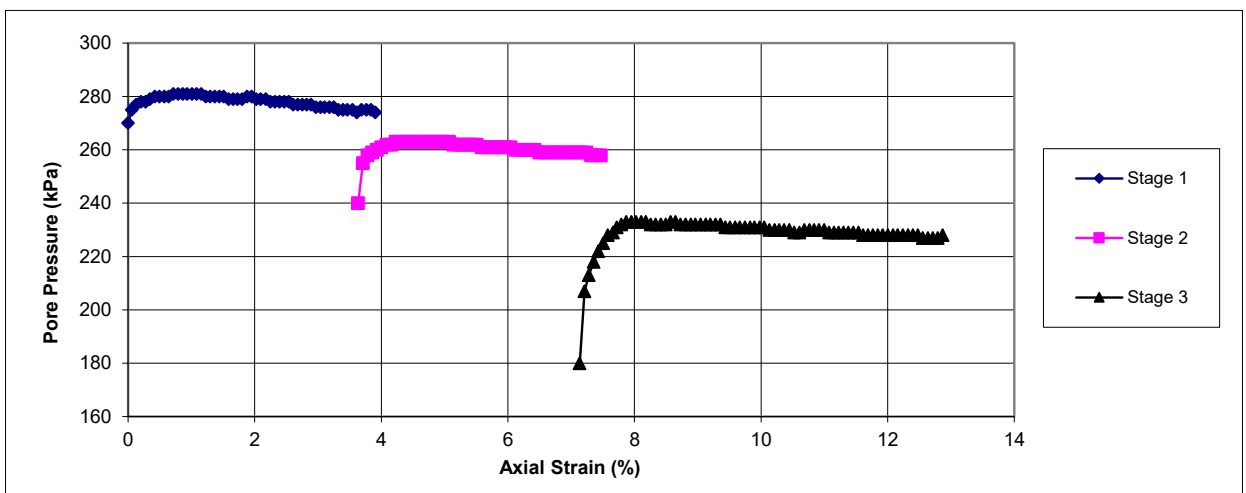
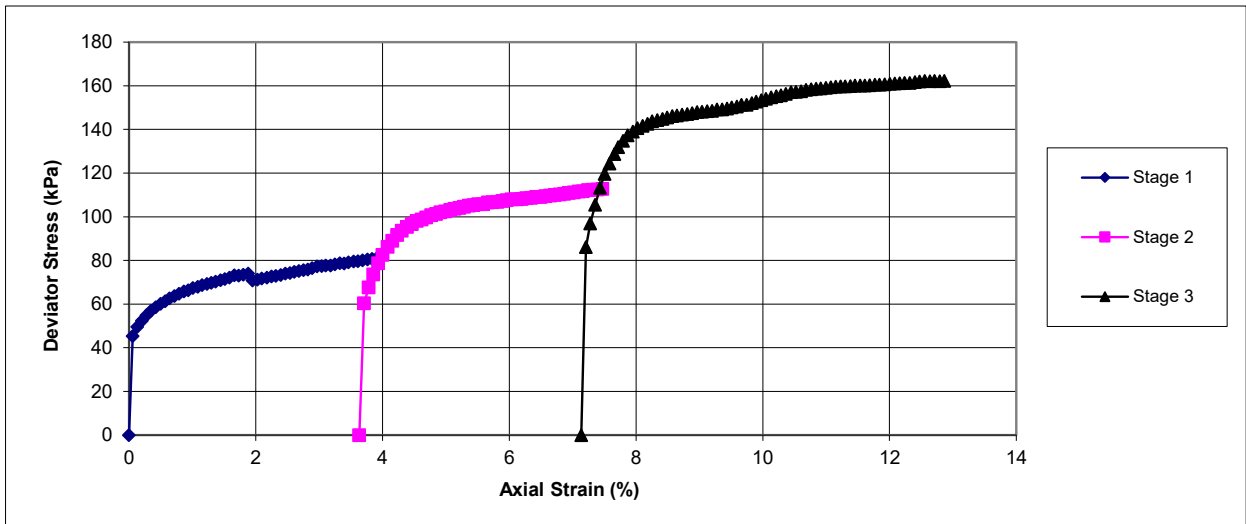
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		16
Depth	m	5
Date		19/03/2017

Shearing Stage



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Checked and Approved By

27/03/17
Date

Client Ref
UA008426-01

Contract No

24142

Northstowe Phase 2

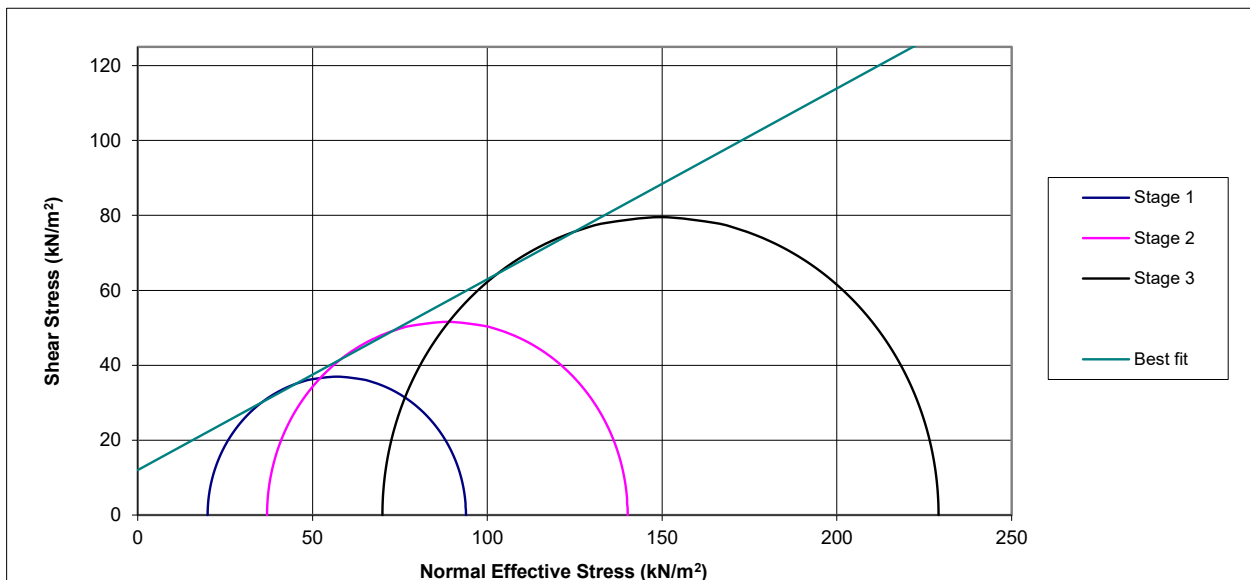
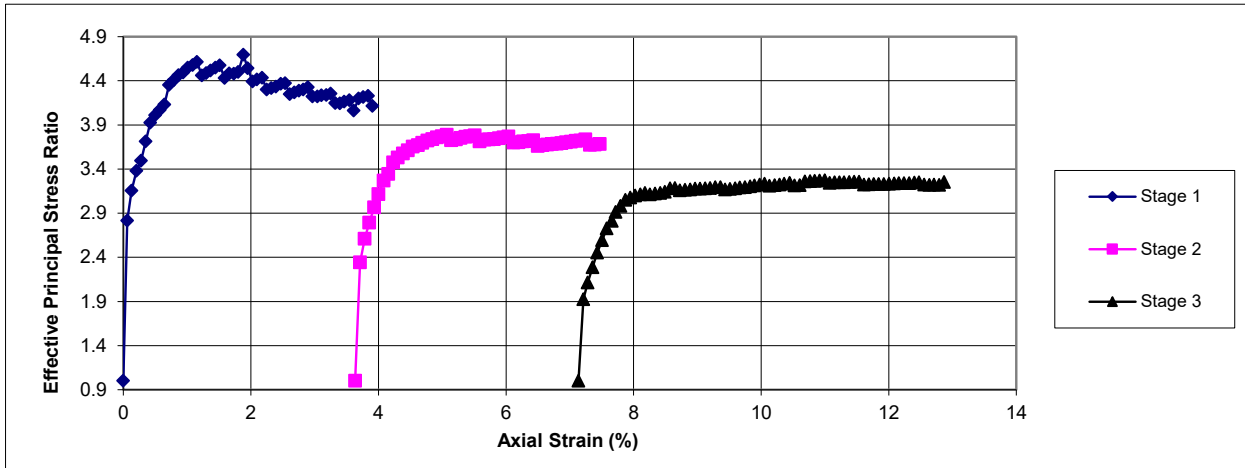
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	16
Depth	5 m
Date	19/03/2017

Shearing Stage



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27/03/17

Date

Client Ref

UA008426-01

Contract No

24142

Northstowe Phase 2

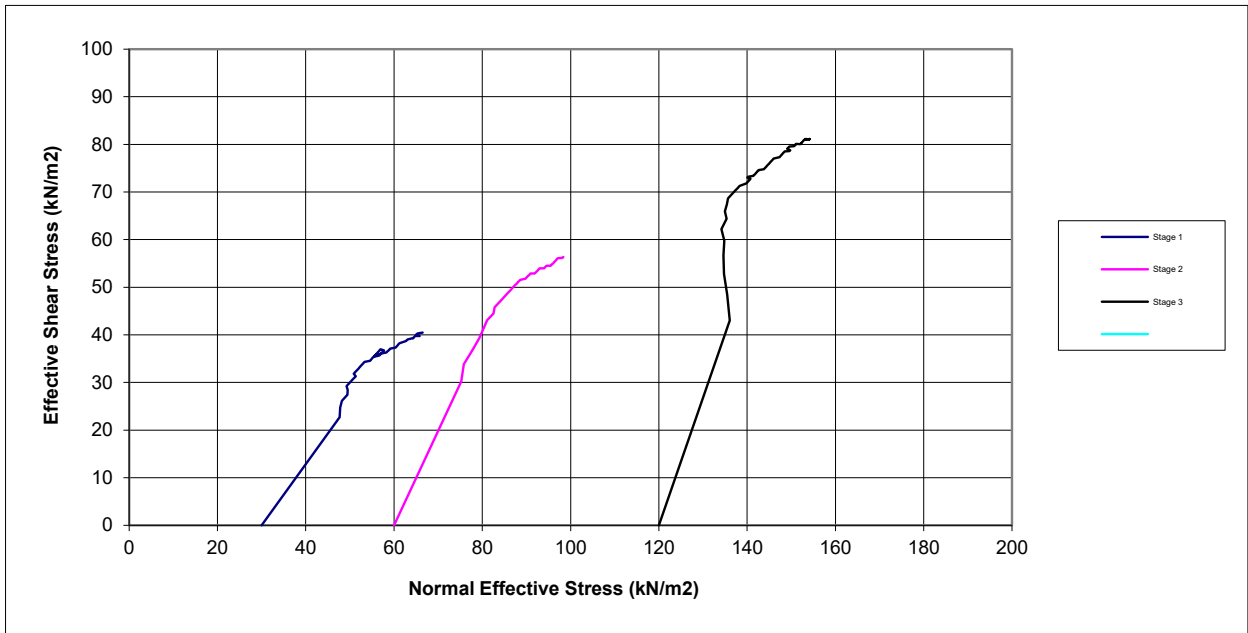
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	16
Depth	5 m
Date	19/03/2017

Shearing Stage



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27/03/17

Date

Client Ref

UA008426-01

Northstowe Phase 2

Contract No

24142

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		26
Depth	m	11
Date		17/04/2017
Disturbed / Undisturbed		Undisturbed

Description of Specimen

Brown sl silty stiff CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1732.95
Mass	g	3438.10
Dry Mass	g	2687.70
Density	Mg/m ³	1.98
Dry Density	Mg/m ³	1.55
Moisture Content	%	28
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	28
Density	Mg/m ³	2.13
Dry Density	Mg/m ³	1.67

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Client Ref

UA008426-01

Contract No

34142

Northstowe Phase 2

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	26
Depth	11 m
Date	17/04/2017

Test Setup

Date started	05/04/2017
Date Finished	16/04/2017
Top Drain Used	y
Base Drain Used	y
Side Drains Used	y
Pressure System Number	P13
Cell Number	C13

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	500.00
Final Pore Pressure	kPa	493.00
Final B Value		0.99

Consolidation

Effective Pressure	kPa	100.00	200.00	300.00
Cell Pressure	kPa	500.00	500.00	500.00
Back Pressure	kPa	400.00	300.00	200.00
Excess Pore Pressure	kPa	93.00	103.00	150.00
Pore Pressure at End	kPa	400.00	300.00	200.00
Consolidated Volume	cm ³	1684.55	1655.75	1607.95
Consolidated Height	mm	202.10	193.82	186.30
Consolidated Area	mm ²	8336.70	8543.34	8632.68
Vol. Compressibility	m ² /MN	0.06982	0.05699	0.14435
Consolidation Coef.	m ² /yr.	0.13665	0.04362	0.03048

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UA008426-01

Northstowe Phase 2

Contract No

34142

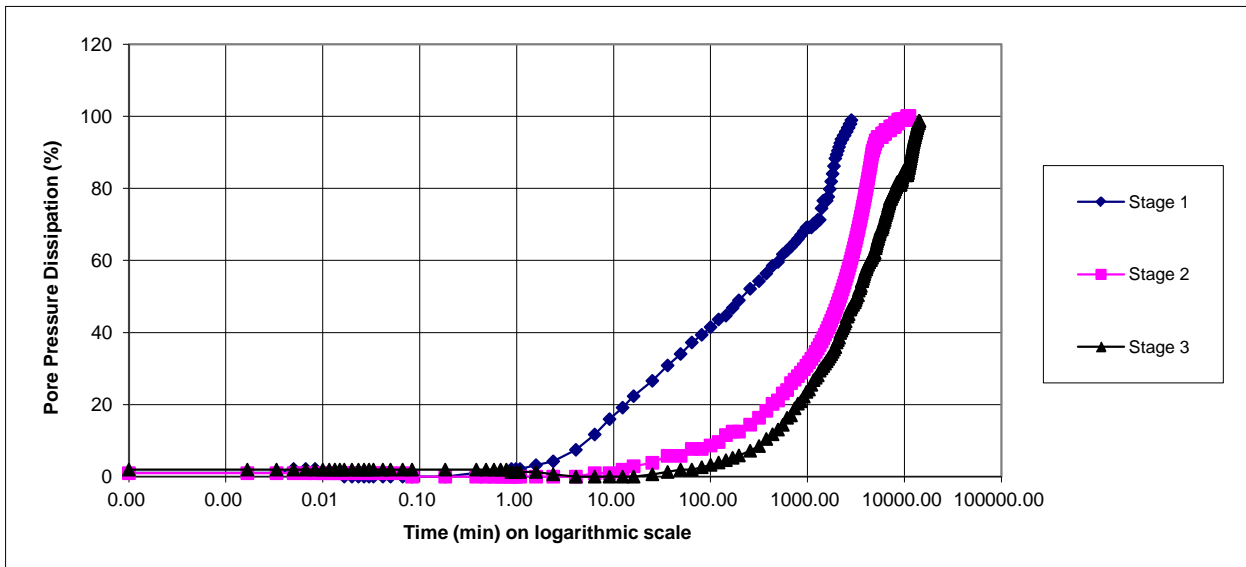
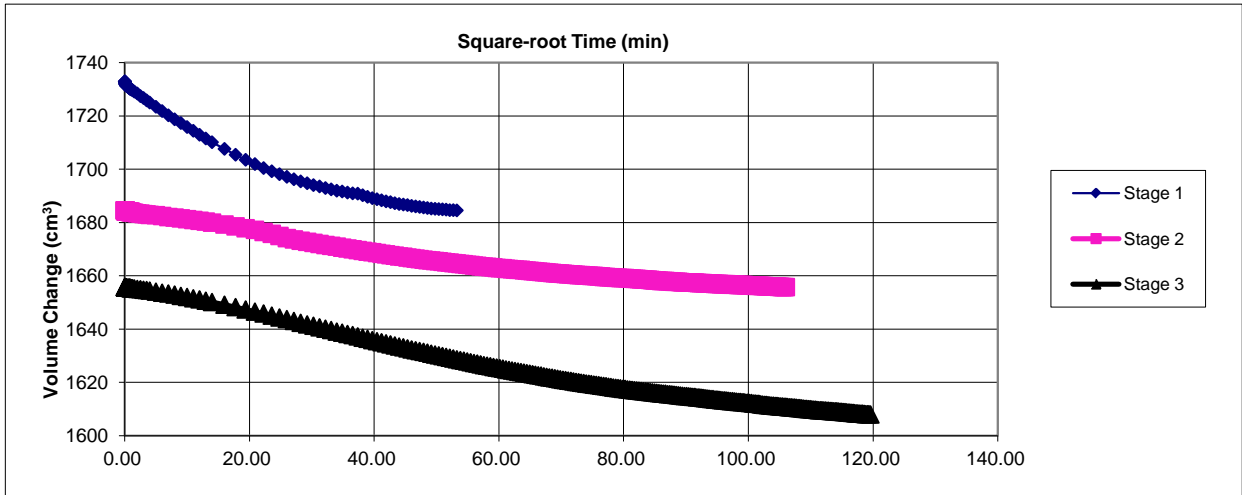
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	26
Depth	11 m
Date	17/04/2017

Consolidation Stage



reg. 13

Checked and Approved By

12/04/17
Date

Client Ref
UA008426-01

Northstowe Phase 2

Contract No

34142

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	26
Depth	11 m
Date	17/04/2017

Shearing

Initial Cell Pressure	kPa	500	500	500
Initial Pore Pressure	kPa	400	300	200
Rate of Strain	mm/min	0.0027	0.0008	0.0006
Max Deviator Stress				
Axial Strain		1.593	5.927	8.931
Axial Stress	kPa	91.033	128.63	197.75
Cor. Deviator stress	kPa	91.867	124.52	193.41
Effective Major Stress	kPa	167.867	253.52	422.41
Effective Minor Stress	kPa	77.000	129.00	229.00
Effective Stress Ratio		2.180	1.965	1.84
s'	kPa	122.433	191.26	325.71
t'	kPa	45.433	62.26	96.71
Max Effective Principle Stress Ratio				
Axial Strain		1.593	5.927	8.931
Axial Stress	kPa	91.033	128.632	197.751
Cor. Deviator stress	kPa	90.867	124.515	193.411
Effective Major Stress	kPa	167.867	253.515	422.411
Effective Minor Stress	kPa	77.000	129.000	229.000
Effective Stress Ratio		2.180	1.965	1.845
s'	kPa	122.433	191.258	325.706
t'	kPa	45.433	62.258	96.706
Shear Resistance Angle	degs	14.5		
Cohesion c'	kPa	15		

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Northstowe Phase 2

Contract No

34142

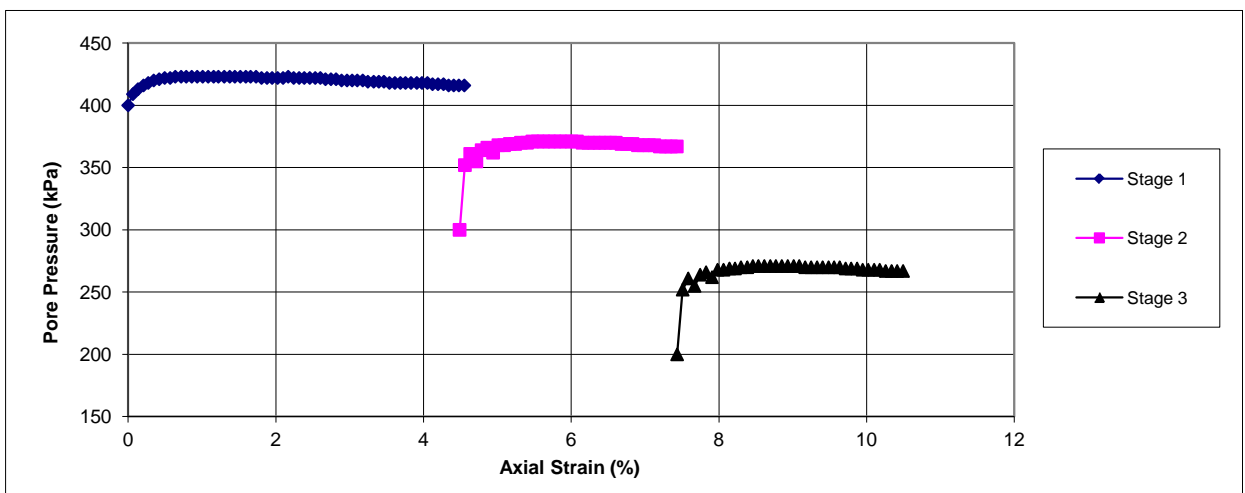
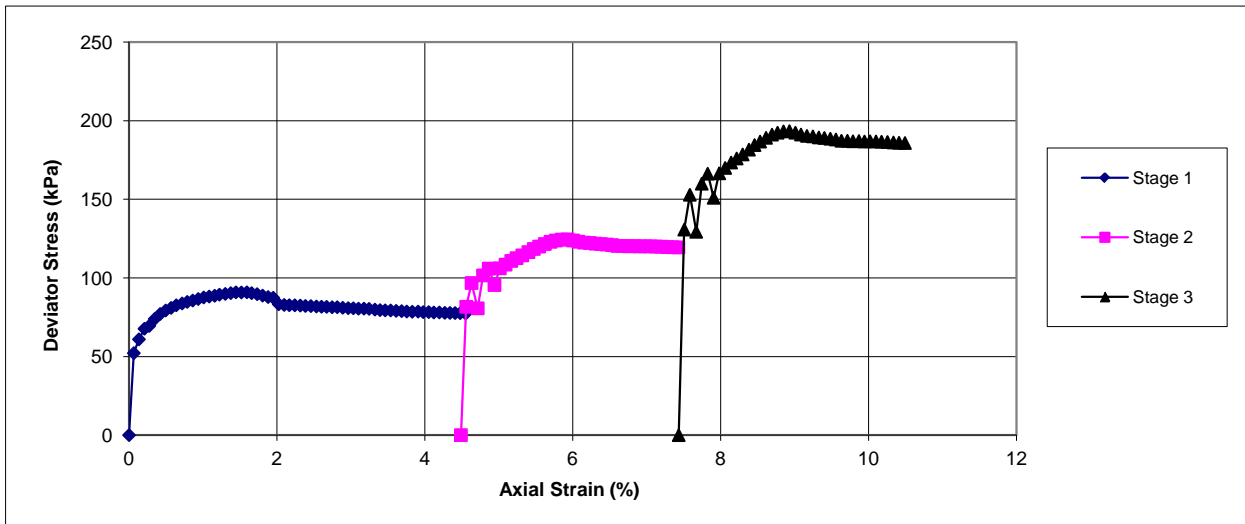
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	26
Depth	11 m
Date	17/04/2017

Shearing Stage



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Checked and Approved By

12/04/17
Date

Client Ref
UA008426-01

Northstowe Phase 2

Contract No

34142

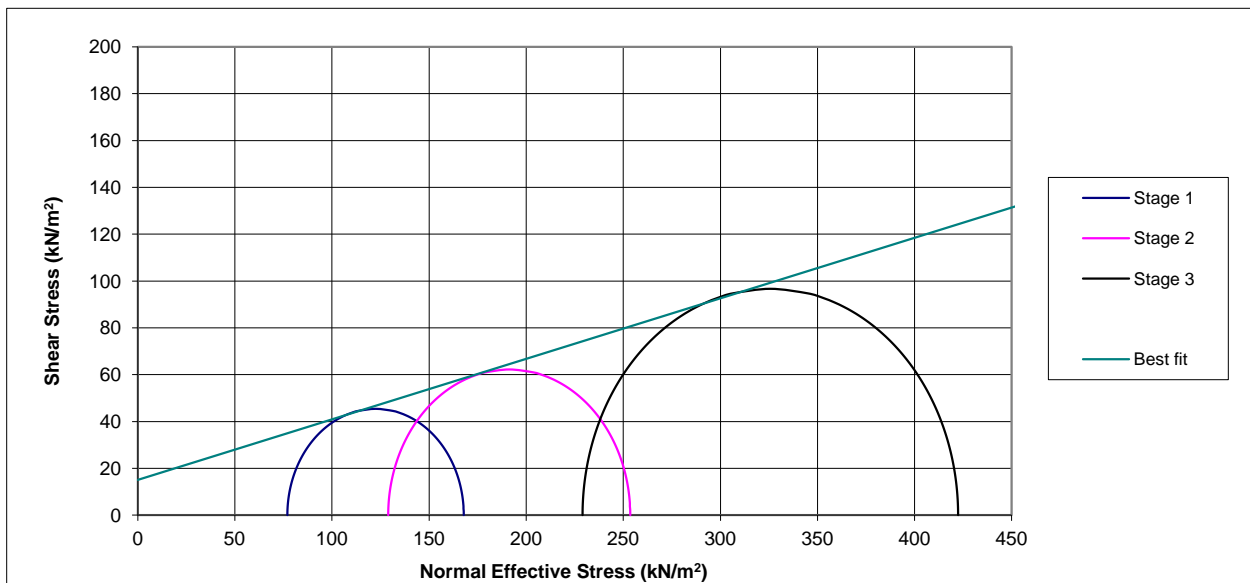
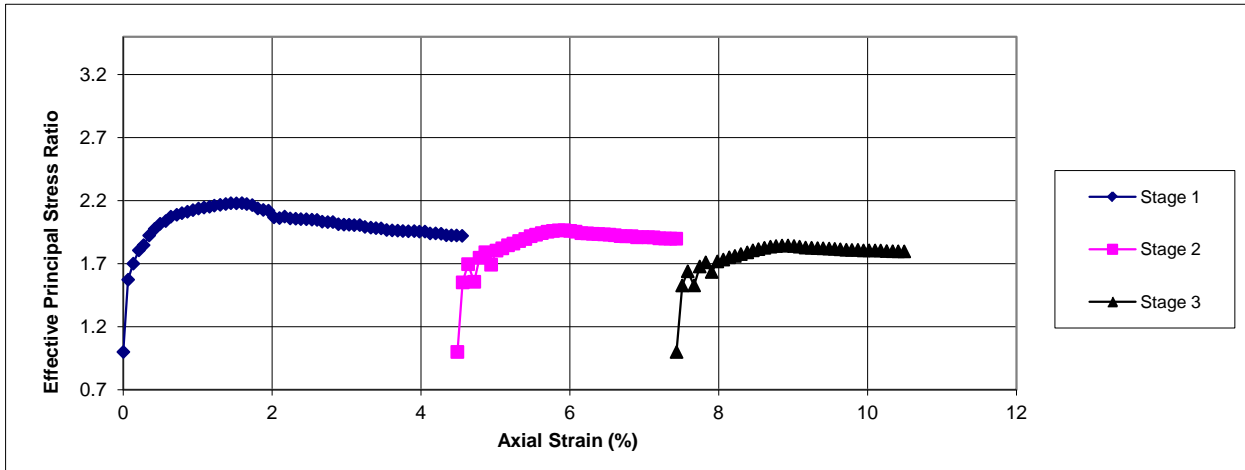
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	26
Depth	11 m
Date	17/04/2017

Shearing Stage



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12/04/17

Date

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UA008426-01

Contract No

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Northstowe Phase 2

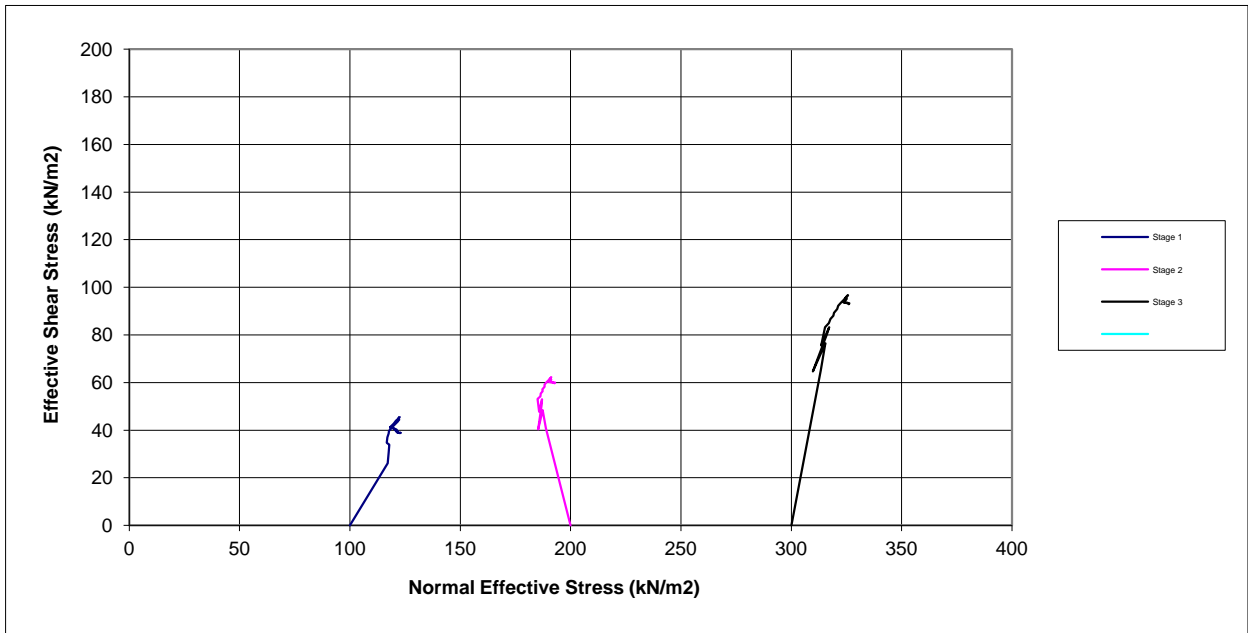
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole	BH1206
Sample No.	26
Depth	11 m
Date	17/04/2017

Shearing Stage



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Checked and Approved By

12/04/17

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Northstowe Phase 2

Contract No

34142

Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		26
Depth	m	11
Date		17/04/2017



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Date

Client Ref

UA008426-01

Northstowe Phase 2

Contract No

34142

Consolidated Undrained Triaxial Compression Test
BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		
Depth	m	23.00-23.45
Date		12/03/2017
Disturbed / Undisturbed		undisturbed

Description of Specimen

Greyish brown sl silty firm CLAY

Initial Specimen Conditions

Height	mm	204.00
Diameter	mm	104.00
Area	mm ²	8494.87
Volume	cm ³	1732.95
Mass	g	3516.90
Dry Mass	g	2835.10
Density	Mg/m ³	2.03
Dry Density	Mg/m ³	1.64
Moisture Content	%	24
Specific Gravity	kN/m ³	2.65
	(assumed/measured)	assumed

Final Specimen Conditions

Moisture Content	%	24
Density	Mg/m ³	2.17
Dry Density	Mg/m ³	1.75

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Northstowe Phase 2

Client Ref
UA008426-01

Contract No

34142

Consolidated Undrained Triaxial Compression Test
BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		
Depth	m	23.00-23.45
Date		12/03/2017

Test Setup

Date started		21/02/2017
Date Finished		11/03/2017
Top Drain Used		y
Base Drain Used		y
Side Drains Used		y
Pressure System Number		P4
Cell Number		C4

Saturation

Cell Pressure Incr.	kPa	100.00
Back Pressure Incr.	kPa	95.00
Differential Pressure	kPa	5.00
Final Cell Pressure	kPa	500.00
Final Pore Pressure	kPa	580.00
Final B Value		0.95

Consolidation

Effective Pressure	kPa	200.00	400.00	800.00
Cell Pressure	kPa	600.00	600.00	900.00
Back Pressure	kPa	400.00	200.00	100.00
Excess Pore Pressure	kPa	200.00	400.00	479.00
Pore Pressure at End	kPa	400.00	200.00	100.00
Consolidated Volume	cm ³	1680.35	1647.75	1622.55
Consolidated Height	mm	201.94	191.15	179.61
Consolidated Area	mm ²	8322.97	8621.13	9034.46
Vol. Compressibility	m ² /MN	0.07588	0.09700	0.15294
Consolidation Coef.	m ² /yr.	0.19367	0.18584	0.46431

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Date

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Contract No

34142



Northstowe Phase 2

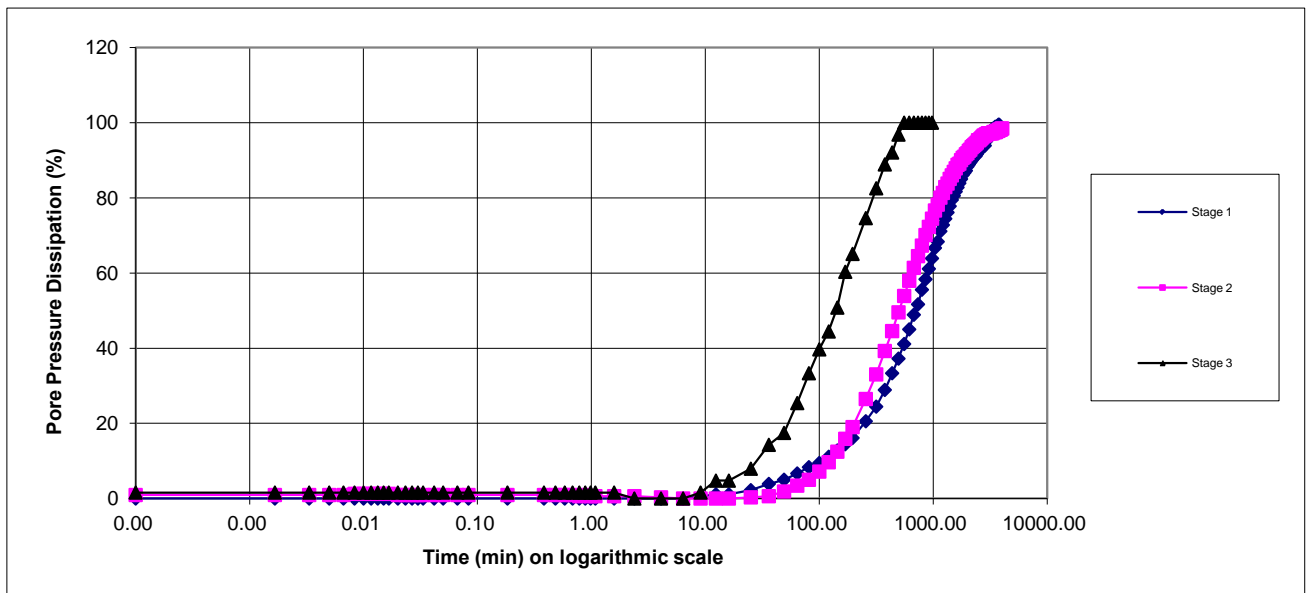
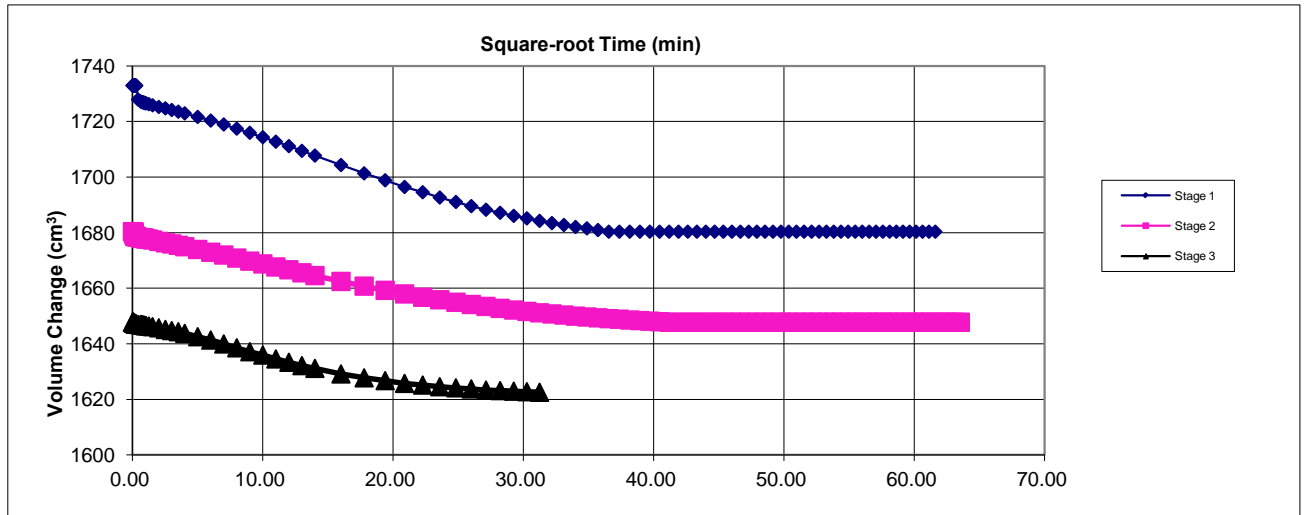
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		
Depth	m	23.00-23.45
Date		12/03/2017

Consolidation Stage



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Date



Northstowe Phase 2

Client Ref
UA008426-01

Contract No

34142

Consolidated Undrained Triaxial Compression Test
BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		
Depth	m	23.00-23.45
Date		12/03/2017

Shearing

Initial Cell Pressure	kPa	600	600	900
Initial Pore Pressure	kPa	400	200	100
Rate of Strain	mm/min	0.0038	0.0035	0.0081

Max Deviator Stress

Axial Strain		6.066	11.849	14.039
Axial Stress	kPa	236.218	541.87	1191.27
Cor. Deviator stress	kPa	233.117	537.13	1186.63
Effective Major Stress	kPa	321.117	768.13	1829.63
Effective Minor Stress	kPa	89.000	231.00	643.00
Effective Stress Ratio		3.608	3.325	2.85
s'	kPa	205.058	499.57	1236.32
t'	kPa	116.058	268.57	593.32

Max Effective Principle Stress Ratio

Axial Strain		3.095	7.994	14.039
Axial Stress	kPa	211.089	510.258	1191.274
Cor. Deviator stress	kPa	207.211	505.926	1186.634
Effective Major Stress	kPa	281.211	749.926	1829.634
Effective Minor Stress	kPa	74.000	244.000	643.000
Effective Stress Ratio		3.800	3.073	2.845
s'	kPa	177.605	496.963	1236.317
t'	kPa	103.605	252.963	593.317
Shear Resistance Angle	degs	27.5		
Cohesion c'	kPa	28		

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Contract No

34142



Northstowe Phase 2

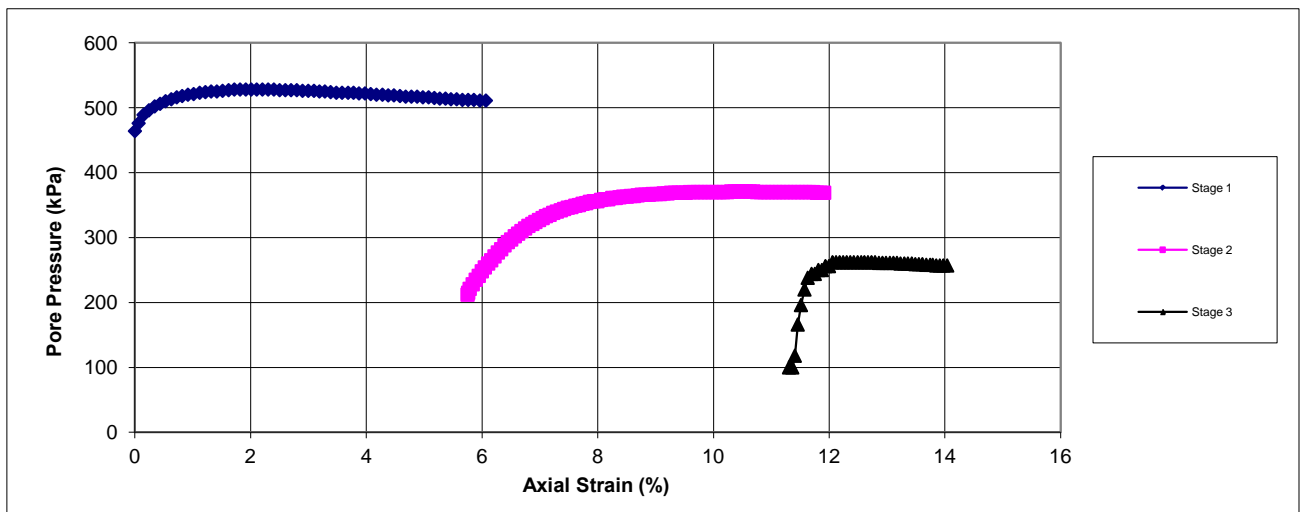
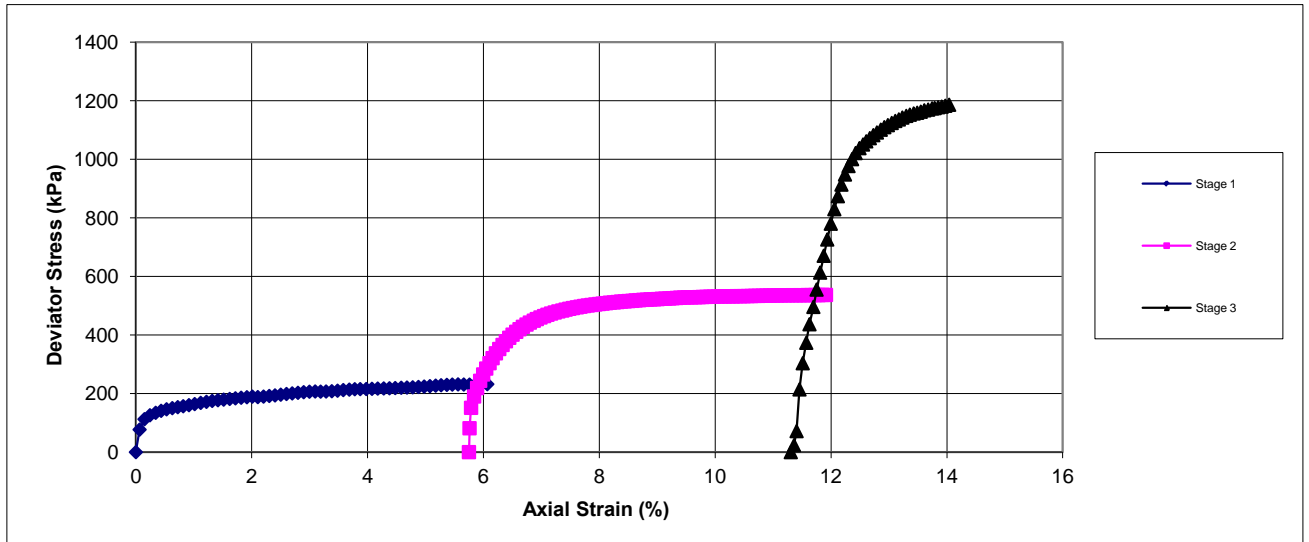
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		
Depth	m	23.00-23.45
Date		12/03/2017

Shearing Stage



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13/03/17

Date



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Client Ref
UA008426-01

Contract No

34142

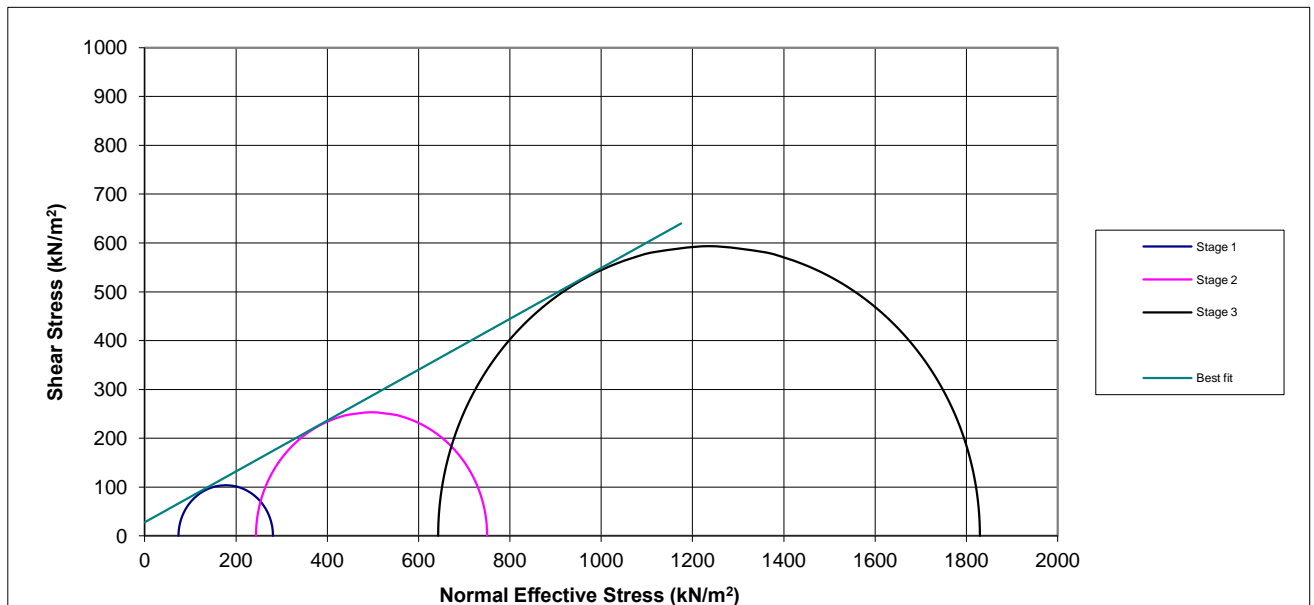
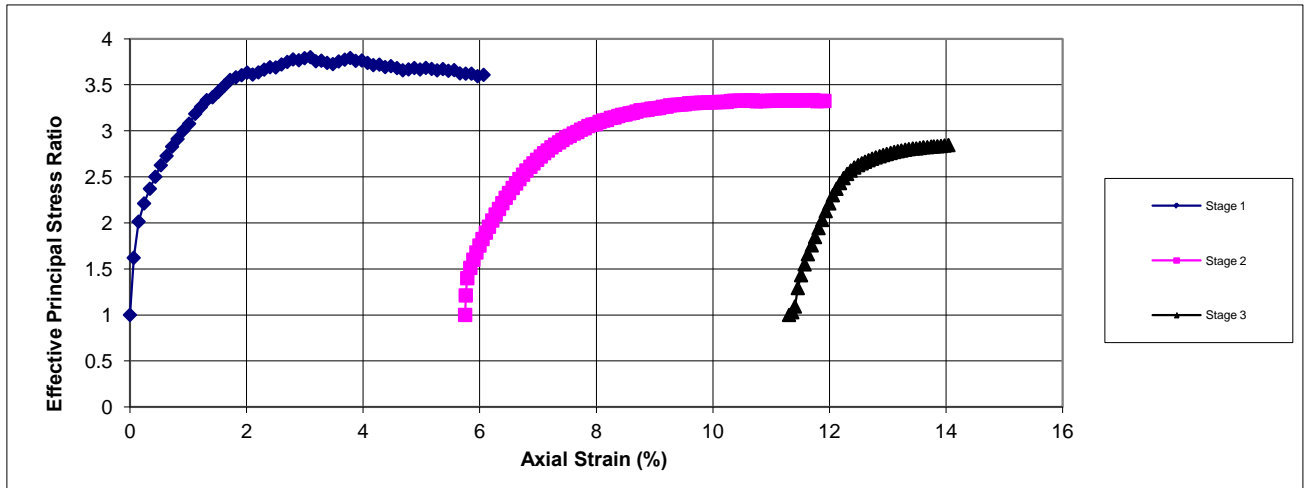
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		
Depth	m	23.00-23.45
Date		12/03/2017

Shearing Stage



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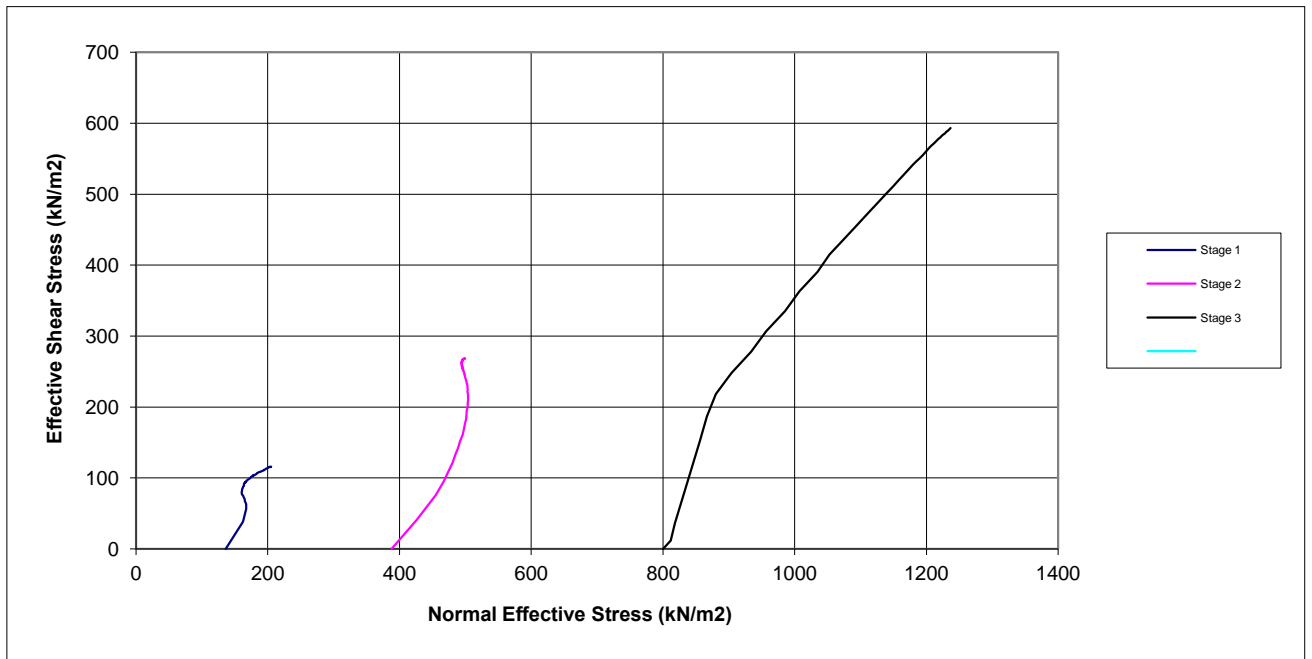
Consolidated Undrained Triaxial Compression Test

BS 1377 : Part 8 : 1990

Specimen Details

Borehole		BH1206
Sample No.		
Depth	m	23.00-23.45
Date		12/03/2017

Shearing Stage



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Northstowe Phase 2

Client Ref
UA008426-01

Contract No

34142

Test Report:

Consolidated Undrained Triaxial Compression Test
BS 1377 : Part 8 : 1990

Client ref:	UA008426-01
Location:	Northstowe Phase 2
Contract Number:	34142
Hole Number:	BH1206
Sample Number:	
Depth (m) :	23.00-23.45
Sample Type :	U



POST TEST SPECIMEN



SPECIMEN SPLIT

APPENDIX G

GEO-ENVIRONMENTAL LABORATORY TEST DATA



reg. 13
Arcadis Consulting (UK) Ltd
Aston Cross Business Village
Birmingham
B6 5RQ

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

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

e: reg. 13 @arcadis.com

Combined Report : Northstowe UA008426 Part A

Project / Site name:	Northstowe	Samples received on:	25/11/2016
Your job number:	UA008426	Samples instructed on:	25/11/2016
Your order number:		Analysis completed by:	02/12/2016
Report Issue Number:	1	Report issued on:	27/02/2017
Samples Analysed:	187 soil samples - 5 water samples - 17 leachate samples		

reg. 13
Signe

reg. 13
reg. 13
For & on behalf of i2 Analytical Ltd.

reg. 13
Signed:

reg. 13
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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Combined Report Northstowe UA008426 Part A
Project / Site name: Northstowe

Lab Sample Number	668473				668474		668475		668476		668477	
Sample Reference	TP1119				TP1119		TP1118		TP1118		TP1117	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.00-0.25				0.50-0.60		0.00-0.25		0.30-0.40		0.30-0.40	
Date Sampled	29/11/2016				29/11/2016		29/11/2016		29/11/2016		29/11/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	13	6.9	19	14	10	10	10	10	
Total mass of sample received	kg	0.001	NONE	1.6	2.0	1.3	1.7	1.7	1.7	1.7	1.7	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	8.1	7.4	7.9	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0076	0.0058	0.016	0.011	0.010
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	3.6	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.76	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.6	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.2	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.39	< 0.10	24	1.7	1.5
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	3.5	0.15	0.24
Fluoranthene	mg/kg	0.1	MCERTS	0.79	< 0.10	48	3.5	2.4
Pyrene	mg/kg	0.1	MCERTS	0.71	< 0.10	39	2.9	2.0
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.38	< 0.10	22	1.4	0.89
Chrysene	mg/kg	0.05	MCERTS	0.42	< 0.05	22	1.6	1.3
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.26	< 0.10	32	1.2	0.82
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.25	< 0.10	14	0.96	0.57
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.24	< 0.10	25	1.2	0.72
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	12	0.44	0.26
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	2.7	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	14	0.64	0.42

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	3.44	< 1.60	264	15.7	11.1
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	15	9.8	14	11
Boron (water soluble)	mg/kg	0.2	MCERTS	1.4	0.6	1.7	1.5	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	< 0.2	1.3	0.2	0.3
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	19	22	25	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	10	22	13	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	49	9.4	150	20	29
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	17	19	17	21	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	39	48	36	48	50
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	65	35	160	59	58



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Lab Sample Number	668473				668474	668475	668476	668477
Sample Reference	TP1119				TP1119	TP1118	TP1118	TP1117
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.00-0.25				0.50-0.60	0.00-0.25	0.30-0.40	0.30-0.40
Date Sampled	29/11/2016				29/11/2016	29/11/2016	29/11/2016	29/11/2016
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit	Accreditation	668473	668474	668475	668476	668477
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit	Accreditation	668473	668474	668475	668476	668477
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	41	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	48	< 10	< 10

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit	Accreditation	668473	668474	668475	668476	668477
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	1.1	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	23	< 2.0	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	320	14	14
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	780	23	30
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	16	< 10	1100	39	46



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Lab Sample Number	668478				668479		668480		668481		668482	
Sample Reference	TP1114				TP1114		TP1122		TP1122		TP1110	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.20-0.30				1.00-1.10		0.10-0.20		0.70-0.80		1.10-1.30	
Date Sampled	30/11/2016				30/11/2016		30/11/2016		30/11/2016		30/11/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	8.0	9.3	12	11	14				
Total mass of sample received	kg	0.001	NONE	1.9	1.8	1.6	1.8	1.9				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.2	8.1	8.1	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.14	0.013	0.014	0.0088	0.057
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	0.4	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.91	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	2.0	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.6	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.69	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.1	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.57	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.70	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.57	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.23	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.32	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	8.58	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	13	12	13	4.8
Boron (water soluble)	mg/kg	0.2	MCERTS	1.0	0.2	1.3	0.7	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	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	18	20	27	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.2	11	13	18	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	9.0	7.9	19	12	5.6
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	19	18	29	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	40	39	42	50	24
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	32	28	55	41	29



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Lab Sample Number				668478	668479	668480	668481	668482
Sample Reference				TP1114	TP1114	TP1122	TP1122	TP1110
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20-0.30	1.00-1.10	0.10-0.20	0.70-0.80	1.10-1.30
Date Sampled				30/11/2016	30/11/2016	30/11/2016	30/11/2016	30/11/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of Detection	Accreditation Status	668478	668479	668480	668481	668482
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of Detection	Accreditation Status	668478	668479	668480	668481	668482
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	3.7
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	29
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	19
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	52

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of Detection	Accreditation Status	668478	668479	668480	668481	668482
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	12	< 10	12
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	20	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	33	< 10	19



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Lab Sample Number	668483				668484		668485		668486		668487	
Sample Reference	TP1107				TP1107		TP1116		TP1123		TP1123	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.20				1.00-1.10		0.60-1.00		0.00-0.20		0.70-1.00	
Date Sampled	28/11/2016				28/11/2016		29/11/2016		29/11/2016		29/11/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	18	9.9	12	17	15				
Total mass of sample received	kg	0.001	NONE	1.1	1.9	1.7	1.1	1.7				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	8.2	8.2	8.0	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.022	0.10	0.028	0.023	0.018
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.72	< 0.10	< 0.10	0.39	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	1.7	< 0.10	< 0.10	0.73	< 0.10
Pyrene	mg/kg	0.1	MCERTS	1.5	< 0.10	< 0.10	0.61	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.64	< 0.10	< 0.10	0.25	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.97	< 0.05	< 0.05	0.48	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.68	< 0.10	< 0.10	0.22	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.53	< 0.10	< 0.10	0.23	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.60	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	7.34	< 1.60	< 1.60	2.91	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.7	6.4	6.1	11	11
Boron (water soluble)	mg/kg	0.2	MCERTS	3.7	0.3	< 0.2	2.3	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.2	0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	15	19	20	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	11	8.7	13	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29	5.7	5.8	19	9.5
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	14	16	16	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	39	27	39	39	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	54	27	26	45	68



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Lab Sample Number				668483	668484	668485	668486	668487
Sample Reference				TP1107	TP1107	TP1116	TP1123	TP1123
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	1.00-1.10	0.60-1.00	0.00-0.20	0.70-1.00
Date Sampled				28/11/2016	28/11/2016	29/11/2016	29/11/2016	29/11/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	668483	668484	668485	668486	668487
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Parameter	Unit	Limit of detection	Accreditation Status	668483	668484	668485	668486	668487
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

Parameter	Unit	Limit of detection	Accreditation Status	668483	668484	668485	668486	668487
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	13	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	39	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	53	< 10	< 10	12	< 10



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Project / Site name: Northstowe

Lab Sample Number	668488				668489	668490	668491	668751
Sample Reference	TP722				BH1107	BH1107	BH1108	TP1117
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30-0.50				0.00-0.52	1.90-2.50	0.10-1.00	1.75-1.85
Date Sampled	28/11/2016				28/11/2016	28/11/2016	29/11/2016	Deviating
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	%	N/A	NONE	10	11	9.8	14	14
Total mass of sample received	kg	0.001	NONE	1.9	1.7	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.2	8.5	8.4	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.015	0.019	0.029	0.13	0.13
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	1.0	1.4	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	0.15	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	1.5	3.1	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	1.3	2.7	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.60	1.3	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.77	1.7	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.49	0.96	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.39	1.1	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.50	1.2	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.43	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.63	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	6.56	14.6	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	13	13	13	11
Boron (water soluble)	mg/kg	0.2	MCERTS	1.0	1.5	< 0.2	1.6	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	0.3	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	27	17	25	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	52	16	6.8	15	9.2
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	35	4.4	13	7.4
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	18	21	12	21	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	47	46	25	53	31
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	55	57	19	48	23



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Lab Sample Number				668488	668489	668490	668491	668751
Sample Reference				TP722	BH1107	BH1107	BH1108	TP1117
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.50	0.00-0.52	1.90-2.50	0.10-1.00	1.75-1.85
Date Sampled				28/11/2016	28/11/2016	28/11/2016	29/11/2016	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of Detection	Accreditation Status	668488	668489	668490	668491	668751
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of Detection	Accreditation Status	668488	668489	668490	668491	668751
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	0.4
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	4.8
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	21
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	140
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	31
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	47
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	240

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of Detection	Accreditation Status	668488	668489	668490	668491	668751
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	2.3	< 2.0	< 2.0	29
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	20	< 10	< 10	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	30	33	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	41	56	< 10	< 10	44



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Project / Site name: Northstowe

Lab Sample Number	668752				668753		668754		668755		668756	
Sample Reference	TP1117				TP1117		TP1109		TP1112		TP613	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	2.00-2.10				3.00		0.40-0.50		0.10-0.20		0.10-0.20	
Date Sampled	Deviating				Deviating		Deviating		Deviating		Deviating	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	14	13	8.8	9.7	15				
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6	8.3	7.9	8.3	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0088	0.011	0.11	0.0095	0.015
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	12	11	11	10
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.4	0.7	0.5	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	16	20	21	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	7.8	7.6	10	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	7.6	6.5	9.0	14	21
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	22	16	16	31	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38	37	43	47	51
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	31	24	34	43	51



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Project / Site name: Northstowe

Lab Sample Number				668752	668753	668754	668755	668756
Sample Reference				TP1117	TP1117	TP1109	TP1112	TP613
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.00-2.10	3.00	0.40-0.50	0.10-0.20	0.10-0.20
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	668752	668753	668754	668755	668756
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Compound	Unit	Limit of detection	Accreditation Status	668752	668753	668754	668755	668756
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

Compound	Unit	Limit of detection	Accreditation Status	668752	668753	668754	668755	668756
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	11	< 10



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Project / Site name: Northstowe

Lab Sample Number	668757				668758		668759		668760		668761	
Sample Reference	TP613				TP1106		TP1102		TP1108		TP1108	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.40-0.50				1.90-2.20		0.10-0.20		0.15-0.25		0.50-0.60	
Date Sampled	Deviating				Deviating		Deviating		Deviating		Deviating	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	17	11	12	9.4	12				
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.8	8.3	11.2	8.6
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.24	0.013	0.016	0.037	0.020
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.5	8.5	8.9	13	12
Boron (water soluble)	mg/kg	0.2	MCERTS	3.5	0.2	0.5	1.2	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	41	12	20	22	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	6.9	11	11	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	14	4.6	16	10	9.1
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	31	10	18	14	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	63	23	42	36	37
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	57	16	43	30	31



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Project / Site name: Northstowe

Lab Sample Number				668757	668758	668759	668760	668761
Sample Reference				TP613	TP1106	TP1102	TP1108	TP1108
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-0.50	1.90-2.20	0.10-0.20	0.15-0.25	0.50-0.60
Date Sampled				Deviating	Deviating	Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	668757	668758	668759	668760	668761
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	668757	668758	668759	668760	668761
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

Compound	Units	Limit of detection	Accreditation Status	668757	668758	668759	668760	668761
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10



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Project / Site name: Northstowe

Lab Sample Number				672975	672976	672977	672978	672979
Sample Reference				TP632	TP632	WS613	WS613	WS611
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	1.00-1.10	0.10-0.20	1.70-1.80	0.10-0.20
Date Sampled				02/12/2016	02/12/2016	05/12/2016	05/12/2016	05/12/2016
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	%	N/A	NONE	19	19	21	20	18
Total mass of sample received	kg	0.001	NONE	1.8	1.7	0.19	0.47	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	7.9	8.4	7.8	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	190	1700	200	4000	180
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.093	0.86	0.10	2.0	0.088
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.66
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.67
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.55
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.28
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.39
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.21
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.16
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.20
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	3.12
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	13	22	8.4	12
Boron (water soluble)	mg/kg	0.2	MCERTS	2.5	2.0	3.4	4.8	2.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	31	59	32	43
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	17	26	17	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	20	13	24	15	27
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	23	21	39	22	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	1.1	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	65	56	90	52	75
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	65	48	81	50	83



Combined Report Northstowe UA008426 Part A
Project / Site name: Northstowe

Lab Sample Number				672975	672976	672977	672978	672979
Sample Reference				TP632	TP632	WS613	WS613	WS611
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	1.00-1.10	0.10-0.20	1.70-1.80	0.10-0.20
Date Sampled				02/12/2016	02/12/2016	05/12/2016	05/12/2016	05/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	672975	672976	672977	672978	672979
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	672975	672976	672977	672978	672979
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

Compound	Units	Limit of detection	Accreditation Status	672975	672976	672977	672978	672979
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-



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Project / Site name: Northstowe

Lab Sample Number				672980	672981	672982	672983	672984
Sample Reference				WS614	WS601	WS612	WS612	WS609
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.20	0.10-0.20	1.90-2.00	0.10-0.20
Date Sampled				05/12/2016	06/12/2016	06/12/2016	06/12/2016	06/12/2016
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	%	N/A	NONE	20	20	23	19	13
Total mass of sample received	kg	0.001	NONE	1.7	1.8	1.7	1.4	0.19

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	8.5	7.8	7.9	6.3
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	110	230	240	4000	37
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.053	0.12	0.12	2.0	0.019
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.20	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.42	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.36	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.21	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.22	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.19	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	12	11	12	14
Boron (water soluble)	mg/kg	0.2	MCERTS	2.3	1.2	2.5	3.0	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	1.8	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	42	42	42	35	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	37	20	100	20	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29	19	83	13	24
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	28	28	30	23	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	67	80	72	59	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	92	62	200	57	46



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Project / Site name: Northstowe

Lab Sample Number				672980	672981	672982	672983	672984
Sample Reference				WS614	WS601	WS612	WS612	WS609
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.20	0.10-0.20	1.90-2.00	0.10-0.20
Date Sampled				05/12/2016	06/12/2016	06/12/2016	06/12/2016	06/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	672980	672981	672982	672983	672984
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	672980	672981	672982	672983	672984
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	-	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	-	< 10

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	672980	672981	672982	672983	672984
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	-	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	-	-	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	-	< 10



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Project / Site name: Northstowe

Lab Sample Number				672985	672986	672987	672988	672989
Sample Reference				WS609	WS605	TP626	TP626	TP602
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	0.10-0.20	0.10-0.20	0.40-0.70	0.10-0.20
Date Sampled				06/12/2016	06/12/2016	07/12/2016	07/12/2016	07/12/2016
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	%	N/A	NONE	11	16	12	9.9	15
Total mass of sample received	kg	0.001	NONE	1.9	1.8	1.4	1.3	1.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	Chrysotile	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	< 0.001	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	< 0.001	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.0	7.8	7.9	7.6
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	46	58	250	270	110
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.023	0.029	0.12	0.14	0.056
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.24	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.57	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.35	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.27	6.1	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.4	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.59	15	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.55	14	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.26	7.9	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.34	6.7	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.22	7.4	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.17	4.0	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.23	6.5	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	3.0	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.58	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	3.7	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	2.63	76.9	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	8.5	10	37	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	1.0	2.9	6.1	2.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	2.3	40	0.9
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	7.8	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	32	37	290	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	34	220	12000	87
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	26	88	1700	97
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	0.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	26	21	53	180	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	53	58	70	51	40
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	56	68	270	4200	180



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Project / Site name: Northstowe

Lab Sample Number				672985	672986	672987	672988	672989
Sample Reference				WS609	WS605	TP626	TP626	TP602
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	0.10-0.20	0.10-0.20	0.40-0.70	0.10-0.20
Date Sampled				06/12/2016	06/12/2016	07/12/2016	07/12/2016	07/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	672985	672986	672987	672988	672989
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	672985	672986	672987	672988	672989
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	1.5	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	7.0	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	-	13	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	-	28	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	49	-	-

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	672985	672986	672987	672988	672989
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	14	-	-



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Project / Site name: Northstowe

Lab Sample Number				672990	672991	672992	672993	672994
Sample Reference				TP612	TP614	TPSA1101	TPSA847	TPSA847
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.20	0.50-0.90	0.10-0.30	0.50-0.80
Date Sampled				07/12/2016	07/12/2016	08/12/2016	08/12/2016	08/12/2016
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	%	N/A	NONE	18	15	5.6	13	10
Total mass of sample received	kg	0.001	NONE	1.3	1.5	2.0	1.8	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	7.1	8.6	7.1	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	71	46	210	650	23
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.036	0.023	0.10	0.32	0.012
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	2.6	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.45	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.42	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.18	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.27	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	12	11	12	12
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	1.0	0.4	0.7	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	36	28	17	19	30
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	28	11	15	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	23	25	7.0	20	17
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	23	17	17	16	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	66	45	43	39	55
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	78	81	28	47	49



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Project / Site name: Northstowe

Lab Sample Number				672990	672991	672992	672993	672994
Sample Reference				TP612	TP614	TPSA1101	TPSA847	TPSA847
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.20	0.50-0.90	0.10-0.30	0.50-0.80
Date Sampled				07/12/2016	07/12/2016	08/12/2016	08/12/2016	08/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	672990	672991	672992	672993	672994
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-

Petroleum Hydrocarbons

Compound	Unit	Limit of detection	Accreditation Status	672990	672991	672992	672993	672994
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-

Compound	Unit	Limit of detection	Accreditation Status	672990	672991	672992	672993	672994
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-



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Project / Site name: Northstowe

Lab Sample Number				672995	672996	672997	672998	672999
Sample Reference				ZTR6	ZTR4b	ZTR3	ZTR3	ZTR2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-0.50	0.30-0.40	0.00-0.10	0.40-0.50	0.15-0.25
Date Sampled				07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016
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	%	N/A	NONE	7.8	13	14	7.8	12
Total mass of sample received	kg	0.001	NONE	1.7	1.5	1.6	1.7	0.15

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	Chrysotile & Amosite	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	< 0.001	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	< 0.001	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	8.1	10.1	8.6	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	41	190	170	67	21
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.020	0.095	0.086	0.033	0.011
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	0.8	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.81	< 0.10	0.41
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.14	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	2.5	< 0.10	0.63
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	2.2	< 0.10	0.50
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.1	< 0.10	0.28
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.0	< 0.05	0.23
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.3	< 0.10	0.25
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.85	< 0.10	0.16
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.1	< 0.10	0.20
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.59	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.76	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	12.3	< 1.60	2.66
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	10	12	9.5	24
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	1.5	1.5	0.8	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.3	0.4	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	26	22	24	35
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	64	35	15	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	27	670	14	18
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	21	24	17	18	37
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46	36	36	39	71
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	52	160	330	43	82



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Project / Site name: Northstowe

Lab Sample Number				672995	672996	672997	672998	672999
Sample Reference				ZTR6	ZTR4b	ZTR3	ZTR3	ZTR2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.40-0.50	0.30-0.40	0.00-0.10	0.40-0.50	0.15-0.25
Date Sampled				07/12/2016	07/12/2016	07/12/2016	07/12/2016	07/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	672995	672996	672997	672998	672999
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	Limit of detection	Accreditation Status	672995	672996	672997	672998	672999
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	22	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	28	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	Limit of detection	Accreditation Status	672995	672996	672997	672998	672999
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	2.3	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	-	14	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	-	31	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	47	-	-



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Project / Site name: Northstowe

Lab Sample Number	673000		673001		673002		673003		673004	
Sample Reference	ZTR1		ZTR8		ZTR8b		ZTR12		BH1102	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.20-0.30		0.50-0.60		0.20-0.30		0.20-0.30		0.30-0.50	
Date Sampled	07/12/2016		08/12/2016		08/12/2016		08/12/2016		08/12/2016	
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	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	12	9.2	10	7.4	14		
Total mass of sample received	kg	0.001	NONE	0.16	1.7	1.9	1.6	1.8		

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	7.9	7.8	7.8	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	34	23	26	13	26
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.017	0.012	0.013	0.0065	0.013
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	1.9	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.76	0.64	0.94	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	0.12	0.10	0.15	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	1.6	1.2	2.2	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	1.3	1.1	1.9	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.61	0.52	1.2	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.61	0.57	0.97	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.68	0.49	1.1	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.39	0.39	0.72	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.49	0.44	0.88	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.26	0.27	0.47	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.33	0.35	0.63	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	7.11	6.04	11.2	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	15	12	11	8.4
Boron (water soluble)	mg/kg	0.2	MCERTS	1.0	1.7	1.0	0.4	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	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	25	26	23	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	19	20	12	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	19	31	24	9.7	9.9
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	19	18	21	16	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46	41	50	47	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	59	80	63	39	44



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 Project / Site name: Northstowe

Lab Sample Number				673000	673001	673002	673003	673004
Sample Reference				ZTR1	ZTR8	ZTR8b	ZTR12	BH1102
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20-0.30	0.50-0.60	0.20-0.30	0.20-0.30	0.30-0.50
Date Sampled				07/12/2016	08/12/2016	08/12/2016	08/12/2016	08/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	673000	673001	673002	673003	673004
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	673000	673001	673002	673003	673004
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	< 10

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	673000	673001	673002	673003	673004
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	14	-	-	< 10



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Project / Site name: Northstowe

Lab Sample Number	673005				673006	673007	673008	673016
Sample Reference	BH611				BH611	BH1101	BH1101	TP627
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.30-0.50				2.80-3.00	0.10-0.20	4.70-4.90	0.10-0.10
Date Sampled	07/12/2016				07/12/2016	07/12/2016	07/12/2016	05/12/2016
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	%	N/A	NONE	12	19	14	12	16
Total mass of sample received	kg	0.001	NONE	1.6	2.0	1.6	2.0	1.4

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	0.014
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	0.014

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	8.2	8.2	8.8	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	28	250	29	140	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.13	0.015	0.071	0.069
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	68.8
Organic Matter	%	0.1	MCERTS	1.5	-	-	0.1	3.7

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.10
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.25
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.25
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.82	< 0.10	5.9
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.11	< 0.10	1.5
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	2.3	< 0.10	12
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.9	< 0.10	12
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.87	< 0.10	5.4
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.2	< 0.05	4.7
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.71	< 0.10	5.7
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.76	< 0.10	3.0
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.80	< 0.10	4.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.44	< 0.10	2.4
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.46
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.48	< 0.05	3.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	10.3	< 1.60	61.7
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.0	8.8	7.3	9.2	27
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	0.3	0.8	< 0.2	2.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	19
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	11	22	12	86
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	15	17	8.7	1700
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	3.9	23	4.7	1000
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	13	19	25	86
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	39	13	40	27	49
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	38	24	47	21	1900



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Project / Site name: Northstowe

Lab Sample Number				673005	673006	673007	673008	673016
Sample Reference				BH611	BH611	BH1101	BH1101	TP627
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.50	2.80-3.00	0.10-0.20	4.70-4.90	0.10-0.10
Date Sampled				07/12/2016	07/12/2016	07/12/2016	07/12/2016	05/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	673005	673006	673007	673008	673016
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	673005	673006	673007	673008	673016
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	22
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	< 10	25

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	673005	673006	673007	673008	673016
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	4.4
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	-	13	< 10	83
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	< 10	170
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	22	< 10	260



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Lab Sample Number	673017		673018		673019		673020		673021		
Sample Reference	TP627		BH1111		BH1111		TP605		TP605		
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied		
Depth (m)	0.35-0.35		0.20-0.30		1.00-1.10		0.00-0.40		0.90-1.00		
Date Sampled	03/12/2016		01/12/2016		01/12/2016		02/12/2016		02/12/2016		
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	19	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	12	9.5	9.6	16	16	18	18	
Total mass of sample received	kg	0.001	NONE	1.5	0.38	0.46	1.6	1.6	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	Chrysotile & Amosite	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	0.016	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	0.016	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	8.0	8.0	7.6	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.12	0.038	0.25	0.011	0.033
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	120	37.8	252	10.7	33.1
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.23	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	0.67	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	0.54	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	8.3	< 0.10	< 0.10	0.63	< 0.10
Anthracene	mg/kg	0.1	MCERTS	2.1	< 0.10	< 0.10	0.13	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	17	< 0.10	< 0.10	1.8	< 0.10
Pyrene	mg/kg	0.1	MCERTS	17	< 0.10	< 0.10	1.7	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	7.3	< 0.10	< 0.10	0.93	< 0.10
Chrysene	mg/kg	0.05	MCERTS	7.1	< 0.05	< 0.05	0.79	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	7.7	< 0.10	< 0.10	0.93	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	5.6	< 0.10	< 0.10	0.54	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	7.3	< 0.10	< 0.10	0.73	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	3.8	< 0.10	< 0.10	0.43	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	0.67	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	4.7	< 0.05	< 0.05	0.60	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	90.4	< 1.60	< 1.60	9.17	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	9.7	8.4	15	17
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	3.6	1.1	0.6	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	16	< 0.2	< 0.2	0.3	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	64	27	40	31	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	480	14	14	23	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	580	17	12	27	8.7
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	98	19	24	22	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	8.8	4.6
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	50	40	32	58	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	1500	41	31	73	35



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Lab Sample Number				673017	673018	673019	673020	673021
Sample Reference				TP627	BH1111	BH1111	TP605	TP605
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.35-0.35	0.20-0.30	1.00-1.10	0.00-0.40	0.90-1.00
Date Sampled				03/12/2016	01/12/2016	01/12/2016	02/12/2016	02/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of Detection	Accreditation Status	673017	673018	673019	673020	673021
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Parameter	Unit	Limit of Detection	Accreditation Status	673017	673018	673019	673020	673021
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	2.5	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	14	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	76	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	93	< 10	< 10	< 10	< 10

Parameter	Unit	Limit of Detection	Accreditation Status	673017	673018	673019	673020	673021
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	16	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	140	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	240	< 10	< 10	12	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	390	< 10	< 10	22	< 10



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Lab Sample Number	673022				673023		673024		673025		673026	
Sample Reference	TP603				TP603		ZBP1		ZBP1		ZBP2	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.00-0.30				1.20-1.30		0.10-0.20		0.60-0.70		0.30-0.40	
Date Sampled	02/12/2016				02/12/2016		05/12/2016		05/12/2016		05/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	16	11	15	20	19				
Total mass of sample received	kg	0.001	NONE	1.9	1.7	1.6	1.9	2.0				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	8.1	7.9	7.6	7.9
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.011	0.17	0.016	0.019	0.025
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	10.7	171	16.1	18.9	24.8
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.38	0.22	0.26
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.90	0.47	0.56
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.82	0.40	0.48
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.36	0.20	0.21
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.59	0.26	0.34
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.51	0.20	0.20
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.29	0.17	0.20
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.35	0.18	0.20
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	4.20	2.10	2.45
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	15	12	12	11
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	1.0	< 0.2	0.8	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.4	< 0.2	0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	29	31	30	28	31
Copper (aqua regia extractable)	mg/kg	1	MCERTS	19	15	19	24	32
Lead (aqua regia extractable)	mg/kg	1	MCERTS	19	12	23	23	24
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	31	21	20	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	2.5	3.2	3.4	4.2	1.8
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	53	60	55	55	53
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	47	90	100	91



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Lab Sample Number				673022	673023	673024	673025	673026
Sample Reference				TP603	TP603	ZBP1	ZBP1	ZBP2
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.30	1.20-1.30	0.10-0.20	0.60-0.70	0.30-0.40
Date Sampled				02/12/2016	02/12/2016	05/12/2016	05/12/2016	05/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	673022	673023	673024	673025	673026
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	673022	673023	673024	673025	673026
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	673022	673023	673024	673025	673026
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10



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Lab Sample Number	673027				673028		673029		673030		673031	
Sample Reference	ZBP3				ZBP3		ZBP4		ZBP4		ZTR9	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.30-0.40				1.00-1.10		0.10-0.20		0.40-0.50		0.00-0.10	
Date Sampled	05/12/2016				05/12/2016		06/12/2016		06/12/2016		06/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	20	20	17	18	19	19	19	19	
Total mass of sample received	kg	0.001	NONE	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-	Chrysotile
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-	< 0.001
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-	< 0.001

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	8.8	8.2	8.0	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.052	0.18	0.028	0.018	0.018
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	51.7	183	28.2	17.9	17.8
Organic Matter	%	0.1	MCERTS	-	-	2.1	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	0.52	0.65	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	0.41	0.52	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	5.7	6.0	< 0.10	< 0.10	0.25
Anthracene	mg/kg	0.1	MCERTS	0.93	1.1	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	13	11	< 0.10	< 0.10	0.58
Pyrene	mg/kg	0.1	MCERTS	11	9.5	< 0.10	< 0.10	0.51
Benzo(a)anthracene	mg/kg	0.1	MCERTS	5.7	4.8	< 0.10	< 0.10	0.23
Chrysene	mg/kg	0.05	MCERTS	5.2	4.4	< 0.05	< 0.05	0.33
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	5.9	4.8	< 0.10	< 0.10	0.21
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	2.9	2.5	< 0.10	< 0.10	0.26
Benzo(a)pyrene	mg/kg	0.1	MCERTS	4.9	4.1	< 0.10	< 0.10	0.24
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	2.1	1.8	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	0.49	0.35	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.6	2.3	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	60.8	54.0	< 1.60	< 1.60	2.61
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	20	15	13	14
Boron (water soluble)	mg/kg	0.2	MCERTS	1.4	1.7	0.8	0.7	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	3.3	0.4	0.2	0.3
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	34	52	36	35	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	310	1500	410	130	23
Lead (aqua regia extractable)	mg/kg	1	MCERTS	85	620	53	38	30
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.6	< 0.3	0.5
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28	89	29	26	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	50	47	63	64	59
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	530	40000	1800	290	81



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Lab Sample Number				673027	673028	673029	673030	673031
Sample Reference				ZBP3	ZBP3	ZBP4	ZBP4	ZTR9
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.40	1.00-1.10	0.10-0.20	0.40-0.50	0.00-0.10
Date Sampled				05/12/2016	05/12/2016	06/12/2016	06/12/2016	06/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit	Accreditation	673027	673028	673029	673030	673031
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Parameter	Unit	Limit	Accreditation	673027	673028	673029	673030	673031
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	1.3	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	3.6	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	44	110	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	56	110	< 10	< 10	< 10

Parameter	Unit	Limit	Accreditation	673027	673028	673029	673030	673031
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	13	5.9	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	59	63	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	74	110	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	150	180	< 10	< 10	< 10



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Lab Sample Number				673032	673033	673034	673035	673036
Sample Reference				ZTR9	ZTR7A	ZTR7A	ZTR7B	TPWS611
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20-0.30	0.20-0.30	0.80-0.90	0.30-0.40	0.10-0.30
Date Sampled				06/12/2016	06/12/2016	06/12/2016	06/12/2016	06/12/2016
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	%	N/A	NONE	13	9.8	6.8	10	20
Total mass of sample received	kg	0.001	NONE	1.8	1.7	1.9	1.7	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	8.1	8.1	8.2	7.7
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.013	0.013	0.0083	0.012	0.028
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	13.0	13.1	8.3	11.8	27.5
Organic Matter	%	0.1	MCERTS	-	-	-	2.0	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.18	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.24	0.69	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.20	0.45	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.32	0.75	2.9	6.6	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.71	1.6	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	0.58	1.3	5.5	12	< 0.10
Pyrene	mg/kg	0.1	MCERTS	0.49	1.1	4.9	10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.24	0.56	2.1	4.7	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.27	0.61	2.6	4.4	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.23	0.45	2.2	3.8	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.17	0.44	1.2	3.1	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.23	0.51	1.9	4.1	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.23	0.84	2.0	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.17	0.39	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.37	1.2	2.4	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	2.53	6.51	26.6	56.4	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	11	13	13	14
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	0.6	0.6	0.5	2.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	< 0.2	0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	23	25	25	45
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	28	22	20	33
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	530	18	17	24
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4	0.4	0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	20	20	18	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	58	48	48	42	77
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	63	270	79	61	100



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Lab Sample Number				673032	673033	673034	673035	673036
Sample Reference				ZTR9	ZTR7A	ZTR7A	ZTR7B	TPWS611
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.20-0.30	0.20-0.30	0.80-0.90	0.30-0.40	0.10-0.30
Date Sampled				06/12/2016	06/12/2016	06/12/2016	06/12/2016	06/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of Detection	Accreditation Status	673032	673033	673034	673035	673036
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Parameter	Unit	Limit of Detection	Accreditation Status	673032	673033	673034	673035	673036
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	71	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	75	< 10	< 10	< 10	< 10

Parameter	Unit	Limit of Detection	Accreditation Status	673032	673033	673034	673035	673036
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	3.1	8.3	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	20	60	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	38	< 10	29	84	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	42	< 10	52	150	< 10



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Lab Sample Number				673037	673038	673039	673040	673041
Sample Reference				TPWS611	TP601	TP601	TP604	TP604
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.20	0.10-0.30	1.00-1.20	0.10-0.30	2.00-2.20
Date Sampled				06/12/2016	06/12/2016	06/12/2016	06/12/2016	06/12/2016
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	%	N/A	NONE	20	22	18	23	22
Total mass of sample received	kg	0.001	NONE	1.8	1.3	1.3	1.5	1.1

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	7.9	7.8	7.7	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.14	0.053	0.18	0.017	0.46
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	137	53.3	176	16.9	459
Organic Matter	%	0.1	MCERTS	-	-	-	2.6	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	0.21	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.38	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	0.32	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	0.15	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.23	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	9.0	12	14
Boron (water soluble)	mg/kg	0.2	MCERTS	3.0	1.7	5.1	1.0	2.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	42	46	28	46	34
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	36	14	32	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	14	31	11	23	12
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	31	29	23	30	28
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	72	80	54	85	54
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	63	110	42	96	50



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Project / Site name: Northstowe

Lab Sample Number				673037	673038	673039	673040	673041
Sample Reference				TPWS611	TP601	TP601	TP604	TP604
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.20	0.10-0.30	1.00-1.20	0.10-0.30	2.00-2.20
Date Sampled				06/12/2016	06/12/2016	06/12/2016	06/12/2016	06/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	673037	673038	673039	673040	673041
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	673037	673038	673039	673040	673041
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	673037	673038	673039	673040	673041
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10



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Project / Site name: Northstowe

Lab Sample Number	673042				673043		673044		673045		673046	
Sample Reference	BH603				BH603		BH602		BH602		BH1109	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.30-1.00				3.50-4.00		0.00-0.40		1.80-2.30		0.30-1.00	
Date Sampled	06/12/2016				06/12/2016		06/12/2016		06/12/2016		05/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	17	21	15	21	21	12			
Total mass of sample received	kg	0.001	NONE	2.0	1.9	2.0	2.0	2.0	2.0			

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.8	7.4	8.0	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.021	2.4	0.026	0.99	0.095
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	21.0	2400	25.6	989	95.0
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.84
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.72
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.54
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.16
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.30
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	2.56
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	11	10	12	7.8
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	2.7	0.8	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	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	33	31	29	42	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	17	18	18	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	18	11	19	16	5.5
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	20	25	18	32	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	61	49	53	66	53
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	54	60	72	29



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 Project / Site name: Northstowe

Lab Sample Number				673042	673043	673044	673045	673046
Sample Reference				BH603	BH603	BH602	BH602	BH1109
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-1.00	3.50-4.00	0.00-0.40	1.80-2.30	0.30-1.00
Date Sampled				06/12/2016	06/12/2016	06/12/2016	06/12/2016	05/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of Detection	Accreditation Status	673042	673043	673044	673045	673046
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of Detection	Accreditation Status	673042	673043	673044	673045	673046
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of Detection	Accreditation Status	673042	673043	673044	673045	673046
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10



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Project / Site name: Northstowe

Lab Sample Number	673047			673048			673049			673853			673854		
Sample Reference	BH1109			BH1112			BH1112			ZTR10			ZTR10		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	2.00-2.45			0.00-1.00			1.50-1.95			0.60-0.70			1.00-1.10		
Date Sampled	05/12/2016			02/12/2016			02/12/2016			09/12/2016			09/12/2016		
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	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	15	8.3	9.8	9.6	13							
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	1.9	2.0							

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	7.6	8.5	6.8	7.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.018	0.0066	0.0091	0.031	0.024
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	18.2	6.6	9.1	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.30	0.24
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.23	0.20
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	3.6	3.1
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.59	0.58
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	5.8	5.4
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	5.0	4.8
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	2.3	2.2
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	2.1	2.5
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	2.1	2.4
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.3	1.4
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.5	1.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.85	0.94
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.17	0.21
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.93	1.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	< 1.60	26.9	26.9
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	5.6	12	12	10	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	0.4	< 0.2	0.3	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.4	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	27	14	25	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	15	14	25	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.3	16	6.9	47	37
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	18	26	19	28	21
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	33	54	33	62	50
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	35	53	25	63	62



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Project / Site name: Northstowe

Lab Sample Number				673047	673048	673049	673853	673854
Sample Reference				BH1109	BH1112	BH1112	ZTR10	ZTR10
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.00-2.45	0.00-1.00	1.50-1.95	0.60-0.70	1.00-1.10
Date Sampled				05/12/2016	02/12/2016	02/12/2016	09/12/2016	09/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	673047	673048	673049	673853	673854
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	673047	673048	673049	673853	673854
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	-

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	673047	673048	673049	673853	673854
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	2.3	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	31	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	27	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	60	-



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Project / Site name: Northstowe

Lab Sample Number	673855				673856	674678	674679	674680
Sample Reference	ZTR11				BH1103	ZBP4b	ZTR9b	ZTR7b
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.60-0.70				0.00-0.30	0.30-0.40	0.40-0.50	0.00-0.10
Date Sampled	09/12/2016				09/12/2016	06/12/2016	06/12/2016	06/12/2016
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	%	N/A	NONE	11	12	17	13	20
Total mass of sample received	kg	0.001	NONE	1.7	1.9	1.9	1.8	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	6.9	8.4	8.5	7.6
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	60	73	36
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.028	0.073	0.030	0.036	0.018
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	2.2	0.8	1.5	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.14
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	1.1
Acenaphthene	mg/kg	0.1	MCERTS	0.22	< 0.10	< 0.10	< 0.10	2.2
Fluorene	mg/kg	0.1	MCERTS	0.19	< 0.10	< 0.10	< 0.10	1.9
Phenanthrene	mg/kg	0.1	MCERTS	3.0	0.13	< 0.10	0.74	25
Anthracene	mg/kg	0.1	MCERTS	0.49	< 0.10	< 0.10	< 0.10	5.1
Fluoranthene	mg/kg	0.1	MCERTS	6.4	0.35	< 0.10	1.6	50
Pyrene	mg/kg	0.1	MCERTS	5.6	0.41	< 0.10	1.4	43
Benzo(a)anthracene	mg/kg	0.1	MCERTS	2.9	0.25	< 0.10	0.68	22
Chrysene	mg/kg	0.05	MCERTS	3.2	0.21	< 0.05	0.71	20
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	3.5	0.27	< 0.10	0.65	22
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	1.7	0.20	< 0.10	0.41	12
Benzo(a)pyrene	mg/kg	0.1	MCERTS	2.5	0.23	< 0.10	0.56	20
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	1.2	0.12	< 0.10	0.26	9.1
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	0.30	< 0.10	< 0.10	< 0.10	2.0
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.6	0.17	< 0.05	0.35	9.6

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	32.8	2.34	< 1.60	7.27	244
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	9.5	12	14	11
Boron (water soluble)	mg/kg	0.2	MCERTS	1.3	1.0	0.9	1.5	1.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	1.5	< 0.2	< 0.2	0.2	0.3
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	31	32	27	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	60	14	20	20	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	210	41	16	33	36
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	0.4	< 0.3	< 0.3	0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	15	23	18	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	43	39	60	50	34
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	34	60	110	79



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Project / Site name: Northstowe

Lab Sample Number				673855	673856	674678	674679	674680
Sample Reference				ZTR11	BH1103	ZBP4b	ZTR9b	ZTR7b
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.60-0.70	0.00-0.30	0.30-0.40	0.40-0.50	0.00-0.10
Date Sampled				09/12/2016	09/12/2016	06/12/2016	06/12/2016	06/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of Detection	Accreditation Status	673855	673856	674678	674679	674680
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of Detection	Accreditation Status	673855	673856	674678	674679	674680
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	5.1	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	12	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	72	25	< 8.0	< 8.0	17
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	89	29	< 10	< 10	24

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of Detection	Accreditation Status	673855	673856	674678	674679	674680
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	9.6	< 2.0	< 2.0	< 2.0	25
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	50	< 10	< 10	< 10	240
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	97	< 10	< 10	< 10	550
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	160	< 10	< 10	< 10	820



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Project / Site name: Northstowe

Lab Sample Number				674830	674983	674984	674985	674986
Sample Reference				BH1004	LIF1102	LIF1105	LIF1101	LIF8002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.20	0.10-0.30	0.10-0.30	0.10-0.30	0.10-0.30
Date Sampled				08/12/2016	12/12/2016	12/12/2016	12/12/2016	12/12/2016
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	%	N/A	NONE	15	15	19	15	14
Total mass of sample received	kg	0.001	NONE	2.0	0.47	0.48	0.49	0.53

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	10.0	7.7	8.0	7.3
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	190	620	34	29	41
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.097	0.31	0.017	0.015	0.021
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	0.9	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.74	1.8	0.71
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.26	0.12
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.8	3.9	1.8
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.5	3.2	1.6
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.0	2.0	0.88
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.1	2.0	1.0
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.2	2.0	0.82
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.65	1.2	0.58
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.92	1.6	0.74
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.45	0.78	0.38
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.53	0.86	0.39

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	9.89	19.5	9.05
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	12	12	14	12
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	1.7	2.4	1.0	1.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	0.2	0.3	0.3
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	23	20	24	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	15	15	16	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	9.3	14	44	22	21
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	19	17	19	19	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38	36	43	47	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	39	40	63	51	63



Combined Report Northstowe UA008426 Part A
Project / Site name: Northstowe

Lab Sample Number				674830	674983	674984	674985	674986
Sample Reference				BH1004	LIF1102	LIF1105	LIF1101	LIF8002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.20	0.10-0.30	0.10-0.30	0.10-0.30	0.10-0.30
Date Sampled				08/12/2016	12/12/2016	12/12/2016	12/12/2016	12/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	674830	674983	674984	674985	674986
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	674830	674983	674984	674985	674986
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	674830	674983	674984	674985	674986
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-



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Project / Site name: Northstowe

Lab Sample Number	674987				674988		674989		674990		674991	
Sample Reference	LIF1002				LIF1103		LIF1004		LIF1003		LIF1001	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.30				0.20-0.50		0.10-0.30		0.10-0.30		0.10-0.30	
Date Sampled	12/12/2016				13/12/2016		13/12/2016		13/12/2016		13/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	15	6.4	7.8	12	17				
Total mass of sample received	kg	0.001	NONE	0.52	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	11.5	10.8	11.5	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	72	350	220	150	51
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.036	0.17	0.11	0.076	0.025
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	0.29	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	0.37	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	0.23	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	3.9	< 0.10	0.31	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	0.50	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	3.4	< 0.10	0.84	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	2.5	< 0.10	0.69	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	1.3	< 0.10	0.56	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	1.4	< 0.05	0.52	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.84	< 0.10	0.27	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.59	< 0.10	0.26	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.69	< 0.10	0.38	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	16.1	< 1.60	3.83	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.5	14	15	11	12
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	0.5	0.5	1.5	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	29	15	19	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	14	21	18	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	13	470	15	21
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	18	17	16	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	47	36	28	35	44
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	51	36	53	50	69



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Project / Site name: Northstowe

Lab Sample Number				674987	674988	674989	674990	674991
Sample Reference				LIF1002	LIF1103	LIF1004	LIF1003	LIF1001
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.20-0.50	0.10-0.30	0.10-0.30	0.10-0.30
Date Sampled				12/12/2016	13/12/2016	13/12/2016	13/12/2016	13/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	674987	674988	674989	674990	674991
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	674987	674988	674989	674990	674991
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	1.4	-	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	-	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	< 8.0	-	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	-	< 10

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	674987	674988	674989	674990	674991
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	3.9	< 2.0	-	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	13	< 10	-	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	15	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	33	< 10	-	< 10



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Project / Site name: Northstowe

Lab Sample Number	674992				674993	674994	674995	674996
Sample Reference	LIF604				BH1110	BH1110	BH1002	BH1002
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10-0.30				0.20-0.40	3.20-3.40	0.00-0.30	0.50-0.70
Date Sampled	13/12/2016				09/12/2016	09/12/2016	09/12/2016	09/12/2016
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	%	N/A	NONE	17	12	6.8	14	9.7
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	8.3	8.6	7.0	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	83	18	42	33	41
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.041	0.0091	0.021	0.016	0.021
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	0.2	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	15	21	13	15
Boron (water soluble)	mg/kg	0.2	MCERTS	2.6	0.8	0.3	1.0	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	31	22	21	21	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	12	7.1	19	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	11	8.6	20	9.5
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	20	18	21	15	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	54	40	54	42	33
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	54	32	26	57	37



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Project / Site name: Northstowe

Lab Sample Number				674992	674993	674994	674995	674996
Sample Reference				LIF604	BH1110	BH1110	BH1002	BH1002
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.20-0.40	3.20-3.40	0.00-0.30	0.50-0.70
Date Sampled				13/12/2016	09/12/2016	09/12/2016	09/12/2016	09/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	674992	674993	674994	674995	674996
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	Limit of detection	Accreditation Status	674992	674993	674994	674995	674996
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	< 10	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	Limit of detection	Accreditation Status	674992	674993	674994	674995	674996
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	< 10	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	< 10	-



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Project / Site name: Northstowe

Lab Sample Number	674997				674998		674999		675000		675001	
Sample Reference	BH610				BH610		WS608		WS606		WS606	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.30				3.00-3.20		0.10-0.20		2.70-2.80		0.10-0.20	
Date Sampled	12/12/2016				12/12/2016		07/12/2016		07/12/2016		07/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	18	24	15	21	16				
Total mass of sample received	kg	0.001	NONE	2.0	2.0	1.9	1.0	1.6				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.1	7.8	7.1	8.2	7.3
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	340	4400	43	260	31
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.17	2.2	0.022	0.13	0.016
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	11	13	11	11
Boron (water soluble)	mg/kg	0.2	MCERTS	2.4	4.6	0.6	2.4	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	25	24	30	31
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	14	16	17	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	13	12	17	14	20
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.6	< 0.3	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	20	17	25	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	53	37	44	48	54
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	47	51	46	57	52



Combined Report Northstowe UA008426 Part A
Project / Site name: Northstowe

Lab Sample Number	674997				674998	674999	675000	675001
Sample Reference	BH610				BH610	WS608	WS606	WS606
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10-0.30				3.00-3.20	0.10-0.20	2.70-2.80	0.10-0.20
Date Sampled	12/12/2016				12/12/2016	07/12/2016	07/12/2016	07/12/2016
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	674997	674998	674999	675000	675001
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	2.3	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	-	-



Combined Report Northstowe UA008426 Part A
Project / Site name: Northstowe

Lab Sample Number	675002				675003		675004		675005		675006	
Sample Reference	WS607				WS615		WS615		WS620		WS617	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.20				0.10-0.20		2.90-3.00		0.10-0.20		0.90-1.00	
Date Sampled	07/12/2016				07/12/2016		07/12/2016		08/12/2016		08/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	15	17	22	16	11				
Total mass of sample received	kg	0.001	NONE	1.5	1.7	1.2	1.7	2.0				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	7.6	7.7	8.0	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	38	240	4300	46	25
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.019	0.12	2.2	0.023	0.013
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	14	11	13	14
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	2.4	4.2	1.8	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	30	27	33	14
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	17	14	16	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	17	9.8	18	6.8
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	20	20	21	23	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	54	58	39	62	29
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	59	63	49	60	23



Combined Report Northstowe UA008426 Part A
 Project / Site name: Northstowe

Lab Sample Number				675002	675003	675004	675005	675006
Sample Reference				WS607	WS615	WS615	WS620	WS617
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.20	2.90-3.00	0.10-0.20	0.90-1.00
Date Sampled				07/12/2016	07/12/2016	07/12/2016	08/12/2016	08/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	675002	675003	675004	675005	675006
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	Limit of detection	Accreditation Status	675002	675003	675004	675005	675006
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	Limit of detection	Accreditation Status	675002	675003	675004	675005	675006
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part A
Project / Site name: Northstowe

Lab Sample Number	675007				675008		675009		675010		675011	
Sample Reference	WS616				WS619		WS619		WS618		WS1103	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.20				0.10-0.20		1.90-2.00		0.90-1.00		0.10-0.20	
Date Sampled	08/12/2016				09/12/2016		09/12/2016		09/12/2016		12/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	15	10	8.4	13	11				
Total mass of sample received	kg	0.001	NONE	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.9	7.8	8.8	8.6	11.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	47	27	27	48	210
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.024	0.014	0.013	0.024	0.11
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.98
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.13
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	3.1
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	3.0
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	2.2
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	2.2
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	1.9
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	1.8
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	2.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	1.4
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	1.7

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	20.8
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	14	14	5.8	12
Boron (water soluble)	mg/kg	0.2	MCERTS	2.6	1.0	0.3	0.5	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	0.3
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	34	21	13	13	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	13	11	11	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	19	13	4.6	4.2	52
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	20	20	14	11	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	55	46	27	19	46
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	55	39	23	20	59



Combined Report Northstowe UA008426 Part A
 Project / Site name: Northstowe

Lab Sample Number				675007	675008	675009	675010	675011
Sample Reference				WS616	WS619	WS619	WS618	WS1103
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.20	1.90-2.00	0.90-1.00	0.10-0.20
Date Sampled				08/12/2016	09/12/2016	09/12/2016	09/12/2016	12/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	675007	675008	675009	675010	675011
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	-	-	-
o-xylene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	675007	675008	675009	675010	675011
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	675007	675008	675009	675010	675011
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number	675012		675013		675014		675015		675016	
Sample Reference	WS1103		WS1103		WS1102		WS1102		TP923	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	1.90-2.00		2.90-3.00		0.10-0.20		1.90-2.00		0.20-0.30	
Date Sampled	12/12/2016		12/12/2016		12/12/2016		12/12/2016		09/12/2016	
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	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	15	25	14	12	10	10	10
Total mass of sample received	kg	0.001	NONE	1.6	0.37	2.0	0.88	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.5	8.8	8.1	8.4	7.4
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	190	21	58	190	18
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.097	0.011	0.029	0.094	0.0091
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.34	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.83	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.67	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.29	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.55	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.22	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.23	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.21	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	3.34	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.5	11	13	10	14
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	< 0.2	1.4	< 0.2	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	15	24	20	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	13	20	15	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	6.6	6.7	26	8.3	12
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	15	17	23	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	28	42	41	40	50
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	29	27	110	31	53



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Lab Sample Number				675012	675013	675014	675015	675016
Sample Reference				WS1103	WS1103	WS1102	WS1102	TP923
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.90-2.00	2.90-3.00	0.10-0.20	1.90-2.00	0.20-0.30
Date Sampled				12/12/2016	12/12/2016	12/12/2016	12/12/2016	09/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of Detection	Accreditation Status	675012	675013	675014	675015	675016
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Parameter	Unit	Limit of Detection	Accreditation Status	675012	675013	675014	675015	675016
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	9.7	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	78	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	88	< 10	< 10	< 10	< 10

Parameter	Unit	Limit of Detection	Accreditation Status	675012	675013	675014	675015	675016
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	3.3	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	11	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	24	< 10	< 10



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Lab Sample Number	675017				675018		675019		675020		675021	
Sample Reference	TP924				TP924		BH601		BH601		BH606	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.00-0.10				1.30-1.40		0.30-0.80		3.80-4.50		0.30-1.00	
Date Sampled	13/12/2016				13/12/2016		07/12/2016		07/12/2016		07/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	15	10	24	21	9.2				
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	1.8	1.9				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.1	8.6	7.6	8.0	8.2
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	23	66	350	4800	33
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.012	0.033	0.18	2.4	0.017
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	1.4	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.22	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.87	< 0.10	0.62	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	0.13	< 0.10	0.11	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	1.2	< 0.10	1.3	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	0.95	< 0.10	1.2	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.55	< 0.10	0.92	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.54	< 0.05	0.92	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.23	< 0.10	1.1	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.20	< 0.10	0.65	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.26	< 0.10	0.83	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.23	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.41	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	4.93	< 1.60	8.48	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.3	14	36	16	14
Boron (water soluble)	mg/kg	0.2	MCERTS	1.0	0.6	5.4	11	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	0.3	27	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	16	75	27	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	25	2000	17	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29	12	830	13	43
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	0.3	0.8	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	14	100	27	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	43	30	66	43	44
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	63	64	8400	83	56



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Lab Sample Number				675017	675018	675019	675020	675021
Sample Reference				TP924	TP924	BH601	BH601	BH606
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.10	1.30-1.40	0.30-0.80	3.80-4.50	0.30-1.00
Date Sampled				13/12/2016	13/12/2016	07/12/2016	07/12/2016	07/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	675017	675018	675019	675020	675021
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	675017	675018	675019	675020	675021
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	2.6	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	11	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	15	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	71	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	99	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	675017	675018	675019	675020	675021
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	5.1	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	< 10	13	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	< 10	48	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	66	-	-



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Lab Sample Number				675022	675023	675024	675025	675026
Sample Reference				BH613	BH607	BH608	BH609	BH1001
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.30-0.50	0.40-0.60	0.40-0.60	0.10-0.40
Date Sampled				07/12/2016	08/12/2016	08/12/2016	09/12/2016	12/12/2016
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	%	N/A	NONE	28	18	5.7	16	16
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.4	8.2	8.4	8.1	7.1
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	30	19	28	33	21
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.015	0.0097	0.014	0.016	0.011
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	12	13	15	17
Boron (water soluble)	mg/kg	0.2	MCERTS	3.5	2.0	0.7	1.9	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	26	19	36	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	15	12	13	15	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	11	7.2	11	18
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	22	23	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	41	39	35	59	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	43	35	31	52	51



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 Project / Site name: Northstowe

Lab Sample Number				675022	675023	675024	675025	675026
Sample Reference				BH613	BH607	BH608	BH609	BH1001
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.30-0.50	0.40-0.60	0.40-0.60	0.10-0.40
Date Sampled				07/12/2016	08/12/2016	08/12/2016	09/12/2016	12/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	675022	675023	675024	675025	675026
Benzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
p & m-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
o-xylene	µg/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	675022	675023	675024	675025	675026
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	675022	675023	675024	675025	675026
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	-	-



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Project / Site name: Northstowe

Lab Sample Number	675027				675028		675029		675030		675031	
Sample Reference	BH1001				BH605		BH604		BH1204		BH1202	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	2.40-2.60				0.40-0.60		0.10-0.30		0.10-0.30		0.40-0.60	
Date Sampled	12/12/2016				12/12/2016		13/12/2016		14/12/2016		13/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	8.6	18	17	20	19				
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.6	8.1	7.9	7.6	8.1
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	89	340	36	76	440
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.045	0.17	0.018	0.038	0.22
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	16	26	19	13
Boron (water soluble)	mg/kg	0.2	MCERTS	0.3	2.7	2.5	1.5	1.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	35	28	32	33
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	18	21	17	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.6	13	32	16	12
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.4	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	27	27	19	15
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	30	61	57	52	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	28	57	62	53	42



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Project / Site name: Northstowe

Lab Sample Number				675027	675028	675029	675030	675031
Sample Reference				BH1001	BH605	BH604	BH1204	BH1202
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.40-2.60	0.40-0.60	0.10-0.30	0.10-0.30	0.40-0.60
Date Sampled				12/12/2016	12/12/2016	13/12/2016	14/12/2016	13/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	675027	675028	675029	675030	675031
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-

Petroleum Hydrocarbons

Compound	Units	Limit of detection	Accreditation Status	675027	675028	675029	675030	675031
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	< 10	-

Compound	Units	Limit of detection	Accreditation Status	675027	675028	675029	675030	675031
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	10	-



Combined Report Northstowe UA008426 Part A
Project / Site name: Northstowe

Lab Sample Number				675297	676897	676898	676899	676900
Sample Reference				WS611	TP611	TP611	TP615	TP928
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	0.10-0.30	0.70-1.00	0.10-0.30	0.10-0.30
Date Sampled				05/12/2016	14/12/2016	14/12/2016	14/12/2016	14/12/2016
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	%	N/A	NONE	23	13	16	17	15
Total mass of sample received	kg	0.001	NONE	1.7	0.50	0.49	0.48	0.51

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	7.1	8.2	6.4	6.5
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	230	32	79	34	82
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.11	0.016	0.040	0.017	0.041
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	15	14	12	12
Boron (water soluble)	mg/kg	0.2	MCERTS	3.3	2.2	2.5	1.6	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	52	25	30	27	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	18	13	19	19
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	17	14	20	24
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	30	18	19	18	16
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	89	46	50	50	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	72	51	56	58	52



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Project / Site name: Northstowe

Lab Sample Number				675297	676897	676898	676899	676900
Sample Reference				WS611	TP611	TP611	TP615	TP928
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.90-1.00	0.10-0.30	0.70-1.00	0.10-0.30	0.10-0.30
Date Sampled				05/12/2016	14/12/2016	14/12/2016	14/12/2016	14/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	675297	676897	676898	676899	676900
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
p & m-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
o-xylene	µg/kg	1	MCERTS	-	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	Limit of detection	Accreditation Status	675297	676897	676898	676899	676900
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	Limit of detection	Accreditation Status	675297	676897	676898	676899	676900
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	-	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	-	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	-	-



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Project / Site name: Northstowe

Lab Sample Number	676901				676902		676903		676904		676905	
Sample Reference	BH1203				WS621		TP925		TP927		TP927	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.30				0.90-1.00		0.50-0.60		0.00-0.10		1.00-1.10	
Date Sampled	13/12/2016				08/12/2016		14/12/2016		14/12/2016		14/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	16	24	11	12	19				
Total mass of sample received	kg	0.001	NONE	1.9	2.0	0.51	0.47	1.9				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	8.2	6.8	6.6	9.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	130	470	35	46	68
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.066	0.24	0.018	0.023	0.034
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.45	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	0.68	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	0.65	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.37	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.37	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.39	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.17	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.34	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.15	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.21	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	3.78	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	17	17	15	16
Boron (water soluble)	mg/kg	0.2	MCERTS	1.4	1.6	0.5	0.8	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	29	23	21	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25	19	15	15	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	31	12	14	17	6.5
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	22	25	20	16	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	45	52	45	39	28
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	63	47	45	46	26



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Project / Site name: Northstowe

Lab Sample Number				676901	676902	676903	676904	676905
Sample Reference				BH1203	WS621	TP925	TP927	TP927
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.90-1.00	0.50-0.60	0.00-0.10	1.00-1.10
Date Sampled				13/12/2016	08/12/2016	14/12/2016	14/12/2016	14/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	676901	676902	676903	676904	676905
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	Limit of detection	Accreditation Status	676901	676902	676903	676904	676905
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	Limit of detection	Accreditation Status	676901	676902	676903	676904	676905
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10



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Project / Site name: Northstowe

Lab Sample Number	676906				676907		676908		677247		677248	
Sample Reference	TP930				BH607		BH1201		WS1101		WS1101	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.30-0.40				1.90-2.40		0.00-0.40		0.10-0.20		0.90-1.00	
Date Sampled	14/12/2016				08/12/2016		14/12/2016		13/12/2016		13/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	16	21	16	16	16	13	13	13	
Total mass of sample received	kg	0.001	NONE	0.50	1.8	0.49	1.9	1.9	2.0	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.6	7.5	7.8	8.4
Total Cyanide	mg/kg	1	MCERTS	< 1	6	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	130	1300	89	28	30
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.066	0.65	0.045	0.014	0.015
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	-	-	-	13.8	14.9
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.14	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.39	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.35	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.19	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.19	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.21	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	16	17	15	8.1
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.3	1.6	3.2	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	25	25	20	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	25	22	25	18	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	15	13	18	18	6.7
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	27	22	15	17	9.9
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.5	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	53	39	41	37	23
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	62	56	61	74	24



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Project / Site name: Northstowe

Lab Sample Number				676906	676907	676908	677247	677248
Sample Reference				TP930	BH607	BH1201	WS1101	WS1101
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.30-0.40	1.90-2.40	0.00-0.40	0.10-0.20	0.90-1.00
Date Sampled				14/12/2016	08/12/2016	14/12/2016	13/12/2016	13/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	676906	676907	676908	677247	677248
Benzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10

TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	< 10



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Project / Site name: Northstowe

Lab Sample Number				677249	677250	677251	677252	677253
Sample Reference				WS906	WS904	WS904	WS1001	WS1001
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.20	0.90-1.00	0.10-0.20	1.90-2.00
Date Sampled				13/12/2016	13/12/2016	13/12/2016	14/12/2016	14/12/2016
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	%	N/A	NONE	13	15	20	12	22
Total mass of sample received	kg	0.001	NONE	1.7	1.6	1.4	0.53	0.45

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	7.3	7.6	6.6	7.8
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	160	630	2100	930	3600
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.081	0.32	1.0	0.46	1.8
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	80.6	317	1040	465	1820
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.18	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	0.43	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	0.37	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.23	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.19	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.17	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	17	16	15	15
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	1.8	2.8	1.0	2.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	30	38	24	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	19	26	22	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	14	20	20	16
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	20	41	46	21	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	43	48	50	45	28
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	47	55	64	70



Combined Report Northstowe UA008426 Part A
 Project / Site name: Northstowe

Lab Sample Number	677249			677250			677251			677252			677253		
Sample Reference	WS906			WS904			WS904			WS1001			WS1001		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	0.10-0.20			0.10-0.20			0.90-1.00			0.10-0.20			1.90-2.00		
Date Sampled	13/12/2016			13/12/2016			13/12/2016			14/12/2016			14/12/2016		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status												

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	677249	677250	677251	677252	677253
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit of detection	Accreditation Status	677249	677250	677251	677252	677253
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit of detection	Accreditation Status	677249	677250	677251	677252	677253
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	10	< 10	-	< 10	-



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Project / Site name: Northstowe

Lab Sample Number				677254	677255	677256	677257	677258
Sample Reference				WS902	WS902	WS901	WS905	WS905
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.70-0.80	0.10-0.20	0.10-0.20	1.20-1.30
Date Sampled				14/12/2016	14/12/2016	14/12/2016	15/12/2016	15/12/2016
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	%	N/A	NONE	13	9.2	13	12	16
Total mass of sample received	kg	0.001	NONE	0.52	0.52	0.50	0.52	0.41

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	8.1	6.8	7.3	8.0
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	42	52	64	150	350
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.021	0.026	0.032	0.077	0.18
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	20.9	26.0	32.2	76.8	177
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.20	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.46	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.1	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.0	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.48	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.55	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.25	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.36	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.40	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	4.76	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	22	15	13	17
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.1	1.9	1.5	2.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	25	27	20	32
Copper (aqua regia extractable)	mg/kg	1	MCERTS	23	20	21	22	23
Lead (aqua regia extractable)	mg/kg	1	MCERTS	18	15	20	19	17
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.4	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	30	21	17	35
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46	46	48	37	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	58	64	58	98



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Project / Site name: Northstowe

Lab Sample Number				677254	677255	677256	677257	677258
Sample Reference				WS902	WS902	WS901	WS905	WS905
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.70-0.80	0.10-0.20	0.10-0.20	1.20-1.30
Date Sampled				14/12/2016	14/12/2016	14/12/2016	15/12/2016	15/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit	Accreditation	677254	677255	677256	677257	677258
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic > EC5 - EC6	Unit	Limit	Accreditation	677254	677255	677256	677257	677258
TPH-CWG - Aliphatic > EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	4.9
TPH-CWG - Aliphatic > EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	12
TPH-CWG - Aliphatic > EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	47
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	64

TPH-CWG - Aromatic > EC5 - EC7	Unit	Limit	Accreditation	677254	677255	677256	677257	677258
TPH-CWG - Aromatic > EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic > EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic > EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	6.1	2.0
TPH-CWG - Aromatic > EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	17	< 10
TPH-CWG - Aromatic > EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	42	15
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	66	26



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Project / Site name: Northstowe

Lab Sample Number	677259				677260		677261		677262		677263	
Sample Reference	WS701				WS701		WS903		WS903		WS402	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.20				1.90-2.00		0.10-0.20		1.00-1.10		0.10-0.20	
Date Sampled	15/12/2016				15/12/2016		15/12/2016		15/12/2016		16/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	19	9.0	13	11	14				
Total mass of sample received	kg	0.001	NONE	0.47	0.56	0.53	0.59	0.49				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	8.4	7.5	8.3	6.9
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	40	270	30	28	29
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.020	0.14	0.015	0.014	0.014
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	20.2	137	14.9	14.1	14.4
Organic Matter	%	0.1	MCERTS	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	13	16	11	11
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	1.1	1.5	0.9	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	18	21	18	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	17	23	15	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	11	22	9.0	21
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.3	0.3	0.4	0.5	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	19	24	18	15	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	42	33	38	32	35
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	39	55	34	51



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Project / Site name: Northstowe

Lab Sample Number				677259	677260	677261	677262	677263
Sample Reference				WS701	WS701	WS903	WS903	WS402
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	1.90-2.00	0.10-0.20	1.00-1.10	0.10-0.20
Date Sampled				15/12/2016	15/12/2016	15/12/2016	15/12/2016	16/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Compound	Unit	Limit of detection	Accreditation Status	677259	677260	677261	677262	677263
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Parameter	Unit	Limit of detection	Accreditation Status	677259	677260	677261	677262	677263
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	8.0	75	16	16	13
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	79	18	17	13
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	2.5
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	34	15	10	33
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	11	40	18	13	42



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Project / Site name: Northstowe

Lab Sample Number				677264	677265			
Sample Reference				WS401	WS401			
Sample Number				None Supplied	None Supplied			
Depth (m)				0.10-0.20	1.00-1.10			
Date Sampled				16/12/2016	16/12/2016			
Time Taken				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	%	N/A	NONE	14	5.8			
Total mass of sample received	kg	0.001	NONE	0.53	0.55			

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-			
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected			
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-			
Asbestos Quantification Total	%	0.001	ISO 17025	-	-			

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	8.7			
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1			
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1			
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	27	37			
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.019			
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	13.5	18.7			
Organic Matter	%	0.1	MCERTS	-	-			

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0			
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10			
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05			

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60			
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	14			
Boron (water soluble)	mg/kg	0.2	MCERTS	1.1	0.7			
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2			
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0			
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	13			
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	11			
Lead (aqua regia extractable)	mg/kg	1	MCERTS	23	7.0			
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3			
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	18			
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0			
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35	25			
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	49	25			



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Lab Sample Number				677264	677265			
Sample Reference				WS401	WS401			
Sample Number				None Supplied	None Supplied			
Depth (m)				0.10-0.20	1.00-1.10			
Date Sampled				16/12/2016	16/12/2016			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0			
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0			
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0			
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0			
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0			

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0			
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0			
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0			
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	13	18			
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	16	18			

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1			
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0			
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0			
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10			
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10			
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	14	< 10			



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Project / Site name:
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Northstowe UA008426 Part A
Northstowe

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
672987	TP626	0.10-0.20	133	Insulation Lagging	Chrysotile	< 0.001	< 0.001
672988	TP626	0.40-0.70	135	Loose Fibres & Insulation Lagging	Chrysotile	< 0.001	< 0.001
672996	ZTR4b	0.30-0.40	138	Loose Fibres	Chrysotile & Amosite	< 0.001	< 0.001
673016	TP627	0.10-0.10	120	Insulation Lagging & Loose Fibres	Chrysotile	0.014	0.014
673017	TP627	0.35-0.35	129	Insulation Lagging	Chrysotile & Amosite	0.016	0.016
673031	ZTR9	0.00-0.10	119	Loose Fibres	Chrysotile	< 0.001	< 0.001
675019	BH601	0.30-0.80	124	Insulation Lagging	Chrysotile	< 0.001	< 0.001

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



Combined Report Northstowe UA008426 Part A

Project / Site name: Northstowe

Lab Sample Number	663637				663638	663639	663640	663641
Sample Reference	BHB0025				BHB0035	BHB003D	WWB001	WWC004
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	2.00-2.00				1.50-1.50	3.50-3.50	3.50-3.50	3.50-3.50
Date Sampled	23/11/2016				23/11/2016	23/11/2016	23/11/2016	22/11/2016
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

General Inorganics

pH	pH Units	N/A	ISO 17025	7.5	7.4	7.4	7.5	7.6
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	640000	1030000	1720000	1260000	111000
Total Sulphur	µg/l	15	NONE	210000	340000	570000	420000	37000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	36	< 15	510	< 15	< 15
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	6.09	5.09	4.99	15.0	2.16
Alkalinity	mqCaCO ₃ /l	3	ISO 17025	540	460	490	450	420

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	2.85	1.64	0.66	0.90	0.18
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.07	0.10	0.04	0.04	< 0.02
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	3.4	4.0	3.3	7.1	1.5
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	14	6.2	7.2	10	4.9
Selenium (dissolved)	µg/l	0.6	ISO 17025	0.9	< 0.6	< 0.6	3.3	< 0.6
Vanadium (dissolved)	µg/l	0.2	ISO 17025	6.5	0.7	1.0	2.4	3.0
Zinc (dissolved)	µg/l	0.5	ISO 17025	5.1	11	11	11	6.3



Combined Report Northstowe UA008426 Part A

Project / Site name: Northstowe

Lab Sample Number	663637			663638			663639			663640			663641		
Sample Reference	BHB0025			BHB0035			BHB003D			WWB001			WWC004		
Sample Number	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Depth (m)	2.00-2.00			1.50-1.50			3.50-3.50			3.50-3.50			3.50-3.50		
Date Sampled	23/11/2016			23/11/2016			23/11/2016			23/11/2016			22/11/2016		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status												

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	663637	663638	663639	663640	663641
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	Units	Limit of detection	Accreditation Status	663637	663638	663639	663640	663641
TPH-CWG - Aliphatic >C5 - C6	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C6 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	Units	Limit of detection	Accreditation Status	663637	663638	663639	663640	663641
TPH-CWG - Aromatic >C5 - C7	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C7 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



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Project / Site name: Northstowe

Lab Sample Number	673009				673010		673050		673051		673052	
Sample Reference	TP632				BH611		TP605		TPWS611		TP604	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	1.00-1.10				2.80-3.00		0.90-1.00		1.00-1.20		2.00-2.20	
Date Sampled	02/12/2016				07/12/2016		02/12/2016		06/12/2016		06/12/2016	
Time Taken	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status									

General Inorganics

Parameter	Units	Limit of detection	Accreditation Status	673009	673010	673050	673051	673052
pH	pH Units	N/A	ISO 17025	8.0	7.7	8.1	8.1	8.0
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	100	ISO 17025	185000	16300	11600	95900	259000
Sulphate as SO ₄	mg/l	0.1	ISO 17025	190	16	12	96	260
Total Sulphur	µg/l	1	NONE	62000	5400	3900	32000	86000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	NONE	47	90	< 15	17	17
Total Organic Carbon (TOC)	mg/l	0.1	NONE	45.2	3.43	3.44	4.83	3.64
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	60	78	49	78	63

Total Phenols

Parameter	Units	Limit of detection	Accreditation Status	673009	673010	673050	673051	673052
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10

Speciated PAHs

Parameter	Units	Limit of detection	Accreditation Status	673009	673010	673050	673051	673052
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Parameter	Units	Limit of detection	Accreditation Status	673009	673010	673050	673051	673052
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2

Heavy Metals / Metalloids

Parameter	Units	Limit of detection	Accreditation Status	673009	673010	673050	673051	673052
Arsenic (dissolved)	µg/l	1.1	ISO 17025	< 1.1	< 1.1	1.3	2.8	< 1.1
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.9	< 0.4	1.2	6.7	6.9
Copper (dissolved)	µg/l	0.7	ISO 17025	13	11	13	15	11
Lead (dissolved)	µg/l	1	ISO 17025	2.4	< 1.0	1.0	3.2	4.4
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	1.2	0.5	0.9	3.3	3.6
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Vanadium (dissolved)	µg/l	1.7	ISO 17025	< 1.7	2.2	3.4	16	16
Zinc (dissolved)	µg/l	0.4	ISO 17025	5.6	5.1	3.0	11	14



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Lab Sample Number	673053		673054		675032		675033		675034	
Sample Reference	BH603		BH602		BH610		WS606		WS615	
Sample Number	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	3.50-4.00		1.80-2.30		3.00-3.20		2.70-2.80		2.90-3.00	
Date Sampled	06/12/2016		06/12/2016		12/12/2016		07/12/2016		07/12/2016	
Time Taken	None Supplied		None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status							

General Inorganics

	pH Units	N/A	ISO 17025	7.8	8.0	7.7	8.0	7.7
pH								
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	100	ISO 17025	1850000	163000	2130000	246000	2050000
Sulphate as SO ₄	mg/l	0.1	ISO 17025	1800	160	2100	250	2000
Total Sulphur	µg/l	1	NONE	620000	54000	710000	82000	680000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	NONE	310	21	200	49	68
Total Organic Carbon (TOC)	mg/l	0.1	NONE	3.57	3.18	4.01	3.53	3.27
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	62	72	69	65	62

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
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Heavy Metals / Metalloids

	µg/l	1.1	ISO 17025	< 1.1	1.6	< 1.1	< 1.1	< 1.1
Arsenic (dissolved)	µg/l	1.1	ISO 17025	< 1.1	1.6	< 1.1	< 1.1	< 1.1
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	3.4	6.6	0.6	0.6	1.3
Copper (dissolved)	µg/l	0.7	ISO 17025	12	8.2	8.1	8.2	9.4
Lead (dissolved)	µg/l	1	ISO 17025	2.6	4.4	< 1.0	1.6	< 1.0
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	3.6	3.4	1.5	0.6	1.6
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Vanadium (dissolved)	µg/l	1.7	ISO 17025	12	14	< 1.7	2.9	4.8
Zinc (dissolved)	µg/l	0.4	ISO 17025	12	11	13	6.4	14



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Lab Sample Number	675035				675036		675037		675038		675039	
Sample Reference	WS619				WS618		BH601		BH601		BH609	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	1.90-2.00				0.90-1.00		0.30-0.80		3.80-4.50		0.40-0.60	
Date Sampled	09/12/2016				09/12/2016		07/12/2016		07/12/2016		09/12/2016	
Time Taken	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status									

General Inorganics

Parameter	Units	Limit of detection	Accreditation Status	675035	675036	675037	675038	675039
pH	pH Units	N/A	ISO 17025	8.1	8.2	8.2	7.7	8.1
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	100	ISO 17025	6140	4030	66600	2300000	5720
Sulphate as SO ₄	mg/l	0.1	ISO 17025	6.1	4.0	67	2300	5.7
Total Sulphur	µg/l	1	NONE	2000	1300	22000	770000	1900
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	NONE	21	34	420	220	160
Total Organic Carbon (TOC)	mg/l	0.1	NONE	4.90	4.08	28.3	4.08	10.4
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	63	48	230	65	100

Total Phenols

Parameter	Units	Limit of detection	Accreditation Status	675035	675036	675037	675038	675039
Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10

Speciated PAHs

Parameter	Units	Limit of detection	Accreditation Status	675035	675036	675037	675038	675039
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Parameter	Units	Limit of detection	Accreditation Status	675035	675036	675037	675038	675039
Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2

Heavy Metals / Metalloids

Parameter	Units	Limit of detection	Accreditation Status	675035	675036	675037	675038	675039
Arsenic (dissolved)	µg/l	1.1	ISO 17025	< 1.1	< 1.1	2.0	2.5	< 1.1
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	2.4	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	1.1	1.3	2.1	0.5	0.8
Copper (dissolved)	µg/l	0.7	ISO 17025	17	8.9	100	15	19
Lead (dissolved)	µg/l	1	ISO 17025	< 1.0	1.6	14	< 1.0	2.4
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	2.9	0.7	14	9.0	2.8
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	57	< 4.0
Vanadium (dissolved)	µg/l	1.7	ISO 17025	3.1	3.3	6.4	2.5	< 1.7
Zinc (dissolved)	µg/l	0.4	ISO 17025	3.9	4.8	320	16	3.0



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Lab Sample Number				676909	676910			
Sample Reference				WS621	BH607			
Sample Number				None Supplied	None Supplied			
Depth (m)				0.90-1.00	1.90-2.40			
Date Sampled				08/12/2016	08/12/2016			
Time Taken				None Supplied	None Supplied			
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status					

General Inorganics

pH	pH Units	N/A	ISO 17025	8.0	7.9			
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10			
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10			
Sulphate as SO ₄	µg/l	100	ISO 17025	101000	313000			
Sulphate as SO ₄	mg/l	0.1	ISO 17025	100	310			
Total Sulphur	µg/l	1	NONE	34000	100000			
Sulphide	µg/l	5	NONE	< 5.0	< 5.0			
Ammoniacal Nitrogen as N	µg/l	15	NONE	40	150			
Total Organic Carbon (TOC)	mg/l	0.1	NONE	2.85	2.15			
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	72	68			

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10			
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Speciated PAHs

Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01			
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01			
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01			
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01			
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01			
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01			
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01			
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01			
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01			
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01			
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01			
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01			
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01			
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01			
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01			
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01			

Total PAH

Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2			
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1.1	ISO 17025	< 1.1	2.2			
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08			
Chromium (hexavalent)	µg/l	5	NONE	< 5.0	< 5.0			
Chromium (dissolved)	µg/l	0.4	ISO 17025	0.4	0.6			
Copper (dissolved)	µg/l	0.7	ISO 17025	6.6	4.7			
Lead (dissolved)	µg/l	1	ISO 17025	1.6	3.4			
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5			
Nickel (dissolved)	µg/l	0.3	ISO 17025	0.4	4.1			
Selenium (dissolved)	µg/l	4	ISO 17025	< 4.0	23			
Vanadium (dissolved)	µg/l	1.7	ISO 17025	< 1.7	< 1.7			
Zinc (dissolved)	µg/l	0.4	ISO 17025	1.9	3.6			

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Project / Site name: Northstowe

* 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 *
668473	TP1119	None Supplied	0.00-0.25	Brown loam and clay with gravel.
668474	TP1119	None Supplied	0.50-0.60	Brown loam and sand with gravel.
668475	TP1118	None Supplied	0.00-0.25	Brown loam and clay with gravel.
668476	TP1118	None Supplied	0.30-0.40	Brown loam and clay with gravel.
668477	TP1117	None Supplied	0.30-0.40	Brown loam and clay with gravel.
668478	TP1114	None Supplied	0.20-0.30	Brown loam and sand with gravel.
668479	TP1114	None Supplied	1.00-1.10	Brown loam and clay with gravel.
668480	TP1122	None Supplied	0.10-0.20	Brown loam and clay with gravel.
668481	TP1122	None Supplied	0.70-0.80	Brown loam and clay with gravel.
668482	TP1110	None Supplied	1.10-1.30	Light grey clay and sand.
668483	TP1107	None Supplied	0.10-0.20	Brown loam and clay with gravel.
668484	TP1107	None Supplied	1.00-1.10	Brown loam and clay with gravel.
668485	TP1116	None Supplied	0.60-1.00	Brown clay and sand.
668486	TP1123	None Supplied	0.00-0.20	Brown loam and clay with gravel.
668487	TP1123	None Supplied	0.70-1.00	Brown clay and loam with gravel.
668488	TP722	None Supplied	0.30-0.50	Brown loam and clay with gravel.
668489	BH1107	None Supplied	0.00-0.52	Brown loam and clay with gravel.
668490	BH1107	None Supplied	1.90-2.50	Light brown sand with gravel.
668491	BH1108	None Supplied	0.10-1.00	Brown loam and clay with gravel.
668751	TP1117	None Supplied	1.75-1.85	Brown sandy clay with gravel.
668752	TP1117	None Supplied	2.00-2.10	Brown clay and sand with gravel.
668753	TP1117	None Supplied	3.00	Brown sandy clay.
668754	TP1109	None Supplied	0.40-0.50	Brown loam and sand with gravel.
668755	TP1112	None Supplied	0.10-0.20	Brown loam and sand with gravel.
668756	TP613	None Supplied	0.10-0.20	Brown loam and clay with gravel.
668757	TP613	None Supplied	0.40-0.50	Brown clay and sand.
668758	TP1106	None Supplied	1.90-2.20	Brown sand with gravel.
668759	TP1102	None Supplied	0.10-0.20	Brown loam and sand with gravel.
668760	TP1108	None Supplied	0.15-0.25	Brown sandy loam with gravel and rubble.
668761	TP1108	None Supplied	0.50-0.60	Brown loam and sand with gravel.
672975	TP632	None Supplied	0.10-0.20	Brown loam and clay with vegetation.
672976	TP632	None Supplied	1.00-1.10	Grey clay and sand with chalk.
672977	WS613	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672978	WS613	None Supplied	1.70-1.80	Grey clay and sand.
672979	WS611	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672980	WS614	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672981	WS601	None Supplied	0.10-0.20	Light brown clay and loam with gravel.
672982	WS612	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672983	WS612	None Supplied	1.90-2.00	Brown clay and sand.
672984	WS609	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672985	WS609	None Supplied	0.90-1.00	Brown clay and sand with gravel.
672986	WS605	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672987	TP626	None Supplied	0.10-0.20	Black loam and clay with gravel and vegetation.
672988	TP626	None Supplied	0.40-0.70	Brown loam and sand with gravel.
672989	TP602	None Supplied	0.10-0.20	Brown loam and clay with gravel.
672990	TP612	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672991	TP614	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
672992	TPSA1101	None Supplied	0.50-0.90	Light brown sand with gravel.
672993	TPSA847	None Supplied	0.10-0.30	Brown loam and clay with gravel.
672994	TPSA847	None Supplied	0.50-0.80	Brown clay and sand with gravel.
672995	ZTR6	None Supplied	0.40-0.50	Light brown sandy loam with gravel and vegetation.
672996	ZTR4b	None Supplied	0.30-0.40	Light brown sandy loam with gravel.
672997	ZTR3	None Supplied	0.00-0.10	Brown loam and clay with gravel and vegetation.
672998	ZTR3	None Supplied	0.40-0.50	Light brown loam and clay with gravel.
672999	ZTR2	None Supplied	0.15-0.25	Brown loam and clay with gravel and vegetation.
673000	ZTR1	None Supplied	0.20-0.30	Brown loam and clay with gravel and vegetation.
673001	ZTR8	None Supplied	0.50-0.60	Brown loam and clay with gravel.
673002	ZTR8b	None Supplied	0.20-0.30	Brown loam and clay with gravel.
673003	ZTR12	None Supplied	0.20-0.30	Brown loam and clay with gravel.
673004	BH1102	None Supplied	0.30-0.50	Brown clay and sand with gravel.
673005	BH611	None Supplied	0.30-0.50	Brown loam and clay with gravel.
673006	BH611	None Supplied	2.80-3.00	Grey clay and sand.
673007	BH1101	None Supplied	0.10-0.20	Brown loam and clay with gravel.
673008	BH1101	None Supplied	4.70-4.90	Grey gravelly sand.
673016	TP627	None Supplied	0.10-0.10	Brown loam and clay with gravel and vegetation.
673017	TP627	None Supplied	0.35-0.35	Brown loam and clay with gravel and vegetation.
673018	BH1111	None Supplied	0.20-0.30	Light brown clay and loam with gravel and stones.

Combined Report Northstowe UA008426 Part A

Project / Site name: Northstowe

* 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 *
673019	BH1111	None Supplied	1.00-1.10	Light brown clay and sand with gravel and vegetation.
673020	TP605	None Supplied	0.00-0.40	Brown clay and loam with gravel and vegetation.
673021	TP605	None Supplied	0.90-1.00	Light brown sand with gravel.
673022	TP603	None Supplied	0.00-0.30	Brown loam and clay with vegetation.
673023	TP603	None Supplied	1.20-1.30	Light brown clay and sand with gravel.
673024	ZBP1	None Supplied	0.10-0.20	Brown loam and clay with gravel.
673025	ZBP1	None Supplied	0.60-0.70	Brown loam and clay with vegetation.
673026	ZBP2	None Supplied	0.30-0.40	Brown loam and clay with vegetation.
673027	ZBP3	None Supplied	0.30-0.40	Light brown clay and loam with gravel.
673028	ZBP3	None Supplied	1.00-1.10	Light brown clay and sand with gravel.
673029	ZBP4	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
673030	ZBP4	None Supplied	0.40-0.50	Brown loam and clay with gravel.
673031	ZTR9	None Supplied	0.00-0.10	Brown loam and sand with vegetation.
673032	ZTR9	None Supplied	0.20-0.30	Brown loam and sand with vegetation.
673033	ZTR7A	None Supplied	0.20-0.30	Brown loam and sand with gravel and vegetation.
673034	ZTR7A	None Supplied	0.80-0.90	Brown loam and sand with gravel and vegetation.
673035	ZTR7B	None Supplied	0.30-0.40	Brown loam and sand with gravel and vegetation.
673036	TPWS611	None Supplied	0.10-0.30	Brown clay and loam with gravel.
673037	TPWS611	None Supplied	1.00-1.20	Brown clay.
673038	TP601	None Supplied	0.10-0.30	Brown clay and loam with gravel and vegetation.
673039	TP601	None Supplied	1.00-1.20	Brown clay and sand.
673040	TP604	None Supplied	0.10-0.30	Brown clay and loam with gravel and vegetation.
673041	TP604	None Supplied	2.00-2.20	Brown clay and sand.
673042	BH603	None Supplied	0.30-1.00	Brown clay and loam with gravel and vegetation.
673043	BH603	None Supplied	3.50-4.00	Brown clay.
673044	BH602	None Supplied	0.00-0.40	Brown clay and loam with gravel.
673045	BH602	None Supplied	1.80-2.30	Light brown clay and sand with gravel.
673046	BH1109	None Supplied	0.30-1.00	Light brown clay and sand.
673047	BH1109	None Supplied	2.00-2.45	Light brown sandy clay.
673048	BH1112	None Supplied	0.00-1.00	Brown loam and clay with gravel and vegetation.
673049	BH1112	None Supplied	1.50-1.95	Light brown gravelly sand.
673853	ZTR10	None Supplied	0.60-0.70	Brown loam and sand with gravel and vegetation.
673854	ZTR10	None Supplied	1.00-1.10	Brown loam and clay with gravel.
673855	ZTR11	None Supplied	0.60-0.70	Brown loam and sand with gravel and vegetation.
673856	BH1103	None Supplied	0.00-0.30	Brown loam and clay with gravel.
674678	ZBP4b	None Supplied	0.30-0.40	Brown clay and sand.
674679	ZTR9b	None Supplied	0.40-0.50	Brown loam and sand with gravel and vegetation.
674680	ZTR7b	None Supplied	0.00-0.10	Brown loam and clay with gravel and vegetation.
674830	BH1004	None Supplied	1.00-1.20	Brown clay and sand.
674983	LIF1102	None Supplied	0.10-0.30	Brown loam and clay with gravel.
674984	LIF1105	None Supplied	0.10-0.30	Brown loam and clay with gravel.
674985	LIF1101	None Supplied	0.10-0.30	Brown loam and clay with gravel.
674986	LIF8002	None Supplied	0.10-0.30	Brown loam and clay with gravel.
674987	LIF1002	None Supplied	0.10-0.30	Brown clay and loam with gravel.
674988	LIF1103	None Supplied	0.20-0.50	Brown sandy loam with gravel and rubble.
674989	LIF1004	None Supplied	0.10-0.30	Brown loam and sand with gravel.
674990	LIF1003	None Supplied	0.10-0.30	Brown loam and sand with gravel.
674991	LIF1001	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
674992	LIF604	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
674993	BH1110	None Supplied	0.20-0.40	Brown loam and clay with gravel and vegetation.
674994	BH1110	None Supplied	3.20-3.40	Brown sand with gravel.
674995	BH1002	None Supplied	0.00-0.30	Brown clay and loam with gravel.
674996	BH1002	None Supplied	0.50-0.70	Brown sand with gravel.
674997	BH610	None Supplied	0.10-0.30	Brown clay.
674998	BH610	None Supplied	3.00-3.20	Brown clay.
674999	WS608	None Supplied	0.10-0.20	Brown clay and loam.
675000	WS606	None Supplied	2.70-2.80	Brown clay.
675001	WS606	None Supplied	0.10-0.20	Brown clay and loam.
675002	WS607	None Supplied	0.10-0.20	Brown clay and loam.
675003	WS615	None Supplied	0.10-0.20	Brown clay and loam with gravel.
675004	WS615	None Supplied	2.90-3.00	Grey clay.
675005	WS620	None Supplied	0.10-0.20	Brown clay and loam with gravel.
675006	WS617	None Supplied	0.90-1.00	Brown loam and clay with gravel.
675007	WS616	None Supplied	0.10-0.20	Brown loam and clay with gravel.
675008	WS619	None Supplied	0.10-0.20	Brown loam and sand with gravel.
675009	WS619	None Supplied	1.90-2.00	Brown sand with gravel.
675010	WS618	None Supplied	0.90-1.00	Brown loam and clay with gravel.



Combined Report Northstowe UA008426 Part A

Project / Site name: Northstowe

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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 *
675011	WS1103	None Supplied	0.10-0.20	Brown loam and clay with gravel.
675012	WS1103	None Supplied	1.90-2.00	Brown sandy clay with gravel.
675013	WS1103	None Supplied	2.90-3.00	Brown sand with gravel.
675014	WS1102	None Supplied	0.10-0.20	Brown clay and loam with gravel.
675015	WS1102	None Supplied	1.90-2.00	Brown clay and sand.
675016	TP923	None Supplied	0.20-0.30	Brown loam and clay with gravel.
675017	TP924	None Supplied	0.00-0.10	Brown clay and loam with gravel.
675018	TP924	None Supplied	1.30-1.40	Brown sand with gravel.
675019	BH601	None Supplied	0.30-0.80	Brown loam and clay with gravel.
675020	BH601	None Supplied	3.80-4.50	Grey clay.
675021	BH606	None Supplied	0.30-1.00	Brown loam and clay with gravel.
675022	BH613	None Supplied	0.10-0.20	Brown loam and clay with gravel.
675023	BH607	None Supplied	0.30-0.50	Brown loam and clay with gravel.
675024	BH608	None Supplied	0.40-0.60	Brown sandy loam with gravel.
675025	BH609	None Supplied	0.40-0.60	Brown loam and clay with gravel.
675026	BH1001	None Supplied	0.10-0.40	Brown loam and clay with gravel.
675027	BH1001	None Supplied	2.40-2.60	Brown sand with gravel.
675028	BH605	None Supplied	0.40-0.60	Brown clay and loam with gravel.
675029	BH604	None Supplied	0.10-0.30	Brown clay and loam with gravel.
675030	BH1204	None Supplied	0.10-0.30	Brown clay and loam with gravel.
675031	BH1202	None Supplied	0.40-0.60	Brown clay and sand.
675297	WS611	None Supplied	0.90-1.00	Brown clay.
676897	TP611	None Supplied	0.10-0.30	Light brown loam and sand with gravel and vegetation.
676898	TP611	None Supplied	0.70-1.00	Light brown clay and sand with gravel.
676899	TP615	None Supplied	0.10-0.30	Brown loam and sand with gravel and vegetation.
676900	TP928	None Supplied	0.10-0.30	Brown loam and sand with vegetation.
676901	BH1203	None Supplied	0.10-0.30	Brown clay and loam with vegetation.
676902	WS621	None Supplied	0.90-1.00	Beige clay.
676903	TP925	None Supplied	0.50-0.60	Brown loam and sand with gravel.
676904	TP927	None Supplied	0.00-0.10	Brown loam and sand with vegetation.
676905	TP927	None Supplied	1.00-1.10	Light brown gravelly sand.
676906	TP930	None Supplied	0.30-0.40	Brown clay and loam.
676907	BH607	None Supplied	1.90-2.40	Grey clay.
676908	BH1201	None Supplied	0.00-0.40	Brown clay.
677247	WS1101	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677248	WS1101	None Supplied	0.90-1.00	Light brown loam and sand with gravel and vegetation.
677249	WS906	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677250	WS904	None Supplied	0.10-0.20	Light brown loam and clay with gravel.
677251	WS904	None Supplied	0.90-1.00	Light brown clay and sand with gravel.
677252	WS1001	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677253	WS1001	None Supplied	1.90-2.00	Grey clay and sand.
677254	WS902	None Supplied	0.10-0.20	Brown loam and clay with gravel.
677255	WS902	None Supplied	0.70-0.80	Light brown loam and sand with gravel.
677256	WS901	None Supplied	0.10-0.20	Brown loam and clay with gravel.
677257	WS905	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677258	WS905	None Supplied	1.20-1.30	Light brown clay and sand with gravel.
677259	WS701	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677260	WS701	None Supplied	1.90-2.00	Light brown loam and sand with gravel.
677261	WS903	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677262	WS903	None Supplied	1.00-1.10	Light brown loam and sand with gravel.
677263	WS402	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677264	WS401	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
677265	WS401	None Supplied	1.00-1.10	Light brown sand with gravel.



Combined Report Northstowe UA008426 Part A

Project / Site name: Northstowe

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Alkalinity in Leachate	Determination of Alkalinity by discreet analyser (colorimetry).	In house method based on MEWAM & USEPA Method 310.2.	L082-PL	W	ISO 17025
Alkalinity in Water	Determination of Alkalinity by discreet analyser (colorimetry). Accredited matrices: SW, PW, GW.	In house method based on MEWAM & USEPA Method 310.2.	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in leachate	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	NONE
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in ouse method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-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
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Free cyanide in leachate	Determination of free cyanide by distillation followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Free cyanide in soil	Determination of free 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
Free cyanide in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazine followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025



Combined Report Northstowe UA008426 Part A

Project / Site name: Northstowe

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

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
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in leachate	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed 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
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-PL	D	MCERTS
pH at 20oC in leachate	Determination of pH in leachate by electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L005-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water followed by electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	W	ISO 17025
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-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.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L0102B-PL	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.	L019-UK/PL	D	NONE
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil"	L039-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025



Combined Report Northstowe UA008426 Part A

Project / Site name: Northstowe

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

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 based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
Sulphide in leachate	Determination of sulphide in leachate by ion selective electrode.	In-house method	L010-PL	W	NONE
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in leachate	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	ISO 17025
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total organic carbon in leachate	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025
Total Sulphur in leachates	Determination of total sulphur in leachates by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	NONE
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil"	L039-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	W	MCERTS
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' 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.

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
TP1102		S	16-34710	668759	a			
TP1106		S	16-34710	668758	a			
TP1108		S	16-34710	668760	a			
TP1108		S	16-34710	668761	a			
TP1109		S	16-34710	668754	a			
TP1112		S	16-34710	668755	a			
TP1117		S	16-34710	668751	a			
TP1117		S	16-34710	668752	a			
TP1117		S	16-34710	668753	a			
TP613		S	16-34710	668756	a			
TP613		S	16-34710	668757	a			

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
WS611		S	16-35377	672979	b	Monohydric phenols in soil	L080-PL	b
WS611		S	16-35377	672979	b	Speciated EPA-16 PAHs in soil	L064-PL	b



reg. 13
 Arcadis Consulting (UK) Ltd
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 2 Glass Wharf
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i2 Analytical Ltd.
 7 Woodshots Meadow,
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Combined Report : Northstowe UA008426 Part B

Project / Site name:	Northstowe	Samples received on:	20/12/2016
Your job number:	UA008426	Samples instructed on:	20/12/2016
Your order number:		Analysis completed by:	03/01/2017
Report Issue Number:	1	Report issued on:	28/02/2017
Samples Analysed:	10 leachate samples - 183 soil samples - 28 water samples		

Signed: reg. 13

reg. 13
 reg. 13
For & on behalf of i2 Analytical Ltd.

Signed: reg. 13

reg. 13
 reg. 13
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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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677392	677393	677394	677395	677396
Sample Reference				TP631	TP631	TPSA618	TPSA618	TPSA618
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.40	1.30-3.00	0.10-0.30	0.90-1.20	0.10-0.30
Date Sampled				01/12/2016	01/12/2016	15/12/2016	15/12/2016	15/12/2016
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	%	N/A	NONE	16	22	17	7.5	21
Total mass of sample received	kg	0.001	NONE	1.5	1.7	0.43	0.47	0.44

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.6	7.7	7.3	8.2	7.2
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	1100	4400	48	120	33
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.56	2.2	0.024	0.058	0.017
Organic Matter	%	0.1	MCERTS	2.0	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	0.11	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	0.33	< 0.10	0.36	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.50	< 0.10	0.43	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	0.42	< 0.10	0.38	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	0.24	< 0.10	0.18	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.19	< 0.05	0.18	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	1.68	< 1.60	1.64	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	677392				677393	677394	677395	677396
Sample Reference	TP631				TP631	TPSA618	TPSA618	TPSA616
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.00-0.40				1.30-3.00	0.10-0.30	0.90-1.20	0.10-0.30
Date Sampled	01/12/2016				01/12/2016	15/12/2016	15/12/2016	15/12/2016
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Heavy Metals / Metalloids

Parameter	Units	Limit of detection	Accreditation Status	677392	677393	677394	677395	677396
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.8	14	12	13	13
Boron (water soluble)	mg/kg	0.2	MCERTS	1.0	1.5	0.8	1.5	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	24	25	19	23
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	17	44	13	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	16	22	17	17
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	16	27	18	19	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38	35	44	34	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	46	60	57	30	47

Monoaromatics

Parameter	Units	Limit of detection	Accreditation Status	677392	677393	677394	677395	677396
Benzene	ug/kg	1	MCERTS	-	-	< 1.0	-	-
Toluene	ug/kg	1	MCERTS	-	-	< 1.0	-	-
Ethylbenzene	ug/kg	1	MCERTS	-	-	< 1.0	-	-
p & m-xylene	ug/kg	1	MCERTS	-	-	< 1.0	-	-
o-xylene	ug/kg	1	MCERTS	-	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	< 1.0	-	-

Petroleum Hydrocarbons

Parameter	Units	Limit of detection	Accreditation Status	677392	677393	677394	677395	677396
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	2.9	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	42	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	51	-	-

Parameter	Units	Limit of detection	Accreditation Status	677392	677393	677394	677395	677396
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	677392				677393	677394	677395	677396
Sample Reference	TP631				TP631	TPSA618	TPSA618	TPSA618
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.00-0.40				1.30-3.00	0.10-0.30	0.90-1.20	0.10-0.30
Date Sampled	01/12/2016				01/12/2016	15/12/2016	15/12/2016	15/12/2016
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

VOCs

Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	677392				677393	677394	677395	677396
Sample Reference	TP631				TP631	TPSA618	TPSA618	TPSA616
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.00-0.40				1.30-3.00	0.10-0.30	0.90-1.20	0.10-0.30
Date Sampled	01/12/2016				01/12/2016	15/12/2016	15/12/2016	15/12/2016
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

SVOCs								
Analytical Parameter	Units	Limit of detection	Accreditation Status	677392	677393	677394	677395	677396
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677397	677398	677399	677400	677401
Sample Reference				TP929	TP929	TP931	TP931	TP932
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.10	1.10-1.20	0.10-0.20	0.50-0.60	0.10-0.20
Date Sampled				15/12/2016	15/12/2016	15/12/2016	15/12/2016	15/12/2016
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	%	N/A	NONE	3.0	7.3	15	14	11
Total mass of sample received	kg	0.001	NONE	0.47	0.51	0.49	0.50	0.48

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.5	8.7	7.6	7.9	7.0
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	45	30	100	430	1700
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.022	0.015	0.051	0.22	0.84
Organic Matter	%	0.1	MCERTS	-	-	1.5	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.20	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.55	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.50	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.23	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.39	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.31	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.19	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.25	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	2.62	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677397	677398	677399	677400	677401
Sample Reference				TP929	TP929	TP931	TP931	TP932
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.10	1.10-1.20	0.10-0.20	0.50-0.60	0.10-0.20
Date Sampled				15/12/2016	15/12/2016	15/12/2016	15/12/2016	15/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	15	11	12	13
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.5	1.3	1.2	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	15	26	29	29
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	16	20	17	29
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	6.5	16	12	18
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	16	16	17	19	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46	40	41	49	48
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	53	28	54	56	82

Monoaromatics

	Units	Limit of detection	Accreditation Status					
Benzene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10

	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	< 10	< 10



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677397	677398	677399	677400	677401
Sample Reference				TP929	TP929	TP931	TP931	TP932
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.10	1.10-1.20	0.10-0.20	0.50-0.60	0.10-0.20
Date Sampled				15/12/2016	15/12/2016	15/12/2016	15/12/2016	15/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677397	677398	677399	677400	677401
Sample Reference				TP929	TP929	TP931	TP931	TP932
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.10	1.10-1.20	0.10-0.20	0.50-0.60	0.10-0.20
Date Sampled				15/12/2016	15/12/2016	15/12/2016	15/12/2016	15/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	677402				677403		677404		677405		677406	
Sample Reference	TP932				BH1206		BH1205		BH1206		LIF1301	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	1.30-1.40				0.10-0.30		0.10-0.30		1.60-1.80		0.00-0.20	
Date Sampled	15/12/2016				15/12/2016		15/12/2016		15/12/2016		16/12/2016	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	16	13	29	23	17				
Total mass of sample received	kg	0.001	NONE	0.47	0.49	0.46	0.44	2.0				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.5	7.2	7.5	7.5	7.5
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	4100	360	450	3100	34
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	2.0	0.18	0.22	1.6	0.017
Organic Matter	%	0.1	MCERTS	-	-	-	0.4	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.28
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.53
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.46
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.22
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.26
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	1.75
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	677402	677403	677404	677405	677406
Sample Reference	TP932	BH1206	BH1205	BH1206	LIF1301
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.30-1.40	0.10-0.30	0.10-0.30	1.60-1.80	0.00-0.20
Date Sampled	15/12/2016	15/12/2016	15/12/2016	15/12/2016	16/12/2016
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	15	14	6.1	11
Boron (water soluble)	mg/kg	0.2	MCERTS	2.2	1.4	1.6	2.1	1.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	0.3
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	32	33	27	38	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	20	16	31	22
Lead (aqua regia extractable)	mg/kg	1	MCERTS	10	16	20	16	26
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	22	19	17	28	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	47	47	44	43	45
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	72	56	100	130

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	< 10



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677402	677403	677404	677405	677406
Sample Reference				TP932	BH1206	BH1205	BH1206	LIF1301
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.30-1.40	0.10-0.30	0.10-0.30	1.60-1.80	0.00-0.20
Date Sampled				15/12/2016	15/12/2016	15/12/2016	15/12/2016	16/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677402	677403	677404	677405	677406
Sample Reference				TP932	BH1206	BH1205	BH1206	LIF1301
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.30-1.40	0.10-0.30	0.10-0.30	1.60-1.80	0.00-0.20
Date Sampled				15/12/2016	15/12/2016	15/12/2016	15/12/2016	16/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677407	677408	677409	677410	677411
Sample Reference				LIF1302	LIF1303	LIF1304	LIF1305	LIF1306
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20
Date Sampled				16/12/2016	16/12/2016	16/12/2016	16/12/2016	16/12/2016
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	%	N/A	NONE	17	16	21	15	17
Total mass of sample received	kg	0.001	NONE	1.9	1.9	1.7	1.7	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.7	7.7	8.3	7.6
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	46	46	58	150	37
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.023	0.023	0.029	0.073	0.019
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.29	0.80	0.61	0.72	0.52
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.12	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	0.58	1.4	1.1	1.9	1.2
Pyrene	mg/kg	0.1	MCERTS	0.50	1.2	0.97	1.8	1.1
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.30	0.53	0.38	0.86	0.46
Chrysene	mg/kg	0.05	MCERTS	0.34	0.59	0.62	0.91	0.61
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.29	0.58	0.40	1.0	0.61
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.30	0.51	0.40	0.82	0.41
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.31	0.45	0.38	1.0	0.54
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.23	< 0.10	0.50	0.31
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.30	< 0.05	0.68	0.39

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	2.91	6.51	4.88	10.3	6.14
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677407	677408	677409	677410	677411
Sample Reference				LIF1302	LIF1303	LIF1304	LIF1305	LIF1306
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20
Date Sampled				16/12/2016	16/12/2016	16/12/2016	16/12/2016	16/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	12	12	11	13
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	2.0	2.2	1.7	2.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	2.4	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	27	22	26	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	20	28	28	35	25
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	82	27	48	51
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	0.3	0.5	0.4	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	21	18	17	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	40	45	37	40	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	87	110	62	94	80

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	22	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	22	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	< 10	31	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	12	< 10	36	< 10



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677407	677408	677409	677410	677411
Sample Reference				LIF1302	LIF1303	LIF1304	LIF1305	LIF1306
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20
Date Sampled				16/12/2016	16/12/2016	16/12/2016	16/12/2016	16/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677407	677408	677409	677410	677411
Sample Reference				LIF1302	LIF1303	LIF1304	LIF1305	LIF1306
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20	0.00-0.20
Date Sampled				16/12/2016	16/12/2016	16/12/2016	16/12/2016	16/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677412	677413	679182	679183	679184
Sample Reference				LIF1307	LIF1308	TP915	TP915	TP919
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.20	0.00-0.20	0.10	0.55	0.10
Date Sampled				16/12/2016	16/12/2016	20/12/2016	20/12/2016	20/12/2016
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	%	N/A	NONE	11	15	17	18	18
Total mass of sample received	kg	0.001	NONE	2.0	2.0	1.8	1.8	1.6

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	7.9	7.0	8.0	7.7
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	24	28	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.012	0.014	0.0093	0.021	0.0083
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	0.31	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	0.22	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	4.1	1.3	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	0.70	0.17	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	9.5	3.3	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	8.2	2.9	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	4.5	1.4	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	3.7	1.4	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	4.1	1.6	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	3.2	0.83	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	3.8	1.3	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	1.9	0.80	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	0.41	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.4	0.94	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	46.8	16.1	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	677412	677413	679182	679183	679184
Sample Reference	LIF1307	LIF1308	TP915	TP915	TP919
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.00-0.20	0.00-0.20	0.10	0.55	0.10
Date Sampled	16/12/2016	16/12/2016	20/12/2016	20/12/2016	20/12/2016
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	13	15	14	15	13
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	2.3	1.5	2.2	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	30	25	26	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	24	24	21	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	41	50	24	15	16
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	19	24	21	22	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	44	59	48	47	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	66	93	61	53	49

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	< 10	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	26	10	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	33	16	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	60	26	< 10	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677412	677413	679182	679183	679184
Sample Reference				LIF1307	LIF1308	TP915	TP915	TP919
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.20	0.00-0.20	0.10	0.55	0.10
Date Sampled				16/12/2016	16/12/2016	20/12/2016	20/12/2016	20/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				677412	677413	679182	679183	679184
Sample Reference				LIF1307	LIF1308	TP915	TP915	TP919
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00-0.20	0.00-0.20	0.10	0.55	0.10
Date Sampled				16/12/2016	16/12/2016	20/12/2016	20/12/2016	20/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679185	679186	679187	679188	679189
Sample Reference				TP908	TP908	TP902	TP902	TP906
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.65	0.20	0.50	0.20
Date Sampled				20/12/2016	20/12/2016	20/12/2016	20/12/2016	20/12/2016
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	%	N/A	NONE	13	11	15	15	17
Total mass of sample received	kg	0.001	NONE	1.7	1.8	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	8.3	7.3	8.0	7.0
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0089	0.0053	0.010	0.0083	0.010
Organic Matter	%	0.1	MCERTS	-	0.7	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	679185	679186	679187	679188	679189
Sample Reference	TP908	TP908	TP902	TP902	TP906
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.65	0.20	0.50	0.20
Date Sampled	20/12/2016	20/12/2016	20/12/2016	20/12/2016	20/12/2016
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	18	15	14	13
Boron (water soluble)	mg/kg	0.2	MCERTS	1.4	0.6	1.5	1.1	1.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	22	25	25	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	21	13	20	13	24
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	9.1	21	21	22
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	19	21	21	21	23
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	39	42	47	45	48
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	52	29	53	45	63

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	11	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	11	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	11



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679185	679186	679187	679188	679189
Sample Reference				TP908	TP908	TP902	TP902	TP906
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.65	0.20	0.50	0.20
Date Sampled				20/12/2016	20/12/2016	20/12/2016	20/12/2016	20/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679185	679186	679187	679188	679189
Sample Reference				TP908	TP908	TP902	TP902	TP906
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.65	0.20	0.50	0.20
Date Sampled				20/12/2016	20/12/2016	20/12/2016	20/12/2016	20/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679190	679191	679192	679193	679194
Sample Reference				TP907	TP907	TP901	TP901	TP912
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.80	0.10
Date Sampled				20/12/2016	20/12/2016	19/12/2016	19/12/2016	19/12/2016
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	%	N/A	NONE	18	8.1	14	9.9	13
Total mass of sample received	kg	0.001	NONE	1.4	2.0	1.5	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	5.7	7.9	7.3	8.3	7.7
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.031	0.012	0.015	0.0071	0.0052
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	679190	679191	679192	679193	679194
Sample Reference	TP907	TP907	TP901	TP901	TP912
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.40	0.10	0.80	0.10
Date Sampled	20/12/2016	20/12/2016	19/12/2016	19/12/2016	19/12/2016
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	15	19	24	18
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	1.4	0.7	0.7	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	21	21	25	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	14	22	11	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	19	12	18	8.9	15
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	19	17	24	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35	40	37	49	41
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	49	41	53	33	44

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679190	679191	679192	679193	679194
Sample Reference				TP907	TP907	TP901	TP901	TP912
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.80	0.10
Date Sampled				20/12/2016	20/12/2016	19/12/2016	19/12/2016	19/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679190	679191	679192	679193	679194
Sample Reference				TP907	TP907	TP901	TP901	TP912
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.80	0.10
Date Sampled				20/12/2016	20/12/2016	19/12/2016	19/12/2016	19/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679195	679196	679197	679198	679199
Sample Reference				TP912	TP917	TP921	TP921	TP916
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.10	0.10	0.80	0.10
Date Sampled				19/12/2016	19/12/2016	19/12/2016	19/12/2016	19/12/2016
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	%	N/A	NONE	10	13	12	9.1	13
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	1.6

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	6.9	6.1	8.7	6.2
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0039	0.0058	0.0059	0.0035	0.013
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	679195	679196	679197	679198	679199
Sample Reference	TP912	TP917	TP921	TP921	TP916
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.70	0.10	0.10	0.80	0.10
Date Sampled	19/12/2016	19/12/2016	19/12/2016	19/12/2016	19/12/2016
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	15	14	28	17
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	0.8	1.0	< 0.2	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	12	19	22	19	22
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	21	19	13	20
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.9	17	19	9.2	19
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	21	15	16	25	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	24	33	38	63	39
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	22	47	47	34	48

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Toluene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
o-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	11	-	< 10	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679195	679196	679197	679198	679199
Sample Reference				TP912	TP917	TP921	TP921	TP916
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.10	0.10	0.80	0.10
Date Sampled				19/12/2016	19/12/2016	19/12/2016	19/12/2016	19/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679195	679196	679197	679198	679199
Sample Reference				TP912	TP917	TP921	TP921	TP916
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.10	0.10	0.80	0.10
Date Sampled				19/12/2016	19/12/2016	19/12/2016	19/12/2016	19/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679200	679201	679335	679336	679337
Sample Reference				TP918	TP913	TPBH612	TPBH612	TP624
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.75	0.10
Date Sampled				19/12/2016	19/12/2016	21/12/2016	21/12/2016	21/12/2016
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	%	N/A	NONE	12	12	13	12	12
Total mass of sample received	kg	0.001	NONE	1.7	1.6	2.0	2.0	1.6

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.4	6.5	8.2	7.7
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	34	74	23
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0073	0.019	0.017	0.037	0.012
Organic Matter	%	0.1	MCERTS	2.2	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.52
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.86
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.72
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.29
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.38
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.23
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.18
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	0.24
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	3.42
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	679200	679201	679335	679336	679337
Sample Reference	TP918	TP913	TPBH612	TPBH612	TP624
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.10	0.10	0.75	0.10
Date Sampled	19/12/2016	19/12/2016	21/12/2016	21/12/2016	21/12/2016
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	13	16	13	15
Boron (water soluble)	mg/kg	0.2	MCERTS	0.7	0.8	0.8	0.9	1.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	21	22	19	19	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	20	16	14	17
Lead (aqua regia extractable)	mg/kg	1	MCERTS	29	25	15	8.5	16
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	17	18	17	23	20
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	43	41	34	35	40
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	48	52	36	27	43

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
Toluene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
o-xylene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	3.3
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	16



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679200	679201	679335	679336	679337
Sample Reference				TP918	TP913	TPBH612	TPBH612	TP624
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.75	0.10
Date Sampled				19/12/2016	19/12/2016	21/12/2016	21/12/2016	21/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679200	679201	679335	679336	679337
Sample Reference				TP918	TP913	TPBH612	TPBH612	TP624
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10	0.10	0.75	0.10
Date Sampled				19/12/2016	19/12/2016	21/12/2016	21/12/2016	21/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	679338				679339		679340	679341	679342
Sample Reference	TP625				TP625		TP607	TP607	TP606
Sample Number	None Supplied				None Supplied		None Supplied	None Supplied	None Supplied
Depth (m)	0.10				1.00		0.40	0.90	0.10
Date Sampled	21/12/2016				21/12/2016		21/12/2016	21/12/2016	21/12/2016
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	%	N/A	NONE	11	11	14	8.7	12	
Total mass of sample received	kg	0.001	NONE	1.7	1.9	1.8	1.8	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	Chrysotile	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	< 0.001	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	< 0.001	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.0	8.5	7.9	8.1	7.9
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	24	57	290	33	78
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.012	0.028	0.14	0.017	0.039
Organic Matter	%	0.1	MCERTS	-	-	2.0	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.64	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.27	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.90	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	6.5	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.9	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	8.3	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	6.5	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	3.2	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	2.5	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	2.4	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	1.6	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	2.5	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.64	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.90	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	38.7	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679338	679339	679340	679341	679342
Sample Reference				TP625	TP625	TP607	TP607	TP606
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.40	0.90	0.10
Date Sampled				21/12/2016	21/12/2016	21/12/2016	21/12/2016	21/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	5.0	13	15	13
Boron (water soluble)	mg/kg	0.2	MCERTS	1.6	< 0.2	1.2	1.1	1.5
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	8.7	21	23	19
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	11	31	18	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	12	5.1	140	14	15
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	11	22	22	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	32	14	35	43	38
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	32	19	94	42	38

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	4.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	36	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	41	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	81	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679338	679339	679340	679341	679342
Sample Reference				TP625	TP625	TP607	TP607	TP606
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.40	0.90	0.10
Date Sampled				21/12/2016	21/12/2016	21/12/2016	21/12/2016	21/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				679338	679339	679340	679341	679342
Sample Reference				TP625	TP625	TP607	TP607	TP606
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.40	0.90	0.10
Date Sampled				21/12/2016	21/12/2016	21/12/2016	21/12/2016	21/12/2016
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				682208	682209	682961	682962	682963
Sample Reference				TP626	BH601	TPSA407	TPSA801	TPSA801
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.20	1.00-2.00	0.10-0.30	0.10-0.40	0.70-1.00
Date Sampled				07/12/2016	07/12/2016	04/01/2017	04/01/2017	04/01/2017
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	%	N/A	NONE	21	25	15	14	13
Total mass of sample received	kg	0.001	NONE	1.2	2.0	1.8	1.5	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.4	7.2	7.5	8.1
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	520	4900	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.26	2.4	0.012	0.016	0.012
Organic Matter	%	0.1	MCERTS	1.3	-	2.5	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	682208	682209	682961	682962	682963
Sample Reference	TP626	BH601	TPSA407	TPSA801	TPSA801
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.00-1.20	1.00-2.00	0.10-0.30	0.10-0.40	0.70-1.00
Date Sampled	07/12/2016	07/12/2016	04/01/2017	04/01/2017	04/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	16	13	12	4.5
Boron (water soluble)	mg/kg	0.2	MCERTS	7.6	6.4	1.3	1.3	0.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	37	28	19	20	11
Copper (aqua regia extractable)	mg/kg	1	MCERTS	36	56	15	16	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	37	25	18	20	5.4
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.4	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	30	15	18	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	77	50	35	37	20
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	150	44	47	17

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	-	-	-	-
Toluene	ug/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	-
o-xylene	ug/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				682208	682209	682961	682962	682963
Sample Reference				TP626	BH601	TPSA407	TPSA801	TPSA801
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.20	1.00-2.00	0.10-0.30	0.10-0.40	0.70-1.00
Date Sampled				07/12/2016	07/12/2016	04/01/2017	04/01/2017	04/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				682208	682209	682961	682962	682963
Sample Reference				TP626	BH601	TPSA407	TPSA801	TPSA801
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.00-1.20	1.00-2.00	0.10-0.30	0.10-0.40	0.70-1.00
Date Sampled				07/12/2016	07/12/2016	04/01/2017	04/01/2017	04/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				682964	682965	682966	682967	682968
Sample Reference				TPSA814	TPSA832	TPSA808	TPSA1105	TPSA1105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.10-0.30	0.70-1.10
Date Sampled				05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
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
Moisture Content	%	N/A	NONE	15	13	16	14	13
Total mass of sample received	kg	0.001	NONE	2.0	2.0	1.9	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.4	7.4	7.3	7.6	8.1
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.012	0.0088	0.0078	0.011	0.012
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.34	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.31	0.63	0.38	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	0.84	1.7	1.0	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	0.68	1.4	0.77	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.33	0.67	0.43	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.36	0.79	0.37	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.30	0.92	0.36	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.28	0.41	0.25	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.31	0.65	0.30	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.26	0.43	0.21	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.23	0.45	0.20	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	4.24	8.11	4.27	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				682964	682965	682966	682967	682968
Sample Reference				TPSA814	TPSA832	TPSA808	TPSA1105	TPSA1105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.10-0.30	0.70-1.10
Date Sampled				05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	15	11	13	13	6.7
Boron (water soluble)	mg/kg	0.2	MCERTS	1.4	1.1	0.7	1.7	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	24	27	23	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	16	15	15	7.7
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	28	16	21	4.4
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	1.0
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	19	18	18	12
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	44	45	47	44	30
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	55	57	46	49	18

Monoaromatics

Analytical Parameter	Units	Limit of detection	Accreditation Status					
Benzene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Toluene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
o-xylene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-

Petroleum Hydrocarbons

Analytical Parameter	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	< 10	-

Analytical Parameter	Units	Limit of detection	Accreditation Status					
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	< 10	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				682964	682965	682966	682967	682968
Sample Reference				TPSA814	TPSA832	TPSA808	TPSA1105	TPSA1105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.10-0.30	0.70-1.10
Date Sampled				05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				682964	682965	682966	682967	682968
Sample Reference				TPSA814	TPSA832	TPSA808	TPSA1105	TPSA1105
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.10-0.30	0.70-1.10
Date Sampled				05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				682969	682970	682971	682972	682973
Sample Reference				TP1209	TP1209	TP1216	TP1217	TP1218
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.80	0.10	0.10	0.10
Date Sampled				05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
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	%	N/A	NONE	16	17	13	19	17
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	6.2	7.3	7.4	7.3
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.024	0.13	0.014	0.014	0.018
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.45	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	1.4	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	0.21	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	2.8	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	2.4	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	1.3	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	1.1	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	1.4	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.81	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	1.2	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.70	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.79	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	14.5	< 1.60	< 1.60	< 1.60	< 1.60
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Project / Site name: Northstowe

Lab Sample Number	682969	682970	682971	682972	682973
Sample Reference	TP1209	TP1209	TP1216	TP1217	TP1218
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.80	0.10	0.10	0.10
Date Sampled	05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	10	24	28	18	18
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.3	0.9	1.0	1.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	25	25	24	24	27
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	14	12	13	16
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	15	15	13	16
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.6	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	15	18	16	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	40	53	42	45	46
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	43	47	40	40	46

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	11	-	< 10	-	< 10



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Project / Site name: Northstowe

Lab Sample Number				682969	682970	682971	682972	682973
Sample Reference				TP1209	TP1209	TP1216	TP1217	TP1218
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.80	0.10	0.10	0.10
Date Sampled				05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				682969	682970	682971	682972	682973
Sample Reference				TP1209	TP1209	TP1216	TP1217	TP1218
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.80	0.10	0.10	0.10
Date Sampled				05/01/2017	05/01/2017	05/01/2017	05/01/2017	05/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



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Lab Sample Number	684503				684504		684505		684506		684507	
Sample Reference	TP609				TP609		TP1212		TP1211		TP1211	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10				0.40		0.10		0.10		0.80	
Date Sampled	10/01/2017				10/01/2017		09/01/2017		06/01/2017		06/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	19	17	18	17	17	16	16	16	
Total mass of sample received	kg	0.001	NONE	1.7	1.7	1.8	1.7	1.7	1.9	1.9	1.9	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.9	6.1	6.3	7.8
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	28	57	28	35	46
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.028	0.014	0.018	0.023
Organic Matter	%	0.1	MCERTS	3.2	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Lab Sample Number				684503	684504	684505	684506	684507
Sample Reference				TP609	TP609	TP1212	TP1211	TP1211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.10	0.80
Date Sampled				10/01/2017	10/01/2017	09/01/2017	06/01/2017	06/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	9.7	17	16	14
Boron (water soluble)	mg/kg	0.2	MCERTS	2.3	2.0	1.3	2.2	2.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	28	24	27	31
Copper (aqua regia extractable)	mg/kg	1	MCERTS	33	11	14	13	21
Lead (aqua regia extractable)	mg/kg	1	MCERTS	34	13	17	15	13
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	23	18	16	17	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	51	50	41	43	48
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	94	50	44	41	54

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	< 10	-



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Lab Sample Number				684503	684504	684505	684506	684507
Sample Reference				TP609	TP609	TP1212	TP1211	TP1211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.10	0.80
Date Sampled				10/01/2017	10/01/2017	09/01/2017	06/01/2017	06/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				684503	684504	684505	684506	684507
Sample Reference				TP609	TP609	TP1212	TP1211	TP1211
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.10	0.80
Date Sampled				10/01/2017	10/01/2017	09/01/2017	06/01/2017	06/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	684508				684509				684510				684511				684512			
Sample Reference	TP1210A				TP1120				TP1120				TP1121				TP1121			
Sample Number	None Supplied				None Supplied				None Supplied				None Supplied				None Supplied			
Depth (m)	0.10				0.10-0.30				0.90-1.20				0.10-0.30				0.60-1.00			
Date Sampled	06/01/2017				06/01/2017				06/01/2017				06/01/2017				06/01/2017			
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	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1			
Moisture Content	%	N/A	NONE	18	12	14	11	9.4												
Total mass of sample received	kg	0.001	NONE	1.8	1.9	2.0	2.0	2.0												

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.9	8.4	7.9	8.3
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	34	18	9.5	15	150
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.017	0.0089	0.0048	0.0076	0.077
Organic Matter	%	0.1	MCERTS	-	-	-	2.1	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.59	< 0.10	< 0.10	1.4	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.26	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	0.91	< 0.10	< 0.10	1.9	< 0.10
Pyrene	mg/kg	0.1	MCERTS	0.71	< 0.10	< 0.10	1.6	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.32	< 0.10	< 0.10	0.78	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.40	< 0.05	< 0.05	0.85	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.33	< 0.10	< 0.10	0.93	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.24	< 0.10	< 0.10	0.42	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.30	< 0.10	< 0.10	0.77	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.66	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.2	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	3.80	< 1.60	< 1.60	10.7	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	684508	684509	684510	684511	684512
Sample Reference	TP1210A	TP1120	TP1120	TP1121	TP1121
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.10-0.30	0.90-1.20	0.10-0.30	0.60-1.00
Date Sampled	06/01/2017	06/01/2017	06/01/2017	06/01/2017	06/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	14	6.9	15	4.3
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	1.6	< 0.2	1.3	0.6
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.4	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	28	23	12	24	11
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	15	7.7	18	7.9
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	14	5.1	120	8.0
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	0.6	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	23	18	10	20	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	54	41	24	42	19
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	58	48	19	57	19

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Toluene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
o-xylene	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	-	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	6.8	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	-	64	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	75	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	-	< 10	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				684508	684509	684510	684511	684512
Sample Reference				TP1210A	TP1120	TP1120	TP1121	TP1121
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10-0.30	0.90-1.20	0.10-0.30	0.60-1.00
Date Sampled				06/01/2017	06/01/2017	06/01/2017	06/01/2017	06/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				684508	684509	684510	684511	684512
Sample Reference				TP1210A	TP1120	TP1120	TP1121	TP1121
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10-0.30	0.90-1.20	0.10-0.30	0.60-1.00
Date Sampled				06/01/2017	06/01/2017	06/01/2017	06/01/2017	06/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				684513	684514	684515	686098	686099
Sample Reference				TPSA1113	TPSA1113	TP1208	TP1222	TP1225
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	1.60-2.00	0.10	0.10-0.30	0.10-0.30
Date Sampled				06/01/2017	06/01/2017	09/01/2017	11/01/2017	11/01/2017
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	%	N/A	NONE	14	11	19	18	23
Total mass of sample received	kg	0.001	NONE	1.7	2.0	1.4	1.6	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.9	8.5	7.4	7.2	7.1
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	22	42	70	20	24
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.011	0.021	0.035	0.010	0.012
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.25	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.60	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.49	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.26	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.33	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.25	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.18	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.26	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	2.62	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				684513	684514	684515	686098	686099
Sample Reference				TPSA1113	TPSA1113	TP1208	TP1222	TP1225
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	1.60-2.00	0.10	0.10-0.30	0.10-0.30
Date Sampled				06/01/2017	06/01/2017	09/01/2017	11/01/2017	11/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.4	4.3	15	20	20
Boron (water soluble)	mg/kg	0.2	MCERTS	2.0	< 0.2	2.0	2.6	4.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	13	22	35	43
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	6.9	15	13	12
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	4.8	22	22	24
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	12	16	23	31
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	36	26	41	60	75
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	41	19	47	66	73

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	< 10	-



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Project / Site name: Northstowe

Lab Sample Number				684513	684514	684515	686098	686099
Sample Reference				TPSA1113	TPSA1113	TP1208	TP1222	TP1225
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	1.60-2.00	0.10	0.10-0.30	0.10-0.30
Date Sampled				06/01/2017	06/01/2017	09/01/2017	11/01/2017	11/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				684513	684514	684515	686098	686099
Sample Reference				TPSA1113	TPSA1113	TP1208	TP1222	TP1225
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	1.60-2.00	0.10	0.10-0.30	0.10-0.30
Date Sampled				06/01/2017	06/01/2017	09/01/2017	11/01/2017	11/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686100	686101	686102	686103	686104
Sample Reference				TP1228	TP1227	TP1226	TP633	TP633
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10	0.10	1.50
Date Sampled				11/01/2017	11/01/2017	12/01/2017	12/01/2017	12/01/2017
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	%	N/A	NONE	22	27	24	15	8.1
Total mass of sample received	kg	0.001	NONE	1.6	1.5	1.4	1.6	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	7.0	6.9	7.4	8.1
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	29	28	53	32	190
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.014	0.014	0.027	0.016	0.097
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	686100	686101	686102	686103	686104
Sample Reference	TP1228	TP1227	TP1226	TP633	TP633
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10-0.30	0.10-0.30	0.10	0.10	1.50
Date Sampled	11/01/2017	11/01/2017	12/01/2017	12/01/2017	12/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	18	19	12	16
Boron (water soluble)	mg/kg	0.2	MCERTS	4.3	4.2	4.1	1.5	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	48	48	52	25	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	18	18	18	8.8	9.8
Lead (aqua regia extractable)	mg/kg	1	MCERTS	25	24	27	19	8.1
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	< 0.3	0.8	0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	29	28	32	20	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	77	72	81	47	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	100	98	110	50	30

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Toluene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Ethylbenzene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
p & m-xylene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
o-xylene	ug/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	< 1.0	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	< 2.0	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	< 10	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	< 10	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	< 10	< 10	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686100	686101	686102	686103	686104
Sample Reference				TP1228	TP1227	TP1226	TP633	TP633
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10	0.10	1.50
Date Sampled				11/01/2017	11/01/2017	12/01/2017	12/01/2017	12/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686100	686101	686102	686103	686104
Sample Reference				TP1228	TP1227	TP1226	TP633	TP633
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10	0.10	1.50
Date Sampled				11/01/2017	11/01/2017	12/01/2017	12/01/2017	12/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686105	686106	686107	686108	686109
Sample Reference				TP623	TP623	TP634	TP634	TP634
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.10	1.80	0.70
Date Sampled				12/01/2017	12/01/2017	12/01/2017	12/01/2017	12/01/2017
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	%	N/A	NONE	17	19	27	19	14
Total mass of sample received	kg	0.001	NONE	1.5	1.7	1.8	1.5	1.3

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	7.7	7.3	7.5	8.0
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	84	290	390	3800	93
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.042	0.15	0.19	1.9	0.046
Organic Matter	%	0.1	MCERTS	-	-	3.6	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686105	686106	686107	686108	686109
Sample Reference				TP623	TP623	TP634	TP634	TP634
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.10	1.80	0.70
Date Sampled				12/01/2017	12/01/2017	12/01/2017	12/01/2017	12/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	11	12	14	11	14
Boron (water soluble)	mg/kg	0.2	MCERTS	2.7	1.0	1.9	2.0	1.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	25	31	25	28
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	13	12	14	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	18	12	20	12	11
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	< 0.3	0.4	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	16	23	24	25	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	35	36	53	36	44
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	55	43	60	48	38

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	-	-	-
Toluene	ug/kg	1	MCERTS	< 1.0	-	-	-	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	-	-	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	-	-	-
o-xylene	ug/kg	1	MCERTS	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686105	686106	686107	686108	686109
Sample Reference				TP623	TP623	TP634	TP634	TP634
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.10	1.80	0.70
Date Sampled				12/01/2017	12/01/2017	12/01/2017	12/01/2017	12/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686105	686106	686107	686108	686109
Sample Reference				TP623	TP623	TP634	TP634	TP634
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	1.00	0.10	1.80	0.70
Date Sampled				12/01/2017	12/01/2017	12/01/2017	12/01/2017	12/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686110	686111	686112	686113	686114
Sample Reference				TP608	TP608	TP622	TPSA610	TPSA610
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.60	0.10	0.10	0.60
Date Sampled				11/01/2017	11/01/2017	11/01/2017	11/01/2017	11/01/2017
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	%	N/A	NONE	15	15	15	17	16
Total mass of sample received	kg	0.001	NONE	1.7	1.6	1.7	1.9	1.5

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.2	8.0	7.6	7.6	8.8
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	110	560	110	110	2400
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.053	0.28	0.056	0.056	1.2
Organic Matter	%	0.1	MCERTS	-	-	-	2.8	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	686110	686111	686112	686113	686114
Sample Reference	TP608	TP608	TP622	TPSA610	TPSA610
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.60	0.10	0.10	0.60
Date Sampled	11/01/2017	11/01/2017	11/01/2017	11/01/2017	11/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	9.7	14	12	14
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.7	2.1	2.1	5.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.3	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	24	23	31	32	41
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	9.4	13	25	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	8.9	20	22	16
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	20	21	21	23	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	43	39	52	52	59
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	50	37	53	85	82

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
Toluene	ug/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
o-xylene	ug/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	< 1.0	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	< 8.0	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	< 10	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	< 0.1	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	< 1.0	< 1.0	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	< 2.0	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	< 10	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	< 10	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	< 10	< 10	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686110	686111	686112	686113	686114
Sample Reference				TP608	TP608	TP622	TPSA610	TPSA610
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.60	0.10	0.10	0.60
Date Sampled				11/01/2017	11/01/2017	11/01/2017	11/01/2017	11/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				686110	686111	686112	686113	686114
Sample Reference				TP608	TP608	TP622	TPSA610	TPSA610
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.60	0.10	0.10	0.60
Date Sampled				11/01/2017	11/01/2017	11/01/2017	11/01/2017	11/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number	686313				686314		686315		686316		689784	
Sample Reference	WS613				BH604		TPBH612		TP605		TP1232	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10-0.20				0.10-0.30		0.10		0.00-0.40		0.10	
Date Sampled	02/12/2016				13/12/2016		21/12/2016		02/12/2016		13/01/2017	
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	64	70	84	82	< 0.1				
Moisture Content	%	N/A	NONE	20	17	15	17	10				
Total mass of sample received	kg	0.001	NONE	0.19	2.0	2.0	1.6	1.6				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	-	-	-	-	7.9
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	< 1
Free Cyanide	mg/kg	1	MCERTS	-	-	-	-	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	33
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	0.017
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	0.23
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	0.81
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	2.6
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	1.9
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	31
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	6.9
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	56
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	47
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	24
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	23
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	25
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	15
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	23
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	2.4
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	11

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-	-	-	280
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Project / Site name: Northstowe

Lab Sample Number	686313	686314	686315	686316	689784
Sample Reference	WS613	BH604	TPBH612	TP605	TP1232
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10-0.20	0.10-0.30	0.10	0.00-0.40	0.10
Date Sampled	02/12/2016	13/12/2016	21/12/2016	02/12/2016	13/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	14	16	11	13	11
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	-	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	20
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	24
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	42
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	55

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
Toluene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
o-xylene	ug/kg	1	MCERTS	-	-	-	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	2.2
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	14

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	32
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	280
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	400
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	720



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686313	686314	686315	686316	689784
Sample Reference				WS613	BH604	TPBH612	TP605	TP1232
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.30	0.10	0.00-0.40	0.10
Date Sampled				02/12/2016	13/12/2016	21/12/2016	02/12/2016	13/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				686313	686314	686315	686316	689784
Sample Reference				WS613	BH604	TPBH612	TP605	TP1232
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.20	0.10-0.30	0.10	0.00-0.40	0.10
Date Sampled				02/12/2016	13/12/2016	21/12/2016	02/12/2016	13/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689785	689786	689787	689788	689789
Sample Reference				TP629	TPSA856	TPSA856	TP633	TP1223
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10-0.30	0.50-0.90	1.80	0.10
Date Sampled				13/01/2017	19/01/2017	19/01/2017	12/01/2017	13/01/2017
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	%	N/A	NONE	17	11	9.9	19	20
Total mass of sample received	kg	0.001	NONE	1.8	2.0	2.0	1.6	1.7

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.8	8.3	8.1	7.4
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	12	18	29	480	60
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0058	0.0092	0.014	0.24	0.030
Organic Matter	%	0.1	MCERTS	2.5	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	689785	689786	689787	689788	689789
Sample Reference	TP629	TPSA856	TPSA856	TP633	TP1223
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.10-0.30	0.50-0.90	1.80	0.10
Date Sampled	13/01/2017	19/01/2017	19/01/2017	12/01/2017	13/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	13	15	10	23
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	1.2	< 0.2	1.5	2.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	30	20	14	20	40
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	20	11	13	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	21	15	7.3	11	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	1.0	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	24	20	16	24	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	61	41	30	34	81
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	55	62	23	35	63

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	< 10	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	< 10	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689785	689786	689787	689788	689789
Sample Reference				TP629	TPSA856	TPSA856	TP633	TP1223
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10-0.30	0.50-0.90	1.80	0.10
Date Sampled				13/01/2017	19/01/2017	19/01/2017	12/01/2017	13/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689785	689786	689787	689788	689789
Sample Reference				TP629	TPSA856	TPSA856	TP633	TP1223
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.10-0.30	0.50-0.90	1.80	0.10
Date Sampled				13/01/2017	19/01/2017	19/01/2017	12/01/2017	13/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	689790				689791		689792		689793		689794	
Sample Reference	TP630				TP630		TP1203		TP1203		TP1235	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10				0.40		0.10		0.40		0.10	
Date Sampled	13/01/2017				13/01/2017		16/01/2017		16/01/2017		17/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	18	16	18	7.5	17				
Total mass of sample received	kg	0.001	NONE	2.0	1.8	1.5	1.6	1.7				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.0	7.0	7.5	8.2	7.5
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	21	27	35	24	21
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.011	0.014	0.018	0.012	0.011
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.47	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.91	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.79	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.30	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.34	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.39	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.21	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.28	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	3.69	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	689790	689791	689792	689793	689794
Sample Reference	TP630	TP630	TP1203	TP1203	TP1235
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.40	0.10	0.40	0.10
Date Sampled	13/01/2017	13/01/2017	16/01/2017	16/01/2017	17/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	17	17	19	17
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	2.1	1.4	0.4	1.0
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	1.0	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	29	26	20	25
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	13	15	13	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	22	15	32	12	18
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	23	23	25	22	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	59	60	52	44	53
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	56	52	61	39	41

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689790	689791	689792	689793	689794
Sample Reference				TP630	TP630	TP1203	TP1203	TP1235
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.40	0.10
Date Sampled				13/01/2017	13/01/2017	16/01/2017	16/01/2017	17/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689790	689791	689792	689793	689794
Sample Reference				TP630	TP630	TP1203	TP1203	TP1235
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.40	0.10	0.40	0.10
Date Sampled				13/01/2017	13/01/2017	16/01/2017	16/01/2017	17/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689795	689796	689797	689798	689799
Sample Reference				TP1235	TP1234	TPSA620	TPSA911	TPSA1201
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.10	0.10	0.10	0.10
Date Sampled				17/01/2017	17/01/2017	18/01/2017	18/01/2017	16/01/2017
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	%	N/A	NONE	8.0	15	19	17	22
Total mass of sample received	kg	0.001	NONE	1.8	1.7	1.7	1.7	1.2

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	7.9	7.6	6.8	7.8
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	33	16	22	27	38
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.017	0.0080	0.011	0.014	0.019
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	0.32	< 0.10	< 0.10	0.83
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	0.21	< 0.10	< 0.10	0.95
Fluorene	mg/kg	0.1	MCERTS	< 0.10	0.23	< 0.10	< 0.10	0.81
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	3.5	< 0.10	< 0.10	19
Anthracene	mg/kg	0.1	MCERTS	< 0.10	0.70	< 0.10	< 0.10	4.1
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	5.7	< 0.10	< 0.10	44
Pyrene	mg/kg	0.1	MCERTS	< 0.10	5.1	< 0.10	< 0.10	39
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	2.5	< 0.10	< 0.10	22
Chrysene	mg/kg	0.05	MCERTS	< 0.05	2.0	< 0.05	< 0.05	22
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	2.2	< 0.10	< 0.10	29
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	1.5	< 0.10	< 0.10	12
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	1.9	< 0.10	< 0.10	23
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.94	< 0.10	< 0.10	12
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	3.2
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	1.2	< 0.05	< 0.05	14

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	28.0	< 1.60	< 1.60	245
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	689795	689796	689797	689798	689799
Sample Reference	TP1235	TP1234	TPSA620	TPSA911	TPSA1201
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.70	0.10	0.10	0.10	0.10
Date Sampled	17/01/2017	17/01/2017	18/01/2017	18/01/2017	16/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	29	14	15	21	14
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	1.7	2.2	1.6	3.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	5.5
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	22	27	28	19	31
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	21	15	18	30
Lead (aqua regia extractable)	mg/kg	1	MCERTS	9.3	28	20	18	150
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	1.0	< 0.3	< 0.3	1.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	25	24	19	19
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	55	57	58	40	40
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	33	74	56	48	140

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	< 8.0	19
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	19

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	< 2.0	3.5
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	< 10	110
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	< 10	280
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	< 10	390



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689795	689796	689797	689798	689799
Sample Reference				TP1235	TP1234	TPSA620	TPSA911	TPSA1201
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.10	0.10	0.10	0.10
Date Sampled				17/01/2017	17/01/2017	18/01/2017	18/01/2017	16/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689795	689796	689797	689798	689799
Sample Reference				TP1235	TP1234	TPSA620	TPSA911	TPSA1201
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.10	0.10	0.10	0.10
Date Sampled				17/01/2017	17/01/2017	18/01/2017	18/01/2017	16/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	689800				689801		690432		693942		693943	
Sample Reference	TPSA1201				TPSA1201A		TP629		TP1206		TP1206	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.50				0.10		2.00		0.10		0.40	
Date Sampled	16/01/2017				16/01/2017		13/01/2017		26/01/2017		26/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	13	16	18	14	14	11	11	11	
Total mass of sample received	kg	0.001	NONE	2.0	1.5	1.1	1.8	1.8	1.8	1.8	1.8	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	7.7	7.7	8.0	10.1
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	3	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	70	450	4000	52	280
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.035	0.23	2.0	0.026	0.14
Organic Matter	%	0.1	MCERTS	-	-	-	3.1	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	0.56	0.50	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	0.14	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	1.6	1.1	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	1.5	1.0	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.65	0.48	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.72	0.49	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.75	0.62	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.40	0.30	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.63	0.48	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.33	0.25	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.47	0.35	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	7.67	5.65	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	689800	689801	690432	693942	693943
Sample Reference	TPSA1201	TPSA1201A	TP629	TP1206	TP1206
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50	0.10	2.00	0.10	0.40
Date Sampled	16/01/2017	16/01/2017	13/01/2017	26/01/2017	26/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	19	14	11	32	20
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	2.0	2.2	2.3	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	8.4	0.3
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	23	27	58	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	16	15	45	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	11	26	13	43	18
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	1.4	0.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	28	20	27	47	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	51	44	44	110	49
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	44	60	52	140	69

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Toluene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
o-xylene	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	-	< 1.0	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	< 1.0	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	-	< 8.0	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	-	< 10	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	-	< 0.1	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	-	2.1	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	-	< 2.0	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	11	-	-	< 10	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	17	-	-	< 10	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	29	-	-	13	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				689800	689801	690432	693942	693943
Sample Reference				TPSA1201	TPSA1201A	TP629	TP1206	TP1206
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.10	2.00	0.10	0.40
Date Sampled				16/01/2017	16/01/2017	13/01/2017	26/01/2017	26/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				689800	689801	690432	693942	693943
Sample Reference				TPSA1201	TPSA1201A	TP629	TP1206	TP1206
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50	0.10	2.00	0.10	0.40
Date Sampled				16/01/2017	16/01/2017	13/01/2017	26/01/2017	26/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				693944	693945	693946	693947	693948
Sample Reference				TP1205	TPC038	TPC038	TPC050B	TPC050B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10	0.50	0.40	1.50
Date Sampled				26/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
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	%	N/A	NONE	20	9.3	11	13	14
Total mass of sample received	kg	0.001	NONE	1.9	1.9	1.8	1.9	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	8.3	8.2	8.9	8.4
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	3400	33	28	79	54
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.7	0.017	0.014	0.039	0.027
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	0.19	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	0.45	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	0.43	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	1.9	5.9	1.8	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	0.39	1.0	0.27	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	7.4	17	5.3	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	7.0	15	4.5	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	5.3	9.7	3.3	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	3.3	10	2.6	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	5.9	17	5.0	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	2.8	6.7	2.6	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	5.1	13	3.8	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	2.5	9.1	2.8	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	0.59	1.9	0.47	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.9	10	3.2	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	45.1	118	35.4	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				693944	693945	693946	693947	693948
Sample Reference				TP1205	TPC038	TPC038	TPC050B	TPC050B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10	0.50	0.40	1.50
Date Sampled				26/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	17	11	9.1	11	7.4
Boron (water soluble)	mg/kg	0.2	MCERTS	2.4	2.2	2.1	1.2	0.8
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	10	1.1	0.4	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	36	22	22	27	15
Copper (aqua regia extractable)	mg/kg	1	MCERTS	57	59	24	12	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	65	60	33	11	5.5
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	2.1	0.3	0.3	0.6	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	25	18	17	20	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	46	38	39	44	20
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	160	72	54	40	28

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	49	12	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	54	12	< 10	< 10	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	1.1	3.4	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	< 2.0	3.5	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	19	54	17	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	46	170	45	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	66	220	68	< 10	< 10



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Lab Sample Number				693944	693945	693946	693947	693948
Sample Reference				TP1205	TPC038	TPC038	TPC050B	TPC050B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10	0.50	0.40	1.50
Date Sampled				26/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				693944	693945	693946	693947	693948
Sample Reference				TP1205	TPC038	TPC038	TPC050B	TPC050B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10	0.50	0.40	1.50
Date Sampled				26/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number	693949				693950		693951		693952		693953	
Sample Reference	TPC050B				TPC051		TPC051		TPC051		TPC051	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	2.30				0.30		0.50		0.90		1.50	
Date Sampled	24/01/2017				24/01/2017		24/01/2017		24/01/2017		24/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	12	16	12	14	14	14	14	14	
Total mass of sample received	kg	0.001	NONE	1.8	2.0	2.0	2.0	2.0	2.0	2.0	1.8	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.5	8.2	8.2	8.0
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	150	230	79	150	28
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.077	0.12	0.040	0.076	0.014
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	7.8	0.94	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	0.39	11	1.5	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.40	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	0.68	2.1	0.32	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	0.20	0.33	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.34	0.22	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.33	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.21	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.22	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	2.77	21.9	2.73	< 1.60
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Project / Site name: Northstowe

Lab Sample Number				693949	693950	693951	693952	693953
Sample Reference				TPC050B	TPC051	TPC051	TPC051	TPC051
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.30	0.50	0.90	1.50
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	4.4	11	11	< 1.0	8.5
Boron (water soluble)	mg/kg	0.2	MCERTS	0.9	1.0	0.8	0.6	0.7
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	18	22	15	15	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	12	11	13	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	6.9	13	6.0	6.2	7.0
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	21	19	19	15	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	38	39	29	25	24
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	34	86	28	27	37

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	9.4	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	12	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	0.6	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	25	77	13	3.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	680	1400	130	57
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	1200	2300	200	110
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	480	800	100	37
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	2400	4600	450	210

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	0.3	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	5.7	73	8.9	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	320	1500	180	31
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	1100	2600	280	78
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	640	810	110	22
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	2100	5000	580	130



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Lab Sample Number				693949	693950	693951	693952	693953
Sample Reference				TPC050B	TPC051	TPC051	TPC051	TPC051
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.30	0.50	0.90	1.50
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	9.4	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	12	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	15	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	31	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	70	< 1.0	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	180	9.2	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	32	3.3	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	< 1.0	26	2.6	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	42	5.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0



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Lab Sample Number				693949	693950	693951	693952	693953
Sample Reference				TPC050B	TPC051	TPC051	TPC051	TPC051
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.30	0.30	0.50	0.90	1.50
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	< 0.1	5.2	0.6	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	7.8	0.94	< 0.10
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	0.39	11	1.5	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Carbazole	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.40	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	0.68	2.1	0.32	< 0.10
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	0.20	0.33	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.34	0.22	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.33	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.21	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.22	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05



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Lab Sample Number	693954				693955		693956		693957		693958	
Sample Reference	TPC051				TP1213		TP1214		TP1214		TP1219	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	3.00				0.10		0.10		0.40		0.10-0.30	
Date Sampled	24/01/2017				25/01/2017		25/01/2017		25/01/2017		25/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	36	15	14	16	16	17	17	17	
Total mass of sample received	kg	0.001	NONE	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	7.2	7.4	7.7	6.3
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	240	26	32	30	32
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.12	0.013	0.016	0.015	0.016
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	< 1.60	< 1.60	< 1.60
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Lab Sample Number				693954	693955	693956	693957	693958
Sample Reference				TPC051	TP1213	TP1214	TP1214	TP1219
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				3.00	0.10	0.10	0.40	0.10-0.30
Date Sampled				24/01/2017	25/01/2017	25/01/2017	25/01/2017	25/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.9	20	17	16	11
Boron (water soluble)	mg/kg	0.2	MCERTS	3.2	1.9	1.0	0.8	1.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	8.6	26	25	27	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	17	14	12	8.4	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	5.2	22	20	13	19
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.5	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	16	15	15	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	3.4	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	18	49	45	51	43
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	34	44	39	41	36

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	1.7	< 1.0	< 1.0	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	8.2	< 2.0	< 2.0	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	15	< 10	< 10	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	2.6	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	12	< 2.0	< 2.0	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	< 10	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	17	< 10	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	38	< 10	< 10	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				693954	693955	693956	693957	693958
Sample Reference				TPC051	TP1213	TP1214	TP1214	TP1219
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				3.00	0.10	0.10	0.40	0.10-0.30
Date Sampled				24/01/2017	25/01/2017	25/01/2017	25/01/2017	25/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Chloroethane	µg/kg	1	NONE	< 1.0	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	< 1.0	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	< 1.0	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
Benzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Toluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	< 1.0	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Styrene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Tribromomethane	µg/kg	1	NONE	< 1.0	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	< 1.0	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	< 1.0	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	< 1.0	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				693954	693955	693956	693957	693958
Sample Reference				TPC051	TP1213	TP1214	TP1214	TP1219
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				3.00	0.10	0.10	0.40	0.10-0.30
Date Sampled				24/01/2017	25/01/2017	25/01/2017	25/01/2017	25/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	< 0.2	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	< 0.2	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	< 0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	< 0.1	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	< 0.1	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	< 0.1	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	< 0.2	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	< 0.3	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	< 0.3	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				693959	693960	693961	693962	693963
Sample Reference				TP1220	TP1221	TP1231	TP1231	TP1204
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.60-1.00	0.10-0.30
Date Sampled				25/01/2017	25/01/2017	20/01/2017	20/01/2017	20/01/2017
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	%	N/A	NONE	18	16	13	5.8	15
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	1.9

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.3	7.4	7.5	8.4	7.4
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	20	36	25	32	45
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0099	0.018	0.013	0.016	0.023
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.37	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.68	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.57	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.36	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.38	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.24	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.26	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	0.29	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	< 1.60	< 1.60	3.15	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				693959	693960	693961	693962	693963
Sample Reference				TP1220	TP1221	TP1231	TP1231	TP1204
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.60-1.00	0.10-0.30
Date Sampled				25/01/2017	25/01/2017	20/01/2017	20/01/2017	20/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	9.9	15	14	16	15
Boron (water soluble)	mg/kg	0.2	MCERTS	1.7	1.6	1.8	0.9	2.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	29	29	17	26
Copper (aqua regia extractable)	mg/kg	1	MCERTS	13	15	13	12	13
Lead (aqua regia extractable)	mg/kg	1	MCERTS	20	21	16	8.1	18
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	1.0
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	17	21	24	20	22
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	45	49	48	30	47
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	51	50	43	28	64

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	< 8.0	-	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	-	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	-	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	< 2.0	-	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	< 10	-	< 10



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Project / Site name: Northstowe

Lab Sample Number				693959	693960	693961	693962	693963
Sample Reference				TP1220	TP1221	TP1231	TP1231	TP1204
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.60-1.00	0.10-0.30
Date Sampled				25/01/2017	25/01/2017	20/01/2017	20/01/2017	20/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Lab Sample Number				693959	693960	693961	693962	693963
Sample Reference				TP1220	TP1221	TP1231	TP1231	TP1204
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	0.10-0.30	0.10-0.30	0.60-1.00	0.10-0.30
Date Sampled				25/01/2017	25/01/2017	20/01/2017	20/01/2017	20/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



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Lab Sample Number				693964	693965	693966	693967	693968
Sample Reference				TPC019	TPC019	WSC027	WSC027	WSC027
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	1.10-1.40	0.20	0.60	1.10
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
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	%	N/A	NONE	16	8.8	12	15	14
Total mass of sample received	kg	0.001	NONE	1.6	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.8	8.4	9.4	8.0	8.1
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	2	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	45	13	78	75	110
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.022	0.0066	0.039	0.038	0.057
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.21	< 0.05	< 0.05	< 0.05	0.28
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	3.3
Phenanthrene	mg/kg	0.1	MCERTS	1.1	< 0.10	< 0.10	< 0.10	4.3
Anthracene	mg/kg	0.1	MCERTS	0.12	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	2.5	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	2.1	< 0.10	< 0.10	< 0.10	0.44
Benzo(a)anthracene	mg/kg	0.1	MCERTS	1.4	< 0.10	< 0.10	< 0.10	0.18
Chrysene	mg/kg	0.05	MCERTS	1.5	< 0.05	< 0.05	< 0.05	0.15
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	1.5	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	1.1	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	1.6	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.80	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.95	< 0.05	< 0.05	< 0.05	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	14.9	< 1.60	< 1.60	< 1.60	8.69
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Project / Site name: Northstowe

Lab Sample Number	693964	693965	693966	693967	693968
Sample Reference	TPC019	TPC019	WSC027	WSC027	WSC027
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10-0.30	1.10-1.40	0.20	0.60	1.10
Date Sampled	24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	21	18	10	10	1.6
Boron (water soluble)	mg/kg	0.2	MCERTS	1.8	0.8	0.8	1.9	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	23	60	20	27	13
Copper (aqua regia extractable)	mg/kg	1	MCERTS	39	9.4	12	11	11
Lead (aqua regia extractable)	mg/kg	1	MCERTS	99	9.0	7.4	12	6.6
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.4	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	27	42	17	20	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	50	53	31	41	23
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	170	35	30	51	28

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	-	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	2.2
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	-	< 1.0	2.4	19
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	-	56	15	570
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	-	120	< 8.0	970
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	-	41	< 8.0	330
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	-	210	21	1900

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	-	< 0.1	< 0.1	0.4
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	1.1	-	< 1.0	< 1.0	8.5
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	2.9	-	3.5	7.5	470
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	-	47	< 10	750
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	-	19	< 10	230
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	14	-	69	12	1500



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Project / Site name: Northstowe

Lab Sample Number				693964	693965	693966	693967	693968
Sample Reference				TPC019	TPC019	WSC027	WSC027	WSC027
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	1.10-1.40	0.20	0.60	1.10
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				693964	693965	693966	693967	693968
Sample Reference				TPC019	TPC019	WSC027	WSC027	WSC027
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10-0.30	1.10-1.40	0.20	0.60	1.10
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	693969	694086	694087	694088	694089			
Sample Reference	WSC027	WSC032A	WSC032A	WSC033	WSC033			
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Depth (m)	2.00	0.60	1.70	0.50	2.00			
Date Sampled	24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017			
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	%	N/A	NONE	11	14	25	12	13
Total mass of sample received	kg	0.001	NONE	2.0	1.7	2.0	1.6	1.8

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	8.9	8.0	7.9	8.2
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	54	130	260	290	56
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.027	0.067	0.13	0.15	0.028
Organic Matter	%	0.1	MCERTS	-	0.6	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.12	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	1.1	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	1.4	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
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	1.6	MCERTS	2.62	< 1.60	< 1.60	< 1.60	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				693969	694086	694087	694088	694089
Sample Reference				WSC027	WSC032A	WSC032A	WSC033	WSC033
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.00	0.60	1.70	0.50	2.00
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	11	8.5	13	7.5
Boron (water soluble)	mg/kg	0.2	MCERTS	0.4	1.0	0.3	1.4	0.4
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	22	10	25	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	14	12	18	13	15
Lead (aqua regia extractable)	mg/kg	1	MCERTS	7.8	11	7.3	15	7.8
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	26	20	24	19	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	11	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	41	42	16	47	27
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	36	40	51	47	38

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	1.0	< 0.1	< 0.1	< 0.1	3.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	16	< 1.0	< 1.0	< 1.0	18
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	250	< 2.0	< 2.0	< 2.0	73
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	350	< 8.0	< 8.0	< 8.0	16
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	130	< 8.0	< 8.0	< 8.0	27
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	750	< 10	< 10	< 10	140

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	4.8	< 1.0	< 1.0	< 1.0	18
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	150	< 2.0	< 2.0	< 2.0	83
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	250	< 10	< 10	< 10	17
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	74	< 10	< 10	< 10	29
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	480	< 10	< 10	< 10	150



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Project / Site name: Northstowe

Lab Sample Number				693969	694086	694087	694088	694089
Sample Reference				WSC027	WSC032A	WSC032A	WSC033	WSC033
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.00	0.60	1.70	0.50	2.00
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Styrene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Tribromomethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-



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Project / Site name: Northstowe

Lab Sample Number				693969	694086	694087	694088	694089
Sample Reference				WSC027	WSC032A	WSC032A	WSC033	WSC033
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				2.00	0.60	1.70	0.50	2.00
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Fluorene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Anthracene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Pyrene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	-



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Project / Site name: Northstowe

Lab Sample Number	694090				694091		694092		694093		694094	
Sample Reference	WSC033				TP024A		TP024A		TP024A		WWC03	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	3.00				0.40		0.80		1.50		0.70	
Date Sampled	24/01/2017				24/01/2017		24/01/2017		24/01/2017		24/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	27	16	13	11	12				
Total mass of sample received	kg	0.001	NONE	2.0	1.8	2.0	2.0	1.9				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.7	8.9	7.3	8.8	7.8
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	520	700	110	23	180
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.26	0.35	0.057	0.011	0.090
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	1.2	0.62	< 0.05	0.47
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	0.19	0.20	< 0.10	0.23
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	4.7	0.18	< 0.10	5.8
Fluorene	mg/kg	0.1	MCERTS	< 0.10	3.1	0.58	< 0.10	5.9
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	12	0.39	< 0.10	24
Anthracene	mg/kg	0.1	MCERTS	< 0.10	3.0	< 0.10	< 0.10	6.0
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	12	0.33	< 0.10	19
Pyrene	mg/kg	0.1	MCERTS	< 0.10	11	0.33	< 0.10	16
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	4.4	0.26	< 0.10	6.1
Chrysene	mg/kg	0.05	MCERTS	< 0.05	4.2	0.27	< 0.05	5.4
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	6.5	1.1	< 0.10	5.8
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	2.4	0.42	< 0.10	2.5
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	4.6	1.1	< 0.10	4.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	2.8	0.73	< 0.10	2.0
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	0.45	< 0.10	< 0.10	0.30
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	3.9	0.86	< 0.05	2.2

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	76.6	7.36	< 1.60	106
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	694090	694091	694092	694093	694094
Sample Reference	WSC033	TP024A	TP024A	TP024A	WWC03
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	3.00	0.40	0.80	1.50	0.70
Date Sampled	24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	17	17	18	17
Boron (water soluble)	mg/kg	0.2	MCERTS	0.5	1.4	1.1	< 0.2	1.1
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	9.3	23	31	17	24
Copper (aqua regia extractable)	mg/kg	1	MCERTS	16	27	13	9.2	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	7.1	16	14	8.2	21
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	0.3	0.4	0.4
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	22	24	27	17	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	12	66	61	46	50
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	39	40	52	33	49

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	5.1	4.8	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	30	120	< 1.0	30
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	130	540	< 2.0	63
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	57	42	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	100	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	11	330	710	< 10	100

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	25	42	1.1	59
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	92	210	5.4	150
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	84	20	< 10	65
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	160	< 10	< 10	63
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	360	280	18	340



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Project / Site name: Northstowe

Lab Sample Number				694090	694091	694092	694093	694094
Sample Reference				WSC033	TP024A	TP024A	TP024A	WWC03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				3.00	0.40	0.80	1.50	0.70
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



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Project / Site name: Northstowe

Lab Sample Number				694090	694091	694092	694093	694094
Sample Reference				WSC033	TP024A	TP024A	TP024A	WWC03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				3.00	0.40	0.80	1.50	0.70
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				694095	694096	694097	694098	694099
Sample Reference				WWC03	WSC012	WSC012	TPC016B	TPC016B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.70	1.50	0.50	1.00
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
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	%	N/A	NONE	15	11	6.0	14	12
Total mass of sample received	kg	0.001	NONE	1.8	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.2	7.0	8.2	7.2	7.3
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	61	110	62	360	95
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.031	0.055	0.031	0.18	0.047
Organic Matter	%	0.1	MCERTS	-	1.1	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.29	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.60	< 0.10
Anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.30	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.5	< 0.10
Pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.5	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.0	< 0.10
Chrysene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	1.0	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	3.9	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	1.0	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	3.3	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	2.5	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	0.46	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	2.8	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	< 1.60	< 1.60	20.1	< 1.60
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				694095	694096	694097	694098	694099
Sample Reference				WWC03	WSC012	WSC012	TPC016B	TPC016B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.70	1.50	0.50	1.00
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	7.1	14	9.1	11	19
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	1.5	< 0.2	2.1	1.3
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	0.3	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	23	12	25	30
Copper (aqua regia extractable)	mg/kg	1	MCERTS	9.9	12	8.8	22	14
Lead (aqua regia extractable)	mg/kg	1	MCERTS	6.3	14	5.7	88	12
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.6	< 0.3	0.6	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	13	22	16	20	24
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	28	51	31	53	61
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	20	44	21	71	46

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	0.9	< 0.1	< 0.1	0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	18	1.2	3.1	14	44
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	190	5.3	70	24	220
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	24	< 8.0	11	16	32
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	8.0	< 8.0	< 8.0	140	9.0
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	250	12	92	190	300

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	16	< 1.0	1.8	8.7	21
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	180	5.2	54	13	130
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	25	< 10	10	18	24
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	11	< 10	< 10	170	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	230	14	75	210	190



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Project / Site name: Northstowe

Lab Sample Number				694095	694096	694097	694098	694099
Sample Reference				WWC03	WSC012	WSC012	TPC016B	TPC016B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.70	1.50	0.50	1.00
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Chloroethane	µg/kg	1	NONE	-	< 1.0	-	< 1.0	< 1.0
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	-	< 1.0	< 1.0
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	-	< 1.0	< 1.0
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	-	< 1.0	< 1.0
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	-	< 1.0	< 1.0
Benzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Toluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	-	< 1.0	< 1.0
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Styrene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Tribromomethane	µg/kg	1	NONE	-	< 1.0	-	< 1.0	< 1.0
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Isopropylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	8.1	< 1.0
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	-	23	< 1.0
sec-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	< 1.0	-	4.7	< 1.0
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	-	< 1.0	< 1.0
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	-	< 1.0	< 1.0



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Project / Site name: Northstowe

Lab Sample Number				694095	694096	694097	694098	694099
Sample Reference				WWC03	WSC012	WSC012	TPC016B	TPC016B
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.20	0.70	1.50	0.50	1.00
Date Sampled				24/01/2017	24/01/2017	24/01/2017	24/01/2017	24/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	< 0.1	-	< 0.1	< 0.1
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	< 0.2	< 0.2
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	< 0.05
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	< 0.2	< 0.2
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	-	< 0.05	< 0.05
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	< 0.1	< 0.1
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	< 0.1	< 0.1
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	< 0.1	< 0.1
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	-	< 0.1	< 0.1
Acenaphthylene	mg/kg	0.1	MCERTS	-	< 0.10	-	0.29	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	-	< 0.10	-	< 0.10	< 0.10
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	-	< 0.3	< 0.3
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
Fluorene	mg/kg	0.1	MCERTS	-	< 0.10	-	< 0.10	< 0.10
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Phenanthrene	mg/kg	0.1	MCERTS	-	< 0.10	-	0.60	< 0.10
Anthracene	mg/kg	0.1	MCERTS	-	< 0.10	-	0.30	< 0.10
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	< 0.2	< 0.2
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	-	< 0.3	< 0.3
Fluoranthene	mg/kg	0.1	MCERTS	-	< 0.10	-	1.5	< 0.10
Pyrene	mg/kg	0.1	MCERTS	-	< 0.10	-	1.5	< 0.10
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	-	< 0.3	< 0.3
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	< 0.10	-	1.0	< 0.10
Chrysene	mg/kg	0.05	MCERTS	-	< 0.05	-	1.0	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	< 0.10	-	3.9	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	< 0.10	-	1.0	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	< 0.10	-	3.3	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	< 0.10	-	2.5	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	< 0.10	-	0.46	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	< 0.05	-	2.8	< 0.05



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Lab Sample Number	694100				694101	694102	694103	694104
Sample Reference	TPC016B				TPC016A	TPC016A	TPC016A	WSC03
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.50				0.40	0.20	1.20	0.40
Date Sampled	24/01/2017				23/01/2017	23/01/2017	23/01/2017	23/01/2017
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	%	N/A	NONE	10	14	4.0	13	10
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	1.9	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	7.5	8.9	7.5	9.7
Electrical Conductivity	µS/cm	10	NONE	-	-	-	-	-
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	130	460	52	150	2500
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.066	0.23	0.026	0.076	1.3
Organic Matter	%	0.1	MCERTS	-	-	-	-	-
Phosphorus (available)	mg/l	1	NONE	-	-	-	-	-
Potassium (available)	mg/l	1	NONE	-	-	-	-	-
Magnesium (available)	mg/l	1	NONE	-	-	-	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	mg/kg	0.1	MCERTS	0.43	< 0.10	< 0.10	0.47	< 0.10
Fluorene	mg/kg	0.1	MCERTS	0.51	< 0.10	< 0.10	0.37	< 0.10
Phenanthrene	mg/kg	0.1	MCERTS	1.4	0.23	< 0.10	0.88	< 0.10
Anthracene	mg/kg	0.1	MCERTS	0.30	0.11	< 0.10	0.23	< 0.10
Fluoranthene	mg/kg	0.1	MCERTS	2.3	0.58	< 0.10	3.0	< 0.10
Pyrene	mg/kg	0.1	MCERTS	1.8	0.67	< 0.10	3.8	< 0.10
Benzo(a)anthracene	mg/kg	0.1	MCERTS	0.54	0.39	< 0.10	1.0	< 0.10
Chrysene	mg/kg	0.05	MCERTS	0.48	0.44	< 0.05	0.86	< 0.05
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	0.48	1.3	< 0.10	1.2	< 0.10
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	0.21	0.40	< 0.10	0.40	< 0.10
Benzo(a)pyrene	mg/kg	0.1	MCERTS	0.24	1.1	< 0.10	0.67	< 0.10
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.79	< 0.10	0.31	< 0.10
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.95	< 0.05	0.34	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	8.68	6.89	< 1.60	13.5	< 1.60
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Project / Site name: Northstowe

Lab Sample Number				694100	694101	694102	694103	694104
Sample Reference				TPC016B	TPC016A	TPC016A	TPC016A	WSC03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	0.40	0.20	1.20	0.40
Date Sampled				24/01/2017	23/01/2017	23/01/2017	23/01/2017	23/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.4	14	8.7	17	13
Boron (water soluble)	mg/kg	0.2	MCERTS	< 0.2	1.8	< 0.2	0.4	1.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.4	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	11	24	12	28	18
Copper (aqua regia extractable)	mg/kg	1	MCERTS	7.6	24	12	14	23
Lead (aqua regia extractable)	mg/kg	1	MCERTS	6.1	64	8.6	14	120
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	21	13	26	17
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	30	52	47	63	36
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	18	82	37	46	53

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	120	3.5	< 0.1	1.4	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	3.5	57	3.9	86	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	75	230	24	470	2.1
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	16	35	< 8.0	51	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	8.6	190	< 8.0	9.2	23
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	220	510	37	620	30

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	6.0	< 0.1	< 0.1	< 0.1	< 0.1
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	2.9	21	1.6	68	< 1.0
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	82	66	14	500	< 2.0
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	28	25	< 10	59	< 10
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	21	190	< 10	34	< 10
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	140	300	21	660	13



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Project / Site name: Northstowe

Lab Sample Number				694100	694101	694102	694103	694104
Sample Reference				TPC016B	TPC016A	TPC016A	TPC016A	WSC03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	0.40	0.20	1.20	0.40
Date Sampled				24/01/2017	23/01/2017	23/01/2017	23/01/2017	23/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Chloroethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
Bromomethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Vinyl Chloride	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Trichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
Benzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Trichloroethene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Dibromomethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Toluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Tetrachloroethene	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Styrene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Tribromomethane	µg/kg	1	NONE	-	< 1.0	< 1.0	-	-
o-Xylene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	14	< 1.0	-	-
Bromobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	76	< 1.0	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	22	< 1.0	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	11	< 1.0	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Butylbenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	< 1.0	< 1.0	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	< 1.0	< 1.0	-	-



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Project / Site name: Northstowe

Lab Sample Number				694100	694101	694102	694103	694104
Sample Reference				TPC016B	TPC016A	TPC016A	TPC016A	WSC03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				1.50	0.40	0.20	1.20	0.40
Date Sampled				24/01/2017	23/01/2017	23/01/2017	23/01/2017	23/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	< 0.05	< 0.05	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	< 0.1	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	< 0.1	< 0.1	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Fluorene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	0.23	< 0.10	-	-
Anthracene	mg/kg	0.1	MCERTS	-	0.11	< 0.10	-	-
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	< 0.2	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	< 0.3	< 0.3	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	0.58	< 0.10	-	-
Pyrene	mg/kg	0.1	MCERTS	-	0.67	< 0.10	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	< 0.3	< 0.3	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	0.39	< 0.10	-	-
Chrysene	mg/kg	0.05	MCERTS	-	0.44	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	1.3	< 0.10	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	0.40	< 0.10	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	1.1	< 0.10	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	0.79	< 0.10	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	< 0.10	< 0.10	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	0.95	< 0.05	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				694105	694106	694107	695376	695377
Sample Reference				WSC03	TP1202	TP1202	TP613	TP613
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.40	0.60	0.00	0.20
Date Sampled				23/01/2017	23/01/2017	23/01/2017	24/01/2017	26/01/2017
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	10	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	14	8.3	14	19	18
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	11.3	7.7	5.7	6.1
Electrical Conductivity	µS/cm	10	NONE	-	-	-	180	480
Total Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	-	-
Free Cyanide	mg/kg	1	MCERTS	< 1	< 1	< 1	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	120	210	69	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.062	0.10	0.035	-	-
Organic Matter	%	0.1	MCERTS	-	-	-	2.8	2.3
Phosphorus (available)	mg/l	1	NONE	-	-	-	12	15
Potassium (available)	mg/l	1	NONE	-	-	-	5.6	424
Magnesium (available)	mg/l	1	NONE	-	-	-	8.2	55

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
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Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	-	-
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	0.25	< 0.10	-	-
Fluorene	mg/kg	0.1	MCERTS	< 0.10	0.26	< 0.10	-	-
Phenanthrene	mg/kg	0.1	MCERTS	< 0.10	2.4	< 0.10	-	-
Anthracene	mg/kg	0.1	MCERTS	< 0.10	0.49	< 0.10	-	-
Fluoranthene	mg/kg	0.1	MCERTS	< 0.10	3.0	< 0.10	-	-
Pyrene	mg/kg	0.1	MCERTS	< 0.10	2.4	< 0.10	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	< 0.10	0.96	< 0.10	-	-
Chrysene	mg/kg	0.05	MCERTS	< 0.05	0.86	< 0.05	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.83	< 0.10	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	< 0.10	0.32	< 0.10	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.60	< 0.10	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	< 0.10	0.22	< 0.10	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	< 0.05	0.26	< 0.05	-	-

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	< 1.60	12.8	< 1.60	-	-
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	694105	694106	694107	695376	695377
Sample Reference	WSC03	TP1202	TP1202	TP613	TP613
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.70	0.40	0.60	0.00	0.20
Date Sampled	23/01/2017	23/01/2017	23/01/2017	24/01/2017	26/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	22	15	12	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	1.5	1.8	1.2	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	< 0.2	< 0.2	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	26	22	32	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	12	11	11	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	16	9.5	13	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.7	< 0.3	< 0.3	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	21	20	25	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	54	48	63	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	45	39	50	-	-

Monoaromatics

Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Toluene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
Ethylbenzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
p & m-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
o-xylene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	2.3	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	3.3	12	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	< 8.0	< 8.0	14	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	< 8.0	23	9.7	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	33	37	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	< 2.0	3.6	6.7	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	< 10	< 10	12	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	< 10	36	< 10	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	< 10	50	26	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				694105	694106	694107	695376	695377
Sample Reference				WSC03	TP1202	TP1202	TP613	TP613
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.40	0.60	0.00	0.20
Date Sampled				23/01/2017	23/01/2017	23/01/2017	24/01/2017	26/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				694105	694106	694107	695376	695377
Sample Reference				WSC03	TP1202	TP1202	TP613	TP613
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.70	0.40	0.60	0.00	0.20
Date Sampled				23/01/2017	23/01/2017	23/01/2017	24/01/2017	26/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	695378				695379		695380		695381		695382	
Sample Reference	TP1218				TP1204		TP628		TP628		TP1221	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.10				0.00		0.00		0.20		0.10	
Date Sampled	25/01/2017				24/01/2017		24/01/2017		26/01/2017		25/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	18	17	19	16	16	16	16	16	
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.4	6.3	6.8	7.6	6.9
Electrical Conductivity	µS/cm	10	NONE	350	270	130	230	280
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Free Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	2.4	2.4	2.2	1.6	2.3
Phosphorus (available)	mg/l	1	NONE	13	3.9	7.0	5.1	19
Potassium (available)	mg/l	1	NONE	277	196	247	206	171
Magnesium (available)	mg/l	1	NONE	30	40	34	32	23

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
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Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-	-	-	-
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	695378	695379	695380	695381	695382
Sample Reference	TP1218	TP1204	TP628	TP628	TP1221
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.10	0.00	0.00	0.20	0.10
Date Sampled	25/01/2017	24/01/2017	24/01/2017	26/01/2017	25/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

Monoaromatics								
Benzene	ug/kg	1	MCERTS	-	-	-	-	-
Toluene	ug/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	-
o-xylene	ug/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				695378	695379	695380	695381	695382
Sample Reference				TP1218	TP1204	TP628	TP628	TP1221
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.00	0.00	0.20	0.10
Date Sampled				25/01/2017	24/01/2017	24/01/2017	26/01/2017	25/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				695378	695379	695380	695381	695382
Sample Reference				TP1218	TP1204	TP628	TP628	TP1221
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.10	0.00	0.00	0.20	0.10
Date Sampled				25/01/2017	24/01/2017	24/01/2017	26/01/2017	25/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	695383				695384		695385		695386		695387	
Sample Reference	TP913				TP913		TP633		TP1213		TP1213	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	0.00				0.20		0.00		0.10		0.40	
Date Sampled	24/01/2017				26/01/2017		24/01/2017		25/01/2017		25/01/2017	
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	< 0.1	< 0.1	< 0.1	
Moisture Content	%	N/A	NONE	14	15	17	16	19				
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0	2.0				

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-	-	-
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-	-	-
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-	-	-

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	6.4	6.3	7.8	6.9	7.8
Electrical Conductivity	µS/cm	10	NONE	250	290	380	260	190
Total Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Free Cyanide	mg/kg	1	MCERTS	-	-	-	-	-
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-	-	-
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-	-	-
Organic Matter	%	0.1	MCERTS	2.3	2.5	1.3	2.2	0.6
Phosphorus (available)	mg/l	1	NONE	36	29	12	22	5.7
Potassium (available)	mg/l	1	NONE	256	259	143	207	215
Magnesium (available)	mg/l	1	NONE	29	35	42	43	580

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-	-	-
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Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-	-	-	-
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Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number	695383	695384	695385	695386	695387
Sample Reference	TP913	TP913	TP633	TP1213	TP1213
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.00	0.20	0.00	0.10	0.40
Date Sampled	24/01/2017	26/01/2017	24/01/2017	25/01/2017	25/01/2017
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-	-	-
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-	-	-
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-	-	-
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	-	-

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	-	-	-	-
Toluene	ug/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	ug/kg	1	MCERTS	-	-	-	-	-
p & m-xylene	ug/kg	1	MCERTS	-	-	-	-	-
o-xylene	ug/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-	-	-

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-	-	-
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-	-	-
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				695383	695384	695385	695386	695387
Sample Reference				TP913	TP913	TP633	TP1213	TP1213
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.20	0.00	0.10	0.40
Date Sampled				24/01/2017	26/01/2017	24/01/2017	25/01/2017	25/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chloroethane	µg/kg	1	NONE	-	-	-	-	-
Bromomethane	µg/kg	1	ISO 17025	-	-	-	-	-
Vinyl Chloride	µg/kg	1	NONE	-	-	-	-	-
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-	-	-
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-	-	-
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-	-	-
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-	-	-
Benzene	µg/kg	1	MCERTS	-	-	-	-	-
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-	-	-
Trichloroethene	µg/kg	1	MCERTS	-	-	-	-	-
Dibromomethane	µg/kg	1	MCERTS	-	-	-	-	-
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-	-	-
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-	-	-
Toluene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-	-	-
Tetrachloroethene	µg/kg	1	NONE	-	-	-	-	-
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-	-	-
Chlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Ethylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
p & m-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
Styrene	µg/kg	1	MCERTS	-	-	-	-	-
Tribromomethane	µg/kg	1	NONE	-	-	-	-	-
o-Xylene	µg/kg	1	MCERTS	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-	-	-
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
Bromobenzene	µg/kg	1	MCERTS	-	-	-	-	-
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-	-	-
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Butylbenzene	µg/kg	1	MCERTS	-	-	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-	-	-
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				695383	695384	695385	695386	695387
Sample Reference				TP913	TP913	TP633	TP1213	TP1213
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.00	0.20	0.00	0.10	0.40
Date Sampled				24/01/2017	26/01/2017	24/01/2017	25/01/2017	25/01/2017
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Naphthalene	mg/kg	0.05	MCERTS	-	-	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-	-	-
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-	-	-
Fluorene	mg/kg	0.1	MCERTS	-	-	-	-	-
Azobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-	-	-
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-	-	-
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-	-	-
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-	-	-
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-	-	-
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Chrysene	mg/kg	0.05	MCERTS	-	-	-	-	-
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-	-	-
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-	-	-
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-	-	-



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				695388	695389	695390		
Sample Reference				TP1207	TP1207	TP612		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				0.00	0.20	0.00		
Date Sampled				24/01/2017	26/01/2017	24/01/2017		
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	%	N/A	NONE	14	12	20		
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0		

Asbestos in Soil Screen / Identification Name	Type	N/A	ISO 17025	-	-	-		
Asbestos in Soil	Type	N/A	ISO 17025	-	-	-		
Asbestos Quantification (Stage 2)	%	0.001	ISO 17025	-	-	-		
Asbestos Quantification Total	%	0.001	ISO 17025	-	-	-		

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	7.4	6.9		
Electrical Conductivity	µS/cm	10	NONE	420	380	430		
Total Cyanide	mg/kg	1	MCERTS	-	-	-		
Free Cyanide	mg/kg	1	MCERTS	-	-	-		
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	-	-	-		
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	-	-	-		
Organic Matter	%	0.1	MCERTS	3.9	4.5	2.5		
Phosphorus (available)	mg/l	1	NONE	86	97	32		
Potassium (available)	mg/l	1	NONE	123	107	410		
Magnesium (available)	mg/l	1	NONE	44	37	78		

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	-	-	-		
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Speciated PAHs

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

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	-	-	-		
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Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number	695388	695389	695390		
Sample Reference	TP1207	TP1207	TP612		
Sample Number	None Supplied	None Supplied	None Supplied		
Depth (m)	0.00	0.20	0.00		
Date Sampled	24/01/2017	26/01/2017	24/01/2017		
Time Taken	None Supplied	None Supplied	None Supplied		

Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
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Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-		
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	-	-	-		
Chromium (hexavalent)	mg/kg	4	MCERTS	-	-	-		
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		
Copper (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		
Lead (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	-	-	-		
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-		

Monoaromatics

Benzene	ug/kg	1	MCERTS	-	-	-		
Toluene	ug/kg	1	MCERTS	-	-	-		
Ethylbenzene	ug/kg	1	MCERTS	-	-	-		
p & m-xylene	ug/kg	1	MCERTS	-	-	-		
o-xylene	ug/kg	1	MCERTS	-	-	-		
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	1	MCERTS	-	-	-		

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	-	-	-		
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	-	-	-		
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-		
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-		
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-		
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	-	-	-		
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	-	-	-		
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-		

TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	-	-	-		
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	-	-	-		
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	-	-	-		
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	-	-	-		
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	-	-	-		
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	-	-	-		
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	-	-	-		
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	-	-	-		



Combined Report Northstowe UA008426 Part B
Project / Site name: Northstowe

Lab Sample Number				695388	695389	695390		
Sample Reference				TP1207	TP1207	TP612		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				0.00	0.20	0.00		
Date Sampled				24/01/2017	26/01/2017	24/01/2017		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
VOCs								
Chloromethane	µg/kg	1	ISO 17025	-	-	-		
Chloroethane	µg/kg	1	NONE	-	-	-		
Bromomethane	µg/kg	1	ISO 17025	-	-	-		
Vinyl Chloride	µg/kg	1	NONE	-	-	-		
Trichlorofluoromethane	µg/kg	1	NONE	-	-	-		
1,1-Dichloroethene	µg/kg	1	NONE	-	-	-		
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	1	ISO 17025	-	-	-		
Cis-1,2-dichloroethene	µg/kg	1	MCERTS	-	-	-		
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	-	-	-		
1,1-Dichloroethane	µg/kg	1	MCERTS	-	-	-		
2,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-		
Trichloromethane	µg/kg	1	MCERTS	-	-	-		
1,1,1-Trichloroethane	µg/kg	1	MCERTS	-	-	-		
1,2-Dichloroethane	µg/kg	1	MCERTS	-	-	-		
1,1-Dichloropropene	µg/kg	1	MCERTS	-	-	-		
Trans-1,2-dichloroethene	µg/kg	1	NONE	-	-	-		
Benzene	µg/kg	1	MCERTS	-	-	-		
Tetrachloromethane	µg/kg	1	MCERTS	-	-	-		
1,2-Dichloropropane	µg/kg	1	MCERTS	-	-	-		
Trichloroethene	µg/kg	1	MCERTS	-	-	-		
Dibromomethane	µg/kg	1	MCERTS	-	-	-		
Bromodichloromethane	µg/kg	1	MCERTS	-	-	-		
Cis-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-		
Trans-1,3-dichloropropene	µg/kg	1	ISO 17025	-	-	-		
Toluene	µg/kg	1	MCERTS	-	-	-		
1,1,2-Trichloroethane	µg/kg	1	MCERTS	-	-	-		
1,3-Dichloropropane	µg/kg	1	ISO 17025	-	-	-		
Dibromochloromethane	µg/kg	1	ISO 17025	-	-	-		
Tetrachloroethene	µg/kg	1	NONE	-	-	-		
1,2-Dibromoethane	µg/kg	1	ISO 17025	-	-	-		
Chlorobenzene	µg/kg	1	MCERTS	-	-	-		
1,1,1,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-		
Ethylbenzene	µg/kg	1	MCERTS	-	-	-		
p & m-Xylene	µg/kg	1	MCERTS	-	-	-		
Styrene	µg/kg	1	MCERTS	-	-	-		
Tribromomethane	µg/kg	1	NONE	-	-	-		
o-Xylene	µg/kg	1	MCERTS	-	-	-		
1,1,2,2-Tetrachloroethane	µg/kg	1	MCERTS	-	-	-		
Isopropylbenzene	µg/kg	1	MCERTS	-	-	-		
Bromobenzene	µg/kg	1	MCERTS	-	-	-		
n-Propylbenzene	µg/kg	1	ISO 17025	-	-	-		
2-Chlorotoluene	µg/kg	1	MCERTS	-	-	-		
4-Chlorotoluene	µg/kg	1	MCERTS	-	-	-		
1,3,5-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-		
tert-Butylbenzene	µg/kg	1	MCERTS	-	-	-		
1,2,4-Trimethylbenzene	µg/kg	1	ISO 17025	-	-	-		
sec-Butylbenzene	µg/kg	1	MCERTS	-	-	-		
1,3-Dichlorobenzene	µg/kg	1	ISO 17025	-	-	-		
p-Isopropyltoluene	µg/kg	1	ISO 17025	-	-	-		
1,2-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-		
1,4-Dichlorobenzene	µg/kg	1	MCERTS	-	-	-		
Butylbenzene	µg/kg	1	MCERTS	-	-	-		
1,2-Dibromo-3-chloropropane	µg/kg	1	ISO 17025	-	-	-		
1,2,4-Trichlorobenzene	µg/kg	1	MCERTS	-	-	-		
Hexachlorobutadiene	µg/kg	1	MCERTS	-	-	-		
1,2,3-Trichlorobenzene	µg/kg	1	ISO 17025	-	-	-		



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Project / Site name: Northstowe

Lab Sample Number				695388	695389	695390		
Sample Reference				TP1207	TP1207	TP612		
Sample Number				None Supplied	None Supplied	None Supplied		
Depth (m)				0.00	0.20	0.00		
Date Sampled				24/01/2017	26/01/2017	24/01/2017		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
SVOCs								
Aniline	mg/kg	0.1	NONE	-	-	-		
Phenol	mg/kg	0.2	ISO 17025	-	-	-		
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-		
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-		
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-		
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-		
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-		
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-		
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-		
Hexachloroethane	mg/kg	0.05	MCERTS	-	-	-		
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-		
4-Methylphenol	mg/kg	0.2	NONE	-	-	-		
Isophorone	mg/kg	0.2	MCERTS	-	-	-		
2-Nitrophenol	mg/kg	0.3	MCERTS	-	-	-		
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-		
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-		
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-		
Naphthalene	mg/kg	0.05	MCERTS	-	-	-		
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-		
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-		
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-		
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-		
2,4,6-Trichlorophenol	mg/kg	0.1	MCERTS	-	-	-		
2,4,5-Trichlorophenol	mg/kg	0.2	MCERTS	-	-	-		
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-		
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-		
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-		
2,6-Dinitrotoluene	mg/kg	0.1	MCERTS	-	-	-		
Acenaphthylene	mg/kg	0.1	MCERTS	-	-	-		
Acenaphthene	mg/kg	0.1	MCERTS	-	-	-		
2,4-Dinitrotoluene	mg/kg	0.2	MCERTS	-	-	-		
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-		
4-Chlorophenyl phenyl ether	mg/kg	0.3	ISO 17025	-	-	-		
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-		
4-Nitroaniline	mg/kg	0.2	MCERTS	-	-	-		
Fluorene	mg/kg	0.1	MCERTS	-	-	-		
Azobenzene	mg/kg	0.3	MCERTS	-	-	-		
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-		
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-		
Phenanthrene	mg/kg	0.1	MCERTS	-	-	-		
Anthracene	mg/kg	0.1	MCERTS	-	-	-		
Carbazole	mg/kg	0.3	MCERTS	-	-	-		
Dibutyl phthalate	mg/kg	0.2	MCERTS	-	-	-		
Anthraquinone	mg/kg	0.3	MCERTS	-	-	-		
Fluoranthene	mg/kg	0.1	MCERTS	-	-	-		
Pyrene	mg/kg	0.1	MCERTS	-	-	-		
Butyl benzyl phthalate	mg/kg	0.3	ISO 17025	-	-	-		
Benzo(a)anthracene	mg/kg	0.1	MCERTS	-	-	-		
Chrysene	mg/kg	0.05	MCERTS	-	-	-		
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	-	-	-		
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	-	-	-		
Benzo(a)pyrene	mg/kg	0.1	MCERTS	-	-	-		
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	-	-	-		
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	-	-	-		
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	-	-	-		



Combined Report **Northstowe UA008426 Part B**
Project / Site name: **Northstowe**
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
679340	TP607	0.40	162	Loose Fibres	Chrysotile	< 0.001	< 0.001

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



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number			703762	703763	703764	703765	703766
Sample Reference			WS901	WS906	BH1002	BH1002	BH1003
Sample Number			1	1	1	2	1
Depth (m)			0.70	1.00	1.80	2.00	2.40
Date Sampled			14/02/2017	14/02/2017	14/02/2017	14/02/2017	14/02/2017
Time Taken			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status				

General Inorganics

pH	pH Units	N/A	ISO 17025	7.4	7.3	7.6	7.3	7.5
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	303000	671000	211000	72200	1400000
Sulphate as SO ₄	mg/l	0.045	ISO 17025	300	670	210	72	1400
Total Sulphur	µg/l	15	NONE	100000	220000	70000	24000	470000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	88	< 15	420	< 15	470
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	8.32	3.00	4.88	6.58	4.27
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	230	480	450	390	470

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.97	< 0.15	0.42	< 0.15	0.41
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.06	0.05	0.08	0.03	0.16
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.2	ISO 17025	1.5	0.4	0.4	0.5	0.5
Copper (dissolved)	µg/l	0.5	ISO 17025	120	4.5	8.0	2.8	9.3
Lead (dissolved)	µg/l	0.2	ISO 17025	2.2	< 0.2	< 0.2	< 0.2	0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	0.12	0.14	0.44	0.30	0.24
Nickel (dissolved)	µg/l	0.5	ISO 17025	4.8	2.5	3.4	2.2	7.7
Selenium (dissolved)	µg/l	0.6	ISO 17025	32	2.4	46	2.3	23
Vanadium (dissolved)	µg/l	0.2	ISO 17025	2.8	0.3	0.4	< 0.2	0.9
Zinc (dissolved)	µg/l	0.5	ISO 17025	7.2	8.3	16	2.8	59



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Project / Site name: Northstowe

Lab Sample Number	703762				703763	703764	703765	703766
Sample Reference	WS901				WS906	BH1002	BH1002	BH1003
Sample Number	1				1	1	2	1
Depth (m)	0.70				1.00	1.80	2.00	2.40
Date Sampled	14/02/2017				14/02/2017	14/02/2017	14/02/2017	14/02/2017
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C6 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C7 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



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Project / Site name: Northstowe

Lab Sample Number			703767	703768	703769	703770	703771
Sample Reference			BH1003	BH613	BH601	BH601	WS903
Sample Number			2	1	1	2	1
Depth (m)			1.30	2.40	3.20	2.20	1.15
Date Sampled			14/02/2017	14/02/2017	14/02/2017	14/02/2017	14/02/2017
Time Taken			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status				

General Inorganics

pH	pH Units	N/A	ISO 17025	7.4	7.2	7.3	7.2	7.4
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	277000	2440000	2310000	2620000	59400
Sulphate as SO ₄	mg/l	0.045	ISO 17025	280	2400	2300	2600	59
Total Sulphur	µg/l	15	NONE	92000	810000	770000	870000	20000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	45	< 15	970	23	< 15
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	4.05	5.63	5.05	4.67	3.82
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	460	440	240	560	430

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.16	0.29	0.23	0.24	0.29
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.13	0.11	0.35	< 0.02
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.8	0.6	0.5	0.4	0.4
Copper (dissolved)	µg/l	0.5	ISO 17025	3.8	17	32	21	2.2
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.4	0.3	< 0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	0.19	0.17	0.19	0.17	0.08
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.8	5.3	15	9.2	1.0
Selenium (dissolved)	µg/l	0.6	ISO 17025	16	54	10	9.8	2.7
Vanadium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	0.4	0.4	0.5	< 0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	6.1	8.0	61	76	2.8



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Project / Site name: Northstowe

Lab Sample Number	703767	703768	703769	703770	703771			
Sample Reference	BH1003	BH613	BH601	BH601	WS903			
Sample Number	2	1	1	2	1			
Depth (m)	1.30	2.40	3.20	2.20	1.15			
Date Sampled	14/02/2017	14/02/2017	14/02/2017	14/02/2017	14/02/2017			
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied			
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Parameter	Units	Limit of detection	Accreditation Status	703767	703768	703769	703770	703771
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

Parameter	Units	Limit of detection	Accreditation Status	703767	703768	703769	703770	703771
TPH-CWG - Aliphatic >C5 - C6	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C6 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

Parameter	Units	Limit of detection	Accreditation Status	703767	703768	703769	703770	703771
TPH-CWG - Aromatic >C5 - C7	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C7 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number			703772	703773	703774	703775	703776
Sample Reference			WS905	WS902	BH1004	BH1004	WS701
Sample Number			1	1	1	2	1
Depth (m)			1.40	0.86	2.80	1.20	1.20
Date Sampled			14/02/2017	14/02/2017	14/02/2017	14/02/2017	14/02/2017
Time Taken			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status				

General Inorganics

pH	pH Units	N/A	ISO 17025	7.2	7.4	7.6	7.1	7.4
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	1250000	450000	485000	329000	160000
Sulphate as SO ₄	mg/l	0.045	ISO 17025	1200	450	480	330	160
Total Sulphur	µg/l	15	NONE	420000	150000	160000	110000	53000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	95	45	< 15	280
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	6.41	5.91	5.09	4.48	4.46
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	430	200	570	570	200

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.18	0.17	0.35	< 0.15	0.24
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.04	0.12	< 0.02	0.03
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.7	0.4	0.7	0.4	0.7
Copper (dissolved)	µg/l	0.5	ISO 17025	4.0	6.2	6.2	2.2	3.1
Lead (dissolved)	µg/l	0.2	ISO 17025	0.3	< 0.2	< 0.2	< 0.2	< 0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	0.09	0.06	0.07	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	4.4	4.7	4.1	2.1	3.3
Selenium (dissolved)	µg/l	0.6	ISO 17025	8.7	51	14	< 0.6	1.7
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.7	1.1	0.7	< 0.2	< 0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	9.6	5.3	140	4.1	3.3



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Project / Site name: Northstowe

Lab Sample Number	703772				703773	703774	703775	703776
Sample Reference	WS905				WS902	BH1004	BH1004	WS701
Sample Number	1				1	1	2	1
Depth (m)	1.40				0.86	2.80	1.20	1.20
Date Sampled	14/02/2017				14/02/2017	14/02/2017	14/02/2017	14/02/2017
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C6 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C7 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number			703777	703778	703779	703780	703781
Sample Reference			WS904	BH1107	BH1107	BH1110	BH1110
Sample Number			1	1	2	1	2
Depth (m)			1.20	1.70	3.50	3.60	2.40
Date Sampled			14/02/2017	13/02/2017	13/02/2017	13/02/2017	13/02/2017
Time Taken			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status				

General Inorganics

pH	pH Units	N/A	ISO 17025	7.4	7.5	7.5	7.7	7.4
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	519000	29100	164000	225000	77000
Sulphate as SO ₄	mg/l	0.045	ISO 17025	520	29	160	220	77
Total Sulphur	µg/l	15	NONE	170000	9700	55000	75000	26000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	< 15	< 15	< 15	440	< 15
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	3.39	2.01	4.53	5.47	2.93
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	390	400	500	530	370

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.24	< 0.15	0.39	0.85	< 0.15
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	< 0.02	< 0.02	0.03	< 0.02
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.6	0.4	0.5	0.4	0.3
Copper (dissolved)	µg/l	0.5	ISO 17025	4.0	2.5	5.9	8.5	1.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	1.3	2.1	1.5	4.8	1.1
Selenium (dissolved)	µg/l	0.6	ISO 17025	35	< 0.6	9.1	39	2.0
Vanadium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	0.3	1.9	< 0.2
Zinc (dissolved)	µg/l	0.5	ISO 17025	3.4	3.1	8.6	53	4.1



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number	703777				703778	703779	703780	703781
Sample Reference	WS904				BH1107	BH1107	BH1110	BH1110
Sample Number	1				1	2	1	2
Depth (m)	1.20				1.70	3.50	3.60	2.40
Date Sampled	14/02/2017				13/02/2017	13/02/2017	13/02/2017	13/02/2017
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C6 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C7 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number			703782	703783	703784	703785	703786
Sample Reference			BH1202	BH1206	BH1206	BH1204	BH1204
Sample Number			1	1	2	1	2
Depth (m)			3.23	4.20	1.93	3.30	0.30
Date Sampled			13/02/2017	13/02/2017	13/02/2017	13/02/2017	13/02/2017
Time Taken			None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status				

General Inorganics

pH	pH Units	N/A	ISO 17025	7.3	7.8	6.6	7.4	7.8
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	2330000	1860000	2180000	1850000	437000
Sulphate as SO ₄	mg/l	0.045	ISO 17025	2300	1900	2200	1900	440
Total Sulphur	µg/l	15	NONE	780000	620000	730000	620000	150000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	1400	1600	260	1200	< 15
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	6.58	6.01	37.6	7.46	8.05
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	680	520	440	490	220

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.35	0.68	0.60	0.48	0.61
Cadmium (dissolved)	µg/l	0.02	ISO 17025	< 0.02	0.09	0.28	0.13	< 0.02
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.8	0.4	0.4	0.3	1.3
Copper (dissolved)	µg/l	0.5	ISO 17025	20	18	8.2	16	8.7
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2	< 0.2	< 0.2	0.3
Mercury (dissolved)	µg/l	0.05	ISO 17025	0.33	0.25	0.33	0.19	0.16
Nickel (dissolved)	µg/l	0.5	ISO 17025	8.9	10	15	9.7	3.6
Selenium (dissolved)	µg/l	0.6	ISO 17025	4.8	6.3	8.5	15	28
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.4	0.8	< 0.2	0.5	0.8
Zinc (dissolved)	µg/l	0.5	ISO 17025	32	37	48	24	2.7



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number	703782			703783			703784			703785			703786		
Sample Reference	BH1202			BH1206			BH1206			BH1204			BH1204		
Sample Number	1			1			2			1			2		
Depth (m)	3.23			4.20			1.93			3.30			0.30		
Date Sampled	13/02/2017			13/02/2017			13/02/2017			13/02/2017			13/02/2017		
Time Taken	None Supplied			None Supplied			None Supplied			None Supplied			None Supplied		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status												

Monoaromatics

Compound	Units	Limit of detection	Accreditation Status	703782	703783	703784	703785	703786
Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	Units	Limit of detection	Accreditation Status	703782	703783	703784	703785	703786
TPH-CWG - Aliphatic >C5 - C6	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C6 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

TPH-CWG - Aromatic >C5 - C7	Units	Limit of detection	Accreditation Status	703782	703783	703784	703785	703786
TPH-CWG - Aromatic >C5 - C7	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C7 - C8	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Lab Sample Number		703787	703788	703789		
Sample Reference		BH1203	BH1205	BH1205		
Sample Number		1	2	1		
Depth (m)		2.55	2.00	2.80		
Date Sampled		13/02/2017	13/02/2017	13/02/2017		
Time Taken		None Supplied	None Supplied	None Supplied		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status			

General Inorganics

pH	pH Units	N/A	ISO 17025	7.1	7.2	7.0		
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10		
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10		
Sulphate as SO ₄	µg/l	45	ISO 17025	2130000	2020000	2090000		
Sulphate as SO ₄	mg/l	0.045	ISO 17025	2100	2000	2100		
Total Sulphur	µg/l	15	NONE	710000	670000	700000		
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0		
Ammoniacal Nitrogen as N	µg/l	15	ISO 17025	1300	260	1500		
Total Organic Carbon (TOC)	mg/l	0.1	ISO 17025	6.44	8.69	6.24		
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	610	240	440		

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10		
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Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01	< 0.01		
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01		
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01		
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01		

Total PAH

Total EPA-16 PAHs	µg/l	0.16	NONE	< 0.16	< 0.16	< 0.16		
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Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	0.42	0.43	< 0.15		
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.20	0.29	0.09		
Chromium (hexavalent)	µg/l	5	ISO 17025	< 5.0	< 5.0	< 5.0		
Chromium (dissolved)	µg/l	0.2	ISO 17025	0.3	0.4	0.5		
Copper (dissolved)	µg/l	0.5	ISO 17025	17	9.9	15		
Lead (dissolved)	µg/l	0.2	ISO 17025	0.2	< 0.2	0.6		
Mercury (dissolved)	µg/l	0.05	ISO 17025	0.20	0.18	0.18		
Nickel (dissolved)	µg/l	0.5	ISO 17025	13	52	31		
Selenium (dissolved)	µg/l	0.6	ISO 17025	9.3	82	8.8		
Vanadium (dissolved)	µg/l	0.2	ISO 17025	0.6	< 0.2	0.3		
Zinc (dissolved)	µg/l	0.5	ISO 17025	120	120	110		



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Project / Site name: Northstowe

Lab Sample Number				703787	703788	703789		
Sample Reference				BH1203	BH1205	BH1205		
Sample Number				1	2	1		
Depth (m)				2.55	2.00	2.80		
Date Sampled				13/02/2017	13/02/2017	13/02/2017		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Water Analysis)	Units	Limit of detection	Accreditation Status					

Monoaromatics

Benzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
Toluene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
Ethylbenzene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
p & m-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
o-xylene	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		
MTBE (Methyl Tertiary Butyl Ether)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0		

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >C5 - C6	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C6 - C8	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aliphatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10		

TPH-CWG - Aromatic >C5 - C7	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C7 - C8	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C8 - C10	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C10 - C12	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C12 - C16	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C16 - C21	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic >C21 - C35	µg/l	10	NONE	< 10	< 10	< 10		
TPH-CWG - Aromatic (C5 - C35)	µg/l	10	NONE	< 10	< 10	< 10		

U/S = Unsuitable Sample I/S = Insufficient Sample



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Project / Site name: Northstowe

Lab Sample Number	677414				679343		682210		682211		686115	
Sample Reference	TP631				TP625		TP626		BH601		TP633	
Sample Number	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Depth (m)	1.30-3.00				1.00		1.00-1.20		1.00-2.00		1.50	
Date Sampled	01/12/2016				21/12/2016		07/12/2016		07/12/2016		12/01/2017	
Time Taken	None Supplied				None Supplied		None Supplied		None Supplied		None Supplied	
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status									

General Inorganics

	pH Units	N/A	ISO 17025	7.7	8.0	8.0	7.7	8.1
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	100	ISO 17025	3250000	8880	67700	1060000	47500
Sulphate as SO ₄	mg/l	0.1	ISO 17025	3200	8.9	68	1100	48
Total Sulphur	µg/l	1	NONE	1100000	3000	23000	350000	16000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	NONE	120	31	30	35	55
Total Organic Carbon (TOC)	mg/l	0.1	NONE	3.30	2.00	5.14	2.47	3.93
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	66	34	69	57	37

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
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Heavy Metals / Metalloids

	µg/l	1.1	ISO 17025	< 1.1	< 1.1	< 1.1	1.1	< 1.1
Arsenic (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	0.15	< 0.08
Cadmium (dissolved)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (hexavalent)	µg/l	0.4	ISO 17025	< 0.4	< 0.4	8.5	< 0.4	0.5
Chromium (dissolved)	µg/l	0.7	ISO 17025	12	3.6	15	12	7.1
Copper (dissolved)	µg/l	1	ISO 17025	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Lead (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mercury (dissolved)	µg/l	0.3	ISO 17025	2.8	< 0.3	1.6	1.7	1.9
Nickel (dissolved)	µg/l	4	ISO 17025	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Selenium (dissolved)	µg/l	1.7	ISO 17025	2.3	< 1.7	6.4	9.1	< 1.7
Vanadium (dissolved)	µg/l	0.4	ISO 17025	8.8	1.1	10	30	5.3
Zinc (dissolved)	µg/l							



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Lab Sample Number	686116				686117	686118	689802	689803
Sample Reference	TP623				TP634	TP608	TP629	TP633
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	1.00				1.80	0.60	2.00	1.80
Date Sampled	12/01/2017				12/01/2017	11/01/2017	13/01/2017	12/01/2017
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status					

General Inorganics

	pH Units	N/A	ISO 17025	7.9	7.6	8.0	8.0	8.1
pH								
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Free Cyanide	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
Sulphate as SO ₄	µg/l	100	ISO 17025	79900	1630000	218000	291000	150000
Sulphate as SO ₄	mg/l	0.1	ISO 17025	80	1600	220	-	-
Total Sulphur	µg/l	1	NONE	27000	540000	73000	97000	50000
Sulphide	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ammoniacal Nitrogen as N	µg/l	15	NONE	54	180	53	33	26
Total Organic Carbon (TOC)	mg/l	0.1	NONE	5.43	9.21	5.59	3.26	3.00
Alkalinity	mgCaCO ₃ /l	3	ISO 17025	66	62	70	75	78

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10	< 10	< 10	< 10
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Speciated PAHs

	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Naphthalene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.2	NONE	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
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Heavy Metals / Metalloids

	µg/l	1.1	ISO 17025	< 1.1	1.8	< 1.1	< 1.1	< 1.1
Arsenic (dissolved)	µg/l	1.1	ISO 17025	< 1.1	1.8	< 1.1	< 1.1	< 1.1
Cadmium (dissolved)	µg/l	0.08	ISO 17025	< 0.08	< 0.08	< 0.08	< 0.08	< 0.08
Chromium (hexavalent)	µg/l	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Chromium (dissolved)	µg/l	0.4	ISO 17025	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
Copper (dissolved)	µg/l	0.7	ISO 17025	7.1	8.3	3.3	14	15
Lead (dissolved)	µg/l	1	ISO 17025	1.5	< 1.0	< 1.0	66	53
Mercury (dissolved)	µg/l	0.5	ISO 17025	< 0.5	< 0.5	< 0.5	< 0.5	0.9
Nickel (dissolved)	µg/l	0.3	ISO 17025	0.5	2.1	1.4	1.0	2.1
Selenium (dissolved)	µg/l	4	ISO 17025	8.2	5.2	< 4.0	< 4.0	< 4.0
Vanadium (dissolved)	µg/l	1.7	ISO 17025	< 1.7	2.1	2.1	3.7	4.6
Zinc (dissolved)	µg/l	0.4	ISO 17025	6.6	9.2	2.2	9.1	13



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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 *
677392	TP631	None Supplied	0.00-0.40	Brown loam and clay with vegetation.
677393	TP631	None Supplied	1.30-3.00	Grey clay and sand.
677394	TPSA618	None Supplied	0.10-0.30	Brown loam and clay with vegetation.
677395	TPSA618	None Supplied	0.90-1.20	Beige clay and sand with chalk.
677396	TPSA616	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
677397	TP929	None Supplied	0.00-0.10	Brown loam and clay with vegetation.
677398	TP929	None Supplied	1.10-1.20	Light brown gravelly sand.
677399	TP931	None Supplied	0.10-0.20	Brown loam and clay with vegetation.
677400	TP931	None Supplied	0.50-0.60	Brown loam and clay with vegetation.
677401	TP932	None Supplied	0.10-0.20	Brown loam and clay with vegetation.
677402	TP932	None Supplied	1.30-1.40	Grey clay and sand with gravel.
677403	BH1206	None Supplied	0.10-0.30	Brown loam and clay with vegetation.
677404	BH1205	None Supplied	0.10-0.30	Brown loam and clay with vegetation.
677405	BH1206	None Supplied	1.60-1.80	Light brown clay and sand.
677406	LIF1301	None Supplied	0.00-0.20	Grey loam and sand with vegetation.
677407	LIF1302	None Supplied	0.00-0.20	Brown loam and sand with vegetation.
677408	LIF1303	None Supplied	0.00-0.20	Brown loam and sand with gravel and vegetation.
677409	LIF1304	None Supplied	0.00-0.20	Brown loam and sand with gravel and vegetation.
677410	LIF1305	None Supplied	0.00-0.20	Brown loam and sand with gravel and vegetation.
677411	LIF1306	None Supplied	0.00-0.20	Brown loam and sand with gravel and vegetation.
677412	LIF1307	None Supplied	0.00-0.20	Brown loam and sand with gravel and vegetation.
677413	LIF1308	None Supplied	0.00-0.20	Brown loam and sand with gravel and vegetation.
679182	TP915	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679183	TP915	None Supplied	0.55	Light brown clay and loam.
679184	TP919	None Supplied	0.10	Grey clay and sand.
679185	TP908	None Supplied	0.10	Brown sandy loam with gravel and vegetation.
679186	TP908	None Supplied	0.65	Light brown sand with gravel.
679187	TP902	None Supplied	0.20	Brown loam and clay with vegetation.
679188	TP902	None Supplied	0.50	Brown loam and clay.
679189	TP906	None Supplied	0.20	Brown clay and loam with gravel and vegetation.
679190	TP907	None Supplied	0.10	Brown sandy loam with gravel and vegetation.
679191	TP907	None Supplied	0.40	Light brown sandy loam with gravel and vegetation.
679192	TP901	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679193	TP901	None Supplied	0.80	Light brown loam and sand with gravel.
679194	TP912	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679195	TP912	None Supplied	0.70	Light brown sand.
679196	TP917	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679197	TP921	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679198	TP921	None Supplied	0.80	Light brown gravelly sand.
679199	TP916	None Supplied	0.10	Brown loam and clay.
679200	TP918	None Supplied	0.10	Brown loam and clay with vegetation.
679201	TP913	None Supplied	0.10	Brown loam and clay with vegetation.
679335	TPBH612	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679336	TPBH612	None Supplied	0.75	Light brown sandy clay with gravel.
679337	TP624	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679338	TP625	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
679339	TP625	None Supplied	1.00	Light brown clay and sand with gravel.
679340	TP607	None Supplied	0.40	Brown loam and sand with rubble and vegetation.
679341	TP607	None Supplied	0.90	Light brown loam and clay with gravel.
679342	TP606	None Supplied	0.10	Brown loam and clay with gravel.
682208	TP626	None Supplied	1.00-1.20	Brown clay.
682209	BH601	None Supplied	1.00-2.00	Brown clay.
682961	TPSA407	None Supplied	0.10-0.30	Brown loam and clay with vegetation.
682962	TPSA801	None Supplied	0.10-0.40	Brown loam and clay with vegetation.
682963	TPSA801	None Supplied	0.70-1.00	Light brown clay and sand with gravel.
682964	TPSA814	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
682965	TPSA832	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
682966	TPSA808	None Supplied	0.10-0.30	Brown clay and loam with vegetation.
682967	TPSA1105	None Supplied	0.10-0.30	Brown loam and clay with vegetation.
682968	TPSA1105	None Supplied	0.70-1.10	Light brown sandy clay.
682969	TP1209	None Supplied	0.10	Brown clay and loam with gravel.
682970	TP1209	None Supplied	0.80	Brown clay and loam.
682971	TP1216	None Supplied	0.10	Brown clay and loam.
682972	TP1217	None Supplied	0.10	Brown sandy clay.
682973	TP1218	None Supplied	0.10	Brown clay and loam.
684503	TP609	None Supplied	0.10	Brown clay and loam with gravel.
684504	TP609	None Supplied	0.40	Light brown clay and sand.

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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 *
684505	TP1212	None Supplied	0.10	Brown loam and clay with vegetation.
684506	TP1211	None Supplied	0.10	Light brown clay and sand with vegetation.
684507	TP1211	None Supplied	0.80	Light brown clay with gravel.
684508	TP1210A	None Supplied	0.10	Brown clay and loam with vegetation.
684509	TP1120	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
684510	TP1120	None Supplied	0.90-1.20	Light brown sandy clay.
684511	TP1121	None Supplied	0.10-0.30	Light brown loam and sand with gravel and vegetation.
684512	TP1121	None Supplied	0.60-1.00	Light brown sand with gravel and vegetation.
684513	TPSA1113	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
684514	TPSA1113	None Supplied	1.60-2.00	Light brown sand with gravel.
684515	TP1208	None Supplied	0.10	Brown clay and loam with vegetation.
686098	TP1222	None Supplied	0.10-0.30	Brown clay and loam with gravel and vegetation.
686099	TP1225	None Supplied	0.10-0.30	Brown clay and loam with vegetation.
686100	TP1228	None Supplied	0.10-0.30	Brown clay and loam with vegetation.
686101	TP1227	None Supplied	0.10-0.30	Brown clay and loam with gravel and vegetation.
686102	TP1226	None Supplied	0.10	Brown clay and loam with vegetation.
686103	TP633	None Supplied	0.10	Brown clay and loam with gravel and vegetation.
686104	TP633	None Supplied	1.50	Light brown sandy clay with gravel.
686105	TP623	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
686106	TP623	None Supplied	1.00	Grey clay with gravel.
686107	TP634	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
686108	TP634	None Supplied	1.80	Grey clay with vegetation.
686109	TP634	None Supplied	0.70	Light grey clay and sand with gravel and vegetation.
686110	TP608	None Supplied	0.10	Brown clay and loam with vegetation.
686111	TP608	None Supplied	0.60	Light grey clay and sand with gravel and vegetation.
686112	TP622	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
686113	TPSA610	None Supplied	0.10	Brown clay and sand with gravel.
686114	TPSA610	None Supplied	0.60	Grey clay with gravel.
686313	WS613	None Supplied	0.10-0.20	Brown loam and clay with gravel and vegetation.
686314	BH604	None Supplied	0.10-0.30	Brown clay and loam with gravel.
686315	TPBH612	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
686316	TP605	None Supplied	0.00-0.40	Brown clay and loam with gravel and vegetation.
689784	TP1232	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689785	TP629	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689786	TPSA856	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
689787	TPSA856	None Supplied	0.50-0.90	Light brown loam and clay with gravel.
689788	TP633	None Supplied	1.80	Brown clay.
689789	TP1223	None Supplied	0.10	Brown loam and clay with gravel.
689790	TP630	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689791	TP630	None Supplied	0.40	Brown loam and clay with gravel.
689792	TP1203	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689793	TP1203	None Supplied	0.40	Light brown loam and clay with gravel and vegetation.
689794	TP1235	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689795	TP1235	None Supplied	0.70	Light brown loam and clay with gravel and vegetation.
689796	TP1234	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689797	TPSA620	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689798	TPSA911	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
689799	TPSA1201	None Supplied	0.10	Brown loam and sand with gravel and vegetation.
689800	TPSA1201	None Supplied	0.50	Light brown loam and clay with gravel.
689801	TPSA1201A	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
690432	TP629	None Supplied	2.00	Brown clay with gravel.
693942	TP1206	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
693943	TP1206	None Supplied	0.40	Brown loam and clay with gravel and vegetation.
693944	TP1205	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
693945	TPC038	None Supplied	0.10	Brown loam and sand with gravel and vegetation.
693946	TPC038	None Supplied	0.50	Brown loam and sand with gravel and vegetation.
693947	TPC050B	None Supplied	0.40	Brown loam and clay with gravel and vegetation.
693948	TPC050B	None Supplied	1.50	Grey clay and sand with gravel.
693949	TPC050B	None Supplied	2.30	Light brown clay and sand with gravel.
693950	TPC051	None Supplied	0.30	Brown loam and clay with vegetation.
693951	TPC051	None Supplied	0.50	Brown clay and sand.
693952	TPC051	None Supplied	0.90	Grey clay and sand.
693953	TPC051	None Supplied	1.50	Grey clay and sand.
693954	TPC051	None Supplied	3.00	Brown clay and sand with gravel.
693955	TP1213	None Supplied	0.10	Brown loam and clay with gravel.
693956	TP1214	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
693957	TP1214	None Supplied	0.40	Brown loam and clay with gravel.



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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 *
693958	TP1219	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
693959	TP1220	None Supplied	0.10-0.30	Brown loam and clay with gravel and vegetation.
693960	TP1221	None Supplied	0.10-0.30	Brown loam and clay with gravel.
693961	TP1231	None Supplied	0.10-0.30	Brown loam and sand with gravel and vegetation.
693962	TP1231	None Supplied	0.60-1.00	Light brown clay and sand with gravel.
693963	TP1204	None Supplied	0.10-0.30	Brown loam and clay with vegetation.
693964	TPC019	None Supplied	0.10-0.30	Brown loam and clay with vegetation.
693965	TPC019	None Supplied	1.10-1.40	Light brown clay and sand with gravel.
693966	WSC027	None Supplied	0.20	Light brown clay and sand with gravel.
693967	WSC027	None Supplied	0.60	Light brown clay and sand with gravel.
693968	WSC027	None Supplied	1.10	Light brown clay and sand with gravel.
693969	WSC027	None Supplied	2.00	Brown clay and sand with gravel.
694086	WSC032A	None Supplied	0.60	Brown loam and clay with gravel and vegetation.
694087	WSC032A	None Supplied	1.70	Grey clay with gravel.
694088	WSC033	None Supplied	0.50	Brown loam and sand with vegetation.
694089	WSC033	None Supplied	2.00	Grey clay.
694090	WSC033	None Supplied	3.00	Grey clay.
694091	TP024A	None Supplied	0.40	Brown loam and sand with gravel.
694092	TP024A	None Supplied	0.80	Brown loam and clay with gravel.
694093	TP024A	None Supplied	1.50	Light brown sandy loam with gravel.
694094	WWC03	None Supplied	0.70	Brown loam and clay with gravel and brick.
694095	WWC03	None Supplied	1.20	Light brown sandy loam with gravel.
694096	WSC012	None Supplied	0.70	Brown loam and clay with gravel and vegetation.
694097	WSC012	None Supplied	1.50	Light brown sandy loam with gravel.
694098	TPC016B	None Supplied	0.50	Brown loam and clay with gravel.
694099	TPC016B	None Supplied	1.00	Brown loam and clay with gravel and vegetation.
694100	TPC016B	None Supplied	1.50	Light brown sandy loam with gravel.
694101	TPC016A	None Supplied	0.40	Brown loam and clay with gravel.
694102	TPC016A	None Supplied	0.20	Light brown gravelly loam.
694103	TPC016A	None Supplied	1.20	Brown clay and sand with gravel.
694104	WSC03	None Supplied	0.40	Light brown sandy loam with gravel and brick.
694105	WSC03	None Supplied	0.70	Brown loam and clay with gravel and stones.
694106	TP1202	None Supplied	0.40	Light brown sandy loam with gravel.
694107	TP1202	None Supplied	0.60	Brown loam and clay with gravel.
695376	TP613	None Supplied	0.00	Brown loam and clay with gravel and vegetation.
695377	TP613	None Supplied	0.20	Brown loam and clay with gravel and vegetation.
695378	TP1218	None Supplied	0.10	Brown loam and clay with vegetation.
695379	TP1204	None Supplied	0.00	Brown loam and clay with vegetation.
695380	TP628	None Supplied	0.00	Brown loam and clay with vegetation.
695381	TP628	None Supplied	0.20	Brown loam and clay with gravel and vegetation.
695382	TP1221	None Supplied	0.10	Brown loam and clay with vegetation.
695383	TP913	None Supplied	0.00	Brown loam and clay with gravel.
695384	TP913	None Supplied	0.20	Brown loam and clay with gravel.
695385	TP633	None Supplied	0.00	Brown loam and clay with gravel and vegetation.
695386	TP1213	None Supplied	0.10	Brown loam and clay with gravel and vegetation.
695387	TP1213	None Supplied	0.40	Light brown loam and clay with vegetation.
695388	TP1207	None Supplied	0.00	Brown loam and sand with gravel and vegetation.
695389	TP1207	None Supplied	0.20	Brown loam and sand with gravel and vegetation.
695390	TP612	None Supplied	0.00	Brown loam and clay with gravel and vegetation.

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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Alkalinity in Leachate	Determination of Alkalinity by discrete analyser (colorimetry).	In house method based on MEWAM & USEPA Method 310.2.	L082-PL	W	ISO 17025
Alkalinity in Water	Determination of Alkalinity by discrete analyser (colorimetry). Accredited matrices: SW, PW, GW.	In house method based on MEWAM & USEPA Method 310.2.	L082-PL	W	ISO 17025
Ammoniacal Nitrogen as N in leachate	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	NONE
Ammoniacal Nitrogen as N in water	Determination of Ammonium/Ammonia/ Ammoniacal Nitrogen by the discrete analyser (colorimetric) salicylate/nitroprusside method. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	ISO 17025
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in ouse method based on references.	HSE Report No: 83/1996, HSG 248, HSG 264 & SCA Blue Book (draft).	A006-PL	D	ISO 17025
BARGE-UBM Bioaccessibility Test for Metals	Bioaccessibility extraction method for metals. Test portion sieved to < 250 um. Analytes as defined on the report.	BARGE UBM Method: https://www.bgs.ac.uk/barge/docs/BARGE_UBM_DEC_2010.pdf	UBM-PL	D	NONE
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
BS EN 12457-1 (2:1) Leachate Prep	2:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-1.	L043-PL	W	NONE
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
BTEX and MTBE in water (Monoaromatics)	Determination of BTEX and MTBE in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA8260	L073B-PL	W	ISO 17025
Electrical conductivity of soil	Determination of electrical conductivity in soil by electrometric measurement.	In-house method	L031-PL	W	NONE
Extractable/Available Metals (BS3882/BS8601)	Determination of the extractable metals in soil, in accordance with BS3882:2007 methodology.	BS3882:2007 & BS8601:2013	L01TS	D	NONE
Free cyanide in leachate	Determination of free cyanide by distillation followed by colorimetry.	In-house method	L080-PL	W	ISO 17025
Free cyanide in soil	Determination of free 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
Free cyanide in water	Determination of free cyanide by distillation followed by colorimetry. Accredited matrices SW, GW, PW.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Hexavalent chromium in leachate	Determination of hexavalent chromium in leachate by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	NONE



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Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Hexavalent chromium in water	Determination of hexavalent chromium in water by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method by continuous flow analyser. Accredited Matrices SW, GW, PW.	L080-PL	W	ISO 17025
Metals by ICP-OES in leachate	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
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
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW.	In-house method based on USEPA Method 6020 & 200.8 "for the determination of trace elements in water by ICP-MS.	L012-PL	W	ISO 17025
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols in leachate	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed 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
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (skalar)	L080-PL	W	ISO 17025
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-PL	D	MCERTS
pH at 20oC in leachate	Determination of pH in leachate by electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L005-PL	W	ISO 17025
pH at 20oC in water (automated)	Determination of pH in water followed by electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	W	ISO 17025
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Phosphorus as PO4 (BS3882/BS8601)	Determination of extractable phosphorus	BS3882:2007	L01TS	W	NONE
Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds in soil by extraction in dichloromethane and hexane followed by GC-MS.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Speciated EPA-16 PAHs in leachate	Determination of PAH compounds in leachate by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L102B-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.	In-house method based on USEPA 8270	L064-PL	D	MCERTS



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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Speciated EPA-16 PAHs in water	Determination of PAH compounds in water by extraction in dichloromethane followed by GC-MS with the use of surrogate and internal standards. Accredited matrices: SW PW GW	In-house method based on USEPA 8270	L0102B-PL	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.	L019-UK/PL	D	NONE
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by acidification followed by ICP-OES. Accredited matrices: SW PW GW	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	ISO 17025
Sulphate in water	Determination of sulphate in water by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
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 based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests, 2:1 water:soil extraction, analysis by ICP-OES.	L038-PL	D	MCERTS
Sulphide in leachate	Determination of sulphide in leachate by ion selective electrode.	In-house method	L010-PL	W	NONE
Sulphide in water	Determination of sulphide in water by ion selective electrode.	In-house method	L029-PL	W	NONE
Total cyanide in leachate	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	ISO 17025
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	ISO 17025
Total organic carbon in leachate	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Total organic carbon in water	Determination of dissolved organic carbon in water by TOC/DOC NDIR analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	ISO 17025



Combined Report Northstowe UA008426 Part B

Project / Site name: Northstowe

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total Sulphur in leachates	Determination of total sulphur in leachates by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L039-PL	W	NONE
Total Sulphur in water	Determination of total sulphur in water by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	W	MCERTS
TPHCWG (Waters)	Determination of dichloromethane extractable hydrocarbons in water by GC-MS, speciation by interpretation.	In-house method	L070-PL	W	NONE
Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
TP631		S	16-36035	677392	c	Free cyanide in soil	L080-PL	c
TP631		S	16-36035	677392	c	Organic matter in soil	L023-PL	c
TP631		S	16-36035	677392	c	Total cyanide in soil	L080-PL	c
TP631		S	16-36035	677393	c	Free cyanide in soil	L080-PL	c
TP631		S	16-36035	677393	c	Total cyanide in soil	L080-PL	c

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
TP921		S	16-36304	679198	b	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
TP921		S	16-36304	679198	b	Monohydric phenols in soil	L080-PL	b
TP921		S	16-36304	679198	b	Speciated EPA-16 PAHs in soil	L064-PL	b
TP921		S	16-36304	679198	b	TPHCWG (Soil)	L076-PL	b

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
BH601		S	17-36656	682209	c	Free cyanide in soil	L080-PL	c
BH601		S	17-36656	682209	c	Hexavalent chromium in soil	L080-PL	c
BH601		S	17-36656	682209	c	Monohydric phenols in soil	L080-PL	c
BH601		S	17-36656	682209	c	Speciated EPA-16 PAHs in soil	L064-PL	c
BH601		S	17-36656	682209	c	Total cyanide in soil	L080-PL	c
BH601		S	17-36656	682209	c	pH in soil (automated)	L099-PL	c
TP626		S	17-36656	682208	c	Free cyanide in soil	L080-PL	c
TP626		S	17-36656	682208	c	Hexavalent chromium in soil	L080-PL	c
TP626		S	17-36656	682208	c	Monohydric phenols in soil	L080-PL	c
TP626		S	17-36656	682208	c	Organic matter in soil	L023-PL	c
TP626		S	17-36656	682208	c	Speciated EPA-16 PAHs in soil	L064-PL	c
TP626		S	17-36656	682208	c	Total cyanide in soil	L080-PL	c
TP626		S	17-36656	682208	c	pH in soil (automated)	L099-PL	c

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
TP629		S	17-38013	690432	b	Monohydric phenols in soil	L080-PL	b
TP629		S	17-38013	690432	b	Speciated EPA-16 PAHs in soil	L064-PL	b

Sample Deviation Report



Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
BH1107	1	W	17-40267	703778	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1107	1	W	17-40267	703778	c	pH at 20oC in water (automated)	L099-PL	c
BH1107	2	W	17-40267	703779	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1107	2	W	17-40267	703779	c	pH at 20oC in water (automated)	L099-PL	c
BH1110	1	W	17-40267	703780	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1110	1	W	17-40267	703780	c	pH at 20oC in water (automated)	L099-PL	c
BH1110	2	W	17-40267	703781	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1110	2	W	17-40267	703781	c	pH at 20oC in water (automated)	L099-PL	c
BH1202	1	W	17-40267	703782	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1202	1	W	17-40267	703782	c	pH at 20oC in water (automated)	L099-PL	c
BH1203	1	W	17-40267	703787	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1203	1	W	17-40267	703787	c	pH at 20oC in water (automated)	L099-PL	c
BH1204	1	W	17-40267	703785	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1204	1	W	17-40267	703785	c	pH at 20oC in water (automated)	L099-PL	c
BH1204	2	W	17-40267	703786	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1204	2	W	17-40267	703786	c	pH at 20oC in water (automated)	L099-PL	c
BH1205	1	W	17-40267	703789	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1205	1	W	17-40267	703789	c	pH at 20oC in water (automated)	L099-PL	c
BH1205	2	W	17-40267	703788	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1205	2	W	17-40267	703788	c	pH at 20oC in water (automated)	L099-PL	c
BH1206	1	W	17-40267	703783	c	Ammoniacal Nitrogen as N in water	L082-PL	c
BH1206	1	W	17-40267	703783	c	pH at 20oC in water (automated)	L099-PL	c
BH1206	2	W	17-40267	703784	cd	BTEX and MTBE in water (Monoaromatics)	L073B-PL	d
BH1206	2	W	17-40267	703784	cd	Ammoniacal Nitrogen as N in water	L082-PL	dc
BH1206	2	W	17-40267	703784	cd	Sulphide in water	L029-PL	d
BH1206	2	W	17-40267	703784	cd	TPHCWG (Waters)	L070-PL	d
BH1206	2	W	17-40267	703784	cd	pH at 20oC in water (automated)	L099-PL	c

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