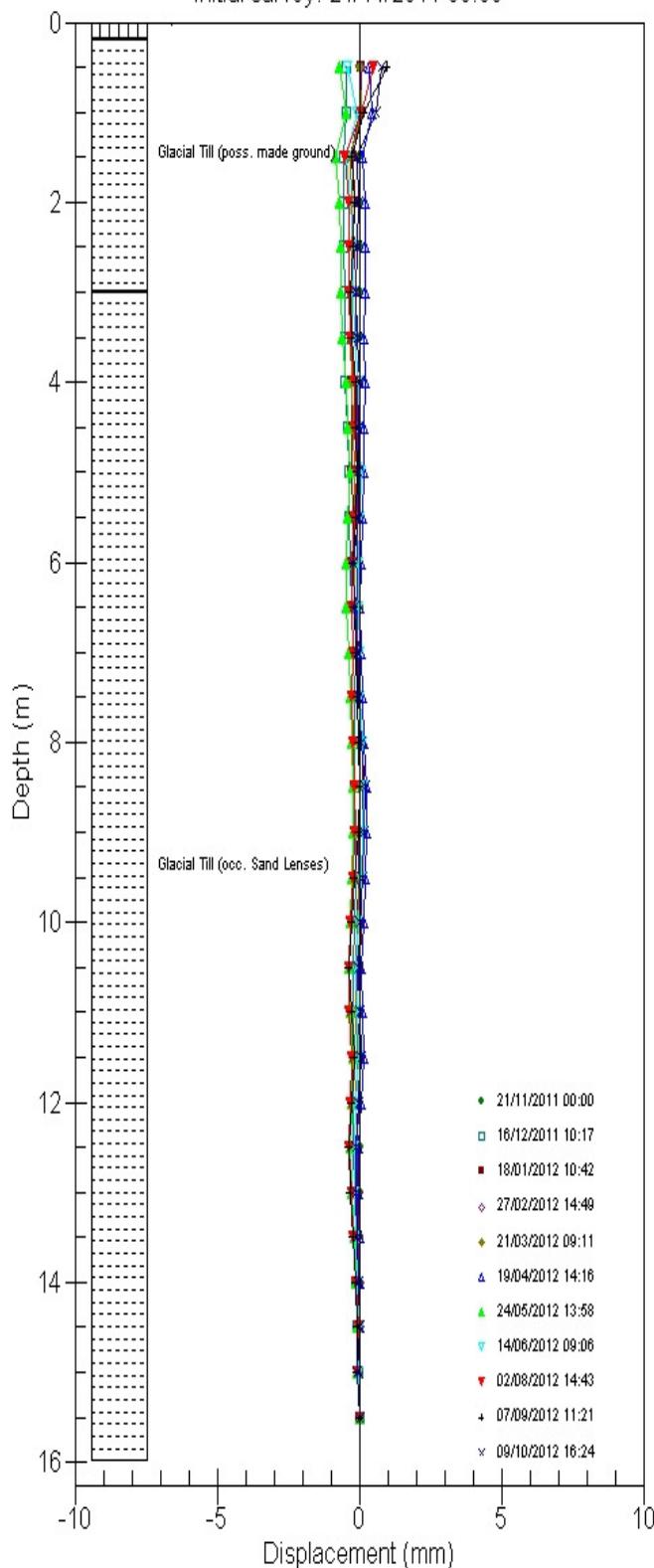


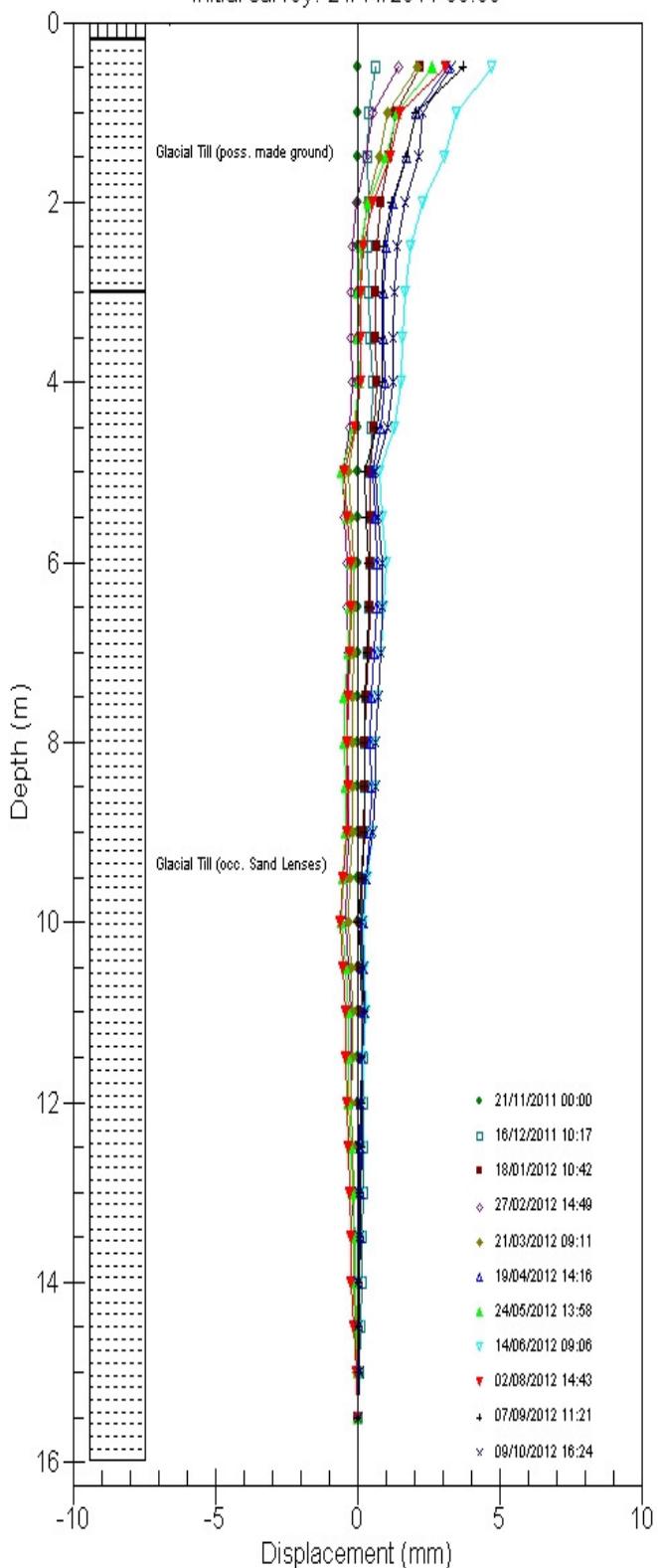
## 3833:BHC5 - A Axis Cumulative

Initial survey: 21/11/2011 00:00



## 3833:BHC5 - B Axis Cumulative

Initial survey: 21/11/2011 00:00



PROJECT: 3833

SITE: Filey Flat Cliffs: Ground Investigation

INSTALLATION: BH-C5

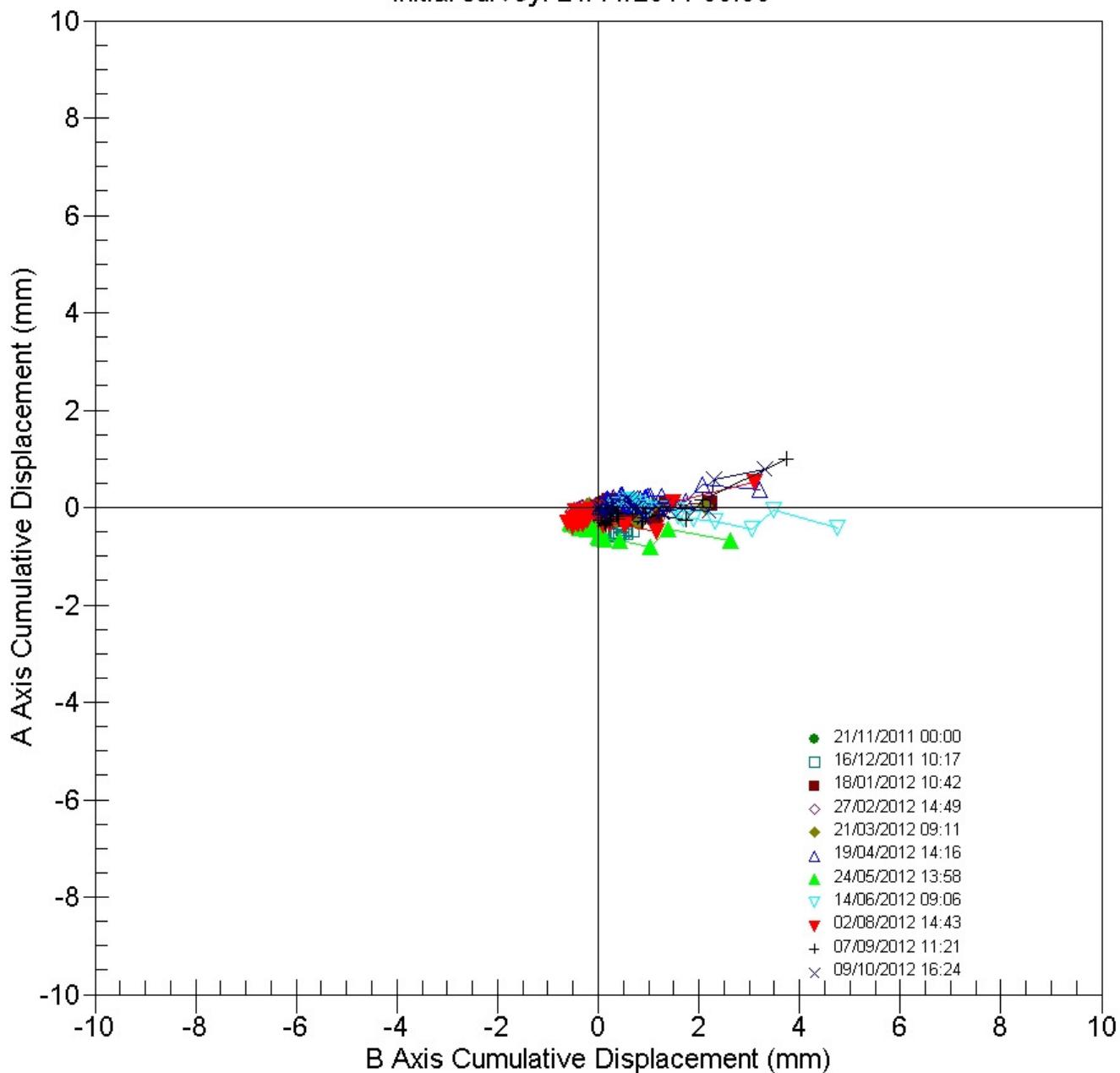
COMPANY: Allied Exploration & Geotechnics Limited

CLIENT: Scarborough Borough Council

NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

# 3833:BHC5 - A Axis vs B Axis

Initial survey: 21/11/2011 00:00



PROJECT: 3833

SITE: Filey Flat Cliffs: Ground Investigation

INSTALLATION: BH-C5

COMPANY: Allied Exploration & Geotechnics Limited

CLIENT: Scarborough Borough Council

NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Cumulative Deflection Data in A Axis (mm):

Depth (m)	21/11/2011 00:00 (mm)	16/12/2011 10:17 (mm)	18/01/2012 10:42 (mm)	27/02/2012 14:49 (mm)	21/03/2012 09:11 (mm)	19/04/2012 14:16 (mm)	24/05/2012 13:58 (mm)	14/06/2012 09:06 (mm)
0.5	0.00	-0.46	0.08	0.07	0.01	0.36	-0.69	-0.43
1.0	0.00	-0.47	0.05	0.04	0.05	0.47	-0.45	-0.07
1.5	0.00	-0.55	-0.22	-0.30	-0.31	0.12	-0.82	-0.45
2.0	0.00	-0.54	-0.19	-0.24	-0.26	0.23	-0.69	-0.30
2.5	0.00	-0.54	-0.22	-0.19	-0.27	0.23	-0.66	-0.24
3.0	0.00	-0.51	-0.21	-0.14	-0.27	0.21	-0.63	-0.23
3.5	0.00	-0.50	-0.25	-0.14	-0.31	0.17	-0.60	-0.19
4.0	0.00	-0.49	-0.27	-0.08	-0.24	0.23	-0.45	-0.04
4.5	0.00	-0.42	-0.26	-0.05	-0.21	0.18	-0.41	-0.02
5.0	0.00	-0.38	-0.26	-0.05	-0.18	0.14	-0.33	0.07
5.5	0.00	-0.37	-0.21	-0.06	-0.18	0.10	-0.41	0.00
6.0	0.00	-0.33	-0.21	-0.06	-0.17	0.06	-0.44	-0.05
6.5	0.00	-0.28	-0.13	-0.08	-0.18	0.04	-0.43	-0.04
7.0	0.00	-0.21	-0.04	-0.07	-0.13	0.09	-0.35	0.00
7.5	0.00	-0.19	0.04	-0.05	-0.07	0.13	-0.32	0.05
8.0	0.00	-0.18	0.13	-0.02	0.00	0.19	-0.26	0.10
8.5	0.00	-0.16	0.13	0.01	0.05	0.25	-0.20	0.15
9.0	0.00	-0.13	0.13	0.00	0.04	0.26	-0.22	0.12
9.5	0.00	-0.14	0.09	-0.02	0.00	0.22	-0.25	0.06
10.0	0.00	-0.17	0.07	-0.05	-0.06	0.16	-0.32	-0.04
10.5	0.00	-0.20	0.01	-0.09	-0.13	0.10	-0.37	-0.10
11.0	0.00	-0.19	0.02	-0.05	-0.10	0.12	-0.32	-0.08
11.5	0.00	-0.17	0.02	0.02	-0.06	0.17	-0.22	-0.01
12.0	0.00	-0.21	-0.03	-0.04	-0.13	0.07	-0.26	-0.11
12.5	0.00	-0.20	-0.08	-0.07	-0.19	-0.01	-0.30	-0.18
13.0	0.00	-0.16	-0.07	-0.03	-0.17	-0.01	-0.26	-0.17
13.5	0.00	-0.14	-0.06	0.00	-0.13	0.01	-0.19	-0.12
14.0	0.00	-0.10	-0.03	0.01	-0.09	0.04	-0.13	-0.06
14.5	0.00	-0.07	-0.01	0.02	-0.05	0.04	-0.07	0.01
15.0	0.00	-0.02	-0.01	-0.02	-0.07	-0.01	-0.07	-0.05
15.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Cumulative Deflection Data in A Axis (mm):

Depth (m)	02/08/2012 14:43 (mm)	07/09/2012 11:21 (mm)	09/10/2012 16:24 (mm)
0.5	0.51	0.99	0.78
1.0	0.09	0.16	0.58
1.5	-0.51	-0.27	-0.07
2.0	-0.38	-0.16	-0.04
2.5	-0.35	-0.21	-0.06
3.0	-0.36	-0.30	-0.12
3.5	-0.32	-0.28	-0.10
4.0	-0.15	-0.10	0.03
4.5	-0.15	-0.13	-0.02
5.0	-0.09	-0.09	-0.01
5.5	-0.16	-0.12	-0.03
6.0	-0.25	-0.24	-0.21
6.5	-0.27	-0.19	-0.18
7.0	-0.23	-0.12	-0.08
7.5	-0.25	-0.09	-0.02
8.0	-0.20	-0.03	0.10
8.5	-0.15	0.01	0.19
9.0	-0.16	-0.04	0.18
9.5	-0.23	-0.16	0.11
10.0	-0.32	-0.27	0.02
10.5	-0.38	-0.34	-0.03
11.0	-0.34	-0.28	0.02
11.5	-0.24	-0.17	0.10
12.0	-0.30	-0.26	-0.02
12.5	-0.34	-0.36	-0.14
13.0	-0.28	-0.32	-0.13
13.5	-0.21	-0.21	-0.10
14.0	-0.11	-0.13	-0.03
14.5	-0.04	-0.07	0.00
15.0	-0.07	-0.08	-0.06
15.5	0.00	0.00	0.00

PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Cumulative Deflection Data in B Axis (mm):

Depth (m)	21/11/2011 00:00 (mm)	16/12/2011 10:17 (mm)	18/01/2012 10:42 (mm)	27/02/2012 14:49 (mm)	21/03/2012 09:11 (mm)	19/04/2012 14:16 (mm)	24/05/2012 13:58 (mm)	14/06/2012 09:06 (mm)
0.5	0.00	0.66	2.22	1.45	2.12	3.22	2.64	4.75
1.0	0.00	0.40	1.37	0.52	1.09	2.08	1.40	3.49
1.5	0.00	0.37	1.14	0.30	0.81	1.75	1.03	3.05
2.0	0.00	0.39	0.83	-0.04	0.37	1.27	0.43	2.33
2.5	0.00	0.38	0.68	-0.19	0.17	1.04	0.12	1.90
3.0	0.00	0.40	0.64	-0.21	0.12	0.93	0.02	1.70
3.5	0.00	0.47	0.66	-0.20	0.02	0.93	0.01	1.60
4.0	0.00	0.53	0.69	-0.18	0.08	0.97	0.06	1.57
4.5	0.00	0.51	0.61	-0.29	-0.05	0.83	-0.12	1.30
5.0	0.00	0.45	0.44	-0.49	-0.31	0.52	-0.53	0.80
5.5	0.00	0.46	0.47	-0.43	-0.21	0.62	-0.37	0.90
6.0	0.00	0.46	0.47	-0.35	-0.10	0.70	-0.23	1.01
6.5	0.00	0.41	0.43	-0.33	-0.10	0.67	-0.26	0.94
7.0	0.00	0.36	0.40	-0.33	-0.10	0.61	-0.33	0.83
7.5	0.00	0.29	0.30	-0.37	-0.16	0.52	-0.43	0.72
8.0	0.00	0.26	0.26	-0.37	-0.18	0.47	-0.46	0.66
8.5	0.00	0.24	0.24	-0.33	-0.17	0.48	-0.43	0.63
9.0	0.00	0.22	0.22	-0.31	-0.16	0.45	-0.41	0.56
9.5	0.00	0.17	0.14	-0.37	-0.26	0.30	-0.52	0.36
10.0	0.00	0.14	0.10	-0.40	-0.31	0.20	-0.57	0.21
10.5	0.00	0.17	0.13	-0.30	-0.22	0.23	-0.42	0.27
11.0	0.00	0.22	0.18	-0.20	-0.15	0.26	-0.31	0.32
11.5	0.00	0.21	0.14	-0.22	-0.18	0.18	-0.33	0.22
12.0	0.00	0.19	0.10	-0.23	-0.20	0.12	-0.29	0.17
12.5	0.00	0.20	0.12	-0.17	-0.17	0.13	-0.22	0.18
13.0	0.00	0.20	0.13	-0.16	-0.14	0.11	-0.18	0.14
13.5	0.00	0.18	0.10	-0.13	-0.11	0.10	-0.09	0.13
14.0	0.00	0.15	0.07	-0.14	-0.11	0.04	-0.09	0.06
14.5	0.00	0.12	0.06	-0.09	-0.06	0.03	-0.05	0.06
15.0	0.00	0.10	0.06	-0.02	-0.01	0.05	0.02	0.05
15.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

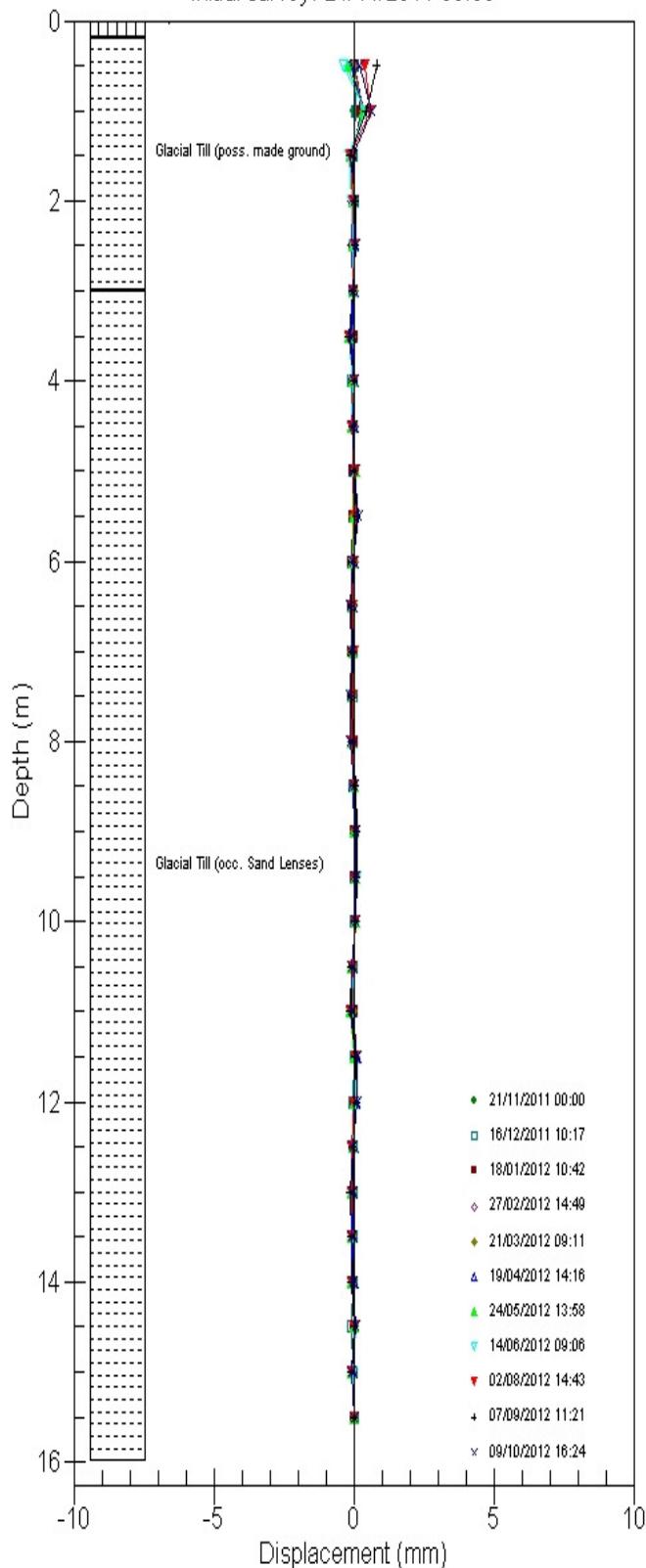
PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Cumulative Deflection Data in B Axis (mm):

Depth (m)	02/08/2012 14:43 (mm)	07/09/2012 11:21 (mm)	09/10/2012 16:24 (mm)
0.5	3.12	3.74	3.32
1.0	1.49	2.07	2.31
1.5	1.17	1.75	2.19
2.0	0.53	1.21	1.69
2.5	0.23	0.94	1.41
3.0	0.11	0.87	1.30
3.5	0.11	0.88	1.27
4.0	0.13	0.89	1.28
4.5	-0.07	0.68	1.05
5.0	-0.45	0.26	0.65
5.5	-0.37	0.29	0.73
6.0	-0.20	0.40	0.90
6.5	-0.23	0.39	0.90
7.0	-0.26	0.35	0.86
7.5	-0.32	0.25	0.71
8.0	-0.35	0.25	0.65
8.5	-0.32	0.27	0.62
9.0	-0.34	0.28	0.54
9.5	-0.50	0.15	0.32
10.0	-0.61	0.04	0.15
10.5	-0.49	0.15	0.23
11.0	-0.40	0.24	0.25
11.5	-0.43	0.18	0.14
12.0	-0.37	0.16	0.10
12.5	-0.30	0.16	0.09
13.0	-0.29	0.13	0.06
13.5	-0.23	0.13	0.08
14.0	-0.20	0.05	0.02
14.5	-0.13	0.07	0.04
15.0	-0.02	0.05	0.05
15.5	0.00	0.00	0.00

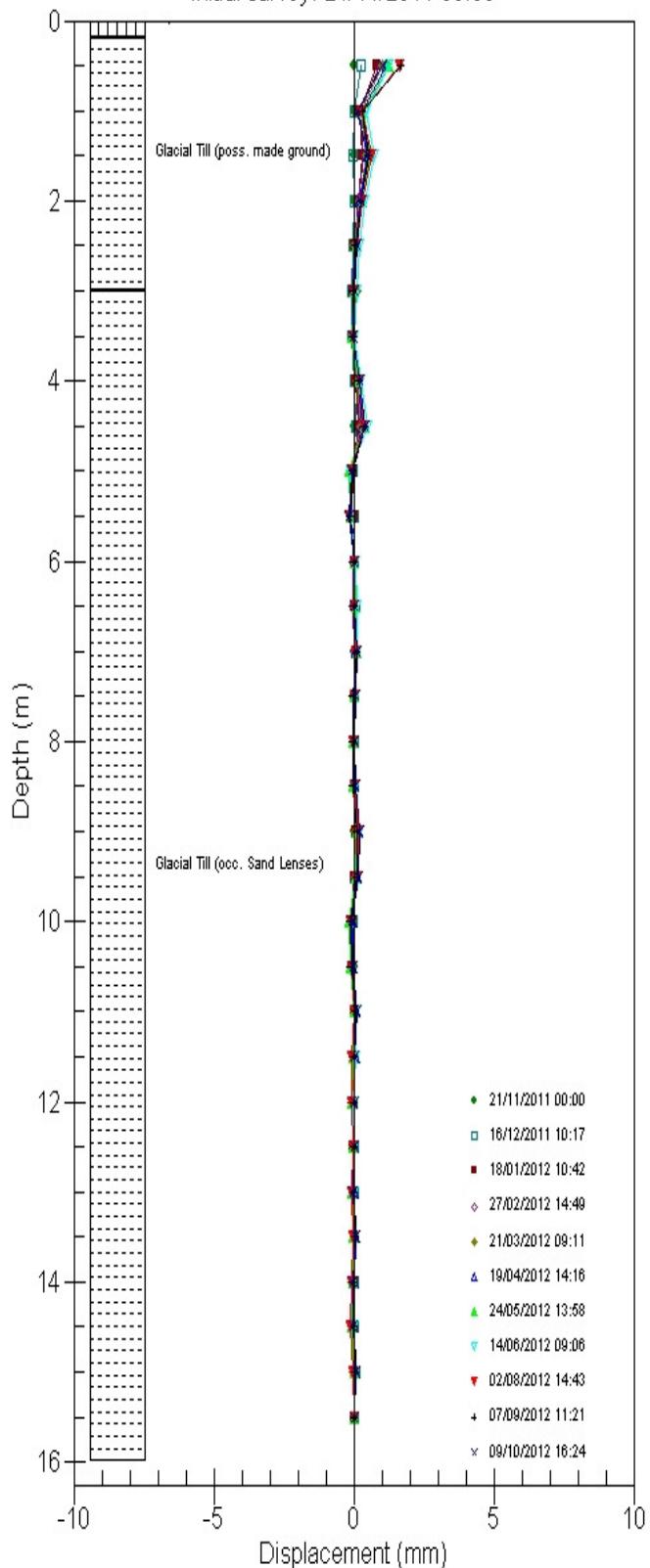
# 3833:BHC5 - A Axis Incremental

Initial survey: 21/11/2011 00:00



# 3833:BHC5 - B Axis Incremental

Initial survey: 21/11/2011 00:00



PROJECT: 3833

SITE: Filey Flat Cliffs: Ground Investigation

INSTALLATION: BH-C5

COMPANY: Allied Exploration & Geotechnics Limited

CLIENT: Scarborough Borough Council

NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Incremental Deflection Data in A Axis (mm):

Depth (m)	21/11/2011 00:00 (mm)	16/12/2011 10:17 (mm)	18/01/2012 10:42 (mm)	27/02/2012 14:49 (mm)	21/03/2012 09:11 (mm)	19/04/2012 14:16 (mm)	24/05/2012 13:58 (mm)	14/06/2012 09:06 (mm)
0.5	0.00	0.01	0.02	0.03	-0.04	-0.11	-0.24	-0.36
1.0	0.00	0.07	0.27	0.34	0.37	0.35	0.37	0.39
1.5	0.00	-0.01	-0.03	-0.06	-0.06	-0.11	-0.13	-0.15
2.0	0.00	0.00	0.02	-0.05	0.01	-0.01	-0.04	-0.07
2.5	0.00	-0.03	0.00	-0.05	0.01	0.02	-0.02	-0.01
3.0	0.00	-0.01	0.04	-0.01	0.04	0.05	-0.04	-0.04
3.5	0.00	-0.01	0.02	-0.06	-0.07	-0.06	-0.15	-0.15
4.0	0.00	-0.07	-0.01	-0.03	-0.03	0.05	-0.05	-0.02
4.5	0.00	-0.04	-0.01	0.00	-0.03	0.04	-0.08	-0.10
5.0	0.00	-0.01	-0.05	0.00	0.00	0.04	0.08	0.07
5.5	0.00	-0.04	-0.01	0.00	-0.01	0.04	0.04	0.05
6.0	0.00	-0.05	-0.08	0.02	0.00	0.01	-0.02	0.00
6.5	0.00	-0.07	-0.09	-0.01	-0.05	-0.05	-0.08	-0.05
7.0	0.00	-0.03	-0.08	-0.02	-0.05	-0.04	-0.04	-0.04
7.5	0.00	-0.01	-0.09	-0.03	-0.07	-0.05	-0.05	-0.05
8.0	0.00	-0.01	0.00	-0.04	-0.05	-0.07	-0.06	-0.05
8.5	0.00	-0.04	0.00	0.01	0.01	-0.01	0.01	0.03
9.0	0.00	0.01	0.04	0.02	0.04	0.04	0.04	0.06
9.5	0.00	0.03	0.03	0.03	0.07	0.06	0.07	0.11
10.0	0.00	0.03	0.06	0.04	0.07	0.07	0.05	0.06
10.5	0.00	0.00	-0.01	-0.03	-0.03	-0.02	-0.05	-0.02
11.0	0.00	-0.02	0.00	-0.08	-0.04	-0.05	-0.10	-0.06
11.5	0.00	0.04	0.06	0.06	0.08	0.10	0.04	0.10
12.0	0.00	0.00	0.04	0.03	0.06	0.08	0.04	0.07
12.5	0.00	-0.04	-0.01	-0.03	-0.02	0.00	-0.04	-0.01
13.0	0.00	-0.03	-0.01	-0.03	-0.04	-0.02	-0.07	-0.05
13.5	0.00	-0.04	-0.03	-0.01	-0.04	-0.03	-0.07	-0.06
14.0	0.00	-0.03	-0.02	-0.01	-0.04	0.00	-0.06	-0.07
14.5	0.00	-0.05	0.00	0.04	0.02	0.05	0.00	0.05
15.0	0.00	-0.02	-0.01	-0.02	-0.07	-0.01	-0.07	-0.05
15.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Incremental Deflection Data in A Axis (mm):

Depth (m)	02/08/2012 14:43 (mm)	07/09/2012 11:21 (mm)	09/10/2012 16:24 (mm)
0.5	0.42	0.83	0.20
1.0	0.60	0.43	0.66
1.5	-0.13	-0.11	-0.04
2.0	-0.03	0.05	0.02
2.5	0.01	0.09	0.06
3.0	-0.04	-0.03	-0.02
3.5	-0.17	-0.18	-0.13
4.0	0.00	0.03	0.05
4.5	-0.06	-0.04	-0.01
5.0	0.07	0.02	0.02
5.5	0.09	0.12	0.18
6.0	0.02	-0.05	-0.03
6.5	-0.04	-0.07	-0.11
7.0	0.01	-0.03	-0.06
7.5	-0.05	-0.06	-0.11
8.0	-0.06	-0.05	-0.10
8.5	0.01	0.06	0.01
9.0	0.07	0.12	0.08
9.5	0.09	0.12	0.09
10.0	0.06	0.07	0.05
10.5	-0.03	-0.06	-0.05
11.0	-0.11	-0.12	-0.08
11.5	0.07	0.09	0.12
12.0	0.04	0.11	0.12
12.5	-0.06	-0.04	-0.01
13.0	-0.08	-0.11	-0.04
13.5	-0.10	-0.09	-0.06
14.0	-0.07	-0.06	-0.04
14.5	0.03	0.01	0.06
15.0	-0.07	-0.08	-0.06
15.5	0.00	0.00	0.00

PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Incremental Deflection Data in B Axis (mm):

Depth (m)	21/11/2011 00:00 (mm)	16/12/2011 10:17 (mm)	18/01/2012 10:42 (mm)	27/02/2012 14:49 (mm)	21/03/2012 09:11 (mm)	19/04/2012 14:16 (mm)	24/05/2012 13:58 (mm)	14/06/2012 09:06 (mm)
0.5	0.00	0.26	0.85	0.93	1.03	1.15	1.24	1.26
1.0	0.00	0.04	0.24	0.23	0.29	0.33	0.37	0.44
1.5	0.00	-0.02	0.30	0.34	0.44	0.48	0.61	0.73
2.0	0.00	0.01	0.15	0.15	0.20	0.24	0.31	0.43
2.5	0.00	-0.02	0.05	0.02	0.05	0.10	0.11	0.21
3.0	0.00	-0.07	-0.02	-0.01	0.11	0.00	0.01	0.10
3.5	0.00	-0.06	-0.03	-0.02	-0.07	-0.04	-0.05	0.03
4.0	0.00	0.02	0.08	0.11	0.13	0.15	0.18	0.27
4.5	0.00	0.06	0.17	0.20	0.27	0.30	0.41	0.50
5.0	0.00	-0.01	-0.03	-0.06	-0.10	-0.10	-0.16	-0.10
5.5	0.00	0.00	0.00	-0.08	-0.12	-0.09	-0.14	-0.11
6.0	0.00	0.04	0.04	-0.02	0.00	0.03	0.03	0.07
6.5	0.00	0.05	0.04	0.00	0.00	0.06	0.07	0.10
7.0	0.00	0.07	0.10	0.04	0.06	0.10	0.10	0.12
7.5	0.00	0.03	0.04	0.00	0.02	0.05	0.03	0.06
8.0	0.00	0.02	0.01	-0.04	-0.01	-0.01	-0.04	0.03
8.5	0.00	0.01	0.02	-0.02	0.00	0.03	-0.01	0.07
9.0	0.00	0.05	0.07	0.06	0.10	0.15	0.11	0.20
9.5	0.00	0.03	0.05	0.03	0.05	0.11	0.05	0.15
10.0	0.00	-0.03	-0.04	-0.10	-0.08	-0.03	-0.15	-0.05
10.5	0.00	-0.05	-0.05	-0.10	-0.08	-0.04	-0.12	-0.05
11.0	0.00	0.01	0.04	0.02	0.04	0.09	0.03	0.10
11.5	0.00	0.01	0.04	0.01	0.02	0.06	-0.04	0.05
12.0	0.00	-0.01	-0.01	-0.06	-0.03	-0.01	-0.07	0.00
12.5	0.00	0.00	-0.01	-0.01	-0.02	0.01	-0.04	0.04
13.0	0.00	0.02	0.02	-0.02	-0.03	0.01	-0.08	0.01
13.5	0.00	0.04	0.03	0.00	0.00	0.06	0.00	0.07
14.0	0.00	0.03	0.01	-0.05	-0.06	0.00	-0.04	-0.01
14.5	0.00	0.02	0.00	-0.07	-0.05	-0.02	-0.07	0.01
15.0	0.00	0.10	0.06	-0.02	-0.01	0.05	0.02	0.05
15.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

PROJECT: 3833  
 SITE: Filey Flat Cliffs: Ground Investigation  
 INSTALLATION: BH-C5  
 COMPANY: Allied Exploration & Geotechnics Limited  
 CLIENT: Scarborough Borough Council  
 NOTE: Initial Average Survey: 21/11/2011 @ 00:00 (from initial readings taken 14/11/2011).

Incremental Deflection Data in B Axis (mm):

Depth (m)	02/08/2012 14:43 (mm)	07/09/2012 11:21 (mm)	09/10/2012 16:24 (mm)
0.5	1.63	1.67	1.01
1.0	0.32	0.32	0.12
1.5	0.64	0.55	0.50
2.0	0.31	0.27	0.28
2.5	0.12	0.07	0.11
3.0	0.00	-0.01	0.03
3.5	-0.02	-0.01	-0.01
4.0	0.20	0.21	0.23
4.5	0.37	0.43	0.41
5.0	-0.07	-0.04	-0.09
5.5	-0.18	-0.11	-0.17
6.0	0.03	0.01	0.00
6.5	0.03	0.04	0.05
7.0	0.06	0.11	0.14
7.5	0.03	0.00	0.07
8.0	-0.03	-0.01	0.03
8.5	0.02	-0.01	0.08
9.0	0.17	0.14	0.23
9.5	0.11	0.11	0.17
10.0	-0.12	-0.11	-0.08
10.5	-0.09	-0.09	-0.02
11.0	0.02	0.06	0.11
11.5	-0.05	0.02	0.04
12.0	-0.07	0.00	0.01
12.5	-0.01	0.02	0.03
13.0	-0.06	0.00	-0.02
13.5	-0.03	0.08	0.07
14.0	-0.07	-0.02	-0.03
14.5	-0.11	0.01	-0.01
15.0	-0.02	0.05	0.05
15.5	0.00	0.00	0.00