



Specialists in Explosives, Blasting and Vibration
Consulting Engineers

October 30, 2017

Dragados-Tomlinson Joint Venture
5597 Power Road
Ottawa, Ontario
K1G 3N4

Attention: Mr. Kevin Stadelmann

**Re: Interim Weekly Vibration Monitoring Report – October 23 to October 29, 2017
Combined Sewage Storage Tunnel (CSST) – Site 5 Operations**

Dear Mr. Stadelmann,

Attached please find the interim weekly summary report detailing the results of the vibration monitoring program developed and implemented as part of the construction operations for the Combined Sewage Storage Tunnel (CSST) Project – Site 5 Operations in Ottawa, Ontario. This monitoring program was initiated on March 31, 2017 and has been recording vibrations generated as a result of the construction equipment in order to confirm predictable levels and to guard against possible adverse impacts on the surrounding structures.

A full time on-site Vibration Monitoring Program is currently implemented to delineate vibration intensities experienced at a representative sampling of structures around the Site 5 construction areas as a result of the construction equipment in operation. The monitoring instruments installed consist of Instantel tri-directional digital seismographs capable of measuring vibration intensities up to 254mm/s at a frequency response of 2 – 250Hz or 1 – 315Hz depending on the installation. The units are programmed to measure all vibration levels continuously at a sampling rate of 1024 samples per second. Following each five minute interval, the units review the 307,200 measured vibrations and permanently records the peak particle velocity for that time interval while deleting all subordinate vibration intensities. This process is repeated for all subsequent five minute time intervals thereby providing maximum vibration intensities experienced at the monitored areas throughout the day.



Such a configuration permits continuous monitoring of vibration levels and provides complete coverage of all vibrations, construction induced or otherwise, experienced at the monitored structure. Events recorded under this program mode are marked by an “H” on the vibrations summary report. As an additional analytical tool, the seismographs are configured to record a more detailed waveform in the event that vibration intensities exceeded a pre-set trigger of 4mm/s. This feature permits advanced analysis in the event that anomalous elevated readings are recorded. Events recorded under this program mode are marked by a “W” on the vibrations summary report.

As per the Contract Specification 02482, Subsection 1.5.1.1, the following threshold, response and shutdown values are observed at Site 5:

Project Threshold, Response and Shutdown Values			
Description of Event	Threshold Value (PPV)	Response Value (PPV)	Shutdown Value (PPV)
Continuous/ Intermittent Source	4mm/s	6mm/s	7mm/s
Transient Source	5mm/s	8mm/s	9mm/s
Blasting	10mm/s	16mm/s	20mm/s

The monitoring locations itemized below were installed for the following sites on the listed days and remain installed during the construction operations:

Site 5A/5B

- **141/151 Stanley Avenue** – Installed on March 31, 2017
- **133 Stanley Avenue** – Installed on August 4, 2017
- **IOS Shaft 5A Location** (Borehole and Surface) – Installed on Sept 5, 2017
- **IOS Shaft IOS Location** (Borehole and Surface) – Installed on Oct 13, 2017



Site 5C

- **54 Queen Victoria Street** – Installed on March 31, 2017
- **51 Queen Victoria Street** – Installed on April 11, 2017

The following readings generated at Site 5 monitoring locations exceeded the 4mm/s trigger level during the interim monitoring period:

Vibration Readings Exceeding 4mm/s During Interim Monitoring Period						
Ref. Event #	Location	Date	Time	Velocity (mm/s)	Cause of Event	Applicable Project Limit Exceeded
Site 5A/5B						
1 to 10	IOS Shaft IOS - Surface	Oct 23, 2017	12:49 to 17:05	Up to 5.588	Transient Source	N/A – Surface is for information purposes only
11	151 Stanley Avenue	Oct 23, 2017	16:59	6.985	Localized Impact	N/A – Not Construction Related
12	151 Stanley Avenue	Oct 24, 2017	11:03	6.223	Localized Impact	N/A – Not Construction Related
13 to 18	IOS Shaft 5A - Surface	Oct 25, 2017	12:54 to 14:21	Up to 22.86	Transient Source	N/A – Surface is for information purposes only
19	141 Stanley Avenue	Oct 25, 2017	12:58	26.29	Localized Impact	N/A – Not Construction Related
20	151 Stanley Avenue	Oct 25, 2017	18:30	5.334	RF / Power Spikes	N/A – Not Construction Related
21 to 25	IOS Shaft 5A - Surface	Oct 26, 2017	7:39 to 16:10	Up to 9.017	Transient Source	N/A – Surface is for information purposes only
26 to 41	IOS Shaft IOS - Surface	Oct 26, 2017	10:10 to 14:50	Up to 9.652	Transient Source	N/A – Surface is for information purposes only
42 to 46	IOS Shaft IOS - Borehole	Oct 26, 2017	19:13 to 20:09	Up to 7.366	RF / Power Spikes	N/A – Not Construction Related
47	151 Stanley Avenue	Oct 26, 2017	19:15	3.937	RF / Power Spikes	N/A – Not Construction Related

EXPLOTECH

48 to 86	IOS Shaft IOS - Surface	Oct 27, 2017	7:26 to 16:03	Up to 21.46	Transient Source	N/A – Surface is for information purposes only
87	IOS Shaft 5A - Surface	Oct 27, 2017	12:40	6.477	Transient Source	N/A – Surface is for information purposes only
88	151 Stanley Avenue	Oct 27, 2017	15:39	5.461	RF / Power Spikes	N/A – Not Construction Related
89 to 92	151 Stanley Avenue	Oct 28, 2017	7:20 to 21:18	Up to 9.398	RF / Power Spikes	N/A – Not Construction Related
93 to 94	IOS Shaft 5A - Surface	Oct 28, 2017	13:05 to 14:23	Up to 4.572	Transient Source	N/A – Surface is for information purposes only

Site 5C						
N/A	No Events	N/A	N/A	N/A	N/A	N/A

All recorded Histogram summaries and Waveform details for Site 5 are available for reference at anytime on the www.constructionvibrations.com website. A summary list is attached to this interim report for reference. Should you have any questions or concerns related to the information contained herein or the monitoring program undertaken, please do not hesitate to contact the undersigned at your leisure.

Kindest regards,



Mitch Malcomson, P.Eng.

**CSST - Site 5
M7550A DTJV
Oct 23, 2017 to Oct 29, 2017**

Event Report: Event List - z:\to be archived\2 csst temp folders\site 5

Type	Serial No.	Date/Time	Tran Peak (mm/s)	Vert Peak (mm/s)	Long Peak (mm/s)	PVS1 (mm/s)	Tran2 Peak (mm/s)	Vert2 Peak (mm/s)	Long2 Peak (mm/s)	PVS2 (mm/s)	Mic Peak (dB)	Description
H	BE15997	Oct 23 /17 06:02:34	0.381	0.635	0.254	0.648	***	***	***	***	***	Site 5C - 54 Queen Victoria Street
H	BE11685	Oct 23 /17 06:06:56	0.381	0.635	0.508	0.751	***	***	***	***	112.6L	Site 5AB - 133 Stanley Avenue
H	BE16212	Oct 23 /17 06:06:56	1.905	1.905	1.270	1.976	4.064	1.397	4.318	5.843	***	Site 5A - IOS Shaft IOS Location
H	BE14293	Oct 23 /17 06:07:06	0.508	0.508	0.381	0.582	4.572	6.985	3.556	8.790	116.3L	Site 5AB - 141+151 Stanley Avenue
H	BE20061	Oct 23 /17 06:07:33	0.381	0.381	0.254	0.458	1.651	2.667	1.143	2.727	***	Site 5A - IOS Shaft 5A Location
H	BE17376	Oct 23 /17 06:07:34	0.762	0.381	1.016	1.092	***	***	***	***	***	Site 5C - 51 Queen Victoria Street
W	BE16212	Oct 23 /17 12:49:50	1.651	1.397	0.762	1.694	4.064	1.270	4.318	5.843	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 12:52:40	1.524	1.778	1.016	1.796	3.937	1.651	2.032	4.086	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 12:54:21	1.143	1.397	0.762	1.470	3.937	1.397	2.032	4.086	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 12:57:08	1.778	2.286	0.889	2.355	4.191	2.286	2.286	4.673	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 13:00:59	1.016	1.524	0.635	1.550	4.191	2.286	2.032	4.673	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 13:03:46	1.905	2.286	1.016	2.314	3.810	2.032	4.191	4.658	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 13:15:47	1.905	1.397	0.762	1.943	3.429	1.905	4.191	4.658	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 13:18:09	2.159	2.540	1.397	2.556	3.810	1.778	4.953	5.954	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 15:42:51	1.778	1.270	0.635	1.796	3.810	1.778	4.953	5.954	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 15:45:36	1.905	1.651	0.635	1.943	3.810	3.048	4.699	5.196	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 15:46:04	1.651	1.270	0.635	1.670	3.810	3.048	4.699	5.196	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 15:48:50	1.905	1.905	0.762	1.926	4.953	3.048	4.826	6.335	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 15:49:19	1.143	1.651	0.635	1.769	4.953	3.048	4.826	6.335	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 15:55:34	1.397	1.778	0.762	1.796	5.588	1.778	1.905	5.770	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 15:55:44	1.270	1.778	0.762	1.796	5.588	1.778	1.905	5.770	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 15:58:28	2.032	2.159	1.143	2.192	4.064	3.048	3.048	4.633	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 23 /17 16:49:00	1.905	1.524	0.762	1.947	4.064	3.048	2.921	4.633	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 16:51:44	2.159	2.413	0.889	2.440	5.334	2.794	3.810	5.865	***	Site 5A - IOS Shaft IOS Location
W	BE14293	Oct 23 /17 16:59:01	0.381	0.381	0.254	0.421	4.572	6.985	3.556	8.790	91.5L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 23 /17 17:02:19	0.508	0.508	0.254	0.582	1.016	0.889	0.889	1.198	109.9L	Site 5AB - 141+151 Stanley Avenue
W	BE16212	Oct 23 /17 17:05:22	1.524	1.397	0.635	1.606	5.334	2.794	3.556	5.865	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 23 /17 17:08:15	2.159	2.159	2.032	2.652	0.381	0.254	0.381	0.458	***	Site 5A - IOS Shaft IOS Location
H	BE15997	Oct 24 /17 06:02:34	0.254	0.254	0.254	0.311	***	***	***	***	***	Site 5C - 54 Queen Victoria Street
H	BE11685	Oct 24 /17 06:06:53	0.254	0.254	0.254	0.311	***	***	***	***	112.8L	Site 5AB - 133 Stanley Avenue
H	BE20061	Oct 24 /17 06:06:53	0.381	0.381	0.254	0.539	1.524	2.667	1.270	2.814	***	Site 5A - IOS Shaft 5A Location
H	BE17376	Oct 24 /17 06:06:55	0.508	0.254	0.254	0.508	***	***	***	***	***	Site 5C - 51 Queen Victoria Street
H	BE16212	Oct 24 /17 06:07:30	2.286	2.159	1.397	2.443	2.540	1.016	1.778	2.797	***	Site 5A - IOS Shaft IOS Location
H	BE14293	Oct 24 /17 06:07:41	0.508	0.508	0.254	0.554	3.302	6.223	3.048	6.891	122.8L	Site 5AB - 141+151 Stanley Avenue
W	BE14293	Oct 24 /17 11:03:13	0.381	0.381	0.254	0.475	3.302	6.223	3.048	6.891	91.5L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 24 /17 11:06:31	0.508	0.508	0.254	0.582	1.143	0.635	2.286	2.403	114.4L	Site 5AB - 141+151 Stanley Avenue
H	BE15997	Oct 25 /17 06:02:32	0.254	0.254	0.254	0.311	***	***	***	***	***	Site 5C - 54 Queen Victoria Street
H	BE16212	Oct 25 /17 06:06:56	1.397	1.143	1.143	1.805	1.524	0.508	1.143	1.606	***	Site 5A - IOS Shaft IOS Location
H	BE17376	Oct 25 /17 06:07:34	0.635	0.254	0.254	0.648	***	***	***	***	***	Site 5C - 51 Queen Victoria Street
H	BE20061	Oct 25 /17 06:07:35	0.381	0.381	0.254	0.539	4.826	2.921	3.048	4.907	***	Site 5A - IOS Shaft 5A Location
H	BE11685	Oct 25 /17 06:07:38	0.254	0.254	0.381	0.381	***	***	***	***	110.2L	Site 5AB - 133 Stanley Avenue
H	BE14293	Oct 25 /17 06:07:45	5.842	27.81	20.70	28.47	1.143	0.508	1.397	1.448	115.9L	Site 5AB - 141+151 Stanley Avenue
W	BE20061	Oct 25 /17 12:54:39	0.381	0.381	0.254	0.402	4.826	2.540	1.651	4.907	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 25 /17 12:57:27	0.381	0.381	0.254	0.402	9.779	6.223	3.810	10.68	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 25 /17 12:57:43	0.254	0.254	0.254	0.381	9.779	6.223	3.810	10.68	***	Site 5A - IOS Shaft 5A Location
W	BE14293	Oct 25 /17 12:58:13	5.842	26.29	20.70	27.01	0.381	0.381	0.254	0.421	97.5L	Site 5AB - 141+151 Stanley Avenue
H	BE20061	Oct 25 /17 12:59:45	0.381	0.254	0.254	0.421	6.858	2.921	3.175	7.402	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 25 /17 12:59:52	0.381	0.254	0.254	0.421	6.858	2.921	3.175	7.402	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 25 /17 13:01:54	0.254	0.381	0.254	0.381	19.05	16.76	22.86	29.45	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 25 /17 13:02:32	0.254	0.254	0.254	0.359	19.05	16.76	22.86	29.45	***	Site 5A - IOS Shaft 5A Location
H	BE14293	Oct 25 /17 13:05:11	0.635	0.635	0.762	0.976	1.524	1.397	5.334	5.520	114.0L	Site 5AB - 141+151 Stanley Avenue
H	BE20061	Oct 25 /17 13:05:16	0.381	0.254	0.254	0.458	6.350	6.604	9.525	12.04	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 25 /17 13:06:03	0.254	0.254	0.254	0.381	6.350	6.604	9.525	12.04	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 25 /17 13:08:04	0.381	0.381	0.254	0.475	2.794	5.461	1.143	6.108	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 25 /17 14:21:18	0.254	0.254	0.254	0.359	2.794	5.461	1.143	6.108	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 25 /17 14:23:24	0.381	0.381	0.254	0.554	1.524	1.778	1.397	2.166	***	Site 5A - IOS Shaft 5A Location
W	BE14293	Oct 25 /17 18:30:12	0.381	0.381	0.254	0.458	0.381	1.397	5.334	5.520	<88L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 25 /17 18:32:48	0.889	1.143	0.254	1.143	1.270	0.381	1.143	1.283	116.1L	Site 5AB - 141+151 Stanley Avenue
H	BE15997	Oct 26 /17 06:02:34	0.254	0.254	0.254	0.359	***	***	***	***	***	Site 5C - 54 Queen Victoria Street
H	BE16212	Oct 26 /17 06:06:55	1.651	1.905	1.397	1.939	3.429	1.397	4.826	5.195	***	Site 5A - IOS Shaft IOS Location
H	BE20061	Oct 26 /17 06:07:32	0.381	0.381	0.254	0.475	3.175	3.175	4.572	4.948	***	Site 5A - IOS Shaft 5A Location
H	BE17376	Oct 26 /17 06:07:33	0.762	0.254	0.254	0.773	***	***	***	***	***	Site 5C - 51 Queen Victoria Street
H	BE11685	Oct 26 /17 06:07:35	0.254	0.254	0.254	0.311	***	***	***	***	105.5L	Site 5AB - 133 Stanley Avenue
H	BE14293	Oct 26 /17 06:09:54	3.175	1.778	3.175	4.506	3.937	0.889	1.270	3.937	132.5L	Site 5AB - 141+151 Stanley Avenue

**CSST - Site 5
M7550A DTJV
Oct 23, 2017 to Oct 29, 2017**

Event Report: Event List - z:\to be archived\2 csst temp folders\site 5

Type	Serial No.	Date/Time	Tran Peak (mm/s)	Vert Peak (mm/s)	Long Peak (mm/s)	PVS1 (mm/s)	Tran2 Peak (mm/s)	Vert2 Peak (mm/s)	Long2 Peak (mm/s)	PVS2 (mm/s)	Mic Peak (dB)	Description
W	BE20061	Oct 26 /17 07:39:37	0.254	0.254	0.254	0.311	2.032	3.175	4.572	4.948	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 26 /17 07:42:21	0.254	0.254	0.254	0.359	3.683	3.937	3.302	4.418	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 26 /17 07:42:40	0.254	0.254	0.254	0.359	3.683	3.937	2.159	4.418	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 26 /17 07:44:43	0.889	0.889	0.508	1.092	3.683	2.413	6.604	7.501	***	Site 5A - IOS Shaft 5A Location
W	BE16212	Oct 26 /17 10:10:41	1.143	1.397	0.889	1.454	2.413	1.016	4.826	5.195	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 10:13:27	1.524	2.032	0.889	2.095	4.191	1.778	3.810	4.401	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 10:27:42	1.270	1.397	0.762	1.420	4.191	0.889	1.778	4.210	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 10:29:45	1.397	1.778	0.762	1.823	3.810	1.397	4.953	5.479	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 10:30:33	1.270	1.778	0.508	1.823	3.810	0.889	4.953	5.479	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 10:33:19	1.651	1.778	0.762	1.814	3.556	2.286	4.064	4.713	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 10:37:52	1.016	1.524	0.508	1.550	3.429	0.889	4.064	4.376	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 10:40:35	1.524	1.524	0.635	1.571	4.826	1.651	2.159	4.843	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 10:41:37	1.397	1.397	0.635	1.420	4.826	1.016	2.159	4.843	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 10:44:21	1.524	2.032	0.635	2.036	3.937	1.397	3.302	4.616	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 10:47:56	1.397	1.016	0.508	1.420	3.937	1.143	3.302	4.616	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 10:50:01	1.905	2.032	0.762	2.098	5.588	3.302	9.652	9.962	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 10:55:16	0.889	0.889	0.635	1.000	5.588	3.302	9.652	9.962	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 10:57:19	1.270	1.778	0.889	1.818	3.556	1.524	5.969	6.689	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 10:57:32	1.016	1.270	0.635	1.332	3.556	1.397	5.969	6.689	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 11:06:56	1.905	2.286	1.524	2.373	3.429	1.905	4.699	5.029	***	Site 5A - IOS Shaft IOS Location
W	BE20061	Oct 26 /17 11:12:54	0.254	0.254	0.254	0.359	3.683	1.143	6.604	7.501	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 26 /17 11:14:57	0.381	0.381	0.254	0.458	2.540	9.017	4.699	9.233	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 26 /17 11:37:57	0.254	0.254	0.254	0.359	2.540	9.017	4.699	9.233	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 26 /17 11:39:58	0.381	0.508	0.254	0.524	2.667	4.064	3.429	5.163	***	Site 5A - IOS Shaft 5A Location
W	BE16212	Oct 26 /17 13:56:21	1.524	1.270	0.762	1.571	2.540	0.889	4.699	5.029	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:09:24	1.778	2.159	1.143	2.196	4.826	1.778	5.080	6.276	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 14:00:15	1.143	1.524	0.635	1.529	4.826	1.397	5.080	6.276	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:02:19	1.778	1.778	0.889	1.840	4.572	2.159	4.953	5.627	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 14:06:24	1.524	1.524	0.635	1.576	4.572	1.143	4.953	5.627	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:09:08	1.778	2.032	0.762	2.067	4.445	1.905	3.429	4.526	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 14:26:45	1.397	1.651	0.508	1.670	4.445	1.397	1.778	4.526	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:28:48	1.651	1.778	0.635	1.836	4.699	1.778	3.048	4.882	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 14:29:59	1.524	1.778	0.508	1.836	4.699	1.778	2.286	4.882	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:32:52	1.905	2.413	0.889	2.420	3.810	1.524	5.334	6.278	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 14:44:29	1.905	1.651	0.635	1.926	3.810	1.016	5.334	6.278	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:46:32	1.905	2.159	0.762	2.192	6.604	1.270	3.683	6.625	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 14:48:06	1.524	1.524	0.635	1.550	6.604	1.270	2.921	6.625	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:50:12	1.778	1.905	0.635	1.947	4.318	0.889	3.048	4.618	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 14:50:35	1.270	1.397	0.635	1.420	4.318	0.889	3.048	4.618	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 14:52:37	4.318	2.921	2.540	5.024	0.889	1.270	1.143	1.332	***	Site 5A - IOS Shaft IOS Location
W	BE20061	Oct 26 /17 16:10:48	0.381	0.254	0.254	0.402	1.016	4.064	3.429	5.163	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 26 /17 16:13:34	0.508	0.381	0.254	0.524	0.889	0.889	1.016	1.092	***	Site 5A - IOS Shaft 5A Location
W	BE16212	Oct 26 /17 19:13:33	4.318	1.143	2.540	5.024	0.254	0.254	0.254	0.311	***	Site 5A - IOS Shaft IOS Location
W	BE14293	Oct 26 /17 19:15:50	0.381	0.381	0.254	0.475	3.937	0.381	0.254	3.937	<88L	Site 5AB - 141+151 Stanley Avenue
H	BE16212	Oct 26 /17 19:16:18	1.778	1.778	5.207	5.360	0.381	0.254	0.254	0.381	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 19:16:50	1.270	1.778	5.207	5.360	0.381	0.254	0.254	0.381	***	Site 5A - IOS Shaft IOS Location
H	BE14293	Oct 26 /17 19:18:28	0.508	0.635	0.254	0.660	2.667	0.381	1.905	2.706	94.0L	Site 5AB - 141+151 Stanley Avenue
H	BE16212	Oct 26 /17 19:18:53	7.366	1.778	1.270	7.447	0.254	0.254	0.254	0.359	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 19:20:23	7.366	1.397	1.270	7.447	0.254	0.254	0.254	0.311	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 19:22:29	4.318	2.286	3.048	5.759	0.381	0.254	0.254	0.402	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 19:39:18	4.318	2.286	3.048	5.759	0.381	0.254	0.254	0.381	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 19:42:11	3.683	3.048	4.572	6.035	0.381	0.254	0.254	0.421	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 26 /17 20:09:12	3.683	1.397	4.572	6.035	0.381	0.254	0.254	0.381	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 26 /17 20:11:58	2.794	2.667	2.667	3.268	0.381	0.254	0.254	0.421	***	Site 5A - IOS Shaft IOS Location
H	BE15997	Oct 27 /17 06:01:53	0.254	0.254	0.254	0.311	***	***	***	***	***	Site 5C - 54 Queen Victoria Street
H	BE20061	Oct 27 /17 06:06:50	0.381	0.381	0.254	0.475	2.667	6.477	2.540	6.522	***	Site 5A - IOS Shaft 5A Location
H	BE11685	Oct 27 /17 06:06:55	0.254	0.254	0.381	0.402	***	***	***	***	108.8L	Site 5AB - 133 Stanley Avenue
H	BE16212	Oct 27 /17 06:07:31	1.905	1.905	1.905	2.148	3.937	0.762	1.651	3.988	***	Site 5A - IOS Shaft IOS Location
H	BE17376	Oct 27 /17 06:07:33	0.508	0.127	0.127	0.539	***	***	***	***	***	Site 5C - 51 Queen Victoria Street
H	BE14293	Oct 27 /17 06:07:39	0.381	0.508	0.508	0.582	2.921	0.381	5.461	6.194	101.9L	Site 5AB - 141+151 Stanley Avenue
W	BE16212	Oct 27 /17 07:26:24	1.143	1.143	0.635	1.178	3.937	0.381	1.143	3.988	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:28:28	1.651	1.778	1.016	1.955	2.794	1.143	4.318	4.545	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:29:33	1.397	1.397	1.016	1.486	2.794	1.143	4.318	4.545	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:31:36	1.778	1.905	1.016	1.988	3.556	1.778	4.318	4.604	***	Site 5A - IOS Shaft IOS Location

**CSST - Site 5
M7550A DTJV
Oct 23, 2017 to Oct 29, 2017**

Event Report: Event List - z:\to be archived\2 csst temp folders\site 5

Type	Serial No.	Date/Time	Tran Peak (mm/s)	Vert Peak (mm/s)	Long Peak (mm/s)	PVS1 (mm/s)	Tran2 Peak (mm/s)	Vert2 Peak (mm/s)	Long2 Peak (mm/s)	PVS2 (mm/s)	Mic Peak (dB)	Description
W	BE16212	Oct 27 /17 07:33:51	1.778	1.651	0.889	1.796	3.556	1.524	4.318	4.604	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:35:55	1.524	1.651	0.635	1.699	5.969	1.905	3.810	6.142	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:36:09	1.270	1.524	0.635	1.611	5.969	1.524	3.175	6.142	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:38:13	1.778	1.905	0.762	1.947	5.969	1.524	4.699	6.171	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:38:36	1.778	1.270	0.635	1.801	5.969	1.524	4.699	6.171	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:41:19	1.778	1.905	0.762	1.926	3.937	1.524	5.080	5.709	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:41:31	1.651	1.397	0.762	1.694	3.937	1.270	5.080	5.709	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:43:35	1.143	1.778	0.762	1.796	5.080	2.032	3.175	5.108	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:43:40	1.143	1.778	0.762	1.796	5.080	2.032	3.175	5.108	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:45:45	1.778	1.651	0.889	1.801	5.715	1.651	5.334	5.896	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:46:27	1.270	1.016	0.762	1.368	5.715	1.397	5.334	5.896	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:48:32	1.397	1.270	0.635	1.420	3.810	1.016	4.064	4.616	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:48:35	1.270	1.270	0.635	1.350	3.302	0.889	4.064	4.183	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:50:38	1.524	1.651	0.635	1.699	4.064	1.524	3.302	4.131	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:50:58	1.143	1.143	0.508	1.276	4.064	1.524	3.302	4.131	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:53:00	1.778	1.651	1.016	1.801	5.080	1.397	4.699	5.256	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:53:28	1.397	1.651	1.016	1.699	5.080	1.397	4.699	5.256	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:55:31	1.524	1.905	0.889	1.947	8.001	1.524	2.921	8.335	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 07:56:27	1.270	1.397	0.762	1.454	8.001	1.397	2.921	8.335	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 07:58:33	1.905	1.778	0.762	1.943	3.429	3.429	4.318	5.527	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:07:13	1.524	1.270	0.508	1.571	3.429	3.429	4.318	5.527	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:09:15	1.651	1.270	0.762	1.699	4.826	3.556	9.271	9.696	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:09:17	1.651	1.270	0.762	1.699	4.826	3.556	9.271	9.696	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:11:20	1.397	1.270	1.016	1.550	3.302	3.683	6.223	6.267	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:11:22	1.397	1.270	0.889	1.550	3.302	3.302	6.223	6.267	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:15:52	1.016	1.397	1.143	1.486	3.429	3.175	6.096	6.336	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:15:56	1.016	1.397	1.143	1.486	3.429	3.048	6.096	6.336	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:18:00	0.889	1.270	0.635	1.442	4.826	3.810	4.191	6.079	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:18:03	0.889	1.270	0.635	1.442	4.826	3.810	4.191	6.079	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:20:08	1.270	1.270	0.635	1.374	2.286	2.667	4.191	4.292	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:20:23	1.270	1.143	0.635	1.368	2.286	2.667	4.191	4.292	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:22:27	1.016	1.016	0.635	1.092	2.159	1.905	6.477	6.582	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:22:32	1.016	1.016	0.508	1.092	2.159	1.905	6.477	6.582	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:24:34	0.889	1.016	0.508	1.032	3.048	3.048	3.937	4.524	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:24:36	0.889	1.016	0.508	1.032	3.048	1.778	3.937	3.957	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:26:41	0.889	1.143	0.635	1.157	2.921	3.683	4.064	4.337	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:26:46	0.762	1.143	0.635	1.157	2.921	3.683	4.064	4.337	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:29:40	1.016	1.016	0.508	1.055	2.794	2.413	5.969	6.056	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:29:49	1.016	1.016	0.508	1.055	2.794	2.159	5.969	6.056	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:31:54	1.016	1.143	0.762	1.314	4.318	3.048	4.953	5.627	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:32:12	0.762	1.016	0.762	1.178	4.318	3.048	4.953	5.627	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:35:30	0.889	1.016	0.381	1.055	2.667	3.683	9.779	10.01	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 08:35:33	0.889	1.016	0.381	1.055	2.667	3.683	9.779	10.01	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 08:37:39	1.651	1.651	1.524	1.769	4.699	1.651	3.175	5.311	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:05:30	0.889	1.397	0.508	1.420	4.699	1.651	3.175	5.311	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:08:14	1.143	1.143	0.508	1.205	4.191	3.048	11.05	11.23	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:08:22	1.143	1.143	0.508	1.205	4.191	3.048	11.05	11.23	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:11:55	0.889	0.889	0.635	0.933	2.159	1.397	5.334	5.390	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:11:55	0.889	0.889	0.635	0.933	2.159	1.397	5.334	5.390	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:14:39	0.889	1.016	0.508	1.055	3.810	3.048	14.73	15.16	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:14:52	0.889	1.016	0.508	1.055	3.810	3.048	14.73	15.16	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:16:58	0.762	0.762	0.508	0.925	2.159	2.794	6.604	6.768	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:16:58	0.762	0.762	0.508	0.925	2.159	2.794	6.604	6.768	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:19:01	1.016	1.016	0.635	1.055	3.175	1.397	10.41	10.42	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:19:16	0.762	1.016	0.635	1.055	3.175	1.397	10.41	10.42	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:22:01	0.762	0.762	0.508	0.803	2.413	2.413	6.604	6.782	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:22:04	0.762	0.762	0.381	0.803	2.286	2.159	6.604	6.782	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:24:07	0.762	0.889	0.762	1.024	1.270	1.016	4.826	4.848	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:24:07	0.762	0.762	0.762	1.024	1.270	1.016	4.826	4.848	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:26:10	0.762	0.889	0.635	1.032	3.302	2.794	16.76	16.92	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:26:10	0.762	0.889	0.635	1.032	3.302	2.413	16.76	16.92	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:28:14	0.889	0.762	0.381	0.925	2.794	3.429	21.46	21.74	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:28:14	0.889	0.762	0.381	0.925	2.794	3.429	21.46	21.74	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:30:17	1.016	1.016	0.508	1.092	2.921	1.778	4.572	5.005	***	Site 5A - IOS Shaft IOS Location

**CSST - Site 5
M7550A DTJV
Oct 23, 2017 to Oct 29, 2017**

Event Report: Event List - z:\to be archived\2 csst temp folders\site 5

Type	Serial No.	Date/Time	Tran Peak (mm/s)	Vert Peak (mm/s)	Long Peak (mm/s)	PVS1 (mm/s)	Tran2 Peak (mm/s)	Vert2 Peak (mm/s)	Long2 Peak (mm/s)	PVS2 (mm/s)	Mic Peak (dB)	Description
W	BE16212	Oct 27 /17 11:30:25	1.016	1.016	0.381	1.092	2.921	1.778	4.572	4.728	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:32:30	1.270	1.143	0.508	1.295	3.556	1.905	4.318	4.690	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:32:52	1.270	1.016	0.381	1.295	3.556	1.905	4.318	4.690	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:34:53	0.762	0.635	0.381	0.773	3.683	4.445	6.350	7.110	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:34:53	0.762	0.635	0.381	0.773	3.683	4.445	6.350	7.110	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:36:55	0.762	1.397	0.635	1.442	3.810	2.159	10.03	10.21	***	Site 5A - IOS Shaft IOS Location
W	BE16212	Oct 27 /17 11:36:55	0.762	1.397	0.635	1.442	3.810	2.159	10.03	10.21	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 11:39:39	1.778	1.778	1.270	1.892	3.556	4.064	5.334	6.712	***	Site 5A - IOS Shaft IOS Location
W	BE20061	Oct 27 /17 12:40:24	0.381	0.254	0.254	0.381	2.667	6.477	2.540	6.522	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 27 /17 12:42:30	0.508	0.381	0.254	0.539	2.540	2.286	2.032	3.912	***	Site 5A - IOS Shaft 5A Location
W	BE14293	Oct 27 /17 15:39:50	0.381	0.381	0.254	0.458	2.921	0.254	5.461	6.194	91.5L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 27 /17 15:43:06	0.635	0.635	0.254	0.660	1.143	0.762	1.651	1.840	111.2L	Site 5AB - 141+151 Stanley Avenue
W	BE16212	Oct 27 /17 16:03:04	0.889	0.889	0.508	0.933	3.556	4.064	5.334	6.712	***	Site 5A - IOS Shaft IOS Location
H	BE16212	Oct 27 /17 16:05:10	2.540	2.794	2.413	3.124	2.032	1.143	1.143	2.040	***	Site 5A - IOS Shaft IOS Location
H	BE15997	Oct 28 /17 06:02:33	0.254	0.254	0.254	0.311	***	***	***	***	***	Site 5C - 54 Queen Victoria Street
H	BE16212	Oct 28 /17 06:06:50	1.905	1.905	1.651	2.293	0.635	0.762	0.762	0.950	***	Site 5A - IOS Shaft IOS Location
H	BE20061	Oct 28 /17 06:06:51	0.381	0.381	0.254	0.458	1.016	4.191	2.921	4.981	***	Site 5A - IOS Shaft 5A Location
H	BE11685	Oct 28 /17 06:06:55	0.254	0.254	0.254	0.311	***	***	***	***	110.2L	Site 5AB - 133 Stanley Avenue
H	BE17376	Oct 28 /17 06:07:36	0.508	0.254	0.254	0.524	***	***	***	***	***	Site 5C - 51 Queen Victoria Street
H	BE14293	Oct 28 /17 06:07:41	0.381	0.508	0.254	0.539	3.175	1.905	7.493	8.358	91.5L	Site 5AB - 141+151 Stanley Avenue
W	BE14293	Oct 28 /17 07:20:56	0.381	0.381	0.254	0.475	3.175	1.905	7.493	8.358	91.5L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 28 /17 07:24:10	0.508	0.635	0.508	0.762	2.032	0.381	4.699	5.120	102.8L	Site 5AB - 141+151 Stanley Avenue
W	BE20061	Oct 28 /17 13:05:48	0.381	0.254	0.254	0.402	1.016	4.191	2.921	4.981	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 28 /17 13:08:35	0.381	0.381	0.254	0.458	2.286	4.572	4.318	6.071	***	Site 5A - IOS Shaft 5A Location
W	BE20061	Oct 28 /17 14:32:03	0.254	0.254	0.254	0.381	1.397	4.572	4.318	6.071	***	Site 5A - IOS Shaft 5A Location
H	BE20061	Oct 28 /17 14:34:49	0.381	0.381	0.254	0.475	2.286	2.921	2.413	3.029	***	Site 5A - IOS Shaft 5A Location
W	BE14293	Oct 28 /17 14:40:49	0.381	0.381	0.254	0.458	2.032	0.381	4.699	5.120	91.5L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 28 /17 14:43:24	0.508	0.508	0.762	0.852	9.398	1.524	1.270	9.542	120.3L	Site 5AB - 141+151 Stanley Avenue
W	BE14293	Oct 28 /17 20:55:38	0.381	0.381	0.254	0.475	9.398	1.524	0.635	9.542	<88L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 28 /17 20:58:14	0.381	0.508	0.254	0.554	6.223	1.143	3.302	7.137	101.9L	Site 5AB - 141+151 Stanley Avenue
W	BE14293	Oct 28 /17 21:18:32	0.381	0.381	0.254	0.475	6.223	1.143	3.302	7.137	<88L	Site 5AB - 141+151 Stanley Avenue
H	BE14293	Oct 28 /17 21:21:46	0.508	0.508	0.254	0.582	0.635	0.381	0.508	0.696	121.9L	Site 5AB - 141+151 Stanley Avenue
H	BE15997	Oct 29 /17 06:01:51	0.254	0.254	0.254	0.311	***	***	***	***	***	Site 5C - 54 Queen Victoria Street
H	BE17376	Oct 29 /17 06:06:53	0.635	0.381	0.381	0.833	***	***	***	***	***	Site 5C - 51 Queen Victoria Street
H	BE11685	Oct 29 /17 06:06:56	0.254	0.254	0.254	0.381	***	***	***	***	123.9L	Site 5AB - 133 Stanley Avenue
H	BE16212	Oct 29 /17 06:06:56	0.889	0.762	0.635	0.925	0.381	0.254	0.254	0.402	***	Site 5A - IOS Shaft IOS Location
H	BE14293	Oct 29 /17 06:07:38	0.635	0.762	0.762	0.976	2.413	0.508	1.524	2.420	141.8L	Site 5AB - 141+151 Stanley Avenue
H	BE20061	Oct 29 /17 06:13:05	0.381	0.381	0.254	0.475	0.254	0.381	0.254	0.421	***	Site 5A - IOS Shaft 5A Location
H	BE16212	Oct 30 /17 09:55:45	0.508	0.635	0.508	0.898	0.508	0.762	0.508	0.880	***	Site 5A - IOS Shaft IOS Location