

BLAST RESULTS 2016

License Number: 3391
Licensee: RIX'S CREEK PTY. LIMITED
 PO BOX 4
 EAST MAITLAND NSW 2323
Premises: RIX'S CREEK COLLIERY
 RIX'S CREEK LANE
 SINGLETON NSW 2330

Monitoring Frequency: Every Blast
Airblast Overpressure Limit: 120 dB(Lin Peak)
Ground Vibration Limit: 10 mm/s

Rix's Blast # 2016	Date	Time	Location of blast / blast name	Ground Vibration (mm/s)	Airblast Overpressure dB(Lin Peak)	Monitoring Location (Residence/Noise sensitive location)	Windspeed (m/s)	Wind Direction (°)	Complaints
JANUARY Data published - 2 February 2016									
1	12/01/2016	14:26	West Pit WE08 Hebden Presplit	0.15 0.59 0.17 1.23	100.4 95.5 88.1 85.6	Ernst Residence Mines Rescue Retreat Wright Residence	6.5	260	0
2	14/01/2016	9:05	West Pit WS12 Lemington 41/42	0.13 0.12 0.05 0.24	99.2 97.2 95.7 99.7	Ernst Residence Mines Rescue Retreat Wright Residence	5.8	306	0
3	18/01/2016	14:24	West Pit WP10 PG28	0.09 0.17 0.14 0.52	86.9 84.8 87.4 94.6	Ernst Residence Mines Rescue Retreat Wright Residence	2.3	109	0
4	22/01/2016	14:30	West Pit WE08 Hebden Presplit	0.22 0.4 0.19 0.99	91.3 81.6 97.7 95.2	Ernst Residence Mines Rescue Retreat Wright Residence	3.5	17	0
FEBRUARY Data published - 3 March 2016									
5	2/02/2016	14:25	West Pit WP10 L21 Presplit	0.58 0.76 0.47 1.69	85.9 97.5 99.2 100.4	Ernst Residence Mines Rescue Retreat Wright Residence	3.0	327	0
6	5/02/2016	11:14	West Pit WS11 L20	0.05 0.08 0.04 0.18	107.8 93.7 105.4 105.7	Ernst Residence Mines Rescue Retreat Wright Residence	7.5	155	0
7	5/02/2016	11:44	West Pit WS11 L16/17	0.06 0.07 0.04 0.1	89.3 98 101.5 84.4	Ernst Residence Mines Rescue Retreat Wright Residence	6.5	163	0
8	12/02/2016	14:27	West Pit WP10 A25	0.51 0.64 0.32 1.21	105.4 91.8 96.8 107.1	Ernst Residence Mines Rescue Retreat Wright Residence	4.3	101	0
9	16/02/2016	14:30	West Pit WP10 A25 #2	0.23 0.38 0.21 0.98	98.3 93.5 95.4 96	Ernst Residence Mines Rescue Retreat Wright Residence	3.8	275	0
10	17/02/2016	14:28	West Pit WP10 A25 #3	0.63 0.57 0.34 1.69	90 91.6 95.4 99.3	Ernst Residence Mines Rescue Retreat Wright Residence	2.0	96	0
11	18/02/2016	14:30	West Pit WS12 Lemington 40	0.36 0.3 0.2 0.52	93.3 92.8 93.4 100.8	Ernst Residence Mines Rescue Retreat Wright Residence	3.0	119	0
12	22/02/2016	14:26	West Pit WP10 L21 Presplit	0.42 0.38 0.24 1.03	97.1 88 81.8 96.9	Ernst Residence Mines Rescue Retreat Wright Residence	4.3	107	0
13	23/02/2016	14:25	West Pit WS11 L15	0.07 0.13 0.07 0.23	93.6 88.5 87.8 100.1	Ernst Residence Mines Rescue Retreat Wright Residence	2.8	90	1 Dust
14	26/02/2016	11:04	West Pit WP10 A25	0.39 0.42 0.25 0.91	90 86 92.5 97.1	Ernst Residence Mines Rescue Retreat Wright Residence	6.8	155	0
March Data published - 5 April 2016									
15	1/03/2016	11:07	West Pit WE10 Lemington 31/32	0.16 0.39 0.14 0.4	91 92.9 97.7 95.5	Ernst Residence Mines Rescue Retreat Wright Residence	6.5	87	0
16	3/03/2016	11:11	West Pit WE10 Lemington 31/32	0.09 0.34 0.2 0.78	92.3 94.6 100 95	Ernst Residence Mines Rescue Retreat Wright Residence	2.0	155	0
17	8/03/2016	11:04	West Pit WS11 PG29	<0.3 0.07 0.03 0.16	<113 89 91.1 100.5	Ernst Residence Mines Rescue Retreat Wright Residence	1.3	74	0

18	8/03/2016	11:05	West Pit WS11 L21	<0.3 0.07 0.05 0.15	<113 89.8 89.7 105.7	Ernst Residence Mines Rescue Retreat Wright Residence	1.3	74	0
19	10/03/2016	10:49	Camberwell Pit CN08 A23	1.79 0.78 5.2 0.34 0.15	94 90.1 108.5 87.8 91	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	2.8	314	2 Vibration
20	11/03/2016	14:26	West Pit WE08 Barrett	0.29 1.46 0.78 1.31	97.6 90.5 95.2 104.5	Ernst Residence Mines Rescue Retreat Wright Residence	2.0	186	0
21	16/03/2016	11:04	West Pit WS11 Upper Barrett	0.06 0.07 0.04 0.2	95.5 92.9 93.6 100	Ernst Residence Mines Rescue Retreat Wright Residence	5.8	113	0
22	17/03/2016	14:22	West Pit WP10 A25	0.02 0.05 0.04 0.07	99.9 89.9 91.8 97.7	Ernst Residence Mines Rescue Retreat Wright Residence	2.8	84	0
23	18/03/2016	10:54	Camberwell Pit CN08 A23	1.8 0.82 4.27 0.19 0.26	94.3 88.6 112 90.1 96.5	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	4.5	301	0
24	23/03/2016	11:00	Camberwell Pit CN08 A23	2.04 1.08 3.32 0.28 0.17	93.2 87.4 107.5 89.8 90.4	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	1.5	273	2 Vibration
April	Data published - 03 May 2016								
25	7/04/2016	11:00	West Pit WE10 Lemington 40	0.15 0.41 0.23 0.86	101 84.8 90.1 94.6	Ernst Residence Mines Rescue Retreat Wright Residence	2.3	135	0
26	12/04/2016	11:02	West Pit WP09 L10	0.1 0.05 0.02 0.06	98.6 93 89.2 94.9	Ernst Residence Mines Rescue Retreat Wright Residence	2.1	129	0
27	12/04/2016	11:18	West Pit WS11 L16/17	0.03 0.23 0.02 0.08	98 88.8 80.9 93	Ernst Residence Mines Rescue Retreat Wright Residence	2.1	147	0
28	12/04/2016	11:30	West Pit WS11 P29	0.03 0.23 0.02 0.12	98 88.8 80.9 98	Ernst Residence Mines Rescue Retreat Wright Residence	2.2	143	0
29	13/04/2016	11:08	Camberwell Pit CN08 A23 PS	0.41 0.39 0.6 0.07 0.09	96.9 88.9 92.9 94.8 84.7	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	3.8	139	0
30	14/04/2016	11:07	Camberwell Pit CN08 A23/4	0.41 0.39 0.6 0.07 0.09	96.9 88.9 92.9 94.8 84.7	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	3.2	98	0
31	15/04/2016	11:30	West Pit WP09 L15	0.09 0.42 0.19 1.02	84.7 96 87.4 104.1	Ernst Residence Mines Rescue Retreat Wright Residence	1.5	121	0
32	19/04/2016	14:30	West Pit WE10 L30b	0.03 0.04 0.03 0.09	91.3 85.3 102.4 92.2	Ernst Residence Mines Rescue Retreat Wright Residence	2.3	127	0
33	20/04/2016	14:26	West Pit WS11 P28	0.03 0.04 0.03 0.09	91.3 85.3 89.9 92.2	Ernst Residence Mines Rescue Retreat Wright Residence	2.2	143	0
34	22/04/2016	11:00	West Pit WS11 P28/2	0.06 0.05 0.03 0.15	87.4 91 89.9 94.6	Ernst Residence Mines Rescue Retreat Wright Residence	3.6	281	0
35	22/04/2016	14:30	West Pit WS11 LB	0.03 0.08 0.04 0.26	89.6 84.6 83 96.6	Ernst Residence Mines Rescue Retreat Wright Residence	5.0	312	0
36	27/04/2016	14:42	West Pit WP09 L16	0.05 0.25 0.15 0.4	86 85.8 86 95.8	Ernst Residence Mines Rescue Retreat Wright Residence	5.0	99	0
37	27/04/2016	14:51	West Pit WE10 L40 PS	0.33 0.27 0.18 0.64	94.4 103.9 83.9 95	Ernst Residence Mines Rescue Retreat Wright Residence	4.3	92	0
38	28/04/2016	11:07	Camberwell Pit	1.09	94	Watling Residence	1.3	229	0

			CM11 A24	0.98 1.21 0.1 0.12	87.4 103.6 88.4 88.6	Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd			
39	28/04/2016	14:23	West Pit WS11 LB PS	0.03 0.08 0.03 0.15	86.2 86.9 89.5 100.3	Ernst Residence Mines Rescue Retreat Wright Residence	1.5	168	0
May	Data published - 6 June 2016								
40	2/05/2016	10:56	Camberwell Pit CN06 L15 Presplit	0.24 0.33 4.73 0.22 0.1	99.5 95.8 107.3 90.7 92.4	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	4.8	305	0
41	4/05/2016	11:12	Camberwell Pit CM08 L20 Presplit	0.78 0.74 6.77 0.23 0.13	89 93.7 97.5 96.5 96	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	5.8	298	0
42	5/05/2016	11:06	West Pit WE10 Lemington 40	0.17 0.33 0.21 0.86	95.2 100.9 107.4 105.8	Watling Residence Mines Rescue Retreat Wright Residence	3.5	306	0
43	13/05/2016	11:06	West Pit WE08 Hebden7	0.03 0.31 0.11 0.59	99.1 92 89.8 88	Watling Residence Mines Rescue Retreat Wright Residence	8.5	294	0
44	16/05/2016	11:03	West Pit WS11 A25	0.04 0.08 0.04 0.3	91.1 87.4 87.9 99.9	Watling Residence Mines Rescue Retreat Wright Residence	1.5	82	0
45	16/05/2016	14:28	West Pit WE10 Lemington 32	0.06 0.21 0.1 0.31	87.2 89.9 95.7 95	Watling Residence Mines Rescue Retreat Wright Residence	1.3	46	0
46	18/05/2016	11:05	Camberwell Pit CM10 PG27	1.19 0.87 1.15 0.14 0.08	95.5 92.9 99.8 85.1 95.7	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	4.5	303	0
47	18/05/2016	14:37	West Pit WE08 Hebden 7	0.02 0.34 0.17 0.48	95 99.3 87.4 92	Watling Residence Mines Rescue Retreat Wright Residence	6.0	298	0
48	20/05/2016	11:03	Camberwell Pit CN06 A23	0.4 0.45 0.87 0.1 0.09	93 88 103.1 89 87.2	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	5	295	0
49	20/05/2016	14:27	West Pit WE08 Hebden 7	0.02 0.15 0.1 0.35	83.6 92 85 93	Watling Residence Mines Rescue Retreat Wright Residence	3.3	293	0
50	30/05/2016	11:17	Camberwell Pit CN08 A23	0.07 0.08 0.33 0.03 0.08	91.1 85.8 103.1 84.8 84.4	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	2.3	299	0
51	30/05/2016	14:35	West Pit WE08 Hebden 7	0.06 0.24 0.1 0.46	93.1 92.1 92 93.9	Watling Residence Mines Rescue Retreat Wright Residence	3.3	128	0
52	30/05/2016	14:35	West Pit WE10 Lemington 32	0.03 0.28 0.13 0.37	88.7 95.8 86.4 87.5	Watling Residence Mines Rescue Retreat Wright Residence	3.3	128	0
53	31/05/2016	11:00	West Pit WS11 A25	0.03 0.07 0.03 0.3	91.1 92.4 92.5 101.5	Watling Residence Mines Rescue Retreat Wright Residence	2.8	135	0
54	31/05/2016	11:01	West Pit WS11 L13	0.02 0.05 0.03 0.09	90.2 88.3 90.4 102.5	Watling Residence Mines Rescue Retreat Wright Residence	2.8	135	0
55	31/05/2016	14:58	West Pit WP09 L15 PS	0.32 0.34 0.19 1.24	89.1 83 92.1 90.5	Watling Residence Mines Rescue Retreat Wright Residence	3.5	92	0
June	Data published - 5 July 2016								
56	1/06/2016	11:01	West Pit WP09 L15	0.19 0.52 0.24 1.06	90 94 97.4 104.1	Watling Residence Mines Rescue Retreat Wright Residence	1.8	63	0
57	1/06/2016	14:26	West Pit WE10 Lemington 38	0.03 0.08 0.04 0.15	100.4 84 99 96.1	Watling Residence Mines Rescue Retreat Wright Residence	4.5	118	0

58	2/06/2016	14:28	West Pit WH10 L21	0.05 0.12 0.05 0.15	92.5 86.8 86.1 82.4	Watling Residence Mines Rescue Retreat Wright Residence	2.5	78	0
59	3/06/2016	11:09	Camberwell Pit CM10 PG27	1.7 1.54 1.84 0.14 0.15	105 99.1 114.2 94.8 93.3	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	3.5	136	0
60	10/06/2016	14:19	Camberwell Pit CM10 PG27	2.32 1.43 2.01 0.15 0.14	102.3 99.4 106.6 99.3 100.2	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	8.5	297	0
61	14/06/2016	14:23	West Pit WE10 PG28	0.1 0.6 0.25 0.44	93.8 92 91.7 101	Watling Residence Mines Rescue Retreat Wright Residence	2.8	298	0
62	17/06/2016	11:08	West Pit WP09 L15	0.12 0.47 0.22 1.27	83 105.6 97.4 105.6	Watling Residence Mines Rescue Retreat Wright Residence	2.3	282	1 Vibration
63	29/06/2016	11:09	Camberwell Pit CN09 A23	1.77 0.8 5.88 0.19 0.15	93 92 110.4 92.1 94	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	5	304	0
64	29/06/2016	14:31	West Pit WS11 A23	0.04 0.08 0.06 0.16	91.4 89.5 94.1 103.3	Watling Residence Mines Rescue Retreat Wright Residence	1.0	207	0
65	29/06/2016	14:37	West Pit WP10 L16 Presplit	0.16 0.57 0.37 1.67	81.7 87.7 91.9 91.3	Watling Residence Mines Rescue Retreat Wright Residence	1.0	246	0
July	Data published - 3 August 2016								
66 / 67	4/07/2016	11:09	West Pit WP10 PG28 Shot #2 WP10 PG28 Shot #3	0.09 <0.3 0.19 0.42	85.3 <113 100 96.9	Watling Residence Mines Rescue Retreat Wright Residence	3.8	318	0
68	4/07/2016	14:32	Camberwell Pit CN08 A23 #2	1.25 0.92 4.84 0.12 0.17	94.6 91.1 113.9 97.9 102.1	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	3.8	278	0
69	5/07/2016	11:37	West Pit WE10 Lemington 35	0.02 <0.3 0.03 0.07	81.3 <113 94 94.4	Watling Residence Mines Rescue Retreat Wright Residence	3.5	309	0
70	11/07/2016	11:08	Camberwell Pit CN09 A23 #3	1.7 1.15 3.64 0.2 0.22	94.7 95.3 112 108.6 107	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	6.8	312	0
71	14/07/2016	11:05	Camberwell Pit CN08 A22	0.13 0.07 0.65 0.02 0.03	101 98.5 101.4 93.9 92.4	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	8.3	314	0
72 / 73	15/07/2016	14:22	West Pit WP10 PG28 WE10 Lemington 35	0.03 0.16 0.12 0.2	96.3 95.2 97.9 94.9	Watling Residence Mines Rescue Retreat Wright Residence	1.3	174	0
74	15/07/2016	14:23	West Pit WS11 Barrett	0.03 0.07 0.03 0.12	94.8 90.4 97.3 99.8	Watling Residence Mines Rescue Retreat Wright Residence	1.3	174	0
75	19/07/2016	11:01	Camberwell Pit CN09 A23 #4	1.34 1.13 2.56 0.13 0.12	101.6 97 118.6 101 103.5	Watling Residence Camberwell UHAQMN Dulwich Residence Cherry Residence Bridgman Rd	8	302	0
76	19/07/2016	14:27	West Pit WP10 L16 Presplit	0.14 <0.3 0.18 1.73	82.9 <113 89.5 90.2	Watling Residence Mines Rescue Retreat Wright Residence	5.0	303	0
77	30/07/2016	10:44	West Pit WP10 L20	0.13 0.18 0.15 0.86	86.5 98.19 97.9 100.5	Watling Residence Mines Rescue Retreat Wright Residence	2.8	282	0
August	Data published - 13 September 2016								
78	2/08/2016	11:16	West Pit WP10 L20	0.09 0.21 0.18 0.63	91.6 91.27 92.8 99.1	Watling Residence Mines Rescue Retreat Wright Residence	3.5	148	0
79	2/08/2016	14:32	West Pit WE10 PG29	0.11 0.36	101.7 100.67	Watling Residence Mines Rescue	6.3	110	0

				0.29	92.1	Retreat			
				0.58	99.7	Wright Residence			
80	10/08/2016	11:00	Camberwell Pit CM09 A23	0.68	108.1	Watling Residence	8.8	302	0
				0.7	101	Camberwell UHAQMN			
				1.13	105	Dulwich Residence			
				0.09	95	Cherry Residence			
				0.07	106.8	Bridgman Rd			
81	11/08/2016	11:14	West Pit WS09 L19/20	0.04	96.8	Watling Residence	5.0	282	0
				<0.3	<113	Mines Rescue			
				0.04	98.5	Retreat			
				0.25	102.4	Wright Residence			
82	12/08/2016	14:26	West Pit WS11 A23	0.03	98.2	Watling Residence	6.8	313	0
				<0.3	<113	Mines Rescue			
				<0.3	<113	Retreat			
				0.16	105.4	Wright Residence			
83	15/08/2016	14:32	West Pit WE10 Lemington 32	0.11	93.9	Watling Residence	2.8	179	0
				0.3	96.38	Mines Rescue			
				0.16	97.9	Retreat			
				0.75	101.4	Wright Residence			
84	15/08/2016	14:33	West Pit WH08 L20	0.09	95.6	Watling Residence	2.8	179	0
				0.25	97.08	Mines Rescue			
				0.22	95.6	Retreat			
				0.34	102	Wright Residence			
85	16/08/2016	11:05	Camberwell Pit CM09 A23 #2	0.64	99.6	Watling Residence	4.0	319	0
				1.23	96.5	Camberwell UHAQMN			
				0.91	104.9	Dulwich Residence			
				0.07	88.1	Cherry Residence			
				0.07	94.4	Bridgman Rd			
86	16/08/2016	14:19	West Pit WE10 PG26 Presplit	0.3	96.6	Watling Residence	5.0	300	0
				<0.3	<113	Mines Rescue			
				0.12	88.9	Retreat			
				1.1	107.5	Wright Residence			
87	17/08/2016	14:07	Camberwell Pit CN07 L19	0.86	103.7	Watling Residence	6.5	296	0
				0.76	97.7	Camberwell UHAQMN			
				7.13	108.3	Dulwich Residence			
				0.36	94.6	Cherry Residence			
				0.29	98.5	Bridgman Rd			
88	18/08/2016	14:40	West Pit WP10 L20	0.06	82.9	Watling Residence	2.5	296	0
				<0.3	<113	Mines Rescue			
				0.15	90.5	Retreat			
				0.66	99.6	Wright Residence			
89	22/08/2016	11:05	Camberwell Pit CN07 L19 #2	0.9	102.2	Watling Residence	1.8	287	0
				1	93.7	Camberwell UHAQMN			
				4.55	113.2	Dulwich Residence			
				0.31	90.5	Cherry Residence			
				0.23	97.8	Bridgman Rd			
90	24/08/2016	11:06	West Pit WP10 L20	0.07	86.1	Watling Residence	4.5	158	0
				0.44	87.5	Mines Rescue			
				0.13	87.3	Retreat			
				0.64	96.6	Wright Residence			
91	26/08/2016	10:59	West Pit WS11 A25	0.03	90.2	Watling Residence	1.5	311	0
				0.08	93.6	Mines Rescue			
				0.04	94.6	Retreat			
				0.21	97.9	Wright Residence			
92	29/08/2016	14:22	West Pit WS11 P29	0.04	91.3	Watling Residence	2.8	145	0
				0.14	84.3	Mines Rescue			
				0.04	89.2	Retreat			
				0.34	102.4	Wright Residence			
93	30/08/2016	14:38	West Pit WS11 L20	<0.3	<113	Watling Residence	3.3	303	0
				0.28	92.4	Mines Rescue			
				0.03	94.1	Retreat			
				0.14	103.1	Wright Residence			
September	Data published - 18 October 2016								
94	1/09/2016	11:04	West Pit WE10 Lemington	0.13	87.7	Watling Residence	3.3	314	0
				0.43	101.4	Mines Rescue			
				0.17	99.6	Retreat			
				0.72	101.4	Wright Residence			
95	6/09/2016	14:17	Camberwell Pit CN07 L19	1.67	98.1	Watling Residence	4	272	0
				1.86	93.4	Camberwell UHAQMN			
				4.76	113.1	Dulwich Residence			
				0.35	92.3	Cherry Residence			
				0.46	99.2	Bridgman Rd			
96	8/09/2016	14:29	West Pit WH08 L20	0.06	110.2	Watling Residence	2.8	189	0
				0.18	104.27	Mines Rescue			
				0.23	108	Retreat			
				0.42	105	Wright Residence			
97	13/09/2016	14:29	West Pit WP09 Hebden Presplit	<0.3	<113	Watling Residence	0.8	304	0
				<0.3	<113	Mines Rescue			
				0.21	91.9	Retreat			
				1.89	97.9	Wright Residence			
98	13/09/2016	14:31	West Pit WS12 Lemington 40	0.19	93.9	Watling Residence	0.8	304	0
				<0.3	<113	Mines Rescue			
				0.16	106.9	Retreat			
				0.56	100.9	Wright Residence			
99	17/09/2016	10:13	West Pit WS11 Lemington 40	0.11	87.5	Watling Residence	3.0	323	0
				<0.3	<113	Mines Rescue			
				0.06	93.6	Retreat			

				0.29	97.4	Wright Residence			
100	17/09/2016	10:17	West Pit WS11 L16/17	0.02	87.7	Watling Residence	3.0	323	0
				<0.3	<113	Mines Rescue			
				0.03	97.1	Retreat			
				0.13	106.6	Wright Residence			
101	20/09/2016	11:20	West Pit WP09 Hebden Presplit	0.03	99.1	Watling Residence	5.0	264	0
				<0.3	<113	Mines Rescue			
				0.06	84.5	Retreat			
				0.42	99	Wright Residence			
102	20/09/2016	14:50	Camberwell Pit CM10 L20 Presplit	1.83	98.4	Watling Residence	4.8	278	0
				1.75	91.6	Camberwell UHAQMN			
				5.87	103	Dulwich Residence			
				0.54	94.8	Cherry Residence			
				0.27	99.3	Bridgman Rd			
103	28/09/2016	11:16	West Pit WP09 Barrett	0.2	85.3	Watling Residence	1.8	308	0
				0.47	111.63	Mines Rescue			
				0.72	98	Retreat			
				2.38	104.3	Wright Residence			
104	28/09/2016	11:17	West Pit WS09 A25	0.03	87.3	Watling Residence	1.8	308	1 Vibration
				0.07	101.19	Mines Rescue			
				0.04	91.9	Retreat			
				0.21	105.5	Wright Residence			
105 / 106	28/09/2016	14:51	Camberwell Pit CM10 A23 - Pattern 1 CM10 A23 - Pattern 3	1.62	103.1	Watling Residence	1.5	183	0
				1.27	97.8	Camberwell UHAQMN			
				2.51	120.4	Dulwich Residence			
				0.18	99	Cherry Residence			
				0.23	97.6	Bridgman Rd			
October	Data published - 7 November 2016								
107	5/10/2016	11:03	Camberwell Pit CN09 L21	0.25	102.1	Watling Residence	8.8	303	0
				0.15	103	Camberwell UHAQMN			
				1.62	102.3	Dulwich Residence			
				0.05	106	Cherry Residence			
				<0.3	<113	Bridgman Rd			
108	6/10/2016	11:14	Camberwell Pit CM10 A23 - Pattern 2	0.86	110.1	Watling Residence	9.5	304	0
				0.58	101.3	Camberwell UHAQMN			
				1.37	107.8	Dulwich Residence			
				0.08	106.6	Cherry Residence			
				0.1	107.9	Bridgman Rd			
109	7/10/2016	11:03	West Pit WS09 L16/17	0.04	101.2	Watling Residence	6.3	286	0
				0.07	102.72	Mines Rescue			
				0.02	96.5	Retreat			
				0.11	105.7	Wright Residence			
110	7/10/2016	11:11	West Pit WS11 PG28	0.02	99.2	Watling Residence	7.0	293	0
				0.06	109.88	Mines Rescue			
				0.02	93.6	Retreat			
				0.14	99	Wright Residence			
111	11/10/2016	11:04	West Pit WS09 Barrett Crop	0.03	100.5	Watling Residence	6.8	290	0
				0.1	111.29	Mines Rescue			
				0.05	92.8	Retreat			
				0.79	101.9	Wright Residence			
112	11/10/2016	11:06	West Pit WS11 L20	0.03	100.6	Watling Residence	6.8	290	0
				0.07	105.65	Mines Rescue			
				0.05	99.6	Retreat			
				0.15	105.3	Wright Residence			
113	12/10/2016	11:10	Camberwell Pit CM10 A23 - Pattern 4	1.61	103.5	Watling Residence	4.8	317	0
				1.22	92.6	Camberwell UHAQMN			
				1.78	114.3	Dulwich Residence			
				0.15	100	Cherry Residence			
				0.16	103	Bridgman Rd			
114	13/10/2016	14:25	West Pit WS12 L40	0.12	100	Watling Residence	9.5	131	0
				0.12	103.28	Mines Rescue			
				0.16	102.6	Retreat			
				0.43	93	Wright Residence			
115	14/10/2016	11:04	West Pit WE10 P29	0.18	92.1	Watling Residence	3.5	84	0
				0.14	97.58	Mines Rescue			
				0.22	97.9	Retreat			
				0.39	104.5	Wright Residence			
116	14/10/2016	14:22	Camberwell Pit CN08 A22	0.25	96.7	Watling Residence	4.3	122	0
				0.12	91.8	Camberwell UHAQMN			
				1.52	105.1	Dulwich Residence			
				0.05	84.7	Cherry Residence			
				0.03	97.9	Bridgman Rd			
117	19/10/2016	11:15	Camberwell Pit CM10 A23	1.94	98.3	Watling Residence	6.3	286	1 Vibration
				1.12	94.8	Camberwell UHAQMN			
				3.15	105.8	Dulwich Residence			
				0.17	92.9	Cherry Residence			
				0.16	93.6	Bridgman Rd			
118	20/10/2016	14:30	West Pit WE10 PG29	0.16	97.4	Watling Residence	4.3	115	0
				0.06	96.77	Mines Rescue			
				0.36	101.9	Retreat			
				0.84	93.4	Wright Residence			
119	20/10/2016	14:30	West Pit WE10 Presplit	0.16	97.4	Watling Residence	4.3	115	0
				0.06	96.77	Mines Rescue			
				0.36	101.9	Retreat			
				0.84	93.4	Wright Residence			
120	21/10/2016	11:20	Camberwell Pit CN09 A22	0.12	95.1	Watling Residence	4.5	318	0
				0.08	88.1	Camberwell UHAQMN			

				0.64	107.7	Dulwich Residence			
				0.02	87.2	Cherry Residence			
				0.06	91	Bridgman Rd			
121	25/10/2016	11:11	West Pit WS09 Crop	0.05	96.7	Watling Residence	6.8	315	0
				0.12	101.1	Mines Rescue			
				0.06	103.7	Retreat			
				0.44	111.4	Wright Residence			
122	27/10/2016	11:04	West Pit WS11 L15	0.04	85.7	Watling Residence	2.5	348	0
				0.06	100.4	Mines Rescue			
				0.05	92	Retreat			
				0.2	102.5	Wright Residence			
123	27/10/2016	14:26	West Pit WE10 P29	0.11	105.1	Watling Residence	9.3	105	0
				0.27	88	Mines Rescue			
				0.2	94	Retreat			
				0.4	98	Wright Residence			
124	28/10/2016	11:10	West Pit WP10 P29	0.02	97.8	Watling Residence	6.5	131	0
				0.04	84.8	Mines Rescue			
				0.03	88.4	Retreat			
				0.06	87.5	Wright Residence			
November	Data published - 6 December 2016								
125	1/11/2016	11:12	West Pit WS11 A25	0.04	95.3	Watling Residence	1.0	182	0
				0.06	88	Mines Rescue			
				0.05	93.8	Retreat			
				0.27	100	Wright Residence			
126	2/11/2016	14:27	West Pit WP11 L19	0.03	95	Watling Residence	5.8	313	0
				0.08	90.3	Mines Rescue			
				0.07	90.5	Retreat			
				0.3	93.6	Wright Residence			
127	3/11/2016	11:11	Camberwell Pit CN09 L21	0.45	94.2	Watling Residence	3.8	331	0
				0.29	87.4	Camberwell UHAQMN			
				2.14	109.3	Dulwich Residence			
				0.08	89.6	Cherry Residence			
				0.05	89.5	Bridgman Rd			
128	4/11/2016	11:08	West Pit WS11 L16/17	0.03	94.4	Watling Residence	5.0	307	0
				0.04	95	Mines Rescue			
				0.04	96.6	Retreat			
				0.1	98.5	Wright Residence			
129	8/11/2016	11:13	Camberwell Pit CN06 Hebden Presplit	0.21	90.6	Watling Residence	2.8	284	0
				0.28	91.6	Camberwell UHAQMN			
				1.41	95.5	Dulwich Residence			
				0.16	80.3	Cherry Residence			
				0.05	87.3	Bridgman Rd			
130 / 131	9/11/2016	11:14	West Pit WH08 L19 WE08 L20	0.1	86	Watling Residence	1.5	330	0
				0.29	93.5	Mines Rescue			
				0.21	94.4	Retreat			
				0.53	101	Wright Residence			
132	11/11/2016	11:00	Camberwell Pit CN09 L21	0.38	96.8	Watling Residence	2.3	17	0
				0.58	91.9	Camberwell UHAQMN			
				1.69	108.5	Dulwich Residence			
				0.06	83.9	Cherry Residence			
				0.05	84	Bridgman Rd			
133	15/11/2016	10:56	Camberwell Pit CM09 L21	0.1	97.7	Watling Residence	0.8	282	0
				0.1	91.1	Camberwell UHAQMN			
				0.18	102.1	Dulwich Residence			
				0.02	85.9	Cherry Residence			
				0.08	84.7	Bridgman Rd			
134	16/11/2016	14:23	West Pit WE09 L20	0.06	98.9	Watling Residence	3.0	137	0
				0.2	94.3	Mines Rescue			
				0.12	88.8	Retreat			
				0.41	98	Wright Residence			
135	18/11/2016	10:59	Camberwell Pit CN08 L21	0.45	94	Watling Residence	4.3	323	0
				0.26	97.4	Camberwell UHAQMN			
				1.44	107	Dulwich Residence			
				0.06	85.3	Cherry Residence			
				0.13	89.2	Bridgman Rd			
136	22/11/2016	14:24	West Pit WP10 L19	0.02	91.7	Watling Residence	1.8	211	0
				0.07	87.8	Mines Rescue			
				0.06	85.2	Retreat			
				0.29	90.9	Wright Residence			
137	24/11/2016	14:26	West Pit WS12 Barrett crop	0.08	100	Watling Residence	1.5	349	1 Overpressure
				0.14	97.4	Mines Rescue			
				0.11	100.4	Retreat			
				0.58	107.4	Wright Residence			
138	25/11/2016	11:03	Camberwell Pit CN08 L21	0.24	89.2	Watling Residence	3	309	0
				0.14	90.6	Camberwell UHAQMN			
				1.31	102.9	Dulwich Residence			
				0.04	94.9	Cherry Residence			
				0.03	98	Bridgman Rd			
139	25/11/2016	11:27	West Pit WP10 L19	0.02	88	Watling Residence	4.3	314	0
				0.06	94.6	Mines Rescue			
				0.05	90.5	Retreat			
				0.17	97.2	Wright Residence			
140	29/11/2016	14:47	Camberwell Pit CN08 L21	0.28	92.4	Watling Residence	5	309	0
				0.21	101.7	Camberwell UHAQMN			
				0.9	106.2	Dulwich Residence			
				0.03	96.8	Cherry Residence			
				0.1	89.2	Bridgman Rd			

141	30/11/2016	11:14	West Pit WE10 PG28	0.11	91.2	Watling Residence	1.8	117	0
				0.37	88.9	Mines Rescue			
				0.24	91	Retreat			
				0.72	97.3	Wright Residence			
December	Data published - 12 January 2017								
142	1/12/2016	11:04	West Pit WP10 L19	0.02	90.6	Watling Residence	4.0	325	0
				0.05	88.6	Mines Rescue			
				0.06	89.9	Retreat			
				0.3	93.9	Wright Residence			
143	1/12/2016	14:30	Camberwell Pit CN08 L21	0.11	92.5	Watling Residence	5.3	333	0
				0.06	105.2	Camberwell UHAQMN			
				0.93	106.5	Dulwich Residence			
				0.02	96.6	Cherry Residence			
				0.02	95	Bridgman Rd			
144	2/12/2016	11:11	West Pit WS09 L21 Presplit	0.36	94	Watling Residence	4.0	307	0
				0.2	92.9	Mines Rescue			
				0.18	90.9	Retreat			
				0.66	101.4	Wright Residence			
145	6/12/2016	10:57	Camberwell Pit CN08 A23	0.08	105.6	Watling Residence	2.3	116	0
				0.07	97.1	Camberwell UHAQMN			
				0.51	111.4	Dulwich Residence			
				0.02	104.8	Cherry Residence			
				0.02	89.2	Bridgman Rd			
146	9/12/2016	11:07	West Pit WE10 PG28	0.19	107.3	Watling Residence	7.3	286	0
				0.44	102.5	Mines Rescue			
				0.33	105.9	Retreat			
				0.94	102.7	Wright Residence			
147	15/12/2016	14:03	Camberwell Pit CN07 Hebden Presplit CN08 L14 Presplit	0.26	101.5	Watling Residence	6.5	99	0
				0.23	96	Camberwell UHAQMN			
				5.14	106.9	Dulwich Residence			
				0.12	82.6	Cherry Residence			
				0.04	85.4	Bridgman Rd			
148	16/12/2016	11:39	Camberwell Pit CN09 L21	1.25	110.4	Watling Residence	3.3	155	0
				0.08	87.8	Camberwell UHAQMN			
				0.5	105.9	Dulwich Residence			
				0.02	75.8	Cherry Residence			
				0.05	84.3	Bridgman Rd			
149	19/12/2016	14:26	West Pit WS11 L15	0.03	100	Watling Residence	5.5	92	0
				0.06	83.4	Mines Rescue			
				0.06	89	Retreat			
				0.21	103.9	Wright Residence			
150	20/12/2016	11:15	Camberwell Pit CN06 L14	1.13	105	Watling Residence	6.5	322	1 Vibration
				1.96	98	Camberwell UHAQMN			
				12.35	110.3	Dulwich Residence			
				0.54	97.1	Cherry Residence			
				0.25	96.9	Bridgman Rd			
151	21/12/2016	11:16	West Pit WE10 PG28	0.16	100	Watling Residence	6.0	290	0
				0.31	95.3	Mines Rescue			
				0.27	96	Retreat			
				0.57	98.5	Wright Residence			
152	22/12/2016	14:19	Camberwell Pit CM09 L21	0.2	105.4	Watling Residence	6.5	79	0
				0.3	99.7	Camberwell UHAQMN			
				0.52	106.7	Dulwich Residence			
				0.03	90.7	Cherry Residence			
				0.02	92.7	Bridgman Rd			
153	23/12/2016	9:09	West Pit WS09 L15	0.04	96.9	Watling Residence	2.3	135	0
				0.05	93.7	Mines Rescue			
				0.03	99.9	Retreat			
				0.18	110.2	Wright Residence			



Blast Monitoring Locations		
Site	Easting	Northing
Bridgman Rd	327982	6404124
Camberwell	320682	6405607
Cherry	325889	6407976
Mines Rescue Singleton Heights	326885	6397684
Retreat	327665	6400814
Watling	321629	6405026
Wright's Maison Dieu	322570	6397470

	Rix's Creek P/L- EPL 3391	
	<h2>Blast Monitoring Sites</h2>	
Scale:- 1:35,000	Date: December 2016 Photo: December 2015	Drawing A3 File:- Integra 4_jhDec16 Monitoring Sites

LEGEND	
	EPL 3391 Boundary
	Blast Monitor Locations