

## Appendix 7

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# BLAST MONITORING RESULTS

**Sunnyside Coal Mine**  
**Environmental Blast Monitoring**

<b>SHOT NO.</b>	<b>DATE</b>	<b>MONITOR LOCATION</b>	<b>PEAK GROUND PRESSURE (mm/s)</b>	<b>PEAK OVERPRESSURE (dBL)</b>	<b>TIME</b>
1	18/Nov/08	Ivanhoe	0.91	110.7	1:44:48 PM
1	18/Nov/08	Plain View	0.86	107.8	1:44:58 PM
1	18/Nov/08	Illilli	0.56	107.4	1:42:25 PM
2	25/Nov/08	Innisvale	0.40	103.2	3:10:59 PM
2	25/Nov/08	Plain View	DNT	DNT	DNT
2	25/Nov/08	Illilli	0.61	105.5	3:10:48 PM
3	28/Nov/08	Ivanhoe	0.65	96.7	9:59:16 AM
3	28/Nov/08	Plain View	0.50	112.3	9:59:16 AM
3	28/Nov/08	Illilli	1.24	100.9	9:59:07 AM
4	28/Jan/09	Illilli	0.10	112.0	9:59:26 AM
4	28/Jan/09	Ivanhoe	DNT	DNT	DNT
4	28/Jan/09	Plain View	DNT	DNT	DNT
5	09/Mar/09	Ivanhoe	0.28	109.4	2:04:23 PM
5	09/Mar/09	Innisvale	0.33	109.7	2:04:29 PM
6	06/Apr/09	Illilli	0.35	97.4	1:53:19 PM
6	06/Apr/09	Ivanhoe	DNT	DNT	DNT
6	06/Apr/09	Plain View	DNT	DNT	DNT
7	11/Jun/09	Innisvale	0.30	97.0	12:21:02 PM
7	11/Jun/09	Ivanhoe	0.53	99.6	12:20:57 PM
7	11/Jun/09	Plain View	0.53	109.3	12:12:21 AM
8	18/Jun/09	Illilli	0.35	106.7	2:58:16 PM
8	18/Jun/09	Ivanhoe	0.37	96.4	2:57:20 PM
8	18/Jun/09	Plain View	DNT	DNT	DNT
9/10	21/Aug/09	Innisvale	0.61	111.0	10:06:36 AM
9/10	21/Aug/09	Ivanhoe	0.97	111.8	10:07:46 AM
9/10	21/Aug/09	Plain View	0.51	111.5	10:06:49 AM
11	24/Nov/09	Innisvale	DNT	DNT	DNT
11	24/Nov/09	Ivanhoe	DNT	DNT	DNT
11	24/Nov/09	Plain View	DNT	DNT	DNT
11	24/Nov/09	Illilli	0.43	109.6	12:11:41 PM
12	18/Dec/09	Innisvale	1.09	101.9	12:07:40 PM
12	18/Dec/09	Ivanhoe	1.70	107.0	12:05:20 PM
12	18/Dec/09	Plain View	1.16	101.9	12:05:34 PM
12	18/Dec/09	Illilli	0.05*	114.1	12:05:50 PM
13	11/Feb/10	Innisvale	DNT	DNT	DNT
13	11/Feb/10	Ivanhoe	DNT	DNT	DNT
13	11/Feb/10	Plain View	0.91	107.4	12:06:42 PM
13	11/Feb/10	Illilli	0.41	106.5	12:05:52 PM

<b>SHOT NO.</b>	<b>DATE</b>	<b>MONITOR LOCATION</b>	<b>PEAK GROUND PRESSURE (mm/s)</b>	<b>PEAK OVERPRESSURE (dBL)</b>	<b>TIME</b>
14	17/Apr/10	Innisvale	0.96	108.6	12:01:29 PM
14	17/Apr/10	Ivanhoe	2.04	110.1	11:57:36 AM
14	17/Apr/10	Plain View	2.39	96.3	12:03:38 PM
14	17/Apr/10	Illili	0.61	114.8	11:59:07 AM
15	23/Jun/10	Innisvale	1.10	102.4	12:13:47 PM
15	23/Jun/10	Ivanhoe	1.54	114.1	12:13:59 PM
15	23/Jun/10	Plain View	DNT	DNT	DNT
15	23/Jun/10	Illili	0.09	114.8	12:15:17 PM
16	09/Jul/10	Innisvale	0.42	100.8	10:04:11 AM
16	09/Jul/10	Ivanhoe	DNT	DNT	DNT
16	09/Jul/10	Plain View	1.11	103.2	10:04:27 AM
16	08/Jul/10	Illili	1.60	99.1	10:04:29 AM
17	12/Aug/10	Innisvale	DNT	DNT	DNT
17	12/Aug/10	Ivanhoe	DNT	DNT	DNT
17	12/Aug/10	Plain View	0.18	110.3	11:57:01 AM
17	12/Aug/10	Illili	0.52	108.0	11:56:56 AM
18	01/Sep/10	Innisvale	0.52	101.4	11:59:00 AM
18	01/Sep/10	Ivanhoe	0.53	103.6	12:02:42 PM
18	01/Sep/10	Plain View	DNT	DNT	DNT
18	01/Sep/10	Illili	DNT	DNT	DNT
20	30/Sep/10	Innisvale	0.58	105.6	12:00:08 PM
20	30/Sep/10	Ivanhoe	0.83	86.6	12:04:38 PM
20	30/Sep/10	Plain View	1.20	92.5	12:00:53 PM
20	30/Sep/10	Illili	0.47	87.5	11:58:03 AM
21	22/Nov/10	Inisvale	0.66	108.4	15:04:15 PM
21	22/Nov/10	Ivanhoe	No access to property - monitor not set		
21	22/Nov/10	Plain View	DNT	DNT	DNT
21	22/Nov/10	Illili	0.45	107.9	15:05:12 PM
22	24/Nov/10	Inisvale	DNT	DNT	DNT
22	24/Nov/10	Plain View	0.76	100.2	12:14:40 PM
22	24/Nov/10	Illili	DNT	DNT	DNT
22	24/Nov/10	Ivanhoe	DNT	DNT	DNT
23	21/Jan/11	Innisvale	0.49	83.70	12:24:10 PM
23	21/Jan/11	Plain View	0.55	110.1	12:24:14 PM
23	21/Jan/11	Illili	0.24	100.20	12:23:46 PM
23	21/Jan/11	Ivanhoe	0.56	80.70	12:26:48 PM
24	16/Feb/11	Innisvale	0.57	104.50	12:13:37 PM
24	16/Feb/11	Plain View	DNT	DNT	12:13:00 PM
24	16/Feb/11	Illili	1.45	106.10	12:13:13 PM
24	16/Feb/11	Ivanhoe	DNT	DNT	12:13:00 PM
25	21/Feb/11	Innisvale	DNT	DNT	12:09:00 PM
25	21/Feb/11	Plain View	1.73	97.7	12:09:27 PM
25	21/Feb/11	Illili	0.26	109.00	12:09:57 PM
25	21/Feb/11	Ivanhoe	DNT	DNT	12:09:00 PM

<b>SHOT NO.</b>	<b>DATE</b>	<b>MONITOR LOCATION</b>	<b>PEAK GROUND PRESSURE (mm/s)</b>	<b>PEAK OVERPRESSURE (dBL)</b>	<b>TIME</b>
26	16/Mar/11	Innisvale	0.49	108.30	12:02:56 PM
26	16/Mar/11	Plain View	DNT	DNT	12:02:00 PM
26	16/Mar/11	Illili	DNT	DNT	12:02:00 PM
26	16/Mar/11	Ivanhoe	DNT	DNT	12:02:00 PM
27	09/Apr/11	Innisvale	0.99	105.30	10:51:21 AM
27	09/Apr/11	Plain View	DNT	DNT	10:51:00 AM
27	09/Apr/11	Illili	DNT	DNT	10:51:00 AM
27	09/Apr/11	Ivanhoe	No data	No data	No data
28	03/May/11	Innisvale	0.52	128.80	11:02:41 AM
28	03/May/11	Plain View	0.40	120.6	11:02:59 AM
28	03/May/11	Ferndale	0.10	124.0	11:03:05 AM
28	03/May/11	Illili	0.13	120.30	11:03:26 AM
28	03/May/11	Ivanhoe	No Data	No Data	No Data
29	18/May/11	Innisvale	0.47	104.50	12:01:34 PM
29	18/May/11	Plain View	0.78	106.9	12:01:42 PM
29	18/May/11	Ferndale	No monitor available	No monitor available	
29	18/May/11	Illili	DNT	DNT	12:01:00 PM
29	18/May/11	Ivanhoe	0.42	103.30	12:01:47 PM
30	31/May/11	Innisvale	DNT	DNT	12:01:00 PM
30	31/May/11	Plain View	DNT	DNT	12:01:00 PM
30	31/May/11	Ferndale	DNT	DNT	12:01:00 PM
30	31/May/11	Illili	DNT	DNT	12:01:00 PM
30	31/May/11	Ivanhoe	DNT	DNT	12:01:00 PM
31	25/Jun/11	Innisvale	0.44	104.30	1:27:21 PM
31	25/Jun/11	Plain View	0.50	115.9	1:27:00 PM
31	25/Jun/11	Ferndale	0.72	104.8	1:27:21 PM
31	25/Jun/11	Illili	1.92	99.10	1:27:21 PM
31	25/Jun/11	Ivanhoe	0.69	90.50	1:27:21 PM
32	15/Jul/11	Innisvale	0.12	113.40	10:14:59 AM
32	15/Jul/11	Plain View	0.70	113.3	10:13:25 AM
32	15/Jul/11	Ferndale	No monitor available	No monitor available	
32	15/Jul/11	Illili	DNT	DNT	10:14:00 AM
32	15/Jul/11	Ivanhoe	0.11	112.80	10:12:11 AM
33	01/Aug/11	Innisvale	DNT	DNT	11:11:00 AM
33	01/Aug/11	Plain View	DNT	DNT	11:11:00 AM
33	01/Aug/11	Ferndale	No monitor available	No monitor available	
33	01/Aug/11	Illili	DNT	DNT	11:11:00 AM
33	01/Aug/11	Ivanhoe	DNT	DNT	11:11:00 AM
34	11/Aug/11	Innisvale	DNT	DNT	3:03:00 PM
34	11/Aug/11	Plain View	0.70	105.9	3:03:25 PM
34	11/Aug/11	Ferndale	No monitor available	No monitor available	
34	11/Aug/11	Illili	DNT	DNT	3:03:00 PM
34	11/Aug/11	Ivanhoe	0.58	81.02	3:03:10 PM

<b>SHOT NO.</b>	<b>DATE</b>	<b>MONITOR LOCATION</b>	<b>PEAK GROUND PRESSURE (mm/s)</b>	<b>PEAK OVERPRESSURE (dBL)</b>	<b>TIME</b>
35	29/Aug/11	Innisvale	0.72	109.70	10:10:58 AM
35	29/Aug/11	Plain View	0.54	113.5	10:10:58 AM
35	29/Aug/11	Ferndale	0.38	110.20	10:11:21 AM
35	29/Aug/11	Illili	0.1	113.40	10:11:05 AM
35	29/Aug/11	Ivanhoe	0.91	84.51	10:11:12 AM
36	31/Aug/11	Innisvale	DNT	DNT	12:12:00 PM
36	31/Aug/11	Plain View	DNT	DNT	12:12:00 PM
36	31/Aug/11	Ferndale	DNT	DNT	12:12:00 PM
36	31/Aug/11	Illili	DNT	DNT	12:12:00 PM
36	31/Aug/11	Ivanhoe	DNT	DNT	12:12:00 PM
37	14/Sep/11	Innisvale	0.58	112.00	12:03:39 PM
37	14/Sep/11	Plain View	DNT	DNT	12:03:00 PM
37	14/Sep/11	Ferndale	DNT	DNT	12:03:00 PM
37	14/Sep/11	Illili	DNT	DNT	12:03:00 PM
37	14/Sep/11	Ivanhoe	DNT	DNT	12:03:00 PM
38	25/Oct/11	Innisvale	DNT	DNT	11:59:00 AM
38	25/Oct/11	Plain View	1.31	115.1	11:59:20 AM
38	25/Oct/11	Ferndale	0.52	88.80	11:59:23 AM
38	25/Oct/11	Illili	0.41	102.60	11:59:22 AM
38	25/Oct/11	Ivanhoe	1.37	110.80	11:59:30 AM
39	28/Oct/11	Innisvale	DNT	DNT	12:01:00 PM
39	28/Oct/11	Plain View	DNT	DNT	12:01:00 PM
39	28/Oct/11	Ferndale	DNT	DNT	12:01:00 PM
39	28/Oct/11	Illili	DNT	DNT	12:01:00 PM
39	28/Oct/11	Ivanhoe	DNT	DNT	12:01:00 PM
40	10/Nov/11	Innisvale	DNT	DNT	1:20:00 PM
40	10/Nov/11	Plain View	DNT	DNT	1:20:00 PM
40	10/Nov/11	Ferndale	DNT	DNT	1:20:00 PM
40	10/Nov/11	Illili	DNT	DNT	1:20:00 PM
40	10/Nov/11	Ivanhoe	DNT	DNT	1:20:00 PM
41	08/Dec/11	Innisvale	0.39	109.4	12:00:22 PM
41	08/Dec/11	Plain View	0.37	109.9	12:00:23 PM
41	08/Dec/11	Ferndale	0.08	109.5	12:00:29 PM
41	08/Dec/11	Illili	DNT	DNT	12:00:00PM
41	08/Dec/11	Ivanhoe	0.51	110.7	12:00:22 PM
42	05/Jan/12	Innisvale	DNT	DNT	3:40:00 PM
42	05/Jan/12	Plain View	DNT	DNT	3:40:00 PM
42	05/Jan/12	Ferndale	DNT	DNT	3:40:00 PM
42	05/Jan/12	Illili	DNT	DNT	3:40:00 PM
42	05/Jan/12	Ivanhoe	DNT	DNT	3:40:00 PM

<b>SHOT NO.</b>	<b>DATE</b>	<b>MONITOR LOCATION</b>	<b>PEAK GROUND PRESSURE (mm/s)</b>	<b>PEAK OVERPRESSURE (dBL)</b>	<b>TIME</b>
43	18/Jan/12	Innisvale	0.11	114.7	12:01:22 PM
43	18/Jan/12	Plain View	0.11	122.2	12:01:22 PM
43	18/Jan/12	Ferndale	0.10	116.4	12:01:23 PM
43	18/Jan/12	Illili	DNT	DNT	12:01:00 PM
43	18/Jan/12	Ivanhoe	0.73	111.8	12:01:16 PM
44	25/Jan/12	Innisvale	0.98	109.8	11:42:12 AM
44	25/Jan/12	Plain View	0.72	104.1	11:42:12 AM
44	25/Jan/12	Ferndale	No monitor available	No monitor available	
44	25/Jan/12	Illili	0.36	112.5	11:43:14 AM
44	25/Jan/12	Ivanhoe	2.15	111.3	11:42:13 AM
45	11/Feb/12	Innisvale	0.86	112.5	11:04:23 AM
45	11/Feb/12	Plain View	2.30	107.0	11:04:21 AM
45	11/Feb/12	Ferndale	0.67	104.8	11:04:23 AM
45	11/Feb/12	Illili	DNT	DNT	11:04:00 AM
45	11/Feb/12	Ivanhoe	1.20	111.4	11:04:23 AM
46	01/Mar/12	Innisvale	Monitor Malfunction	Monitor Malfunction	
46	01/Mar/12	Plain View	0.36	105.9	12:03:01 PM
46	01/Mar/12	Ferndale	No monitor available	No monitor available	
46	01/Mar/12	Illili	1.07	102.5	12:03:00 PM
46	01/Mar/12	Ivanhoe	0.96	102.9	12:02:23 PM
47	08/Mar/12	Innisvale	0.33	105.3	11:59:59 AM
47	08/Mar/12	Plain View	DNT	DNT	12:00:00 PM
47	08/Mar/12	Ferndale	DNT	DNT	12:00:00 PM
47	08/Mar/12	Illili	DNT	DNT	12:00:00 PM
47	08/Mar/12	Ivanhoe	0.40	106.1	11:59:59 AM
48	21/Mar/12	Innisvale	DNT	DNT	12:00:00 PM
48	21/Mar/12	Plain View	DNT	DNT	12:00:00PM
48	21/Mar/12	Ferndale	DNT	DNT	12:00:00 PM
48	21/Mar/12	Illili	DNT	DNT	12:00:00PM
48	21/Mar/12	Ivanhoe	DNT	DNT	12:00:00PM
49	26/Mar/12	Innisvale	DNT	DNT	11:57:00 AM
49	26/Mar/12	Plain View	1.17	99.62	11:57:31 AM
49	26/Mar/12	Ferndale	0.33	100.5	11:57:52 AM
49	26/Mar/12	Illili	DNT	DNT	11:57:00 AM
49	26/Mar/12	Ivanhoe	1.02	105.0	11:57:30 AM
50	04/Apr/12	Innisvale	0.29	101.3	1:03:01 PM
50	04/Apr/12	Plain View	0.37	98.6	1:03:00 PM
50	04/Apr/12	Ferndale	DNT	DNT	1:03:00 PM
50	04/Apr/12	Illili	DNT	DNT	1:03:00 PM
50	04/Apr/12	Ivanhoe	DNT	DNT	1:03:00 PM

<b>SHOT NO.</b>	<b>DATE</b>	<b>MONITOR LOCATION</b>	<b>PEAK GROUND PRESSURE (mm/s)</b>	<b>PEAK OVERPRESSURE (dBL)</b>	<b>TIME</b>
51	07/May/12	Innisvale	0.55	103.5	3:59:26 PM
51	07/May/12	Plain View	1.07	107.9	3:59:39 PM
51	07/May/12	Ferndale	0.49	102.1	1:59:32 PM
51	07/May/12	Illili	DNT	DNT	3:59:00 PM
51	07/May/12	Ivanhoe	0.96	104.2	3:59:37 PM
52	10/May/12	Innisvale	DNT	DNT	12:12:00 PM
52	10/May/12	Plain View	DNT	DNT	12:12:00 PM
52	10/May/12	Ferndale	DNT	DNT	12:12:00 PM
52	10/May/12	Illili	DNT	DNT	12:12:00 PM
52	10/May/12	Ivanhoe	0.30	97.5	12:12:43 PM
53	22/May/12	Innisvale	1.80	101.1	12:03:00 PM
53	22/May/12	Plain View	0.90	107.6	12:03:00 PM
53	22/May/12	Ferndale	DNT	DNT	12:03:00 PM
53	22/May/12	Illili	DNT	DNT	12:03:00 PM
53	22/May/12	Ivanhoe	1.06	107.0	12:03:00 PM
54	15/Jun/12	Innisvale	DNT	DNT	11:58:00 AM
54	15/Jun/12	Plain View	DNT	DNT	11:58:00 AM
54	15/Jun/12	Ferndale	0.31	99.4	12:00:19 PM
54	15/Jun/12	Illili	0.24	100.2	11:59:33 AM
54	15/Jun/12	Ivanhoe	0.44	99.5	11:58:57 AM
55	04/Jul/12	Innisvale	0.70	103.5	11:58:40 AM
55	04/Jul/12	Plain View	0.80	106.1	11:56:57AM
55	04/Jul/12	Ferndale	0.61	104.8	11:58:04 AM
55	04/Jul/12	Illili	0.24	108.9	11:57:55 AM
55	04/Jul/12	Ivanhoe	0.48	106.9	11:57:43 AM
56	18/Jul/12	Innisvale	DNT	DNT	11:58:00AM
56	18/Jul/12	Plain View	DNT	DNT	11:58:00AM
56	18/Jul/12	Ferndale	DNT	DNT	11:58:00 AM
56	18/Jul/12	Illili	0.25	100.9	11:58:17 AM
56	18/Jul/12	Ivanhoe	DNT	DNT	11:58:00AM
57	23/Jul/12	Innisvale	0.05	108.9	12:03:18 PM
57	23/Jul/12	Plain View	0.05	109.9	12:02:04 PM
57	23/Jul/12	Ferndale	0.18	104.3	12:02:36 PM
57	23/Jul/12	Illili	DNT	DNT	12:02:00 PM
57	23/Jul/12	Ivanhoe	DNT	DNT	12:02:00 PM
58	03/Aug/12	Innisvale	0.93	101.8	12:02:19 PM
58	03/Aug/12	Plain View	1.10	114.8	12:02:26 PM
58	03/Aug/12	Ferndale	1.05	108.1	12:02:20 PM
58	03/Aug/12	Illili	0.26	104.0	12:02:13 PM
58	03/Aug/12	Ivanhoe	0.35	107.5	12:03:03 PM

<b>SHOT NO.</b>	<b>DATE</b>	<b>MONITOR LOCATION</b>	<b>PEAK GROUND PRESSURE (mm/s)</b>	<b>PEAK OVERPRESSURE (dBL)</b>	<b>TIME</b>
59	31/Aug/12	Innisvale	1.08	102.1	11:59:04 AM
59	31/Aug/12	Plain View	0.67	110.6	11:58:44 AM
59	31/Aug/12	Ferndale	0.66	109.8	11:58:49 AM
59	31/Aug/12	Illili	0.35	109.7	11:59:45 AM
59	31/Aug/12	Ivanhoe	0.62	104.9	11:58:04 AM
60	27/Sep/12	Innisvale	DNT	DNT	12:02:00 PM
60	27/Sep/12	Plain View	1.07	111.2	12:02:08 PM
60	27/Sep/12	Ferndale	0.57	108.3	12:02:08 PM
60	27/Sep/12	Illili	0.45	107.5	12:02:08 PM
60	27/Sep/12	Ivanhoe	0.79	104.9	12:01:37 PM
61	24/Jan/14	Innisvale	0.21	97.5	11:10:38 AM
61	24/Jan/14	Plain View	0.21	104.8	11:10:38 AM
61	24/Jan/14	Illili	0.16	97.5	11:10:38 AM
61	24/Jan/14	Ivanhoe	0.24	98.5	11:10:38 AM
62	21/Feb/14	Innisvale	0.24	105.5	12:40:37 PM
62	21/Feb/14	Plain View	0.18	112.2	12:40:37 PM
62	21/Feb/14	Illili	0.16	111.1	12:40:37 PM
62	21/Feb/14	Ivanhoe	0.31	106.9	12:40:37 PM
63	26/Feb/14	Innisvale	0.36	126.1	12:57:30 PM
63	26/Feb/14	Plain View	0.25	122.8	12:57:30 PM
63	26/Feb/14	Illili	0.14	112.1	12:57:30 PM
63	26/Feb/14	Ivanhoe	0.35	118.0	12:57:30 PM
64	17/Mar/14	Innisvale	0.14	100.8	11:57:44 AM
64	17/Mar/14	Plain View	0.17	109.4	11:57:44 AM
64	17/Mar/14	Illili	0.09	101.5	11:57:44 AM
64	17/Mar/14	Ivanhoe	0.14	98.0	11:57:44 AM

\* Orica believes the monitor was triggered by something other than the blast. This assumption is based on the high overpressure and very low ground pressure

DNT = Did Not Trigger