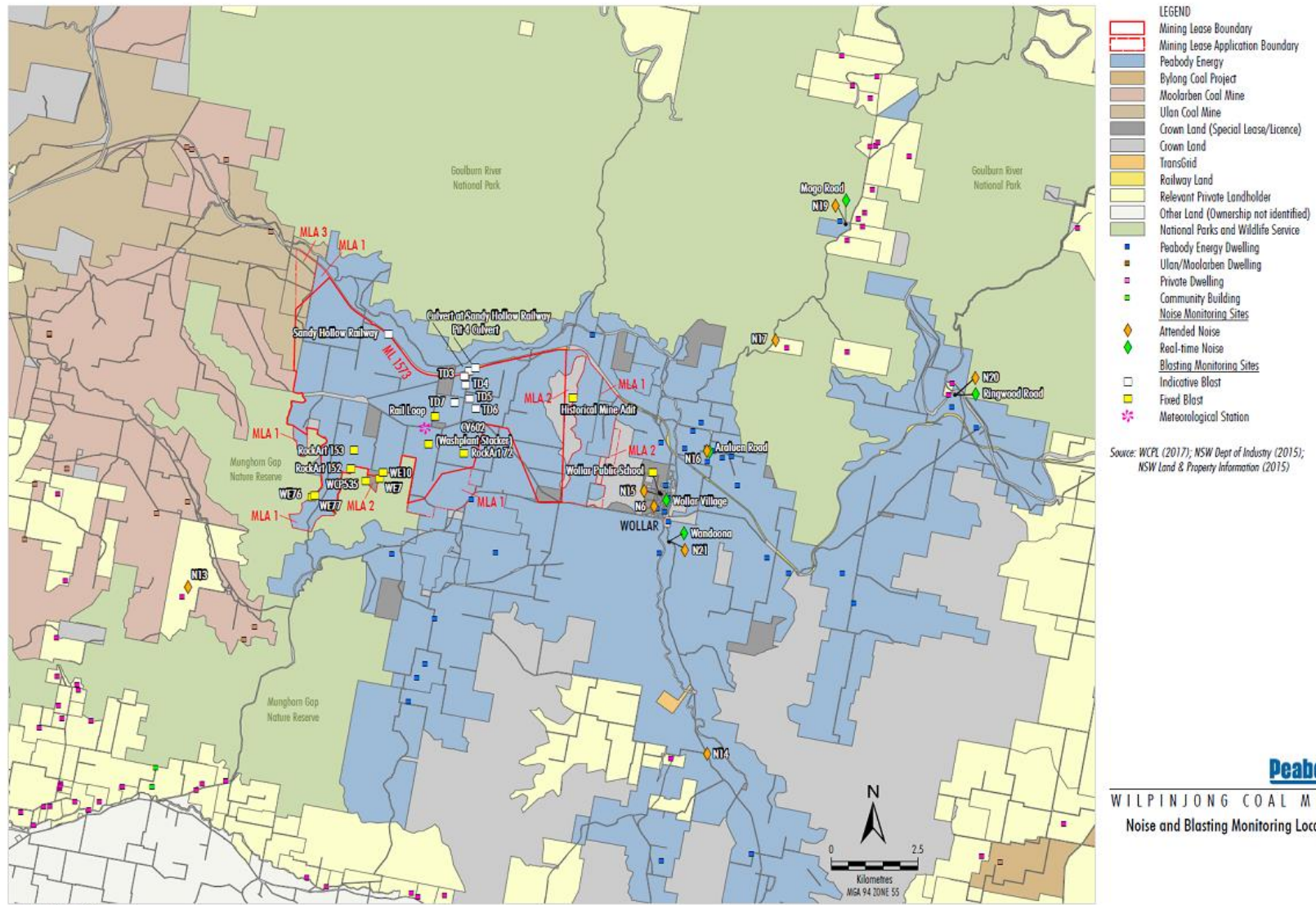


APPENDIX 3E – BLAST MONITORING DATA

Blast Monitoring Locations



WIL-12-11_EMS 2017_2018



Figure 1 – Blast Monitoring Locations (Wollar)

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
1814	02-Jan-18	12:19:00	5	4	16-20	PS	120	115	5	10	93.7	0.13
1822	02-Jan-18	12:19:00	4	18-19	10-13	PS	120	115	5	10		
1833	04-Jan-18	15:27:00	2	58	03-07	EG	120	115	5	10	94.1	0.04
1815	05-Jan-18	12:39:00	5	4	16-20	OB	120	115	5	10	85.8	0.14
1834	05-Jan-18	15:30:00	1	34	04-06	DP	120	115	5	10	82.6	0.05
1836	06-Jan-18	11:27:00	5	48	20-24	PS	120	115	5	10	81.5	0.03
1837	08-Jan-18	11:32:00	1	34	08-10	PS	120	115	5	10	89.6	0.04
1836	08-Jan-18	11:32:00	5	48	20-24	PS	120	115	5	10		
1839	10-Jan-18	11:34:00	2	59	03-07	PS	120	115	5	10	89	0.15
1830	11-Jan-18	12:40:00	4	18	10-13	OB	120	115	5	10	107.5	0.43
1835	12-Jan-18	11:27:00	5	48	17-20	PS	120	115	5	10	79.1	0.05
1844	13-Jan-18	14:56:00	6	7	12-17	CD	120	115	5	10	99.8	0.03
1843	15-Jan-18	11:38:00	5	48	25-26	OB	120	115	5	10	105.9	0.13
1841	15-Jan-18	11:38:00	5	48	17-20	OB	120	115	5	10		
1845	16-Jan-18	14:57:00	1	34	04-06	EG	120	115	5	10	82.6	0.08
1842	18-Jan-18	11:30:00	5	54	07-13	PS	120	115	5	10	88.3	0.05
1840	20-Jan-18	11:35:00	2	59	03-07	OB	120	115	5	10	92.4	0.25
1846	22-Jan-18	11:34:00	7	16	01-07	PS	120	115	5	10	100.9	0.5
1850	22-Jan-18	15:36:00	5	48	21-22	OB	120	115	5	10	81.2	0.12
1847	23-Jan-18	11:26:00	5	54	07-13	OB	120	115	5	10	94.4	0.06
1851	25-Jan-18	12:48:00	3	7	16-20	BP	120	115	5	10	97.8	0.15
1853	27-Jan-18	14:30:00	6	7	12-17	EG	120	115	5	10	80.8	0.04

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
1852	29-Jan-18	12:24:00	5	4	16-21	BP	120	115	5	10	97.1	0.03
1849	05-Feb-18	15:06:00	7	16	1-3	OB	120	115	5	10	102.9	2.18
1847.5	07-Feb-18	15:01:00	5	54	07-13	OB	120	115	5	10	70.2	0.11
1858	09-Feb-18	11:28:00	3	11	10-15	BP	120	115	5	10	98.9	0.26
1857	10-Feb-18	14:56:00	5	48	16-20	BP	120	115	5	10	82.7	0.07
1859	10-Feb-18	12:14:00	5	4	16-20	DP	120	115	5	10	96.2	0.04
1863	13-Feb-18	11:36:00	6	8	14	OB	120	115	5	10	86.5	0.04
1854	13-Feb-18	11:36:00	6	8	12-17	OB	120	115	5	10		
1861	13-Feb-18	15:05:00	1	34	10-11	DP	120	115	5	10	100.6	0.02
1859	15-Feb-18	11:29:00	5	4	16-20	DP	120	115	5	10	86.1	0.05
1859	17-Feb-18	11:27:00	5	4	16-20	DP	120	115	5	10	92.6	0.29
1860	19-Feb-18	14:17:00	3	7	16-20	DP	120	115	5	10	88.8	0.41
1848	19-Feb-18	14:17:00	3	8	16-20	PS	120	115	5	10		
1865	23-Feb-18	11:30:00	5	48	17-19	DP	120	115	5	10	79.1	0.02
1855	24-Feb-18	12:08:00	5	3	16	PS	120	115	5	10	96.6	0.08
1866	24-Feb-18	12:08:00	5	4	16-21	EG	120	115	5	10		
1864	26-Feb-18	12:40:00	1	34	9-10	EG	120	115	5	10	79.3	0.11
1868	26-Feb-18	15:25:00	4	18	09-13	BP	120	115	5	10	88.4	0.06
1869	02-Mar-18	11:07:00	5	3	16-27	OB	120	115	5	10	93	0.31
1870	03-Mar-18	11:33:00	3	11	10-15	DP	120	115	5	10	100.8	0.31
1872	05-Mar-18	11:29:00	5	48	24-26	DP	120	115	5	10	75.9	0.08
1876	05-Mar-18	15:22:00	5	54	07-9	DP	120	115	5	10	89.4	0.03
1876.5	06-Mar-18	15:04:00	5	54	7-9	DP	120	115	5	10	99.2	0.04
1869.5	12-Mar-18	12:54:00	5	3	16-20	OB	120	115	5	10	99.6	0.27

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
1877	12-Mar-18	12:54:00	5	3	27	OB	120	115	5	10		
1874	12-Mar-18	15:30:00	7	16	05-07	DP	120	115	5	10	95.3	0.32
1880	14-Mar-18	11:41:00	5	48	17-19	EG	120	115	5	10	76.2	0.02
1882	16-Mar-18	12:41:00	4	18	10-13	DP	120	115	5	10	88.7	0.11
1881	16-Mar-18	12:41:00	3	7	16-21	EG	120	115	5	10		
1867	17-Mar-18	15:28:00	6	8	12-14	OB	120	115	5	10	82.9	0.12
1883	19-Mar-18	11:22:00	5	48	24-26	EG	120	115	5	10	83.6	0.02
1879	20-Mar-18	11:36:00	3	8	16	PS	120	115	5	10	86.1	0.28
1884	21-Mar-18	12:25:00	5	54	7-13	EG	120	115	5	10	100.1	0.04
1885	23-Mar-18	15:34:00	3	11	10-15	EG	120	115	5	10	82.1	0.1
1871	26-Mar-18	15:00:00	2	59	03-07	BP	120	115	5	10	97.5	0.13
1888	27-Mar-18	15:31:00	7	16	05-07	EG	120	115	5	10	88.3	0.13
1869.75	28-Mar-18	15:40:00	5	3	16-18	OB	120	115	5	10	95.3	0.15
1887	29-Mar-18	15:40:00	4	18	09-13	EG	120	115	5	10	84.6	0.06
1890	03-Apr-18	12:36:00	7	16	01-03	BP	120	115	5	10	94.4	0.15
1889	05-Apr-18	12:31:00	5	3	21-27	BP	120	115	5	10	76.5	0.06
1875	06-Apr-18	15:25:00	3	12	10-15	PS	120	115	5	10	90.7	0.44
1896	07-Apr-18	15:19:00	1	35	09-10	DP	120	115	5	10	87.8	0.05
1873	09-Apr-18	13:01:00	3	8	16-21	OB	120	115	5	10	104.6	1.36
1886	11-Apr-18	11:29:00	6	8	14-17	O/B	120	115	5	10	95.9	0.08
1891	11-Apr-18	11:29:00	6	8	12	PS	120	115	5	10		
1898	12-Apr-18	15:06:00	2	59	03-07	BP	120	115	5	10	98.8	0.05
1894	13-Apr-18	12:58:00	5	3	16-21	BP	120	115	5	10	86.8	0.04
1906	16-Apr-18	12:32:00	3	9	16	OB	120	115	5	10	99	0.63

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
1904	17-Apr-18	15:29:00	7	16	01-03	DP	120	115	5	10	91	0.18
1907	18-Apr-18	15:27:00	1	35	4-10	EG	120	115	5	10	84.9	0.03
1905	20-Apr-18	9:24:00	5	55	7-13	PS	120	115	5	10	79.1	0.04
1895	20-Apr-18	12:32:00	4	19	10-13	PS	120	115	5	10	87.3	0.29
1907.5	21-Apr-18	15:24:00	1	35	04-10	EG	120	115	5	10	75.9	0.03
1893	23-Apr-18	11:41:00	3	12	10-15	OB	120	115	5	10	96.6	1.54
1899	24-Apr-18	12:19:00	5	49	24	OB	120	115	5	10	67	0.1
1897	24-Apr-18	12:19:00	5	49	24-30	PS	120	115	5	10		
1908	26-Apr-18	14:51:00	2	59	5-7	DP	120	115	5	10	96.9	0.12
1912	27-Apr-18	12:38:00	5	3	16-20	DC	120	115	5	10	91.6	0.09
1901	30-Apr-18	15:31:00	7	13	8-13	PS	120	115	5	10	99.9	0.65
1911	01-May-18	11:36:00	5	49	27-28	OB	120	115	5	10	78	0.16
1913	04-May-18	11:30:00	6	8	12-17	BP	120	115	5	10	98	0.04
1914	05-May-18	11:30:00	7	16	01-03	EG	120	115	5	10	91	0.1
1915	07-May-18	11:31:00	6	6	09-11	PS	120	115	5	10	80.8	0.05
1917	08-May-18	15:04:00	5	3	21-27	EG	120	115	5	10	75.5	0.04
1900	09-May-18	14:07:00	4	19	8-13	OB	120	115	5	10	108	0.61
1910	10-May-18	11:36:00	5	55	07-13	OB	120	115	5	10	103.2	0.08
1920	12-May-18	11:55:00	2	59	03-07	EG	120	115	5	10	90.8	0.04
1922	14-May-18	12:31:00	5	3	16-21	EG	120	115	5	10	79.7	0.03
1903	16-May-18	12:54:00	7	13	08-13	OB	120	115	5	10	108.4	1.74
1916	18-May-18	10:08:00	2	44	11-17	PS	120	115	5	10	97.1	0.19
1919	18-May-18	10:08:00	2	60	03-07	PS	120	115	5	10		
1921	19-May-18	11:29:00	1	36	09-10	OB	120	115	5	10	87.3	0.03

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
1925	21-May-18	12:27:00	3	8	16-20	BP	120	115	5	10	93.5	0.27
1925.5	22-May-18	12:21:00	3	8	16-20	BP	120	115	5	10	93.8	0.04
1918	25-May-18	11:30:00	6	8	8-11	OB	120	115	5	10	85.2	0.18
1924	28-May-18	11:34:00	2	60	03-07	OB	120	115	5	10	95.7	0.37
1929	28-May-18	15:25:00	1	33	01-03	PS	120	115	5	10	97.1	0.08
1933	29-May-18	11:25:00	1	36	09-10	DP	120	115	5	10	91.1	0.02
1923	31-May-18	12:35:00	5	2	19-25	PS	120	115	5	10	89.4	0.07
1932	01-Jun-18	15:01:00	6	8	12/17	EG	120	115	5	10	90.2	0.02
1931	02-Jun-18	14:55:00	3	12	10-15	BP	120	115	5	10	91.4	0.18
1936	04-Jun-18	11:45:00	5	55	07-09	BP	120	115	5	10	80.2	0.04
1938	04-Jun-18	11:45:00	5	55	11-12	DP	120	115	5	10		
1937	07-Jun-18	11:33:00	1	36	04-06	DP	120	115	5	10	86.7	0.05
1926	08-Jun-18	12:31:00	5	2	19-25	OB	120	115	5	10	104.1	0.31
1902	12-Jun-18	14:59:00	2	44	11-17	OB	120	115	5	10	109.1	0.18
1942	13-Jun-18	15:26:00	4	19	09-13	BP	120	115	5	10	96.8	0.11
1939	13-Jun-18	15:26:00	3	8	16-21	DP	120	115	5	10		
1946	14-Jun-18	11:23:00	1	36	04-10	EG	120	115	5	10	85.9	0.02
1949	14-Jun-18	14:50:00	2	60	04	OB	120	115	5	10	91.8	0.02
1940	15-Jun-18	12:31:00	5	2	10-18	OB	120	115	5	10	101.1	0.12
1943	16-Jun-18	11:20:00	5	55	08-09	DP	120	115	5	10	89.3	0.02
1930	18-Jun-18	12:20:00	1	33	01-03	OB	120	115	5	10	92.3	0.24
1946.5	18-Jun-18	12:20:00	1	36	04-10	EG	120	115	5	10		
1945	19-Jun-18	12:32:00	3	12	10-15	DP	120	115	5	10	98.2	0.2
1947	22-Jun-18	11:30:00	5	49	24-28	BP	120	115	5	10	72.5	0.09

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
1948	22-Jun-18	11:30:00	5	50	24-28	PS	120	115	5	10		
1935	23-Jun-18	12:31:00	3	9	16-21	PS	120	115	5	10	105.1	0.48
1951	25-Jun-18	12:40:00	4	20	09-13	PS	120	115	5	10	93.1	0.16
1952	25-Jun-18	12:40:00	4	19	09-13	DP	120	115	5	10		
1956	26-Jun-18	15:05:00	5	55	09-11	EG	120	115	5	10	83.3	0.06
1941	26-Jun-18	15:05:00	5	56	09-11	PS	120	115	5	10		
1955	30-Jun-18	14:58:00	2	60	04-07	BP	120	115	5	10	103.6	0.18
1927	02-Jul-18	12:32:00	7	3	13-20	PS	120	115	5	10	102.4	1.12
1928	02-Jul-18	12:32:00	7	3	13-20	OB	120	115	5	10		
1957	04-Jul-18	11:32:00	3	13	08-13	BP	120	115	5	10	96.2	0.46
1962	09-Jul-18	11:25:00	5	49	24-26	DP	120	115	5	10	77.2	0.07
1948.5	09-Jul-18	11:25:00	5	50	24-28	PS	120	115	5	10		
1954	09-Jul-18	14:55:00	5	56	07-13	OB	120	115	5	10	84.2	0.05
1958	10-Jul-18	14:48:00	5	2	21-25	BP	120	115	5	10	76.9	0.07
1964	11-Jul-18	12:42:00	3	8	16-21	EG	120	115	5	10	95	0.06
1965	13-Jul-18	12:38:00	4	19	09-13	EG	120	115	5	10	88.5	0.03
1959	14-Jul-18	15:01:00	2	61	04-07	PS	120	115	5	10	96.3	0.11
1963	16-Jul-18	13:06:00	5	1	21-27	PS	120	115	5	10	95	0.04
1966	19-Jul-18	14:55:00	2	44	11-15	BP	120	115	5	10	94.2	0.2
1967	21-Jul-18	15:43:00	3	12	10-15	EG	120	115	5	10	97.8	0.58
1968	21-Jul-18	15:43:00	3	13	10-15	PS	120	115	5	10		
1950	24-Jul-18	12:48:00	3	9	16-21	OB	120	115	5	10	100.8	0.95
1969	26-Jul-18	12:16:00	7	13	08-13	DP	120	115	5	10	103	0.66
1970	28-Jul-18	11:34:00	5	49	24-28	EG	120	115	5	10	78.6	0.03

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
1977	28-Jul-18	11:34:00	5	56	11	BP	120	115	5	10		
1953	30-Jul-18	12:51:00	4	20	09-13	OB	120	115	5	10	90.2	0.49
1974	31-Jul-18	15:05:00	2	60	04-07	BP	120	115	5	10	98.4	0.07
1972	01-Aug-18	11:40:00	3	14	10	OB	120	115	5	10	87.6	0.24
1975	02-Aug-18	11:43:00	6	14	09-10	OB	120	115	5	10	84.6	0.07
1978	03-Aug-18	12:27:00	5	2	16-21	EG	120	115	5	10	94.4	0.03
1973	04-Aug-18	11:31:00	6	9	12-14	PS	120	115	5	10	98	0.04
1980	04-Aug-18	11:31:00	6	9	15-17	PS	120	115	5	10		
1982	07-Aug-18	12:52:00	5	2	21-25	EG	120	115	5	10	89.8	0.03
1988	07-Aug-18	15:01:00	2	44	11-15	BP	120	115	5	10	105.3	0.05
1976	08-Aug-18	11:46:00	3	13	11-13	OB	120	115	5	10	100.2	0.79
1987	11-Aug-18	15:02:00	5	57	7-13		120	115	5	10	105.4	0.08
1984	11-Aug-18	15:02:00	5	56	10-12	DP	120	115	5	10		
1979	11-Aug-18	15:02:00	5	56	7-9	DP	120	115	5	10		
1981	11-Aug-18	11:37:00	6	9	14-17	OB	120	115	5	10	92	0.05
1985	13-Aug-18	15:01:00	2	60	07-09	DP	120	115	5	10	103.1	0.11
1989	15-Aug-18	11:36:00	7	13	8-13	EG	120	115	5	10	93.9	0.21
1971	16-Aug-18	12:40:00	4	20	09-11	OB	120	115	5	10	91.2	0.06
1993	17-Aug-18	12:35:00	1	35	1-3	BP	120	115	5	10	91.7	0.06
1986	18-Aug-18	9:42:00	7	14	8-13	EG	120	115	5	10	116.7	1.2
1994	21-Aug-18	11:35:00	6	6	8-12	BP	120	115	5	10	94.6	0.03
1995	22-Aug-18	11:16:00	5	56	7-13	EG	120	115	5	10	88.7	0.02
1996	27-Aug-18	14:53:00	2	44	11-16	DP	120	115	5	10	95.3	0.13
1992	28-Aug-18	11:30:00	5	57	7-12	OB	120	115	5	10	78.6	0.04

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
2001	29-Aug-18	11:32:00	5	50	24	OB	120	115	5	10	103.1	0.08
1998	29-Aug-18	15:10:00	3	13	12	PS	120	115	5	10	91.3	0.53
1999	01-Sep-18	14:56:00	2	60	4-7	EG	120	115	5	10	98.2	0.06
2002	03-Sep-18	11:25:00	1	33	4-7	BP	120	115	5	10	88.9	0.11
1991	04-Sep-18	15:41:00	5	1	26	OB	120	115	5	10	95.3	0.09
1997	06-Sep-18	12:52:00	3	9	16-21	BP	120	115	5	10	91	0.17
2011	10-Sep-18	15:12:00	6	9	14-17	BP	120	115	5	10	73.5	0.03
2008	12-Sep-18	14:56:00	7	4	13-20	BP	120	115	5	10	103.4	0.44
1983	17-Sep-18	11:35:00	3	13	10-15	OB	120	115	5	10	95.2	2
2004	17-Sep-18	15:34:00	1	35	01-03	DP	120	115	5	10	85.1	0.08
2003	20-Sep-18	11:28:00	2	44	11-17	EG	120	115	5	10	92.4	0.08
2006	21-Sep-18	12:28:00	5	1	21	OB	120	115	5	10	89.4	0.12
2005	22-Sep-18	11:23:00	6	6	8-12	EG	120	115	5	10	70.8	0.03
2010	22-Sep-18	15:18:00	5	50	27-28	OB	120	115	5	10	91.3	0.12
2008.5	24-Sep-18	11:33:00	7	3	13-20	BP	120	115	5	10	92.7	0.2
2014	25-Sep-18	11:35:00	5	57	7-12	BP	120	115	5	10	76.2	0.02
2012	26-Sep-18	15:07:00	1	33-34	1-3	DP	120	115	5	10	78.6	0.07
2013	28-Sep-18	12:29:00	4	20	12-13	OB	120	115	5	10	100.6	0.18
2015	28-Sep-18	12:29:00	3	9	16-21	DP	120	115	5	10		
2009	29-Sep-18	15:25:00	5	50	26-27	OB	120	115	5	10	71.4	0.07
2016	02-Oct-18	11:29:00	6	7	9-11	PS	120	115	5	10	76.5	0.04
2019	03-Oct-18	11:30:00	5	57	7-12	DP	120	115	5	10	91.2	0.08
2018	04-Oct-18	11:29:00	1	35	1-3	EG	120	115	5	10	81.9	0.07
1960	04-Oct-18	15:06:00	2	61	04-07	OB	120	115	5	10	82.9	0.25

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
2020	08-Oct-18	11:37:00	7	4	13-16	DP	120	115	5	10	112.5	0.62
2021	09-Oct-18	14:59:00	6	7	9-11	OB	120	115	5	10	87.7	0.1
2022	12-Oct-18	12:49:00	5	1	22-24	OB	120	115	5	10	94.1	0.14
2025	13-Oct-18	12:30:00	5	50	24-28	BP	120	115	5	10	97.4	0.06
2024	15-Oct-18	11:41:00	6	9	12-15	EG	120	115	5	10	83	0.03
2026	16-Oct-18	13:20:00	4	20	9-13	BP	120	115	5	10	90.1	0.09
2030	17-Oct-18	14:53:00	1	33	01-03	EG	120	115	5	10	82.9	0.06
2028	22-Oct-18	12:40:00	3	9	16-21	EG	120	115	5	10	88.2	0.11
2033	23-Oct-18	14:43:00	5	57	07-13	EG	120	115	5	10	96	0.02
2007	24-Oct-18	15:08:00	6	9	12-14	OB	120	115	5	10	94.7	0.1
2023	26-Oct-18	12:52:00	5	1	24-25	OB	120	115	5	10	105	0.13
2027	27-Oct-18	15:00:00	7	4	13-16	EG	120	115	5	10	106.1	0.15
2017	29-Oct-18	12:28:00	3	10	16-21	PS	120	115	5	10	90.6	0.49
2034	30-Oct-18	11:23:00	5	50	24-28	BP	120	115	5	10	86.3	0.07
2029	31-Oct-18	15:38:00	7	3	13-16	DP	120	115	5	10	109.4	0.48
2044	02-Nov-18	12:30:00	1	37	1-10	OB	120	115	5	10	106.6	0.1
2041	02-Nov-18	15:20:00	6	7	9-11	BP	120	115	5	10	102.6	0.03
2042	05-Nov-18	12:30:00	4	20	9-13	DP	120	115	5	10	85.7	0.06
2000	05-Nov-18	15:25:00	7	14	8-13	OB	120	115	5	10	104.8	1.18
2031	06-Nov-18	15:00:00	2	45	11-17	PS	120	115	5	10	91.3	0.25
2045	07-Nov-18	10:30:00	5	58	7-13	PS	120	115	5	10	87.7	0.05
2039	08-Nov-18	14:58:00	6	8	09-11	PS	120	115	5	10	66	0.06
2046	10-Nov-18	12:29:00	5	58	7-13	OB	120	115	5	10	93.5	0.07
2051	12-Nov-18	11:25:00	7	3	13-16	EG	120	115	5	10	93.1	0.33

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
2047	13-Nov-18	12:46:00	5	1	27	OB	120	115	5	10	77.2	0.13
2000.5	15-Nov-18	15:28:00	7	14	12-14	OB	120	115	5	10	107.1	2.86
2043	16-Nov-18	11:19:00	1	37	1-10	BP	120	115	5	10	87.4	0.19
2048	16-Nov-18	15:14:00	5	1	21-23	OB	120	115	5	10	96.3	0.05
2053	17-Nov-18	12:26:00	3	13	10-15	BP	120	115	5	10	89.8	0.13
2059	19-Nov-18	11:39:00	6	7	8-12	EG	120	115	5	10	92	0.02
2036	20-Nov-18	11:37:00	2	62	4-7	PS	120	115	5	10	98.8	0.18
2037	20-Nov-18	11:37:00	2	61	03-07	BP	120	115	5	10		
2054	21-Nov-18	11:48:00	6	9	12-14	BP	120	115	5	10	98.8	0.03
2058	23-Nov-18	12:31:00	4	20	9-13	EG	120	115	5	10	105.3	0.1
2056	23-Nov-18	12:31:00	4	21	9-13	PS	120	115	5	10		
2050	24-Nov-18	11:32:00	6	8	8-12	OB	120	115	5	10	91.9	0.09
2052	24-Nov-18	15:24:00	5	50	24-28	EG	120	115	5	10	93.5	0.02
2060	26-Nov-18	11:24:00	7	3	17/18	BP	120	115	5	10	99.9	0.37
2049	28-Nov-18	12:32:00	6	6	19-24	PS	120	115	5	10	87.3	0.03
2062	29-Nov-18	13:09:00	5	58	7-13	DP	120	115	5	10	90.8	0.04
2064	30-Nov-18	11:34:00	5	1	21-24	BP	120	115	5	10	87	0.02
2068	01-Dec-18	16:04:00	3	13	10-15	DP	120	115	5	10	102	0.27
2065	03-Dec-18	13:02:00	5	1	24-27	BP	120	115	5	10	93.7	0.02
2032	04-Dec-18	12:42:00	3	10	16-21	OB	120	115	5	10	90.1	1.48
2068.5	05-Dec-18	11:30:00	3	13	10-15	DP	120	115	5	10	89.3	0.46
2072	05-Dec-18	11:30:00	3	14	10-13	PS	120	115	5	10		
2070	06-Dec-18	12:33:00	1	37	1-8	DP	120	115	5	10	86.5	0.13
2073	07-Dec-18	11:33:00	6	9	12-14	EG	120	115	5	10	70.8	0.03

Blast	Date	Time	Location			Type	Overpressure Max. Limit (dBL)	Overpressure Limit 5% Total Blasts (dBL)	Vibration Max. Limit (mm/s)	Vibration Limit 5% Total Blasts (mm/s)	Wollar Public School EPA Compliance Point	
			Pit	Strip	Block						IB/OB	Wollar Public School EPA Compliance Point Overpressure (dBL)
2066	08-Dec-18	11:27:00	5	59	7-13	PS	120	115	5	10	85.8	0.03
2071	10-Dec-18	11:27:00	7	3	18-19	DP	120	115	5	10	103	0.38
2074	10-Dec-18	14:50:00	5	58	7-13	EG	120	115	5	10	82.2	0.03
2055	11-Dec-18	15:18:00	2	45	14-17	OB	120	115	5	10	88.3	0.11
2069	19-Dec-18	13:25:00	6	6	18-24	OB	120	115	5	10	72.5	0.1
2078	19-Dec-18	13:25:00	6	9	9-11	PS	120	115	5	10	83.6	0.07
2081	19-Dec-18	13:25:00	6	8	9-11	BP	120	115	5	10		
2084	21-Dec-18	12:29:00	3	13	10-15	EG	120	115	5	10	89	0.1
2076	22-Dec-18	15:20:00	1	37	1-10	EG	120	115	5	10	82.2	0.08
2080	24-Dec-18	11:19:00	5	51	24-28	PS	120	115	5	10	73	0.03
2082	24-Dec-18	13:23:00	2	61	04-07	BP	120	115	5	10	92.7	0.1
2084.5	28-Dec-18	11:35:00	3	13	10-15	EG	120	115	5	10	87.3	0.04
2083	28-Dec-18	15:22:00	7	3-4	18-19	EG	120	115	5	10	96	0.17
2085	29-Dec-18	15:33:00	3	14	13-15	PS	120	115	5	10	98	0.3

Blasts Within 500 Metres of Rail Culvert 2018

Shot Id	Date fired	Time fired	BCM (m ³)	TYPE	MIC (Kg)	Culvert Pit3 (mm/s)	Culvert Pit5 (mm/s)
1857	10-Feb-18	14:56	45,053	BP	-	0.26	0.29
1860	19-Feb-18	14:17	137,533	DP	223	0.22	7
1855	24-Feb-18	12:08	135,070	PS	402	19.23	0.46
1868	26-Feb-18	15:25	57,460	BP	170	0.11	0.12
1869	2-Mar-18	11:07	673,458	OB	5,244	34.29	1.78
1877	12-Mar-18	12:54	540,170	OB	10,175	30.84	0.84
1882	16-Mar-18	12:41	220,001	DP	161	0.31	4.9
1869.75	28-Mar-18	15:40	310,284	OB	1,589	13.9	0.67
1887	29-Mar-18	15:40	102,713	EG	144	0.19	2.94
1889	5-Apr-18	12:31	82,083	BP	118	11.35	0.12
1873	9-Apr-18	13:01	336,896	OB	6,472	0.9	15.6
1894	13-Apr-18	12:58	48,047	BP	87	16.57	0.16
1895	20-Apr-18	12:32	15,686	PS	242	0.25	10.83
1912	27-Apr-18	12:38	133,537	DC	161	6.02	0.28
1917	8-May-18	15:04	92,891	EG	141	5.39	0.06
1900	9-May-18	14:07	405,719	OB	4,101	1.18	29.87
1922	14-May-18	12:31	81,432	EG	139	6.15	0.11
1925	21-May-18	12:27	118,574	BP	207	0.2	6.78
1923	31-May-18	12:35	33,587	PS	306	12.66	0.38
1926	8-Jun-18	12:31	757,772	OB	2,515	34.39	1.96
1942	13-Jun-18	15:26	145,168	BP	195	0.1	2.31
1940	15-Jun-18	12:31	67,558	OB	1,916	34.36	0.67
1935	23-Jun-18	12:31	25,886	PS	507	0.19	5
1952	25-Jun-18	12:40	77,077	DP	220	0.31	19.1
Shot Id	Date fired	Time fired	BCM (m ³)	TYPE	MIC (Kg)	Culvert Pit3 (mm/s)	Culvert Pit5 (mm/s)

1955	30-Jun-18	14:58	179,568	BP	717	0.3	0.3
1958	10-Jul-18	14:48	139,989	BP	176	15.36	0.25
1964	11-Jul-18	12:42	122,611	EG	140	0.07	2.13
1965	13-Jul-18	12:38	51,215	EG	147	0.13	2.56
1963	16-Jul-18	13:06	26,976	PS	114	21.16	0.2
1950	24-Jul-18	12:48	543,134	OB	6,535	0.4	11.48
1953	30-Jul-18	12:51	267,838	OB	1,722	0.6	28.84
1978	3-Aug-18	12:27	56,146	EG	66	5.08	0.14
1982	7-Aug-18	12:52	93,111	EG	150	5.06	0.06
1971	16-Aug-18	12:40	88,580	OB	151	0.09	6.92
1991	4-Sep-18	15:41	212,161	OB	175	6.24	0.57
1997	6-Sep-18	12:52	140,868	BP	290	0.1	3.09
2006	21-Sep-18	12:28	71,248	OB	178	37.85	0.57
2015	28-Sep-18	12:29	168,118	DP	207	0.15	10.06
2022	12-Oct-18	12:49	167,760	OB	268	61.25	0.71
2026	16-Oct-18	13:20	55,568	BP	160	0.12	6.75
2028	22-Oct-18	12:40	110,950	EG	171	0.09	2.42
2023	26-Oct-18	12:52	437,011	OB	877	16.83	0.8
2017	29-Oct-18	12:28	35,280	PS	476	0.22	4.92
2042	5-Nov-18	12:30	53,221	DP	186	0.2	7.1
2047	13-Nov-18	12:46	111,552	OB	123	11.52	0.67
2048	16-Nov-18	15:14	61,623	OB	102	25.42	0.25
2058	23-Nov-18	12:31	79,232	EG	140	0.27	9.61
2049	28-Nov-18	12:32	22,173	PS	322	0.15	0.16
2064	30-Nov-18	11:34	67,804	BP	54	6.98	0.08
2065	3-Dec-18	13:02	79,719	BP	127	0.43	11.07
2032	4-Dec-18	12:42	1,221,369	OB	7,262	1.65	0.08