APPENDIX A. Pressure front calculations per weight of explosive. Developed by John Long. Provided by Eastridge, J. 1998. U. S. Department of Agriculture, Agricultural Research Service, Beltsville, MD, 20705.

Table 1. Pressure (psi) by weight (g) of binary explosive

Radius	Pressure (psi) by weight (g) of binary explosive													
in	30 g	40 g	50 g	60 g	75 g	100 g	150 g	200 g	250 g	300 g	350 g	400 g	450 g	500 g
4	22,488	25,060	27,259	29,190	31,750	35,390	41,230	45,950	49,979	53,532	56,732	59,658	62,365	64,889
5	17,450	19,450	21,160	22,664	24,650	27,472	32,005	35,668	38,796	41,550	44,038	46,310	48,410	50,370
6	14,200	15,830	17,220	18,440	20,060	22,357	26,046	29,027	31,570	33,810	35,839	37,687	39,397	40,992
7	11,930	13,300	14,460	15,490	16,850	18,780	21,880	24,387	26,525	28,410	30,100	31,660	33,099	34,439
8	10,200	11,370	12,370	13,250	14,410	16,060	18,710	20,854	22,682	24,295	25,747	27,075	28,303	29,449
9	8,984	10,010	10,890	11,660	12,680	14,140	16,470	18,350	19,960	21,380	22,666	23,835	24,910	25,925
10	8,010	8,929	9,710	10,400	11,310	12,610	14,690	16,370	17,800	19,070	20,210	21,250	22,220	23,110
11	7,130	7,949	8,645	9,260	10,070	11,220	13,070	14,570	15,850	16,970	17,990	18,920	19,780	20,580
12	6,490	7,234	7,868	8,427	9,160	10,210	11,900	13,260	14,420	15,450	16,370	17,220	18,000	18,730
13	5,950	6,630	7,210	7,725	8,403	9,365	10,910	12,150	13,220	14,160	15,010	15,780	16,500	17,170
14	5,436	6,058	6,589	7,057	7,676	8,555	9,966	11,100	12,080	12,940	13,710	14,420	15,070	15,680
15	5,044	5,622	6,110	6,549	7,120	7,939	9,249	10,300	11,200	12,000	12,720	13,380	13,980	14,550
16	4,703	5,240	5,700	6,100	6,640	7,400	8,622	9,609	10,450	11,190	11,860	12,470	12,040	13,570
17	4,367	4,867	5,294	5,670	6,160	6,873	8,008	8,924	9,706	10,390	11,010	11,580	12,110	12,600
18	4,100	4,575	4,976	5,330	5,797	6,460	7,527	8,388	9,120	9,772	10,350	10,890	11,380	11,840
19	3,870	4,310	4,692	5,026	5,467	6,092	7,097	7,910	8,603	9,210	9,766	10,270	10,730	11,170
20	3,636	4,052	4,408	4,720	5,130	5,723	6,667	7,430	8,080	8,656	9,170	9,646	10,080	10,490
21	3,449	3,844	4,180	4,478	4,870	5,428	6,323	7,047	7,665	8,210	8,700	9,150	9,565	9,952
22	3,279	3,654	3,975	4,257	4,630	5,160	6,010	6,700	7,287	7,806	8,272	8,699	9,063	9,462
23	3,110	3,468	3,772	4,040	4,395	4,897	5,706	6,359	6,910	7,408	7,850	8,256	8,630	8,979
24	2,966	3,305	3,595	3,850	4,180	4,668	5,438	6,060	6,590	7,060	7,482	7,868	8,225	8,558
25	2,837	3,160	3,439	3,684	4,007	4,465	5,202	5,797	6,306	6,754	7,150	7,527	7,868	8,180
26	2,709	3,010	3,284	3,510	3,826	4,264	4,967	5,536	6,020	6,449	6,835	7,180	7,510	7,810
27	2,596	2,893	3,140	3,370	3,666	4,086	4,760	5,305	5,770	6,180	6,550	6,888	7,200	7,492
28	2,492	2,777	3.020	3,236	3,510	3,922	4,569	5,092	5,539	5,932	6,287	6,610	6,910	7,190

Table 2. Pressure (psi) by weight (g) of molecular explosiveRadius

Radius	Pressure (psi) by weight (g) of molecular explosive															
in	30	40	50	60	75	100	150	200	250	300	350	400	450	500	550	600
4	28,015	31,221	33,958	36,372	39,561	44,089	51,364	57,243	62,262	66,688	70,674	74,320	77,691	80,837	83,791	86,583
5	21,171	23,594	25,663	27,487	29,897	33,319	38,817	43,259	47,052	50,397	53,410	56,165	58,713	61,089	63,322	65,432
6	17,697	19,723	21,452	22,977	24,992	27,852	32,448	36,161	39,332	42,128	44,647	46,950	49,079	51,066	52,933	54,696
7	14,869	16,571	18,024	19,305	20,998	23,401	27,262	30,382	33,046	35,396	37,512	39,447	41,236	42,905	44,474	45,955
8	12,714	14,169	15,411	16,507	17,954	20,009	23,311	25,979	28,257	30,265	32,074	33,729	35,259	36,686	38,027	39,294
9	11,192	12,473	13,567	14,532	15,806	17,615	20,521	22,870	24,875	26,643	28,236	29,693	31,040	32,296	33,477	34,592
10	9,981	11,124	12,099	12,959	14,095	15,709	18,300	20,395	22,183	23,760	25,181	26,479	27,681	28,801	29,854	30,849
11	8,885	9,902	10,770	11,536	12,547	13,983	16,291	18,155	19,747	21,151	22,415	23,572	24,641	25,638	26,575	27,461
12	8,086	9,012	9,802	10,499	11,419	12,726	14,826	16,523	17,971	19,249	20,400	21,452	22,425	23,333	24,186	24,992
13	7,413	8,261	8,985	9,624	10,468	11,666	13,591	15,146	16,475	17,646	18,701	19,665	20,557	21,390	22,171	22,910
14	6,772	7,547	8,208	8,792	9,563	10,657	12,416	13,837	15,050	16,120	17,083	17,965	18,780	19,540	20,254	20,929
15	6,284	7,003	7,617	8,159	8,874	9,890	11,522	12,840	13,966	14,959	15,853	16,671	17,427	18,133	18,795	19,422
16	5,859	6,529	7,102	7,606	8,273	9,220	10,742	11,971	13,021	13,946	14,780	15,542	16,247	16,905	17,523	18,107
17	5,441	6,063	6,595	7,064	7,683	8,563	9,976	11,117	12,092	12,952	13,726	14,434	15,089	15,699	16,273	16,815
18	5,114	5,699	6,199	6,640	7,222	8,048	9,376	10,450	11,366	12,174	12,902	13,567	14,182	14,757	15,296	15,806
19	4,822	5,374	5,846	6,261	6,810	7,589	8,842	9,854	10,718	11,480	12,166	12,793	13,374	13,915	14,424	14,904

P= 2.25 x 10^[w^.333/r]^1.13

Where:P = pressure, psi
w = weight of explosive in lbs
r = radius or distance from explosive to tank wall in inches