



Charge Performance Summary												
	O.D. (in.)	Charge Type	Shot Density (spf) Dry or Fluid	Phasing	Charge P/N	Explosive Weight (g)	Casing O.D. (in.)	Entry Hole (in.)	Penetration (in.)	Penetration Normalized @ 5000 psi (in)	Temp 1hr	Data Source
Through Tubing Perforating												
Shogun Systems												
RAPTOR	1 11/16	SDP	4F/6F	60°/40°	STP-1687-401NTX	8.4	5.0	0.23	18.39	19.24	375°F	API RP-43
	1 11/16	BH	4F/6F	60°/40°	STP-1687-301NB	8.8	5.5	0.48	10.54	10.54	310°F	EPA
	1 11/16	SDP	4F/6F	60°/40°	STP-1687-401NT	9.0	5.0	0.24	16.40	17.69	375°F	API RP-43
	1 11/16	DP	4F/6F	0°	STP-1687-301E	8.4	4.5	0.35	11.22	12.24	310°F	API RP-43
	1 11/16	BH	4F/6F	0°	STP-1687-301BE	10.8	5.5	0.48	10.54	10.54	310°F	EPA
	2 1/8	BH	4F/6F	0°/60°/40°	STP-2125-301NB	13.4	5.5	0.62	12.97	12.97	310°F	EPA
RAPTOR	2 1/8	SDP	4F/6F	60°/40°	STP-2125-401NTX	13.9	5.5	0.25	26.93	27.76	375°F	API RP-43
	2 1/8	SDP	4F/6F	60°/40°	STP-2125-401NT	14.0	5.5	0.27	23.64	24.37	375°F	API RP-43
	2 1/8	DP	4F/6F	0°	STP-2125-301E	18.0	5.5	0.43	16.17	17.46	310°F	API RP-43
	2 1/8	BH	4F/6F	0°	STP-2125-301BE	19.0	5.5	0.62	12.97	12.97	310°F	EPA
	2 1/2	SDP	4F	60°	STP-2500-401NT	24.5	5.5	0.35	33.33	34.94	375°F	API RP-43
RAPTOR	2 1/2	SDP	4F	60°	STP-2500-401NTX	26.4	5.5	0.34	32.62	35.95	375°F	API RP-19B
Swing Jet II Systems												
	1-3/8 x 3-3/4	DP	4.9F	180°	STK-3750-401SJ	11.0	4.5	0.34	18.01	19.96	375°F	API RP-43
RAPTOR	1-11/16 x 3-7/8	DP	4.4F	180°	STK-4250-402NTX	18.0	4.5	0.30	30.73	31.92	375°F	API RP-43
	2-1/8 x 5-3/8	DP	3.5F	180°	STK-5500-401SJ	32.0	7.0	0.43	35.15	38.49	375°F	API RP-43
Bi-Wire Systems												
	1 11/16	DP	4F	0°/180°	BWC-1687-301	11.0	5.5	0.40	8.06	8.06	310°F	EPA
	2 1/8	DP	4F	0°/180°	BWC-2125-302	22.0	5.5	0.49	12.56	12.56	310°F	EPA
Formed Wire Systems												
	1 11/16	DP	4F	0°/180°	FWC-1687-301	11.0	5.5	0.40	8.06	8.06	310°F	EPA
	2 1/8	DP	4F	0°/180°	FWC-2125-302	22.0	5.5	0.49	12.56	12.56	310°F	EPA
Link Systems												
	1 11/16	DP	4F	0°/90°/180°	LNK-1687-301	11.0	5.5	0.40	8.06	8.06	310°F	EPA
	2 1/8	DP	4F	0°/90°/180°	LNK-2125-302	22.0	5.5	0.49	12.56	12.56	310°F	EPA
Retrievable Tubing Gun Systems												
	1 11/16	DP	4D/6D	0°/60°/90°/180°	RTG-1687-301	3.2	4.5	0.17	6.79	6.79	330°F	EPA
	1 11/16	BH	4D/6D	0°/60°/90°/180°	RTG-1687-301BH	3.3	4.5	0.37	3.29	3.29	330°F	EPA
	1 11/16	SDP	4D/6D	0°/60°/90°/180°	RTG-1687-401NT	3.5	4.5	0.18	8.14	9.08	400°F	API RP-43
RAPTOR	1 11/16	SDP	4D/6D	0°/60°/90°/180°	SDP-1687-401NTX	3.5	3.5	0.21	10.72	10.90	400°F	API RP-43
	2 1/8	BH	4D/6D	0°/60°/90°/180°	RTG-2125-302BH	6.4	4.5	0.45	3.79	3.79	330°F	EPA
	2 1/8	DP	4D/6D	0°/60°/90°/180°	RTG-2125-302	6.5	4.5	0.29	10.73	11.49	330°F	API RP-43
RAPTOR	2 1/8	SDP	4D/6D	0°/60°/90°/180°	SDP-2125-402NTX	6.5	4.5	0.26	20.01	22.00	400°F	API RP-43
	2 1/8	SDP	4D/6D	0°/60°/90°/180°	RTG-2125-302LS	5.0	4.5	0.28	20.94	20.94	330°F	EPA
	2 1/8	GH	4D/6D	0°/60°/90°/180°	RTG-2125-302GH	6.4	5.5	0.36	6.62	6.62	330°F	EPA
	2 3/8	SDP	4F	0°/60°/90°/180°	TAG-2375-402NT	10.0	4.5	0.28	19.04	20.58	400°F	API RP-43
	2 3/8	DP	4F	0°/60°/90°/180°	TAG-2375-401BH	10.0	4.5	0.47	7.20	7.35	400°F	API RP-43
	2 1/2	SDP	6D	0°/60°/90°/180°	TAG-2500-402NT	11.0	4.5	0.36	20.17	20.17	400°F	EPA
	2 1/2	SDP	4D	0°/60°/90°/180°	RTG-2500-305	13.0	4.5	0.31	18.57	19.88	330°F	API RP-43

D = Dry; F = Fluid

Penetration normalized @ 5% per 1000 psi change