



Deep Penetrating Shaped Charges

Table with columns: Gun Size, Shot Density, Phasing, JRC P/N, Charge Name, Penetration, Normalized Penetration, Entrance Hole, Casing Size, Target Strength, Explosive Load, Case Material, Data Type. Includes sub-sections for CAPSULE GUNS and PORTED GUNS.

Table with columns: Gun Size, Shot Density, Phasing, JRC P/N, Charge Name, Penetration, Normalized Penetration, Entrance Hole, Casing Size, Target Strength, Explosive Load, Case Material, Data Type. Includes sub-section for PORTED GUNS.

Table with columns: Gun Size, Shot Density, Phasing, JRC P/N, Charge Name, Penetration, Normalized Penetration, Entrance Hole, Casing Size, Target Strength, Explosive Load, Case Material, Data Type. Includes sub-section for SLICKWALL GUNS.

Table with columns: Gun Size, Shot Density, Phasing, JRC P/N, Charge Name, Penetration, Normalized Penetration, Entrance Hole, Casing Size, Target Strength, Explosive Load, Case Material, Data Type. Includes sub-section for SCALLOPED GUNS.

MaxForce®- FRAC Shaped Charges

Table with columns: Gun Size, Shot Density, Phasing, JRC P/N, Charge Name, Entrance Hole, Casing Size, Explosive Load, Case Material, Data Type. Includes sub-section for SCALLOPED GUNS.

Big Hole Shaped Charges

Table with columns: Gun Size, Shot Density, Phasing, JRC P/N, Charge Name, Penetration, Normalized Penetration, Entrance Hole, Casing Size, Target Strength, Explosive Load, Case Material, Data Type. Includes sub-section for SCALLOPED GUNS.

5"	12 (39)	150/30	100005319	4-5/8" BH, RDX	8.8 (223.5)	9.5 (240.3)	0.84 (21.3)	7"	6508	25	Steel	QC
5"	12 (39)	150/30	100156995	4-5/8" SUPER HOLE, HMX	6.0 (152.4)	6.4 (163.8)	1.00 (25.4)	7"	6487	28	Steel	QC
5"	12 (39)	150/30	100005311	4-5/8" SUPER HOLE, RDX	6.6 (168.9)	7.6 (193.3)	0.83 (21.1)	7-5/8"	7877	28	Steel	RP43
5"	12 (39)	135	101307494	5" MIRAGE, RDX, LD	6.0 (152.4)	6.4 (162.6)	0.90 (22.9)	7-5/8"	6551	32	Zinc	<a href="#">19B</a>
5"	21 (69)	120 Cluster	101292616	5" BH, RDX	5.3 (134.6)	5.4 (137.4)	0.72 (18.3)	7-5/8"	5411	21	Steel	<a href="#">19B<sup>1</sup></a>
5-1/8"	12 (39)	135	101307494	5" MIRAGE, RDX, LD	6.6 (167.6)	6.8 (172.5)	0.88 (22.4)	7-5/8"	5576	32	Zinc	<a href="#">19B</a>
5-1/8"	21 (69)	120 Cluster	101292616	5" BH, RDX	5.6 (143.5)	5.9 (152.1)	0.74 (18.8)	7-5/8"	6246	21	Steel	QC
5-3/4"	18 (59)	60/120	101688614	5-3/4" MIRAGE, RDX, LD	6.5 (165.1)	6.8 (173.7)	0.94 (23.9)	8-5/8"	6050	28	Zinc	QC
6-1/2"	12/14 (39/46)	135/45/138	101304878	6-1/2" MIRAGE, RDX, LD	5.6 (142.2)	6.2 (156.7)	1.07 (27.2)	8-5/8"	7043	47	Zinc	<a href="#">19B</a>
6-1/2"	12/14 (39/46)	135/45/138	101304878	6-1/2" MIRAGE, RDX, LD	6.8 (172.7)	6.8 (172.7)	0.91 (23.1)	9-5/8"	5088	47	Zinc	<a href="#">19B</a>
6-1/2"	12/14 (39/46)	135/45/138	101304878	6-1/2" MIRAGE, RDX, LD	6.8 (172.7)	7.4 (189.5)	0.90 (22.8)	9-7/8"	6949	47	Zinc	<a href="#">19B<sup>2</sup></a>
6-3/4"	18 (59)	60/120	102505344	390 MaxForce-Flow UltraKleen, HMX	5.4 (137.2)	5.8 (147.3)	1.00 (25.4)	9-5/8"	6350	39.0	Steel	<a href="#">19B</a>
6-3/4"	18 (59)	60/120	102428572	390 MaxForce-Flow, HMX	5.5 (139.7)	6.1 (154.9)	1.02 (25.9)	9-5/8"	7131	39.0	Steel	<a href="#">19B</a>
6-3/4"	18 (59)	60/120	102528007	390 MaxForce-Flow, HMX	6.1 (155)	6.6 (167.6)	0.82 (20.8)	9-7/8"	6671	39.0	Zinc	<a href="#">19B</a>
7"	12/14 (39/46)	138	101329124	6-1/2" MIRAGE, HMX, LD	6.9 (175.3)	7.2 (181.9)	1.00 (25.4)	9-5/8"	5740	47	Zinc	<a href="#">19B</a>
7"	12/14 (39/46)	135/45/138	101304878	6-1/2" MIRAGE, RDX, LD	6.1 (154.9)	6.5 (164.1)	1.07 (27.2)	9-5/8"	6178	47	Zinc	<a href="#">19B</a>
7"	12/14 (39/46)	135/45/138	101213474	7" SUPER HOLE, RDX	5.8 (147.3)	6.1 (154.4)	1.29 (32.8)	9-5/8"	5975	56.5	Steel	<a href="#">19B</a>
7"	18 (59)	60/120	101711688	7" MIRAGE, HMX, LD	7.6 (194.1)	8.0 (203.2)	1.03 (26.2)	9-7/8"	5950	39	Zinc	QC
7"	12/14 (39/46)	135/45/138	101228037	7" MIRAGE SUPER HOLE, RDX, LD	4.7 (119.4)	4.9 (124.0)	1.03 (26.2)	9-5/8"	5746	39	Zinc	<a href="#">19B</a>

<sup>1</sup> Registered 19B data except fired in 7-5/8" 47# P110 Casing

<sup>2</sup> Registered 19B data except fired in 9-5/8" 71# N-80 Casing

<sup>3</sup> Registered 19B data except fired in air instead of fluid

"IS" = Industry Standard design

"BH" = Big Hole

"LD" = Low Debris

"SH" = Super Hole

"HW" = Heavy Wall Gun

Charge performance will vary due to well conditions.

For wellbore condition simulation, please contact JRC for testing in our API Section IV "Perforation Flow Lab" Penetration Normalization is not certified by API for 19B.

RP43 testing is no longer endorsed by API and will not be available on new or improved JRC Charges.