



Stuck pipe is unfortunately one of the most common problems when drilling a well. The consequences can range from a minor inconvenience to major complications, such as the loss of the drill string or even worse, complete loss of the well.

The dedicated Pipe Recovery Teams at Allied-Horizontal understand the various causes and symptoms of stuck pipe. Whether it be differential sticking, overbalance, poor filter cake or a list of other causes, we realize you don't have time to spare. We have trained specialists on call 24/7 to solve stuck-pipe problems safely and efficiently.

- ***Free Point Indicator***
- ***Stuck Pipe Log***
- ***Jet Cutter***
- ***String Shot / Back Off Services***
- ***Chemical Cutter***
- ***Radial Cutting Torch***
- ***Severing Tools***

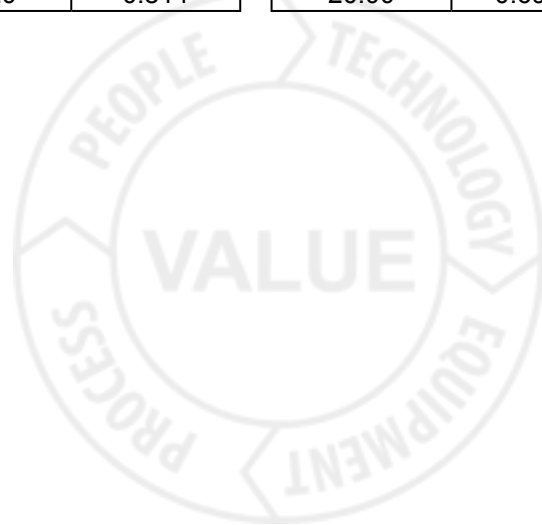
Pipe Stretch		
Pipe Size	lbs./ft.	Required Pull
1 in. Tubing	1.80	4,000
1 in. Tubing	2.25	5,000
1-1/4 in. Tubing	2.40	5,500
1-1/2 in. Tubing	2.90	6,500
2-1/16 in. Tubing	3.40	7,500
2-3/8 in. Tubing	4.70	10,000
2-3/8 in. Tubing	5.30	12,000
2-3/8 in. Tubing	5.95	13,000
2-7/8 in. Tubing	6.50	14,000
2-7/8 in. Tubing	7.90	17,000
2-7/8 in. Tubing	8.70	19,000
3-1/2 in. Tubing	9.30	20,000
3-1/2 in. Tubing	10.30	23,000
3-1/2 in. Tubing	12.95	28,000
4 in. Tubing	11.00	24,000
4 in. Tubing	13.40	29,000
4-1/2 in. Tubing	12.75	28,000
4-1/2 in. Tubing	15.50	34,000
4-1/2 in. Tubing	19.20	42,000

2-3/8 in. Drill Pipe	6.65	15,000
2-7/8 in. Drill Pipe	10.40	23,000
3-1/2 in. Drill Pipe	13.30	30,000
4-1/2 in. Drill Pipe	16.60	36,000
5 in. Drill Pipe	19.50	43,000

5 in. Casing	15.00	33,000
5-1/2 in. Casing	17.00	38,000
6-5/8 in. Casing	24.00	53,000
7 in. Casing	35.00	77,000
7-5/8 in. Casing	29.70	66,000
8-5/8 in. Casing	40.00	88,000
9-5/8 in. Casing	43.50	96,000
10-3/4 in. Casing	45.50	100,000

* Weight to pull above string weight to obtain 3-1/2 inches of stretch per 1,000 feet of free pipe

Buoyancy Factor			
Mud Weight lbs./gallon	Buoyancy Factor	Mud Weight lbs./gallon	Buoyancy Factor
8.40	0.872	12.40	0.811
8.60	0.869	12.60	0.807
8.80	0.866	12.80	0.804
9.00	0.862	13.00	0.801
9.20	0.859	13.20	0.798
9.40	0.856	13.40	0.795
9.60	0.853	13.60	0.792
9.80	0.850	14.00	0.786
10.00	0.847	14.50	0.778
10.20	0.844	15.00	0.771
10.40	0.841	15.50	0.763
10.60	0.838	16.00	0.756
10.80	0.835	16.50	0.748
11.00	0.832	17.00	0.740
11.20	0.829	17.50	0.733
11.40	0.826	18.00	0.725
11.60	0.823	18.50	0.717
11.80	0.820	19.00	0.710
12.00	0.817	19.50	0.702
12.20	0.814	20.00	0.694



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