

FLUID LOSS ADDITIVES

Halliburton's fluid loss additives can be used to tailor a slurry precisely to the well's requirements for the most effective cementing job possible.

Halad®-9 & Halad 9 LXP Additive

- Applicable to primary and squeeze cementing through a wide temperature range-60 to 300°F (16 to 149°C)
- Compatible with all classes of cement and a wide variety of typical cement additives
- Available as a powder or a liquid.

Halad®-22A and Halad-22A LXP Additive

- Recommended for high temperature control of fluid loss in fresh or saltwater (18%) slurries.
- Ideal for circulating long columns of cement on primary casing jobs and for deep liner cementing.
- Helps maintain fluidity, eliminate premature dehydration, and helps prevent annular bridging in a tight annulus.
- Free-flowing powder compatible with most additives used in deep well cementing.

Halad®-100A and Halad-100AL Additive

- Effective up to 400°F.
- Excellent Versatility — works well in saturated salt, sea water, and fresh water at high and low temperatures.
- Ideal for high temperature casing and liner cement slurry designs.

Halad®-322 and Halad-322 LXP Additive

- Specially designed for shallow wells at temperatures as low as 100°F.
- Designed not to retard compressive strength development.
- May be used in salt concentrations up to 18%.
- Easy-to-mix dispersant that facilitates low viscosity slurries.

Halad®-344 and Halad -344 LXP Additive

- Non-retarding additive for low temperature applications.
- Ideal for lightweight slurries with long thickening times.
- Effective up to 400°F
- Salt tolerant up to 18% salt.

Halad®-413 and Halad 413 Liquid Additive

- Excellent for high temperature wells.
- Excellent for densified slurries or slurries mixed with high salt concentrations.
- Even above 400°F, displays no tendency to increase viscosity.

Halad®-447 Additive

- Effective up to 200°F.
- For use in fresh water slurries, not compatible with salt or dispersants.
- Improves cement resistance to acid/corrosive fluids.

Halad®-567 & Halad 567L Additive

- Effective up to 250°F.
- Excellent for densified slurries or slurries mixed with high salt concentrations.
- For use in cement designs requiring low viscosity slurry properties.

Halad®-600LE+ Additive

- Effective from 125°F to 300°F.
- Excellent versatility - works well in fresh water, sea water and salt concentrations up to saturation.
- Environmentally friendly and offers excellent fluid loss control.

LAP-1

- Effective up to 180°F.
- For use in fresh water slurries, not compatible with salt or dispersants.
- Improves cement resistance to acid/corrosive fluids.

Latex 2000™ Additive

- Liquid latex with excellent acid resistance and fluid loss control properties.
- Provides resiliency and improved bond strength.
- Good choice for wells in a CO₂ flood.

RETARDERS

Retarders are necessary in cementing compositions for high-temperature well conditions or situations where pumping time is critical.

HR®-5 and HR®-6L Retarder

- Useful in cementing operations with BHCT's of 206°F (97°C) either freshwater or saltwater cement slurries.
- A chemically modified lignosulfonate that provides a uniform thickening time for each increase in retarder concentration.
- Liquid version (HR-6L) available for use offshore or where bulk blending facilities do not exist.

HR®-7 Retarder

- Similar to HR-4, but with superior dispersing properties.
- Designed primarily for use with high percentages of gel cement. When cements contain 8 to 25% Halliburton gel, the dispersing action of HR-7 reduces the viscosity and yields smoother, more uniform slurries.

HR®-12 and HR®-12L Retarder

- Organic compound that can be used to retard slurries up to about 500°F (260°C) BHST.
- Provides excellent early strengths.
- Dispersing action of this retarder permits the use of less weighting material necessary to obtain a given slurry weight.

HR®-13L Retarder

- Effective from 248°F to 380°F.
- Good dispersing properties, care should be used with other dispersing additives.
- Ideal retarders for high temperature casing, liner, and squeeze applications.

HR®-25 and HR®-25L Retarder

- Retarder/intensifier intended for high-temperature cementing designs.
- Mainly used as an intensifier for common retarders.
- Used at concentrations of 0.2 to 2.0% at BHCT's of about 220° to 400°F (104° to 204°C).
- Has high water solubility and may be added to the mixing water or dry-blended.
- Less influence on compressive strength development, especially at the top of long columns of cement.

SCR-100™ and SCR-100™ Liquid Retarder

- A synthetic product (not a lignosulfonate) that provides very uniform characteristics and superior versatility.
- Can provide thixotropy when used with Halad®-9, Halad®-22A, or ZoneSeal Retarder. This combination will provide short transition times in freshwater cement systems at temperatures up to 250°F (121°C) bottomhole circulating temperature.
- In salt-saturated cement, SCR-100 will give predictable retarder response and excellent short-term compressive strength at BHCT's ranging from 250° to 350°F (121° to 177°C).
- When combined with certain retarder-enhancing agents, SCR-100 may be used in freshwater cement systems at bottomhole circulating temperatures as high as 360°F (182°C)

SCR-500™ and SCR-500L™ Retarder

- A synthetic product effective from 160°F to 500°F.
- Can provide thixotropy when used with Halad®-9, Halad®-22A, or ZoneSeal Retarder in fresh water cement slurries.
- In salt-saturated cement, SCR-500 will give predictable retarder response and excellent short-term compressive strength.

ZoneSeal Retarder

- Effective from 110°F to 300°F for ZoneSeal slurries..
- A non-dispersing retarder that is very effective at stabilizing solids settling by viscosifying slurries..
- ZoneSeal Retarder is incompatible with Calcium Chloride.

ENGLISH / METRIC UNITS

SECTION No. 221

VOLUME and HEIGHT Between TUBINGS and TUBING and CASING and CASINGS and DRILL PIPE and CASING

NOTE:

No allowance made for couplings and upsets.

NOTE:

There are some differences in the values in these tables and those previously published. The differences are slight and the former values are sufficiently accurate for dependable results.

The values in these tables have been calculated on the IBM 370/155 Computer.



Copyright ©1995, 2000
Halliburton Company

ALL RIGHTS RESERVED

Inside Tubing		ENGLISH UNITS			
O.D. 1.050"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE TUBING					
Size O.D. In.	Wt. With Couplings Lbs./Ft.	Inside Diameter In.	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
2.375	4.00	2.041	1.947	.0030	336.06
	4.60	1.995	1.901	.0028	357.74
	*5.30	1.939	1.845	.0026	387.40
	5.80	1.867	1.773	.0023	431.95
2.875	6.40	2.441	2.347	.0047	211.99
	*7.90	2.323	2.229	.0042	239.74
	8.60	2.259	2.165	.0039	257.32
3.500	7.70	3.068	2.943	.0081	123.87
	9.20	2.992	2.867	.0076	131.14
	10.20	2.922	2.797	.0072	138.44
	12.70	2.750	2.625	.0063	159.35

Inside Tubing		ENGLISH UNITS			
O.D. 1.315"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE TUBING					
Size O.D. In.	Wt. With Couplings Lbs./Ft.	Inside Diameter In.	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
2.375	4.00	2.041	1.947	.0024	422.50
	4.60	1.995	1.901	.0022	457.35
	*5.30	1.939	1.845	.0020	506.98
	5.80	1.867	1.773	.0017	586.06
2.875	6.40	2.441	2.347	.0041	243.40
	*7.90	2.323	2.229	.0036	280.72
	8.60	2.259	2.165	.0033	305.11
3.500	7.70	3.068	2.943	.0075	133.98
	9.20	2.992	2.867	.0070	142.52
	10.20	2.922	2.797	.0066	151.19
	12.70	2.750	2.625	.0057	176.47

Inside Tubing		ENGLISH UNITS			
O.D. 1.660"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE TUBING					
Size O.D. In.	Wt. With Couplings Lbs./Ft.	Inside Diameter In.	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
2.375	4.00	2.041	1.947	.0014	730.04
	4.60	1.995	1.901	.0012	840.73
	*5.30	1.939	1.845	.0010	1025.19
	5.80	1.867	1.773	.0007	409.98
2.875	6.40	2.441	2.347	.0031	321.40
	*7.90	2.323	2.229	.0026	389.82
	8.60	2.259	2.165	.0023	438.52
3.500	7.70	3.068	2.943	.0065	154.64
	9.20	2.992	2.867	.0060	166.13
	10.20	2.922	2.797	.0056	178.02
	12.70	2.750	2.625	.0047	214.15

*Not API Standard. Shown for information only

METRIC UNITS

Inside Tubing

O.D. 26.67 mm

BETWEEN TUBINGS**

ONE STRING

OUTSIDE TUBING					
Size O.D. mm.	Mass With Couplings kg/m	Inside Diameter mm.	Drift Diameter mm	Cu. Meters Per Lin. Meter m ² /m	Lin. Meters Per Cu. Meter m/m ²
60.33	5.95	51.84	49.45	.0016	644.02
	6.85	50.67	48.29	.0015	685.58
	*7.89	49.25	46.86	.0013	742.42
	8.63	47.42	45.03	.0012	827.78
73.03	9.52	62.00	59.61	.0025	406.25
	*11.76	59.00	56.62	.0022	459.44
	12.80	57.38	54.99	.0020	493.12
88.90	11.46	77.93	74.75	.0042	237.39
	13.69	76.00	72.82	.0040	251.32
	15.18	74.22	71.04	.0038	265.31
	18.90	69.85	66.68	.0033	305.38

Inside Tubing

O.D. 33.40 mm

ONE STRING

OUTSIDE TUBING					
Size O.D. mm.	Mass With Couplings kg/m	Inside Diameter mm.	Drift Diameter mm	Cu. Meters Per Lin. Meter m ² /m	Lin. Meters Per Cu. Meter m/m ²
60.33	5.95	51.84	49.45	.0012	809.68
	6.85	50.67	48.29	.0011	876.47
	*7.89	49.25	46.86	.0010	971.57
	8.63	47.42	45.03	.0009	1123.14
73.03	9.52	62.00	59.61	.0021	466.46
	*11.76	59.00	56.62	.0019	537.96
	12.80	57.38	54.99	.0017	584.72
88.90	11.46	77.93	74.75	.0039	256.76
	13.69	76.00	72.82	.0037	273.13
	15.18	74.22	71.04	.0035	289.73
	18.90	69.85	66.68	.0030	338.19

Inside Tubing

O.D. 42.16 mm

ONE STRING

OUTSIDE TUBING					
Size O.D. mm.	Mass With Couplings kg/m	Inside Diameter mm.	Drift Diameter mm	Cu. Meters Per Lin. Meter m ² /m	Lin. Meters Per Cu. Meter m/m ²
60.33	5.95	51.84	49.45	.0007	1399.04
	6.85	50.67	48.29	.0006	1611.17
	*7.89	49.25	46.86	.0005	1964.66
	8.63	47.42	45.03	.0004	2702.08
73.03	9.52	62.00	59.61	.0016	615.93
	*11.76	59.00	56.62	.0013	747.05
	12.80	57.38	54.99	.0012	840.37
88.90	11.46	77.93	74.75	.0034	296.34
	13.69	76.00	72.82	.0031	318.37
	15.18	74.22	71.04	.0029	341.16
	18.90	69.85	66.68	.0024	410.40

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.050"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0152	65.88
	10.50	4.052	3.927	.0149	67.21
	11.60	4.000	3.875	.0145	69.10
	13.50	3.920	3.795	.0139	72.17
	*15.10	3.826	3.701	.0131	76.05
	*16.60	3.754	3.629	.0126	79.25
	*18.80	3.640	3.515	.0118	84.75
	*4.750	16.00	4.082	3.957	.0151
5.000	11.50	4.560	4.435	.0191	52.28
	13.00	4.494	4.369	.0185	53.91
	15.00	4.408	4.283	.0178	56.17
	18.00	4.276	4.151	.0167	59.91
	*20.30	4.184	4.059	.0159	62.76
	*20.80	4.156	4.031	.0157	63.66
	*23.20	4.044	3.919	.0148	67.50
	*24.20	4.000	3.875	.0145	69.10
5.500	*13.00	5.044	4.919	.0236	42.29
	14.00	5.012	4.887	.0233	42.86
	*15.00	4.974	4.849	.0230	43.55
	15.50	4.950	4.825	.0227	43.99
	17.00	4.892	4.767	.0222	46.09
	20.00	4.778	4.653	.0211	47.38
	23.00	4.670	4.545	.0201	49.71
	*26.00	4.548	4.423	.0190	52.57
*5.750	14.00	5.290	5.165	.0261	38.29
	17.00	5.190	5.065	.0251	39.85
	19.50	5.090	4.965	.0241	41.50
	22.50	4.990	4.865	.0231	43.26
*6.000	15.00	5.524	5.399	.0286	35.00
	16.00	5.500	5.375	.0283	35.32
	17.00	5.450	5.325	.0278	35.99
	18.00	5.424	5.299	.0275	36.35
	20.00	5.352	5.227	.0268	37.38
	23.00	5.240	5.115	.0256	39.06
	26.00	5.140	5.015	.0245	40.66
	6.625	*17.00	6.135	6.010	.0355
20.00		6.049	5.924	.0345	29.01
*22.00		5.989	5.864	.0338	29.61
24.00		5.921	5.796	.0330	30.32
*26.00		5.855	5.730	.0322	31.03
28.00		5.791	5.666	.0315	31.74
*29.00		5.761	5.636	.0312	32.08
32.00		5.675	5.550	.0302	33.10
7.000	17.00	6.538	6.413	.0405	24.72
	20.00	6.456	6.331	.0394	25.37
	*22.00	6.398	6.273	.0387	25.84
	23.00	6.366	6.241	.0383	26.11
	*24.00	6.336	6.211	.0379	26.37
	26.00	6.276	6.151	.0372	26.89
	*28.00	6.214	6.089	.0364	27.44
	29.00	6.184	6.059	.0361	27.72
	*30.00	6.154	6.029	.0357	28.00
	32.00	6.094	5.969	.0350	28.57
	*33.70	6.048	5.923	.0345	29.02
	35.00	6.004	5.879	.0339	29.46
	38.00	5.920	5.795	.0330	30.33
	*40.00	5.836	5.711	.0320	31.24

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 26.67 mm	
OUTSIDE CASING				ONE STRING	
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0079	126.25
	15.63	102.92	99.75	.0078	128.80
	17.26	101.60	98.43	.0076	132.42
	20.09	99.57	96.39	.0072	138.30
	*22.47	97.18	94.01	.0069	145.74
	*24.70	95.35	92.18	.0066	151.87
	*27.98	92.46	89.28	.0062	162.41
*120.65	23.81	103.68	100.51	.0079	126.78
127.00	17.11	115.82	112.65	.0100	100.19
	19.35	114.15	110.97	.0097	103.32
	22.32	111.96	108.79	.0093	107.64
	26.79	108.61	105.44	.0087	114.82
	*30.21	106.27	103.10	.0083	120.27
	*30.95	105.56	102.39	.0082	122.00
	*34.53	102.72	99.54	.0077	129.35
*36.01	101.60	98.43	.0076	132.42	
139.70	*19.35	128.12	124.94	.0123	81.05
	20.83	127.31	124.13	.0122	82.14
	*22.32	126.34	123.16	.0120	83.46
	23.07	125.73	122.56	.0119	84.31
	25.30	124.26	121.08	.0116	86.41
	29.76	121.36	118.19	.0110	90.80
	34.23	118.62	115.44	.0105	95.27
	*38.69	115.52	112.34	.0099	100.74
	*146.05	20.83	134.37	131.19	.0136
25.30	131.83	128.65	.0131	76.36	
29.02	129.29	126.11	.0126	79.53	
33.48	126.75	123.57	.0121	82.90	
*152.40	22.32	140.31	137.13	.0149	67.07
	23.81	139.70	136.53	.0148	67.68
	25.30	138.43	135.26	.0145	68.98
	26.79	137.77	134.59	.0144	69.67
	29.76	135.94	132.77	.0140	71.63
	34.23	133.10	129.92	.0134	74.85
	38.69	130.56	127.38	.0128	77.92
168.28	*25.30	155.83	152.65	.0185	54.00
	29.76	153.64	150.47	.0180	55.59
	*32.74	152.12	148.95	.0176	56.74
	35.72	150.39	147.22	.0172	58.10
	*38.69	148.72	145.54	.0168	59.46
	41.67	147.09	143.92	.0164	60.83
	*43.16	146.33	143.15	.0163	61.48
	47.62	144.15	140.97	.0158	63.43
	25.30	166.07	162.89	.0211	47.37
	29.76	163.98	160.81	.0206	48.62
*32.74	162.51	159.33	.0202	49.53	
34.23	161.70	158.52	.0200	50.04	
*35.72	160.93	157.76	.0198	50.53	
38.69	159.41	156.24	.0194	51.53	
*41.67	157.84	154.66	.0190	52.59	
43.16	157.07	153.90	.0188	53.12	
*44.64	156.31	153.14	.0186	53.65	
47.62	154.79	151.61	.0183	54.75	
*50.15	153.62	150.44	.0180	55.61	
52.09	152.50	149.33	.0177	56.46	
56.55	150.37	147.19	.0172	58.12	
*59.53	148.23	145.06	.0167	59.86	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.050"		VOLUME & HEIGHT			
TWO STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0141	70.88
	10.50	4.052	3.927	.0138	72.42
	11.60	4.000	3.875	.0134	74.62
	13.50	3.920	3.795	.0128	78.21
	*15.10	3.826	3.701	.0121	82.80
	*16.60	3.754	3.629	.0115	86.60
	*18.80	3.640	3.515	.0107	93.21
	*4.750	16.00	4.082	3.957	.0140
5.000	11.50	4.560	4.435	.0181	55.38
	13.00	4.494	4.369	.0175	57.22
	15.00	4.408	4.283	.0167	59.76
	18.00	4.276	4.151	.0156	64.02
	*20.30	4.184	4.059	.0149	67.28
	*20.80	4.156	4.031	.0146	68.32
	*23.20	4.044	3.919	.0137	72.76
	*24.20	4.000	3.875	.0134	74.62
5.500	*13.00	5.044	4.919	.0226	44.30
	14.00	5.012	4.887	.0223	44.92
	*15.00	4.974	4.849	.0219	45.68
	15.50	4.950	4.825	.0217	46.17
	17.00	4.892	4.767	.0211	47.38
	20.00	4.778	4.653	.0200	49.91
	23.00	4.670	4.545	.0190	52.51
	*26.00	4.548	4.423	.0180	55.71
*5.750	14.00	5.290	5.165	.0250	39.93
	17.00	5.190	5.065	.0240	41.62
	19.50	5.090	4.965	.0230	43.43
	22.50	4.990	4.865	.0220	45.36
*6.000	15.00	5.524	5.399	.0275	36.36
	16.00	5.500	5.375	.0272	36.71
	17.00	5.450	5.325	.0267	37.44
	18.00	5.424	5.299	.0264	37.83
	20.00	5.352	5.227	.0257	38.94
	23.00	5.240	5.115	.0245	40.76
	26.00	5.140	5.015	.0235	42.51
	6.625	*17.00	6.135	6.010	.0344
20.00		6.049	5.924	.0334	29.94
*22.00		5.989	5.864	.0327	30.58
24.00		5.921	5.796	.0319	31.33
*26.00		5.855	5.730	.0312	32.09
28.00		5.791	5.666	.0304	32.86
*29.00		5.761	5.636	.0301	33.22
32.00		5.675	5.550	.0291	34.31
7.000		17.00	6.538	6.413	.0394
	20.00	6.456	6.331	.0383	26.08
	22.00	6.398	6.273	.0376	26.58
	23.00	6.366	6.241	.0372	26.86
	*24.00	6.336	6.211	.0369	27.13
	26.00	6.276	6.151	.0361	27.68
	*28.00	6.214	6.089	.0354	28.27
	29.00	6.184	6.059	.0350	28.57
	*30.00	6.154	6.029	.0346	28.86
	32.00	6.094	5.969	.0339	29.47
	*33.70	6.048	5.923	.0334	29.95
	35.00	6.004	5.879	.0329	30.42
	38.00	5.920	5.795	.0319	31.35
	40.00	5.836	5.711	.0309	32.32

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 26.67 mm	
				TWO STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0074	135.84
	15.63	102.92	99.75	.0072	138.79
	17.26	101.60	98.43	.0070	143.01
	20.09	99.57	96.39	.0067	149.89
	*22.47	97.18	94.01	.0063	158.67
	*24.70	95.35	92.18	.0060	165.95
	*27.98	92.46	89.28	.0056	178.62
*120.65	23.81	103.68	100.51	.0073	136.45
127.00	17.11	115.82	112.65	.0094	106.13
	19.35	114.15	110.97	.0091	109.65
	22.32	111.96	108.79	.0087	114.53
	26.79	108.61	105.44	.0082	122.69
	*30.21	106.27	103.10	.0078	128.93
	*30.95	105.56	102.39	.0076	130.93
	*34.53	102.72	99.54	.0072	139.43
*36.01	101.60	98.43	.0070	143.01	
139.70	*19.35	128.12	124.94	.0118	84.80
	20.83	127.31	124.13	.0116	86.09
	**22.32	126.34	123.16	.0114	87.54
	23.07	125.73	122.56	.0113	88.47
	25.30	124.26	121.08	.0110	90.80
	29.76	121.36	118.19	.0105	95.65
	34.23	118.62	115.44	.0099	100.63
	*38.69	115.52	112.34	.0094	106.76
	*146.05	20.83	134.37	131.19	.0131
25.30	131.83	128.65	.0125	79.77	
29.02	129.29	126.11	.0120	83.23	
33.48	126.75	123.57	.0115	86.92	
*152.40	22.32	140.31	137.13	.0144	69.69
	23.81	139.70	136.53	.0142	70.34
	25.30	138.43	135.26	.0139	71.74
	26.79	137.77	134.59	.0138	72.49
	29.76	135.94	132.77	.0134	74.62
	34.23	133.10	129.92	.0128	78.12
	38.69	130.56	127.38	.0123	81.47
168.28	*25.30	155.83	152.65	.0180	55.68
	29.76	153.64	150.47	.0174	57.37
	*32.74	152.12	148.95	.0171	58.60
	35.72	150.39	147.22	.0167	60.05
	*38.69	148.72	145.54	.0163	61.50
	41.67	147.09	143.92	.0159	62.97
	*43.16	146.33	143.15	.0157	63.67
	47.62	144.15	140.97	.0152	65.76
	*177.80	25.30	166.07	162.89	.0206
29.76	163.98	160.81	.0200	49.98	
*32.74	162.51	159.33	.0196	50.94	
34.23	161.70	158.52	.0194	51.48	
*35.72	160.93	157.76	.0192	52.00	
38.69	159.41	156.24	.0188	53.06	
*41.67	157.84	154.66	.0185	54.18	
43.16	157.07	153.90	.0183	54.74	
*44.64	156.31	153.14	.0181	55.31	
47.62	154.79	151.61	.0177	56.47	
*50.15	153.62	150.44	.0174	57.39	
52.09	152.50	149.33	.0172	58.29	
56.55	150.37	147.19	.0166	60.07	
*59.53	148.23	145.06	.0161	61.93	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.050"		VOLUME & HEIGHT			
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0130	76.70
	10.50	4.052	3.927	.0127	78.51
	11.60	4.000	3.875	.0123	81.10
	13.50	3.920	3.795	.0117	85.37
	*15.10	3.826	3.701	.0110	90.85
	*16.60	3.754	3.629	.0105	95.45
	*18.80	3.640	3.515	.0097	103.54
	*4.750	16.00	4.082	3.957	.0130
5.000	11.50	4.560	4.435	.0170	58.87
	13.00	4.494	4.369	.0164	60.95
	15.00	4.408	4.283	.0157	63.85
	18.00	4.276	4.151	.0145	68.73
	*20.30	4.184	4.059	.0138	72.50
	*20.80	4.156	4.031	.0136	73.71
	*23.20	4.044	3.919	.0127	78.90
	*24.20	4.000	3.875	.0123	81.10
5.500	*13.00	5.044	4.919	.0215	46.51
	14.00	5.012	4.887	.0212	47.19
	*15.00	4.974	4.849	.0208	48.03
	15.50	4.950	4.825	.0206	48.57
	17.00	4.892	4.767	.0200	49.91
	20.00	4.778	4.653	.0190	52.73
	23.00	4.670	4.545	.0180	55.64
	*26.00	4.548	4.423	.0169	59.24
*5.750	14.00	5.290	5.165	.0240	41.72
	17.00	5.190	5.065	.0230	43.57
	19.50	5.090	4.965	.0220	45.55
	22.50	4.990	4.865	.0210	47.67
*6.000	15.00	5.524	5.399	.0264	37.84
	16.00	5.500	5.375	.0262	38.21
	17.00	5.450	5.325	.0256	39.00
	18.00	5.424	5.299	.0254	39.42
	20.00	5.352	5.227	.0246	40.63
	23.00	5.240	5.115	.0235	42.63
	26.00	5.140	5.015	.0225	44.54
6.625	*17.00	6.135	6.010	.0333	29.99
	20.00	6.049	5.924	.0323	30.93
	*22.00	5.989	5.864	.0316	31.62
	24.00	5.921	5.796	.0308	32.42
	*26.00	5.855	5.730	.0301	33.24
	28.00	5.791	5.666	.0294	34.05
	*29.00	5.761	5.636	.0290	34.45
	32.00	5.675	5.550	.0281	35.62
7.000	17.00	6.538	6.413	.0383	26.10
	20.00	6.456	6.331	.0373	26.83
	*22.00	6.398	6.273	.0366	27.36
	23.00	6.366	6.241	.0362	27.66
	*24.00	6.336	6.211	.0358	27.94
	26.00	6.276	6.151	.0350	28.53
	*28.00	6.214	6.089	.0343	29.16
	29.00	6.184	6.059	.0339	29.47
	*30.00	6.154	6.029	.0336	29.78
	32.00	6.094	5.969	.0329	30.43
	*33.70	6.048	5.923	.0323	30.94
	35.00	6.004	5.879	.0318	31.44
	38.00	5.920	5.795	.0308	32.43
	*40.00	5.836	5.711	.0299	33.48

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 26.67 mm		
				THREE STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
114.30	14.14	103.89	100.71	.0068	147.00	
	15.63	102.92	99.75	.0066	150.46	
	17.26	101.60	98.43	.0064	155.43	
	20.09	99.57	96.39	.0061	163.59	
	*22.47	97.18	94.01	.0057	174.11	
	*24.70	95.35	92.18	.0055	182.92	
	*27.98	92.46	89.28	.0050	198.43	
*120.65	23.81	103.68	100.51	.0068	147.71	
127.00	17.11	115.82	112.65	.0089	112.82	
	19.35	114.15	110.97	.0086	116.81	
	22.32	111.96	108.79	.0082	122.36	
	26.79	108.61	105.44	.0076	131.72	
	*30.21	106.27	103.10	.0072	138.94	
	*30.95	105.56	102.39	.0071	141.27	
	*34.53	102.72	99.54	.0066	151.21	
*36.01	101.60	98.43	.0064	155.43		
139.70	*19.35	128.12	124.94	.0112	89.13	
	20.83	127.31	124.13	.0111	90.44	
	*22.32	126.34	123.16	.0109	92.04	
	23.07	125.73	122.56	.0107	93.08	
	25.30	124.26	121.08	.0105	95.65	
	29.76	121.36	118.19	.0099	101.05	
	34.23	118.62	115.44	.0094	106.63	
	*38.69	115.52	112.34	.0088	113.53	
	*146.05	20.83	134.37	131.19	.0125	79.94
		25.30	131.83	128.65	.0120	83.49
29.02		129.29	126.11	.0115	87.29	
33.48		126.75	123.57	.0109	91.36	
*152.40	22.32	140.31	137.13	.0138	72.51	
	23.81	139.70	136.53	.0137	73.22	
	25.30	138.43	135.26	.0134	74.74	
	26.79	137.77	134.59	.0132	75.55	
	29.76	135.94	132.77	.0128	77.86	
	34.23	133.10	129.92	.0122	81.69	
	38.69	130.56	127.38	.0117	85.36	
168.28	*25.30	155.83	152.65	.0174	57.46	
	29.76	153.64	150.47	.0169	59.27	
	*32.74	152.12	148.95	.0165	60.59	
	35.72	150.39	147.22	.0161	62.13	
	*38.69	148.72	145.54	.0157	63.69	
	41.67	147.09	143.92	.0153	65.26	
	*43.16	146.33	143.15	.0151	66.02	
	47.62	144.15	140.97	.0146	68.27	
	177.80	25.30	166.07	162.89	.0200	50.02
		29.76	163.98	160.81	.0195	51.41
*32.74		162.51	159.33	.0191	52.43	
34.23		161.70	158.52	.0189	53.00	
*35.72		160.93	157.76	.0187	53.55	
38.69		159.41	156.24	.0183	54.68	
*41.67		157.84	154.66	.0179	55.88	
43.16		157.07	153.90	.0177	56.47	
*44.64		156.31	153.14	.0175	57.08	
47.62		154.79	151.61	.0171	58.32	
*50.15		153.62	150.44	.0169	59.29	
52.09		152.50	149.33	.0166	60.25	
56.55		150.37	147.19	.0161	62.16	
*59.53	148.23	145.06	.0156	64.15		

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.050"		VOLUME & HEIGHT			
FOUR STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0120	83.57
	10.50	4.052	3.927	.0117	85.72
	11.60	4.000	3.875	.0113	88.82
	13.50	3.920	3.795	.0106	93.96
	*15.10	3.826	3.701	.0099	100.64
	*16.60	3.754	3.629	.0094	106.32
	*18.80	3.640	3.515	.0086	116.45
*4.750	16.00	4.082	3.957	.0119	84.02
5.000	11.50	4.560	4.435	.0159	62.83
	13.00	4.494	4.369	.0153	65.21
	15.00	4.408	4.283	.0146	68.53
	18.00	4.276	4.151	.0135	74.20
	*20.30	4.184	4.059	.0127	78.61
	*20.80	4.156	4.031	.0125	80.03
	*23.20	4.044	3.919	.0116	86.19
*24.20	4.000	3.875	.0113	88.82	
5.500	13.00	5.044	4.919	.0204	48.95
	14.00	5.012	4.887	.0201	49.71
	15.00	4.974	4.849	.0197	50.63
	15.50	4.950	4.825	.0195	51.23
	17.00	4.892	4.767	.0190	52.73
	20.00	4.778	4.653	.0179	55.89
	23.00	4.670	4.545	.0169	59.17
*26.00	4.548	4.423	.0158	63.25	
*5.750	14.00	5.290	5.165	.0229	43.67
	17.00	5.190	5.065	.0219	45.70
	19.50	5.090	4.965	.0209	47.88
	22.50	4.990	4.865	.0199	50.24
*6.000	15.00	5.524	5.399	.0254	39.43
	16.00	5.500	5.375	.0251	39.84
	17.00	5.450	5.325	.0246	40.70
	18.00	5.424	5.299	.0243	41.16
	20.00	5.352	5.227	.0235	42.48
	23.00	5.240	5.115	.0224	44.66
	26.00	5.132	5.015	.0214	46.77
6.625	*17.00	6.135	6.010	.0323	30.98
	20.00	6.049	5.924	.0313	31.99
	*22.00	5.989	5.864	.0306	32.72
	24.00	5.921	5.796	.0298	33.59
	*26.00	5.855	5.730	.0290	34.46
	28.00	5.791	5.666	.0283	35.34
	*29.00	5.761	5.636	.0280	35.77
32.00	5.675	5.550	.0270	37.04	
7.000	17.00	6.538	6.413	.0372	26.85
	20.00	6.456	6.331	.0362	27.62
	*22.00	6.398	6.273	.0355	28.18
	23.00	6.366	6.241	.0351	28.50
	*24.00	6.336	6.211	.0347	28.81
	26.00	6.276	6.151	.0340	29.43
	*28.00	6.214	6.089	.0332	30.10
	29.00	6.184	6.059	.0329	30.43
	*30.00	6.154	6.029	.0325	30.76
	32.00	6.094	5.969	.0318	31.45
	*33.70	6.048	5.923	.0312	32.10
	35.00	6.004	5.879	.0307	32.54
	38.00	5.920	5.795	.0298	33.60
*40.00	5.836	5.711	.0288	34.72	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 26.67 mm	
				FOUR STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0062	160.15
	15.63	102.92	99.75	.0061	164.28
	17.26	101.60	98.43	.0059	170.21
	20.09	99.57	96.39	.0056	180.06
	*22.47	97.18	94.01	.0052	192.87
	*24.70	95.35	92.18	.0049	203.74
	*27.98	92.46	89.28	.0045	223.17
	*120.65	23.81	103.68	100.51	.0062
127.00	17.11	115.82	112.65	.0083	120.41
	19.35	114.15	110.97	.0080	124.97
	22.32	111.96	108.79	.0076	131.34
	26.79	108.61	105.44	.0070	142.19
	*30.21	106.27	103.10	.0066	150.64
	*30.95	105.56	102.39	.0065	153.38
	*34.53	102.72	99.54	.0061	165.17
	*36.01	101.60	98.43	.0059	170.21
139.70	*19.35	128.12	124.94	.0107	93.80
	20.83	127.31	124.13	.0105	95.26
	*22.32	126.34	123.16	.0103	97.03
	23.07	125.73	122.56	.0102	98.18
	25.30	124.26	121.08	.0099	101.05
	29.76	121.36	118.19	.0093	107.10
	34.23	118.62	115.44	.0088	113.38
	*38.69	115.52	112.34	.0082	121.22
*146.05	20.83	134.37	131.19	.0119	83.68
	25.30	131.83	128.65	.0114	87.58
	29.02	129.29	126.11	.0109	91.76
	33.48	126.75	123.57	.0104	96.28
*152.40	22.32	140.31	137.13	.0132	75.57
	23.81	139.70	136.53	.0131	76.35
	25.30	138.43	135.26	.0128	78.00
	26.79	137.77	134.59	.0127	78.88
	29.76	135.94	132.77	.0123	81.41
	34.23	133.10	129.92	.0117	85.60
	38.69	130.56	127.38	.0112	89.63
168.28	*25.30	155.83	152.65	.0168	59.37
	29.76	153.64	150.47	.0163	61.30
	*32.74	152.12	148.95	.0159	62.71
	35.72	150.39	147.22	.0155	64.37
	*38.69	148.72	145.54	.0151	66.04
	41.61	147.09	143.92	.0148	67.73
	*43.16	146.33	143.15	.0146	68.55
	47.62	144.15	140.97	.0141	70.97
177.80	25.30	166.07	162.89	.0194	51.46
	29.76	163.98	160.81	.0189	52.93
	*32.74	162.51	159.33	.0185	54.01
	34.23	161.70	158.52	.0183	54.62
	*35.72	160.93	157.76	.0181	55.21
	38.69	159.41	156.24	.0177	56.40
	*41.67	157.84	154.66	.0173	57.68
	43.16	157.07	153.90	.0171	58.31
	*44.64	156.31	153.14	.0170	58.96
	47.62	154.79	151.61	.0166	60.28
	*50.15	153.62	150.44	.0163	61.33
	52.09	152.50	149.33	.0160	62.35
	56.55	150.37	147.19	.0155	64.39
*59.53	148.23	145.06	.0150	66.54	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.315"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0146	68.63
	10.50	4.052	3.927	.0143	70.08
	11.60	4.000	3.875	.0139	72.13
	13.50	3.920	3.795	.0132	75.49
	*15.10	3.826	3.701	.0125	79.74
	*16.60	3.754	3.629	.0120	83.26
	*18.80	3.640	3.515	.0112	89.36
*4.750	16.00	4.082	3.957	.0145	68.93
5.000	11.50	4.560	4.435	.0185	54.00
	13.00	4.494	4.369	.0179	55.74
	15.00	4.408	4.283	.0172	58.15
	18.00	4.276	4.151	.0161	62.18
	*20.30	4.184	4.059	.0153	65.25
	*20.80	4.156	4.031	.0151	66.23
	*23.20	4.044	3.919	.0142	70.39
	*24.20	4.000	3.875	.0139	72.13
5.500	*13.00	5.044	4.919	.0230	43.41
	14.00	5.012	4.887	.0227	44.01
	*15.00	4.974	4.849	.0224	44.73
	15.50	4.950	4.825	.0221	45.20
	17.00	4.892	4.767	.0216	46.36
	20.00	4.778	4.653	.0205	48.79
	23.00	4.670	4.545	.0195	51.27
	*26.00	4.548	4.423	.0184	54.31
*5.750	14.00	5.290	5.165	.0255	39.21
	17.00	5.190	5.065	.0245	40.84
	19.50	5.090	4.965	.0235	42.57
	22.50	4.990	4.865	.0225	44.43
*6.000	15.00	5.524	5.399	.0280	35.76
	16.00	5.500	5.375	.0277	36.09
	17.00	5.450	5.325	.0272	36.80
	18.00	5.424	5.299	.0269	37.18
	20.00	5.352	5.227	.0261	38.25
	23.00	5.240	5.115	.0250	40.01
	26.00	5.140	5.015	.0240	41.69
6.625	*17.00	6.135	6.010	.0349	28.67
	20.00	6.049	5.924	.0339	29.53
	*22.00	5.989	5.864	.0332	30.15
	24.00	5.921	5.796	.0324	30.89
	*26.00	5.855	5.730	.0316	31.62
	28.00	5.791	5.666	.0309	32.36
	*29.00	5.761	5.636	.0306	32.72
	32.00	5.675	5.550	.0296	33.78
7.000	17.00	6.538	6.413	.0398	25.10
	20.00	6.456	6.331	.0388	25.77
	*22.00	6.398	6.273	.0381	26.26
	23.00	6.366	6.241	.0377	26.53
	*24.00	6.336	6.211	.0373	26.80
	26.00	6.276	6.151	.0366	27.34
	*28.00	6.214	6.089	.0358	27.91
	29.00	6.184	6.059	.0355	28.19
	*30.00	6.154	6.029	.0351	28.48
	32.00	6.094	5.969	.0344	29.07
	*33.70	6.048	5.923	.0339	29.54
	35.00	6.004	5.879	.0333	30.00
	38.00	5.920	5.795	.0324	30.90
	*40.00	5.836	5.711	.0314	31.84

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 33.40 mm	
				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0076	131.53
	15.63	102.92	99.75	.0074	134.30
	17.26	101.60	98.43	.0072	138.24
	20.09	99.57	96.39	.0069	144.66
	*22.47	97.18	94.01	.0065	152.82
	*24.70	95.35	92.18	.0063	159.57
	*27.98	92.46	89.28	.0058	171.24
*120.65	23.81	103.68	100.51	.0076	132.10
127.00	17.11	115.82	112.65	.0097	103.48
	19.35	114.15	110.97	.0094	106.83
	22.32	111.96	108.79	.0090	111.45
	26.79	108.61	105.44	.0084	119.16
	*30.21	106.27	103.10	.0080	125.04
	*30.95	105.56	102.39	.0079	126.92
	*34.53	102.72	99.54	.0074	134.89
*36.01	101.60	98.43	.0072	138.24	
139.70	*19.35	128.12	124.94	.0120	83.19
	20.83	127.31	124.13	.0119	84.34
	*22.32	126.34	123.16	.0117	85.73
	23.07	125.73	122.56	.0115	86.63
	25.30	124.26	121.08	.0113	88.85
	29.76	121.36	118.19	.0107	93.50
	34.23	118.62	115.44	.0102	98.25
*38.69	115.52	112.34	.0096	104.08	
*146.05	20.83	134.37	131.19	.0133	75.14
	25.30	131.83	128.65	.0128	78.26
	29.02	129.29	126.11	.0123	81.59
	33.48	126.75	123.57	.0117	85.14
*152.40	22.32	140.31	137.13	.0146	68.53
	23.81	139.70	136.53	.0145	69.17
	25.30	138.43	135.26	.0142	70.52
	26.79	137.77	134.59	.0140	71.24
	29.76	135.94	132.77	.0136	73.30
	34.23	133.10	129.92	.0130	76.68
	38.69	130.56	127.38	.0125	79.90
168.28	*25.30	155.83	152.65	.0182	54.94
	29.76	153.64	150.47	.0177	56.59
	*32.74	152.12	148.95	.0173	57.79
	35.72	150.39	147.22	.0169	59.19
	*38.69	148.72	145.54	.0165	60.60
	41.67	147.09	143.92	.0161	62.02
	*43.16	146.33	143.15	.0159	62.71
47.62	144.15	140.97	.0154	64.73	
177.80	25.30	166.07	162.89	.0208	48.10
	29.76	163.98	160.81	.0203	49.38
	*32.74	162.51	159.33	.0199	50.32
	34.23	161.70	158.52	.0197	50.85
	*35.72	160.93	157.76	.0195	51.35
	38.69	159.41	156.24	.0191	52.38
	*41.67	157.84	154.66	.0187	53.48
	43.16	157.07	153.90	.0185	54.03
	*44.64	156.31	153.14	.0183	54.58
	47.62	154.79	151.61	.0179	55.72
	*50.15	153.62	150.44	.0177	56.61
	52.09	152.50	149.33	.0174	57.48
	56.55	150.37	147.19	.0169	59.21
*59.53	148.23	145.06	.0164	61.02	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.315"		VOLUME & HEIGHT			
TWO STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0129	77.58
	10.50	4.052	3.927	.0126	79.43
	11.60	4.000	3.875	.0122	82.08
	13.50	3.920	3.795	.0116	86.45
	*15.10	3.826	3.701	.0109	92.08
	*16.60	3.754	3.629	.0103	96.80
	*18.80	3.640	3.515	.0095	105.14
	*4.750	16.00	4.082	3.957	.0128
5.000	11.50	4.560	4.435	.0168	59.38
	13.00	4.494	4.369	.0163	61.50
	15.00	4.408	4.283	.0155	64.45
	18.00	4.276	4.151	.0144	69.43
	*20.30	4.184	4.059	.0136	73.28
	*20.80	4.156	4.031	.0134	74.52
	*23.20	4.044	3.919	.0125	79.83
	*24.20	4.000	3.875	.0122	82.08
5.500	*13.00	5.044	4.919	.0214	46.83
	14.00	5.012	4.887	.0210	47.52
	*15.00	4.974	4.849	.0207	48.37
	15.50	4.950	4.825	.0204	48.92
	17.00	4.892	4.767	.0199	50.28
	20.00	4.778	4.653	.0188	53.14
	23.00	4.670	4.545	.0178	56.10
	*26.00	4.548	4.423	.0167	59.76
*5.750	14.00	5.290	5.165	.0238	41.97
	17.00	5.190	5.065	.0228	43.85
	19.50	5.090	4.965	.0218	45.85
	22.50	4.990	4.865	.0208	48.01
*6.000	15.00	5.524	5.399	.0263	38.05
	16.00	5.500	5.375	.0260	38.42
	17.00	5.450	5.325	.0255	39.22
	18.00	5.424	5.299	.0252	39.65
	20.00	5.352	5.227	.0245	40.87
	23.00	5.240	5.115	.0233	42.89
	26.00	5.140	5.015	.0223	44.83
6.625	*17.00	6.135	6.010	.0332	30.12
	20.00	6.049	5.924	.0322	31.07
	*22.00	5.989	5.864	.0315	31.76
	24.00	5.921	5.796	.0307	32.58
	*26.00	5.855	5.730	.0299	33.40
	28.00	5.791	5.666	.0292	34.23
	*29.00	5.761	5.636	.0289	34.62
	32.00	5.675	5.550	.0279	35.81
7.000	17.00	6.538	6.413	.0382	26.20
	20.00	6.456	6.331	.0371	26.93
	*22.00	6.398	6.273	.0364	27.47
	23.00	6.366	6.241	.0360	27.77
	*24.00	6.336	6.211	.0356	28.06
	26.00	6.276	6.151	.0349	28.65
	*28.00	6.214	6.089	.0342	29.28
	29.00	6.184	6.059	.0338	29.59
	*30.00	6.154	6.029	.0334	29.91
	32.00	6.094	5.969	.0327	30.57
	*33.70	6.048	5.923	.0322	31.08
	35.00	6.004	5.879	.0317	31.59
	38.00	5.920	5.795	.0307	32.59
*40.00	5.836	5.711	.0297	33.64	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 33.40 mm	
				TWO STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0067	148.67
	15.63	102.92	99.75	.0066	152.22
	17.26	101.60	98.43	.0064	157.30
	20.09	99.57	96.39	.0060	165.67
	*22.47	97.18	94.01	.0057	176.46
	*24.70	95.35	92.18	.0054	185.51
	*27.98	92.46	89.28	.0050	201.48
*120.65	23.81	103.68	100.51	.0067	149.40
127.00	17.11	115.82	112.65	.0088	113.80
	19.35	114.15	110.97	.0085	117.86
	22.32	111.96	108.79	.0081	123.51
	26.79	108.61	105.44	.0075	133.06
	*30.21	106.27	103.10	.0071	140.44
	*30.95	105.56	102.39	.0070	142.81
	*34.53	102.72	99.54	.0065	152.98
*36.01	101.60	98.43	.0064	157.30	
139.70	*19.35	128.12	124.94	.0111	89.74
	20.83	127.31	124.13	.0110	91.07
	*22.32	126.34	123.16	.0108	92.70
	23.07	125.73	122.56	.0107	93.74
	25.30	124.26	121.08	.0104	96.36
	29.76	121.36	118.19	.0098	101.84
	34.23	118.62	115.44	.0093	107.50
*38.69	115.52	112.34	.0087	114.52	
*146.05	20.83	134.37	131.19	.0124	80.44
	25.30	131.83	128.65	.0119	84.03
	29.02	129.29	126.11	.0114	87.87
	33.48	126.75	123.57	.0109	92.01
*152.40	22.32	140.31	137.13	.0137	72.91
	23.81	139.70	136.53	.0136	73.63
	25.30	138.43	135.26	.0133	75.17
	26.79	137.77	134.59	.0132	75.99
	29.76	135.94	132.77	.0128	78.33
	34.23	133.10	129.92	.0122	82.20
	38.69	130.56	127.38	.0116	85.92
168.28	*25.30	155.83	152.65	.0173	57.72
	29.76	153.64	150.47	.0168	59.54
	*32.74	152.12	148.95	.0164	60.87
	35.72	150.39	147.22	.0160	62.43
	*38.69	148.72	145.54	.0156	64.00
	41.67	147.09	143.92	.0152	65.59
	*43.16	146.33	143.15	.0151	66.35
47.62	144.15	140.97	.0146	68.62	
177.80	25.30	166.07	162.89	.0199	50.21
	29.76	163.98	160.81	.0194	51.61
	*32.74	162.51	159.33	.0190	52.64
	34.23	161.70	158.52	.0188	53.22
	*35.72	160.93	157.76	.0186	53.77
	38.69	159.41	156.24	.0182	54.91
	*41.67	157.84	154.66	.0178	56.12
	43.16	157.07	153.90	.0176	56.72
	*44.64	156.31	153.14	.0174	57.33
	47.62	154.79	151.61	.0171	58.58
	*50.15	153.62	150.44	.0168	59.56
	52.09	152.50	149.33	.0165	60.53
56.55	150.37	147.19	.0160	62.45	
*59.53	148.23	145.06	.0155	64.47	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.315"		VOLUME & HEIGHT			
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0112	89.20
	10.50	4.052	3.927	.0109	91.66
	11.60	4.000	3.875	.0105	95.21
	13.50	3.920	3.795	.0099	101.13
	*15.10	3.826	3.701	.0092	108.93
	*16.60	3.754	3.629	.0087	115.60
	*18.80	3.640	3.515	.0078	127.69
	*4.750	16.00	4.082	3.957	.0111
5.000	11.50	4.560	4.435	.0152	65.96
	13.00	4.494	4.369	.0146	68.59
	15.00	4.408	4.283	.0138	72.28
	18.00	4.276	4.151	.0127	78.60
	*20.30	4.184	4.059	.0120	83.57
	*20.80	4.156	4.031	.0117	85.18
	*23.20	4.044	3.919	.0108	92.19
	*24.20	4.000	3.875	.0105	95.21
5.500	*13.00	5.044	4.919	.0197	50.82
	14.00	5.012	4.887	.0194	51.65
	*15.00	4.974	4.849	.0190	52.65
	15.50	4.950	4.825	.0188	53.30
	17.00	4.892	4.767	.0182	54.92
	20.00	4.778	4.653	.0171	58.35
	23.00	4.670	4.545	.0161	61.93
	*26.00	4.548	4.423	.0151	66.43
*5.750	14.00	5.290	5.165	.0221	45.16
	17.00	5.190	5.065	.0211	47.33
	19.50	5.090	4.965	.0201	49.68
	22.50	4.990	4.865	.0191	52.22
*6.000	15.00	5.524	5.399	.0246	40.65
	16.00	5.500	5.375	.0243	41.07
	17.00	5.450	5.325	.0238	41.99
	18.00	5.424	5.299	.0235	42.48
	20.00	5.352	5.227	.0228	43.89
	23.00	5.240	5.115	.0216	46.22
	26.00	5.140	5.015	.0206	48.48
6.625	*17.00	6.135	6.010	.0315	31.72
	20.00	6.049	5.924	.0305	32.78
	*22.00	5.989	5.864	.0298	33.55
	24.00	5.921	5.796	.0290	34.46
	*26.00	5.855	5.730	.0283	35.38
	28.00	5.791	5.666	.0275	36.31
	*29.00	5.761	5.636	.0272	36.76
	32.00	5.675	5.550	.0262	38.10
7.000	17.00	6.538	6.413	.0365	27.41
	20.00	6.456	6.331	.0354	28.21
	*22.00	6.398	6.273	.0347	28.80
	23.00	6.366	6.241	.0343	29.13
	*24.00	6.336	6.211	.0340	29.45
	26.00	6.276	6.151	.0332	30.10
	*28.00	6.214	6.089	.0325	30.80
	29.00	6.184	6.059	.0321	31.14
	*30.00	6.154	6.029	.0318	31.50
	32.00	6.094	5.969	.0310	32.22
	*33.70	6.048	5.923	.0305	32.79
	35.00	6.004	5.879	.0300	33.36
	38.00	5.920	5.795	.0290	34.48
*40.00	5.836	5.711	.0280	35.66	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 33.40 mm	
				THREE STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m ² /m ³
114.30	14.14	103.89	100.71	.0058	170.94
	15.63	102.92	99.75	.0057	175.65
	17.26	101.60	98.43	.0055	182.45
	20.09	99.57	96.39	.0052	193.81
	*22.47	97.18	94.01	.0048	208.74
	*24.70	95.35	92.18	.0045	221.54
	*27.98	92.46	89.28	.0041	244.70
	*120.65	23.81	103.68	100.51	.0058
127.00	17.11	115.82	112.65	.0079	126.41
	19.35	114.15	110.97	.0076	131.44
	22.32	111.96	108.79	.0072	138.51
	26.79	108.61	105.44	.0066	150.63
	*30.21	106.27	103.10	.0062	160.15
	*30.95	105.56	102.39	.0061	163.25
	*34.53	102.72	99.54	.0057	176.67
	*36.01	101.60	98.43	.0055	182.45
139.70	*19.35	128.12	124.94	.0103	97.40
	20.83	127.31	124.13	.0101	98.97
	*22.32	126.34	123.16	.0099	100.89
	23.07	125.73	122.56	.0098	102.14
	25.30	124.26	121.08	.0095	105.25
	29.76	121.36	118.19	.0089	111.82
	34.23	118.62	115.44	.0084	118.69
	*38.69	115.52	112.34	.0079	127.30
*146.05	20.83	134.37	131.19	.0116	86.54
	25.30	131.83	128.65	.0110	90.71
	29.02	129.29	126.11	.0105	95.21
	33.48	126.75	123.57	.0100	100.08
*152.40	22.32	140.31	137.13	.0128	77.89
	23.81	139.70	136.53	.0127	78.71
	25.30	138.43	135.26	.0124	80.47
	26.79	137.77	134.59	.0123	81.41
	29.76	135.94	132.77	.0119	84.10
	34.23	133.10	129.92	.0113	88.58
	38.69	130.56	127.38	.0108	92.91
	168.28	*25.30	155.83	152.65	.0164
29.76		153.64	150.47	.0159	62.82
*32.74		152.12	148.95	.0156	64.30
35.72		150.39	147.22	.0151	66.04
*38.69		148.72	145.54	.0147	67.81
41.67		147.09	143.92	.0144	69.59
*43.16		146.33	143.15	.0142	70.45
47.62		144.15	140.97	.0137	73.02
177.80	25.30	166.07	162.89	.0190	52.53
	29.76	163.98	160.81	.0185	54.06
	*32.74	162.51	159.33	.0181	55.19
	34.23	161.70	158.52	.0179	55.83
	*35.72	160.93	157.76	.0177	56.43
	38.69	159.41	156.24	.0173	57.68
	*41.67	157.84	154.66	.0169	59.02
	43.16	157.07	153.90	.0168	59.68
	*44.64	156.31	153.14	.0166	60.36
	47.62	154.79	151.61	.0162	61.75
	*50.15	153.62	150.44	.0159	62.85
	52.09	152.50	149.33	.0156	63.93
	56.55	150.37	147.19	.0151	66.07
*59.53	148.23	145.06	.0146	68.33	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.315"		VOLUME & HEIGHT			
FOUR STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0095	104.92
	10.50	4.052	3.927	.0092	108.34
	11.60	4.000	3.875	.0088	113.33
	13.50	3.920	3.795	.0082	121.83
	*15.10	3.826	3.701	.0075	133.32
	*16.60	3.754	3.629	.0070	143.46
	*18.80	3.640	3.515	.0062	162.56
	*4.750	16.00	4.082	3.957	.0095
5.000	11.50	4.560	4.435	.0135	74.18
	13.00	4.494	4.369	.0129	77.52
	15.00	4.408	4.283	.0122	82.26
	18.00	4.276	4.151	.0110	90.56
	*20.30	4.184	4.059	.0103	97.22
	*20.80	4.156	4.031	.0101	99.41
	*23.20	4.044	3.919	.0092	109.08
	*24.20	4.000	3.875	.0088	113.33
5.500	*13.00	5.044	4.919	.0180	55.57
	14.00	5.012	4.887	.0177	56.55
	*15.00	4.974	4.849	.0173	57.76
	15.50	4.950	4.825	.0171	58.54
	17.00	4.892	4.767	.0165	60.50
	20.00	4.778	4.653	.0155	64.69
	23.00	4.670	4.545	.0145	69.13
	*26.00	4.548	4.423	.0134	74.77
*5.750	14.00	5.290	5.165	.0205	48.86
	17.00	5.190	5.065	.0194	51.42
	19.50	5.090	4.965	.0184	54.20
	22.50	4.990	4.865	.0175	57.24
*6.000	15.00	5.524	5.399	.0229	43.62
	16.00	5.500	5.375	.0227	44.12
	17.00	5.450	5.325	.0221	45.18
	18.00	5.424	5.299	.0219	45.75
	20.00	5.352	5.227	.0211	47.38
	23.00	5.240	5.115	.0200	50.12
	26.00	5.140	5.015	.0189	52.78
6.625	*17.00	6.135	6.010	.0298	33.51
	20.00	6.049	5.924	.0288	34.69
	*22.00	5.989	5.864	.0281	35.56
	24.00	5.921	5.796	.0273	36.58
	*26.00	5.855	5.730	.0266	37.62
	28.00	5.791	5.666	.0259	38.67
	*29.00	5.761	5.636	.0255	39.18
	32.00	5.675	5.550	.0246	40.71
7.000	17.00	6.538	6.413	.0348	28.73
	20.00	6.456	6.331	.0338	29.61
	*22.00	6.398	6.273	.0330	30.26
	23.00	6.366	6.241	.0326	30.63
	*24.00	6.336	6.211	.0323	30.98
	26.00	6.276	6.151	.0315	31.70
	*28.00	6.214	6.089	.0308	32.48
	29.00	6.184	6.059	.0304	32.86
	*30.00	6.154	6.029	.0301	33.26
	32.00	6.094	5.969	.0294	34.06
	*33.70	6.048	5.923	.0288	34.71
	35.00	6.004	5.879	.0283	35.34
	38.00	5.920	5.795	.0273	36.60
*40.00	5.836	5.711	.0264	37.93	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 33.40 mm	
				FOUR STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m ³
114.30	14.14	103.89	100.71	.0050	201.07
	15.63	102.92	99.75	.0048	207.62
	17.26	101.60	98.43	.0046	217.19
	20.09	99.57	96.39	.0043	233.48
	*22.47	97.18	94.01	.0039	255.49
	*24.70	95.35	92.18	.0036	274.93
	*27.98	92.46	89.28	.0032	311.52
*120.65	23.81	103.68	100.51	.0049	202.42
127.00	17.11	115.82	112.65	.0070	142.16
	19.35	114.15	110.97	.0067	148.56
	22.32	111.96	108.79	.0063	157.65
	26.79	108.61	105.44	.0058	173.55
	*30.21	106.27	103.10	.0054	186.30
	*30.95	105.56	102.39	.0052	190.50
	*34.53	102.72	99.54	.0048	209.04
*36.01	101.60	98.43	.0046	217.19	
139.70	*19.35	128.12	124.94	.0094	106.49
	20.83	127.31	124.13	.0092	108.37
	*22.32	126.34	123.16	.0090	110.68
	23.07	125.73	122.56	.0089	112.18
	25.30	124.26	121.08	.0086	115.94
	29.76	121.36	118.19	.0081	123.98
	34.23	118.62	115.44	.0075	132.47
*38.69	115.52	112.34	.0070	143.29	
*146.05	20.83	134.37	131.19	.0107	93.64
	25.30	131.83	128.65	.0101	98.54
	29.02	129.29	126.11	.0096	103.88
	33.48	126.75	123.57	.0091	109.70
*152.40	22.32	140.31	137.13	.0120	83.60
	23.81	139.70	136.53	.0118	84.55
	25.30	138.43	135.26	.0116	86.58
	26.79	137.77	134.56	.0114	87.67
	29.76	135.94	132.77	.0110	90.80
	34.23	133.10	129.92	.0104	96.04
	38.69	130.56	127.38	.0099	101.15
168.28	*25.30	155.83	152.65	.0156	64.21
	29.76	153.64	150.47	.0150	66.48
	*32.74	152.12	148.95	.0147	68.14
	35.72	150.39	147.22	.0143	70.10
	*38.69	148.72	145.54	.0139	72.09
	41.67	147.09	143.92	.0135	74.11
	*43.16	146.33	143.15	.0133	75.09
47.62	144.15	140.97	.0128	78.01	
177.80	25.30	166.07	162.89	.0182	55.06
	29.76	163.98	160.81	.0176	56.75
	*32.74	162.51	159.33	.0172	57.99
	34.23	161.70	158.52	.0170	58.70
	*35.72	160.93	157.76	.0168	59.37
	38.69	159.41	156.24	.0165	60.75
	*41.67	157.84	154.66	.0161	62.24
	43.16	157.07	153.90	.0159	62.98
	*44.64	156.31	153.14	.0157	63.73
	47.62	154.79	151.61	.0153	65.28
	*50.15	153.62	150.44	.0150	66.51
	52.09	152.50	149.33	.0148	67.72
	56.55	150.37	147.19	.0143	70.13
*59.53	148.23	145.06	.0138	72.68	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.6650"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0136	73.67
	10.50	4.052	3.927	.0133	75.34
	11.60	4.000	3.875	.0129	77.72
	13.50	3.920	3.795	.0123	81.63
	*15.10	3.826	3.701	.0115	86.63
	*16.60	3.754	3.629	.0110	90.80
	*18.80	3.640	3.515	.0102	98.10
*4.750	16.00	4.082	3.957	.0135	74.02
5.000	11.50	4.560	4.435	.0175	57.07
	13.00	4.494	4.369	.0169	59.02
	15.00	4.408	4.283	.0162	61.73
	18.00	4.276	4.151	.0151	66.29
	*20.30	4.184	4.059	.0143	69.79
	*20.80	4.156	4.031	.0141	70.91
	*23.20	4.044	3.919	.0132	75.70
	*24.20	4.000	3.875	.0129	77.72
5.500	*13.00	5.044	4.919	.0220	45.38
	14.00	5.012	4.887	.0217	46.03
	*15.00	4.974	4.849	.0214	46.82
	15.50	4.950	4.825	.0211	47.34
	17.00	4.892	4.767	.0206	48.61
	20.00	4.778	4.653	.0195	51.28
	23.00	4.670	4.545	.0185	54.03
	*26.00	4.548	4.423	.0174	57.42
*5.750	14.00	5.290	5.165	.0245	40.80
	17.00	5.190	5.065	.0235	42.57
	19.50	5.090	4.965	.0225	44.46
	22.50	4.990	4.865	.0215	46.49
*6.000	15.00	5.524	5.399	.0270	37.08
	16.00	5.500	5.375	.0267	37.44
	17.00	5.450	5.325	.0262	38.20
	18.00	5.424	5.299	.0259	38.61
	20.00	5.352	5.227	.0251	39.76
	23.00	5.240	5.115	.0240	41.67
	26.00	5.132	5.015	.0230	43.50
6.625	*17.00	6.135	6.010	.0339	29.51
	20.00	6.049	5.924	.0329	30.42
	*22.00	5.989	5.864	.0322	31.09
	24.00	5.921	5.796	.0314	31.87
	*26.00	5.855	5.730	.0306	32.65
	28.00	5.791	5.666	.0299	33.44
	*29.00	5.761	5.636	.0296	33.83
	32.00	5.675	5.550	.0286	34.95
	7.000	17.00	6.538	6.413	.0388
20.00		6.456	6.331	.0378	26.45
*22.00		6.398	6.273	.0371	26.96
23.00		6.366	6.241	.0367	27.25
*24.00		6.336	6.211	.0363	27.53
26.00		6.276	6.151	.0356	28.10
*28.00		6.214	6.089	.0348	28.71
29.00		6.184	6.059	.0345	29.01
*30.00		6.154	6.029	.0341	29.31
32.00		6.094	5.969	.0334	29.94
*33.70		6.048	5.923	.0329	30.44
35.00		6.004	5.879	.0323	30.92
38.00		5.920	5.795	.0314	31.88
*40.00		5.836	5.711	.0304	32.89

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 42.16 mm	
				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0071	141.19
	15.63	102.92	99.75	.0069	144.39
	17.26	101.60	98.43	.0067	148.95
	20.09	99.57	96.39	.0064	156.43
	*22.47	97.18	94.01	.0060	166.02
	*24.70	95.35	92.18	.0057	174.01
	*27.98	92.46	89.28	.0053	187.99
*120.65	23.81	103.68	100.51	.0070	141.85
127.00	17.11	115.82	112.65	.0091	109.37
	19.35	114.15	110.97	.0088	113.11
	22.32	111.96	108.79	.0085	118.31
	26.79	108.61	105.44	.0079	127.04
	*30.21	106.27	103.10	.0075	133.74
	*30.95	105.56	102.39	.0074	135.90
	*34.53	102.72	99.54	.0069	145.07
*36.01	101.60	98.43	.0067	148.95	
139.70	*19.35	128.12	124.94	.0115	86.96
	20.83	127.31	124.13	.0113	88.21
	*22.32	126.34	123.16	.0111	89.73
	23.07	125.73	122.56	.0110	90.71
	25.30	124.26	121.08	.0107	93.16
	29.76	121.36	118.19	.0102	98.28
	34.23	118.62	115.44	.0097	103.54
*38.69	115.52	112.34	.0091	110.03	
*146.05	20.83	134.37	131.19	.0128	78.20
	25.30	131.83	128.65	.0123	81.58
	29.02	129.29	126.11	.0117	85.21
	33.48	126.75	123.57	.0112	89.09
*152.40	22.32	140.31	137.13	.0141	71.07
	23.81	139.70	136.53	.0139	71.75
	25.30	138.43	135.26	.0137	73.21
	26.79	137.77	134.59	.0135	73.99
	29.76	135.94	132.77	.0131	76.20
	34.23	133.10	129.92	.0125	79.86
	38.69	130.56	127.38	.0120	83.37
168.28	*25.30	155.83	152.65	.0177	56.55
	29.76	153.64	150.47	.0172	58.31
	*32.74	152.12	148.95	.0168	59.58
	35.72	150.39	147.22	.0164	61.07
	*38.69	148.72	145.54	.0160	62.58
	41.67	147.09	143.92	.0156	64.09
	*43.16	146.33	143.15	.0154	64.82
47.62	144.15	140.97	.0149	66.99	
177.80	25.30	166.07	162.89	.0203	49.33
	29.76	163.98	160.81	.0197	50.68
	*32.74	162.51	159.33	.0194	51.67
	34.23	161.70	158.52	.0191	52.23
	*35.72	160.93	157.76	.0190	52.76
	38.69	159.41	156.24	.0186	53.85
	*41.67	157.84	154.66	.0182	55.02
	43.16	157.07	153.90	.0180	55.59
	*44.64	156.31	153.14	.0178	56.18
	47.62	154.79	151.61	.0174	57.38
	*50.15	153.62	150.44	.0171	58.33
	52.09	152.50	149.33	.0169	59.26
56.55	150.37	147.19	.0164	61.09	
*59.53	148.23	145.06	.0159	63.02	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.660"		VOLUME & HEIGHT			
TWO STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0109	91.77
	10.50	4.052	3.927	.0106	94.38
	11.60	4.000	3.875	.0102	98.14
	13.50	3.920	3.795	.0096	104.45
	*15.10	3.826	3.701	.0089	112.79
	*16.60	3.754	3.629	.0083	119.96
	*18.80	3.640	3.515	.0075	133.03
*4.750	16.00	4.082	3.957	.0108	92.31
5.000	11.50	4.560	4.435	.0148	67.36
	13.00	4.494	4.369	.0143	70.10
	15.00	4.408	4.283	.0135	73.96
	18.00	4.276	4.151	.0124	80.59
	*20.30	4.184	4.059	.0117	85.82
	*20.80	4.156	4.031	.0114	87.53
	*23.20	4.044	3.919	.0105	94.94
	*24.20	4.000	3.875	.0102	98.14
5.500	*13.00	5.044	4.919	.0194	51.65
	14.00	5.012	4.887	.0190	52.50
	*15.00	4.974	4.849	.0187	53.53
	15.50	4.950	4.825	.0184	54.20
	17.00	4.892	4.767	.0179	55.88
	20.00	4.778	4.653	.0168	59.44
	23.00	4.670	4.545	.0158	63.16
	*26.00	4.548	4.423	.0147	67.84
*5.750	14.00	5.290	5.165	.0218	45.81
	17.00	5.190	5.065	.0208	48.05
	19.50	5.090	4.965	.0198	50.47
	22.50	4.990	4.865	.0188	53.09
*6.000	15.00	5.524	5.399	.0243	41.17
	16.00	5.500	5.375	.0240	41.61
	17.00	5.450	5.325	.0235	42.55
	18.00	5.424	5.299	.0232	43.06
	20.00	5.352	5.227	.0225	44.50
	23.00	5.240	5.115	.0213	46.91
	26.00	5.140	5.015	.0202	49.23
6.625	*17.00	6.135	6.010	.0312	32.04
	20.00	6.049	5.924	.0302	33.12
	*22.00	5.989	5.864	.0295	33.91
	24.00	5.921	5.796	.0287	34.84
	*26.00	5.855	5.730	.0279	35.78
	28.00	5.791	5.666	.0272	36.73
	*29.00	5.761	5.636	.0269	37.19
	32.00	5.675	5.550	.0259	38.56
7.000	17.00	6.538	6.413	.0362	27.65
	20.00	6.456	6.331	.0351	28.46
	*22.00	6.398	6.273	.0344	29.06
	23.00	6.366	6.241	.0340	29.40
	*24.00	6.336	6.211	.0336	29.72
	26.00	6.276	6.151	.0329	30.39
	*28.00	6.214	6.089	.0322	31.10
	29.00	6.184	6.059	.0318	31.45
	*30.00	6.154	6.029	.0314	31.81
	32.00	6.094	5.969	.0307	32.55
	*33.70	6.048	5.923	.0302	33.24
	35.00	6.004	5.879	.0297	33.71
	38.00	5.920	5.795	.0287	34.85
	*40.00	5.836	5.711	.0277	36.06

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 42.16 mm	
				TWO STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m ³ /m
114.30	14.14	103.89	100.71	.0057	175.87
	15.63	102.92	99.75	.0055	180.86
	17.26	101.60	98.43	.0053	188.08
	20.09	99.57	96.39	.0050	200.17
	*22.47	97.18	94.01	.0046	216.14
	*24.70	95.35	92.18	.0043	229.89
	*27.98	92.46	89.28	.0039	254.93
	*120.65	23.81	103.68	100.51	.0057
127.00	17.11	115.82	112.65	.0077	129.09
	19.35	114.15	110.97	.0074	134.34
	22.32	111.96	108.79	.0071	141.73
	26.79	108.61	105.44	.0065	154.45
	*30.21	106.27	103.10	.0061	164.47
	*30.95	105.56	102.39	.0060	167.74
	*34.53	102.72	99.54	.0055	181.94
	*36.01	101.60	98.43	.0053	188.08
139.70	*19.35	128.12	124.94	.0101	98.08
	20.83	121.31	124.13	.0099	100.61
	*22.32	126.34	123.16	.0097	102.59
	23.07	125.73	122.56	.0096	103.88
	25.30	124.26	121.08	.0093	107.10
	29.76	121.36	118.19	.0088	113.91
	34.23	118.62	115.44	.0083	121.05
	*38.69	115.52	112.34	.0077	130.02
*146.05	20.83	134.37	131.19	.0114	87.78
	25.30	131.83	128.65	.0109	92.08
	29.02	129.29	126.11	.0103	96.72
	33.48	126.75	123.57	.0098	101.75
*152.40	22.32	140.31	137.13	.0127	78.90
	23.81	139.70	136.53	.0125	79.74
	25.30	138.43	135.26	.0123	81.55
	26.79	137.77	134.59	.0121	82.51
	29.76	135.74	132.77	.0117	85.28
	34.23	133.10	129.92	.0111	89.89
	38.69	130.56	127.38	.0106	94.35
168.28	*25.30	155.83	152.65	.0163	61.41
	29.76	153.64	150.47	.0158	63.48
	*32.74	152.12	148.95	.0154	64.99
	*35.72	150.39	147.22	.0150	66.77
	*38.69	148.72	145.54	.0146	68.57
	41.67	147.09	143.92	.0142	70.39
	*43.16	146.33	143.15	.0140	71.28
	47.62	144.15	140.97	.0135	73.90
177.80	25.30	166.07	162.89	.0189	52.98
	29.76	163.98	160.81	.0183	54.54
	*32.74	162.51	159.33	.0180	55.69
	34.23	161.70	158.52	.0177	56.34
	*35.72	160.93	157.76	.0176	56.96
	38.69	159.41	156.24	.0172	58.23
	*41.67	157.84	154.66	.0168	59.60
	43.16	157.07	153.90	.0166	60.27
	*44.64	156.31	153.14	.0164	60.96
	47.62	154.79	151.61	.0160	62.38
	*50.15	153.62	150.44	.0157	63.50
	52.09	152.50	149.33	.0155	64.60
	56.55	150.37	147.19	.0150	66.79
*59.53	148.23	145.06	.0145	69.10	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.660"		VOLUME & HEIGHT			
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
5.000	11.50	4.560	4.435	.0122	82.18
	13.00	4.494	4.369	.0116	86.29
	15.00	4.408	4.283	.0108	92.21
	18.00	4.276	4.151	.0097	102.76
	*20.30	4.184	4.059	.0090	111.42
	*20.80	4.156	4.031	.0087	114.31
	*23.20	4.044	3.919	.0079	127.29
	*24.20	4.000	3.875	.0075	133.12
5.500	*13.00	5.044	4.919	.0167	59.94
	14.00	5.012	4.887	.0164	61.08
	*15.00	4.974	4.849	.0160	62.49
	15.50	4.950	4.825	.0158	63.40
	17.00	4.892	4.767	.0152	65.71
	20.00	4.778	4.653	.0141	70.69
	23.00	4.670	4.545	.0132	76.02
	*26.00	4.548	4.423	.0121	82.90
*5.750	14.00	5.290	5.165	.0192	52.21
	17.00	5.190	5.065	.0181	55.14
	19.50	5.090	4.965	.0171	58.35
	22.50	4.990	4.865	.0162	61.89
*6.000	15.00	5.524	5.399	.0216	46.27
	16.00	5.500	5.375	.0214	46.83
	17.00	5.450	5.325	.0208	48.02
	18.00	5.424	5.299	.0205	48.67
	20.00	5.352	5.227	.0198	50.52
	23.00	5.240	5.115	.0186	53.64
26.00	5.140	5.015	.0176	56.71	
6.625	*17.00	6.135	6.010	.0285	35.05
	20.00	6.049	5.924	.0275	36.34
	*22.00	5.989	5.864	.0268	37.30
	24.00	5.921	5.796	.0260	38.42
	*26.00	5.855	5.730	.0253	39.57
	28.00	5.791	5.666	.0245	40.74
	*29.00	5.761	5.636	.0242	41.30
	32.00	5.675	5.550	.0233	43.00
7.000	17.00	6.538	6.413	.0335	29.86
	20.00	6.456	6.331	.0325	30.81
	*22.00	6.398	6.273	.0317	31.51
	23.00	6.366	6.241	.0313	31.91
	*24.00	6.336	6.211	.0310	32.29
	26.00	6.276	6.151	.0302	33.08
	*28.00	6.214	6.089	.0295	33.92
	29.00	6.184	6.059	.0291	34.34
	*30.00	6.154	6.029	.0288	34.77
	32.00	6.094	5.969	.0280	35.66
	*33.70	6.048	5.923	.0275	36.36
	35.00	6.004	5.879	.0270	37.05
	38.00	5.920	5.795	.0260	38.44
	*40.00	5.836	5.711	.0251	39.91
7.625	*20.00	7.125	7.000	.0413	24.22
	24.00	7.025	6.900	.0399	25.06
	26.40	6.969	6.844	.0391	25.54
	29.70	6.875	6.750	.0379	26.40
	33.70	6.765	6.640	.0364	27.45
	39.00	6.625	6.500	.0346	28.90
	*45.30	6.435	6.310	.0322	31.06
	46.10	6.560	6.500	.0338	29.61
*8.000	26.00	7.386	7.261	.0450	22.24

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 42.16 mm		
				THREE STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
127.00	17.11	115.82	112.65	.0063	157.48	
	19.35	114.15	110.97	.0060	165.37	
	22.32	111.96	108.79	.0057	176.71	
	26.79	108.61	105.44	.0051	196.93	
	*30.21	106.27	103.10	.0047	213.52	
	*30.95	105.56	102.39	.0046	219.06	
	*34.53	102.72	99.54	.0041	243.94	
	*36.01	101.60	98.43	.0039	255.10	
	139.70	*19.35	128.12	124.94	.0087	114.86
		20.83	127.31	124.13	.0085	117.05
*22.32		126.34	123.16	.0084	119.75	
23.07		125.73	122.56	.0082	121.51	
25.30		124.26	121.08	.0079	125.94	
29.76		121.36	118.19	.0074	135.47	
34.23		118.62	115.44	.0069	145.68	
*38.69		115.52	112.34	.0063	158.87	
*146.05		20.83	134.37	131.19	.0100	100.05
	25.30	131.83	128.65	.0095	105.67	
	29.02	129.29	126.11	.0089	111.83	
	33.48	126.75	123.57	.0084	118.60	
*152.40	22.32	140.31	137.13	.0113	88.67	
	23.81	139.70	136.53	.0111	89.74	
	25.30	138.43	135.26	.0109	92.03	
	26.79	137.77	134.59	.0107	93.26	
	29.76	135.94	132.77	.0103	96.81	
	34.23	133.10	129.92	.0097	102.80	
	38.69	130.56	127.38	.0092	108.68	
168.28	*25.30	155.83	152.65	.0149	67.17	
	29.76	153.64	150.47	.0144	69.65	
	*32.74	152.12	148.95	.0140	71.47	
	35.72	150.39	147.22	.0136	73.63	
	*38.69	148.72	145.54	.0132	75.83	
	41.67	147.09	143.92	.0128	78.07	
	*43.16	146.33	143.15	.0126	79.16	
	47.62	144.15	140.97	.0121	82.41	
177.80	25.30	166.07	162.89	.0175	57.22	
	29.76	163.98	160.81	.0169	59.04	
	*32.74	162.51	159.33	.0166	60.39	
	34.23	161.70	158.52	.0164	61.15	
	*35.72	160.93	157.76	.0162	61.88	
	38.69	159.41	156.24	.0158	63.39	
	*41.67	157.84	154.66	.0154	65.01	
	43.16	157.07	153.90	.0152	65.81	
	*44.64	156.31	153.14	.0150	66.64	
	47.62	154.79	151.61	.0146	68.33	
	*50.15	153.62	150.44	.0144	69.68	
	52.09	152.50	149.33	.0141	71.01	
	56.55	150.37	147.19	.0136	73.67	
*59.53	148.23	145.06	.0131	76.49		
193.68	*29.76	180.98	177.80	.0215	46.42	
	35.72	178.44	175.26	.0208	48.02	
	39.29	177.01	173.84	.0204	48.95	
	44.20	174.63	171.45	.0198	50.59	
	50.15	171.83	168.66	.0190	52.61	
	58.04	168.28	165.10	.0181	55.38	
	*67.41	163.45	160.27	.0168	59.52	
	*196.85	68.60	166.62	165.10	.0176	56.74
*203.20	38.69	187.60	184.43	.0235	42.62	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT	
O.D. 1.660"					
FOUR STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
5.500	*13.00	5.044	4.919	.0140	71.39
	14.00	5.012	4.887	.0137	73.02
	*15.00	4.974	4.849	.0133	75.04
	15.50	4.950	4.825	.0131	76.37
	17.00	4.892	4.767	.0125	79.74
	20.00	4.778	4.653	.0115	87.19
	23.00	4.670	4.545	.0105	95.44
	*26.00	4.548	4.423	.0094	106.54
	*5.750	14.00	5.290	5.165	.0165
17.00		5.190	5.065	.0155	64.69
19.50		5.090	4.965	.0145	69.15
22.50		4.990	4.865	.0135	74.18
*6.000	15.00	5.524	5.399	.0189	52.81
	16.00	5.500	5.375	.0187	53.54
	17.00	5.450	5.325	.0181	55.11
	18.00	5.424	5.299	.0179	55.95
	20.00	5.352	5.227	.0171	58.42
	23.00	5.240	5.115	.0160	62.63
	26.00	5.140	5.015	.0150	66.86
6.625	*17.00	6.135	6.010	.0259	38.68
	20.00	6.049	5.924	.0248	40.26
	*22.00	5.989	5.864	.0241	41.43
	24.00	5.921	5.796	.0233	42.83
	*26.00	5.855	5.730	.0226	44.26
	28.00	5.791	5.666	.0219	45.72
	*29.00	5.761	5.636	.0215	46.44
	32.00	5.675	5.550	.0206	48.60
	7.000	17.00	6.538	6.413	.0308
20.00		6.456	6.331	.0298	33.58
*22.00		6.398	6.273	.0291	34.41
23.00		6.366	6.241	.0287	34.89
*24.00		6.336	6.211	.0283	35.35
26.00		6.276	6.151	.0276	36.29
*28.00		6.214	6.089	.0268	37.31
29.00		6.184	6.059	.0264	37.82
*30.00		6.154	6.029	.0261	38.34
32.00		6.094	5.969	.0254	39.42
*33.70		6.048	5.923	.0248	40.28
35.00		6.004	5.879	.0243	41.13
38.00		5.920	5.795	.0233	42.85
*40.00	5.836	5.711	.0224	44.69	
7.625	*20.00	7.125	7.000	.0386	25.90
	24.00	7.025	6.900	.0372	26.86
	26.40	6.969	6.844	.0365	27.42
	29.70	6.875	6.750	.0352	28.40
	33.70	6.765	6.640	.0338	29.63
	39.00	6.625	6.500	.0319	31.32
	*45.30	6.435	6.310	.0295	33.88
*7.750	46.10	6.560	6.500	.0311	32.16
*8.000	26.00	7.386	7.261	.0423	23.65
*8.125	28.00	7.485	7.360	.0437	22.87
	32.00	7.385	7.260	.0423	23.66
	35.50	7.285	7.160	.0408	24.48
	39.50	7.185	7.060	.0394	25.35

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 42.16 mm		
				FOUR STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
139.70	*19.35	128.12	124.94	.0073	136.81	
	20.63	127.31	124.13	.0071	139.93	
	*22.32	126.34	123.16	.0070	143.81	
	23.07	125.73	122.56	.0068	146.35	
	25.30	124.26	121.08	.0065	152.82	
	29.76	121.36	118.19	.0060	167.09	
	34.23	118.62	115.44	.0055	182.89	
	*38.69	115.52	112.34	.0049	204.18	
	*146.05	20.83	134.37	131.19	.0086	116.31
		25.30	131.83	128.65	.0081	123.97
29.02		129.29	126.11	.0075	132.53	
33.48		126.75	123.57	.0070	142.15	
*152.40	22.32	140.31	137.13	.0099	101.21	
	23.81	139.70	136.53	.0097	102.60	
	25.30	138.43	135.26	.0095	105.61	
	26.79	137.77	134.59	.0093	107.23	
	29.76	135.94	132.77	.0089	111.95	
	34.23	133.10	129.92	.0083	120.03	
	38.69	130.56	127.38	.0078	128.12	
168.28	*25.30	155.83	152.65	.0135	74.12	
	29.76	153.64	150.47	.0130	77.16	
	*32.74	152.12	148.95	.0126	79.40	
	35.72	150.39	147.22	.0122	82.08	
	*38.69	148.72	145.54	.0118	84.82	
	41.67	147.09	143.92	.0114	87.63	
	*43.16	146.33	143.15	.0112	89.00	
	47.62	144.15	140.97	.0107	93.13	
	177.80	25.30	166.07	162.89	.0161	62.19
		29.76	163.98	160.81	.0155	64.35
*32.74		162.51	159.33	.0152	65.95	
34.23		161.70	158.52	.0150	66.87	
*35.72		160.93	157.76	.0148	67.74	
38.69		159.41	156.24	.0144	69.55	
*41.67		157.84	154.66	.0140	71.50	
43.16		157.07	153.90	.0138	72.48	
*44.64		156.31	153.14	.0136	73.48	
47.62		154.79	151.61	.0132	75.54	
*50.15		153.62	150.44	.0130	77.19	
52.09		152.50	149.33	.0127	78.83	
56.55		150.37	147.19	.0122	82.12	
*59.53	148.23	145.06	.0117	85.64		
193.68	*29.76	180.98	177.80	.0201	49.64	
	35.72	178.44	175.26	.0194	51.47	
	39.29	177.01	173.84	.0190	52.54	
	44.20	174.63	171.45	.0184	54.43	
	50.15	171.83	168.66	.0176	56.78	
	58.04	168.28	165.10	.0167	60.02	
	*67.41	163.45	160.27	.0154	64.92	
	*196.85	68.60	166.62	165.10	.0162	61.63
*203.20	38.69	187.60	184.43	.0221	45.32	
*206.38	41.67	190.12	186.94	.0228	43.84	
	47.62	187.58	184.40	.0221	45.33	
	52.83	185.04	181.86	.0213	46.92	
	58.78	182.50	179.32	.0206	48.59	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT	
O.D. 1.660"					
FOUR STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0530	18.87
	28.00	8.017	7.892	.0517	19.33
	32.00	7.921	7.796	.0502	19.90
	36.00	7.825	7.700	.0488	20.50
	*38.00	7.775	7.650	.0480	20.83
	40.00	7.725	7.600	.0473	21.16
	*43.00	7.651	7.526	.0462	21.66
	44.00	7.625	7.500	.0458	21.85
	49.00	7.511	7.386	.0441	22.68
	*8.750	49.70	7.636	7.500	.0459
9.000	34.00	8.290	8.134	.0561	17.84
	38.00	8.196	8.040	.0545	18.33
	40.00	8.150	7.994	.0538	18.58
	45.00	8.032	7.876	.0520	19.24
	55.00	7.812	7.656	.0486	20.59
9.625	*29.30	9.063	8.907	.0691	14.48
	32.30	9.001	8.845	.0680	14.71
	36.00	8.921	8.765	.0666	15.01
	*38.00	8.885	8.760	.0660	15.16
	40.00	8.835	8.670	.0651	15.36
	43.50	8.755	8.599	.0638	15.69
	47.00	8.681	8.525	.0625	16.00
	53.50	8.535	8.379	.0601	16.65
	*58.40	8.435	8.279	.0584	17.12
	*61.10	8.375	8.219	.0574	17.41
*71.80	8.125	7.969	.0534	18.72	
*9.750	59.20	8.560	8.500	.0605	16.54
*9.875	62.80	8.625	8.500	.0616	16.24
*10.000	33.00	9.384	9.228	.0748	13.36
10.750	32.75	10.192	10.036	.0902	11.09
	*35.75	10.136	9.980	.0891	11.22
	40.50	10.050	9.894	.0874	11.44
	45.50	9.950	9.794	.0855	11.70
	51.00	9.850	9.694	.0835	11.97
	*54.00	9.784	9.628	.0823	12.15
	55.50	9.760	9.604	.0818	12.22
	*60.70	9.660	9.504	.0799	12.51
	*65.70	9.560	9.404	.0781	12.81
*71.10	9.450	9.294	.0760	13.15	
11.750	*38.00	11.150	10.994	.1101	9.09
	42.00	11.084	10.928	.1086	9.20
	47.00	11.000	10.844	.1068	9.36
	54.00	10.880	10.724	.1043	9.59
	60.00	10.772	10.616	.1020	9.80
	*65.00	10.682	10.526	.1001	9.99
	*71.00	10.586	10.430	.0982	10.19
*11.875	71.80	10.711	10.625	.1007	9.93
*12.000	40.00	11.384	11.228	.1152	8.68
*13.000	40.00	12.438	12.282	.1396	7.16
	45.00	12.360	12.204	.1377	7.26
	50.00	12.282	12.126	.1358	7.36
	54.00	12.220	12.064	.1344	7.44
13.325	48.00	12.715	12.559	.1463	6.83
	54.50	12.615	12.459	.1439	6.95
	61.00	12.515	12.359	.1414	7.07
	68.00	12.415	12.259	.1390	7.19

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 42.16 mm	
OUTSIDE CASING				FOUR STRINGS	
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
219.08	35.72	205.66	202.49	.0276	36.17
	41.67	203.63	200.46	.0270	37.05
	47.62	201.19	198.02	.0262	38.14
	53.57	198.76	195.58	.0255	39.29
	*56.55	197.49	194.31	.0251	39.91
	59.53	196.22	193.04	.0247	40.55
	*63.99	194.34	191.16	.0241	41.52
	65.48	193.68	190.50	.0239	41.87
	72.92	190.78	187.60	.0230	43.46
	*222.25	73.96	193.95	190.50	.0240
*228.60	50.60	210.57	206.60	.0292	34.19
	56.55	208.18	204.22	.0285	35.13
	59.53	207.01	203.05	.0281	35.61
	66.97	204.01	200.05	.0271	36.88
	81.85	198.43	194.46	.0253	39.45
244.48	*43.60	230.20	226.24	.0360	27.74
	48.07	228.63	224.66	.0355	28.18
	53.57	226.59	222.63	.0348	28.77
	*56.55	225.68	222.50	.0344	29.05
	59.53	224.41	220.45	.0340	29.43
	64.74	222.38	218.42	.0333	30.06
	69.94	220.50	216.54	.0326	30.66
	79.62	216.79	212.83	.0313	31.91
	*86.91	214.25	210.29	.0305	32.81
	*90.93	212.73	208.76	.0300	33.37
	*106.85	206.38	202.41	.0279	35.87
	*247.65	88.10	217.42	215.90	.0316
*250.83	93.46	219.08	215.90	.0321	31.13
*254.00	49.11	238.35	234.39	.0391	25.61
273.05	48.74	258.88	254.91	.0471	21.25
	*53.20	257.45	253.49	.0465	21.51
	60.27	255.27	251.31	.0456	21.92
	67.71	252.73	248.77	.0446	22.42
	75.90	250.19	246.23	.0436	22.94
	*80.36	248.51	244.55	.0429	23.29
	82.59	247.90	243.94	.0427	23.42
	*90.33	245.36	241.40	.0417	23.97
	*97.77	242.82	238.86	.0407	24.55
	*105.81	240.03	236.07	.0397	25.20
	298.45	*56.55	283.21	279.25	.0574
62.50		281.53	277.57	.0567	17.64
69.94		279.40	275.44	.0557	17.94
80.36		276.35	272.39	.0544	18.38
89.29		273.61	269.65	.0532	18.79
*96.73		271.32	267.36	.0523	19.14
*105.66		268.88	264.92	.0512	19.52
*301.63		106.85	272.06	269.88	.0526
*304.80	59.53	289.15	285.19	.0601	16.64
*330.20	59.53	315.93	311.96	.0728	13.73
	66.97	313.94	309.98	.0719	13.92
	74.41	311.96	308.00	.0709	14.11
	80.36	310.39	306.43	.0701	14.26
339.73	71.43	322.96	319.00	.0764	13.10
	81.10	320.42	316.46	.0751	13.32
	90.78	317.88	313.92	.0738	13.55

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.900"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0127	78.47
	10.50	4.052	3.927	.0124	80.37
	11.60	4.000	3.875	.0120	83.08
	13.50	3.920	3.795	.0114	87.56
	*15.10	3.826	3.701	.0107	93.34
	*16.60	3.754	3.629	.0102	98.20
	*18.80	3.640	3.515	.0094	106.79
	*4.750	16.00	4.082	3.957	.0127
5.000	11.50	4.560	4.435	.0167	59.91
	13.00	4.494	4.369	.0161	62.07
	15.00	4.408	4.283	.0154	65.07
	18.00	4.276	4.151	.0143	70.15
	*20.30	4.184	4.059	.0135	74.08
	*20.80	4.156	4.031	.0133	75.35
	*23.20	4.044	3.919	.0124	80.78
	*24.20	4.000	3.875	.0120	83.08
5.500	*13.00	5.044	4.919	.0212	47.15
	14.00	5.012	4.887	.0209	47.86
	*15.00	4.974	4.849	.0205	48.72
	15.50	4.950	4.825	.0203	49.27
	17.00	4.892	4.767	.0197	50.66
	20.00	4.778	4.653	.0187	53.56
	23.00	4.670	4.545	.0177	56.56
	*26.00	4.548	4.423	.0166	60.29
*5.750	14.00	5.290	5.165	.0237	42.23
	17.00	5.190	5.065	.0227	44.13
	19.50	5.090	4.965	.0217	46.17
	22.50	4.990	4.865	.0207	48.35
*6.000	15.00	5.524	5.399	.0261	38.26
	16.00	5.500	5.375	.0259	38.64
	17.00	5.450	5.325	.0253	39.45
	18.00	5.424	5.299	.0251	39.88
	20.00	5.352	5.227	.0243	41.12
	23.00	5.240	5.115	.0232	43.17
	26.00	5.140	5.015	.0222	45.13
	6.625	*17.00	6.135	6.010	.0331
20.00		6.049	5.924	.0320	31.21
*22.00		5.989	5.864	.0313	31.91
24.00		5.921	5.796	.0305	32.73
*26.00		5.855	5.730	.0298	33.56
28.00		5.791	5.666	.0291	34.40
*29.00		5.761	5.636	.0287	34.80
32.00		5.675	5.550	.0278	36.00
7.000	17.00	6.538	6.413	.0380	26.30
	20.00	6.456	6.331	.0370	27.04
	*22.00	6.398	6.273	.0363	27.58
	23.00	6.366	6.241	.0359	27.89
	*24.00	6.336	6.211	.0355	28.18
	26.00	6.276	6.151	.0348	28.77
	*28.00	6.214	6.089	.0340	29.41
	29.00	6.184	6.059	.0336	29.72
	*30.00	6.154	6.029	.0333	30.05
	32.00	6.094	5.969	.0326	30.70
	*33.70	6.048	5.923	.0320	31.22
	35.00	6.004	5.879	.0315	31.73
	38.00	5.920	5.795	.0305	32.75
*40.00	5.836	5.711	.0296	33.81	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 48.26 mm	
				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0066	150.38
	15.63	102.92	99.75	.0065	154.02
	17.26	101.60	98.43	.0063	159.22
	20.09	99.57	96.39	.0060	167.80
	*22.47	97.18	94.01	.0056	178.88
	*24.70	95.35	92.18	.0053	188.20
	*27.98	92.46	89.28	.0049	204.65
*120.65	23.81	103.68	100.51	.0066	151.14
127.00	17.11	115.82	112.65	.0087	114.80
	19.35	114.15	110.97	.0084	118.94
	22.32	111.96	108.79	.0080	124.70
	26.79	108.61	105.44	.0074	134.44
	*30.21	106.27	103.10	.0070	141.97
	*30.95	105.56	102.39	.0069	144.39
	*34.53	102.72	99.54	.0065	154.80
*36.01	101.60	98.43	.0063	159.22	
139.70	*19.35	128.12	124.94	.0111	90.36
	20.83	127.31	124.13	.0109	91.71
	*22.32	126.34	123.16	.0107	93.36
	23.07	125.73	122.56	.0106	94.42
	25.30	124.26	121.08	.0103	97.08
	29.76	121.36	118.19	.0097	102.64
	34.23	118.62	115.44	.0092	108.40
*38.69	115.52	112.34	.0087	115.54	
*146.05	20.83	134.37	131.19	.0124	80.94
	25.30	131.83	128.65	.0118	84.57
	29.02	129.29	126.11	.0113	88.47
	33.48	126.75	123.57	.0108	92.66
*152.40	22.32	140.31	137.13	.0136	73.32
	23.81	139.70	136.53	.0135	74.05
	25.30	138.43	135.26	.0132	75.61
	26.79	137.77	134.59	.0131	76.43
	29.76	135.94	132.77	.0127	78.80
	34.23	133.10	129.92	.0121	82.72
	38.69	130.56	127.38	.0116	86.49
168.28	*25.30	155.83	152.65	.0172	57.97
	29.76	153.64	150.47	.0167	59.82
	*32.74	152.12	148.95	.0164	61.16
	35.72	150.39	147.22	.0159	62.73
	*38.69	148.72	145.54	.0155	64.32
	41.67	147.09	143.92	.0152	65.92
	*43.16	146.33	143.15	.0150	66.69
47.62	144.15	140.97	.0145	68.99	
177.80	25.30	166.07	162.89	.0198	50.41
	29.76	163.98	160.81	.0193	51.82
	*32.74	162.51	159.33	.0189	52.85
	34.23	161.70	158.52	.0187	53.44
	*35.72	160.93	157.76	.0185	54.00
	38.69	159.41	156.24	.0181	55.14
	*41.67	157.84	154.66	.0177	56.36
	43.16	157.07	153.90	.0176	56.96
	*44.64	156.31	153.14	.0174	57.58
	47.62	154.79	151.61	.0170	58.84
	*50.15	153.62	150.44	.0167	59.84
	52.09	152.50	149.33	.0164	60.82
	56.55	150.37	147.19	.0159	62.75
*59.53	148.23	145.06	.0154	64.79	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS				
O.D. 1.900"		VOLUME & HEIGHT				
TWO STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
5.000	11.50	4.560	4.435	.0132	75.84	
	13.00	4.494	4.369	.0126	79.33	
	15.00	4.408	4.283	.0119	84.31	
	18.00	4.276	4.151	.0107	93.04	
	*20.30	4.184	4.059	.0100	100.08	
	*20.80	4.156	4.031	.0098	102.41	
	*23.20	4.044	3.919	.0089	112.70	
	*24.20	4.000	3.875	.0085	117.25	
5.500	*13.00	5.044	4.919	.0177	56.49	
	14.00	5.012	4.887	.0174	57.51	
	*15.00	4.974	4.849	.0170	58.75	
	15.50	4.950	4.825	.0168	59.56	
	17.00	4.892	4.767	.0162	61.60	
	20.00	4.778	4.653	.0152	65.95	
	23.00	4.670	4.545	.0142	70.56	
	*26.00	4.548	4.423	.0131	76.46	
*5.750	14.00	5.290	5.165	.0202	49.58	
	17.00	5.190	5.065	.0192	52.21	
	19.50	5.090	4.965	.0182	55.08	
	22.50	4.990	4.865	.0172	58.22	
*6.000	15.00	5.524	5.399	.0226	44.19	
	16.00	5.500	5.375	.0224	44.70	
	17.00	5.450	5.325	.0218	45.79	
	18.00	5.424	5.299	.0216	46.37	
	20.00	5.352	5.227	.0208	48.05	
	23.00	5.240	5.115	.0197	50.87	
	26.00	5.140	5.015	.0187	53.62	
6.625	*17.00	6.135	6.010	.0295	33.84	
	20.00	6.049	5.924	.0285	35.05	
	*22.00	5.989	5.864	.0278	35.93	
	24.00	5.921	5.796	.0270	36.98	
	*26.00	5.855	5.730	.0263	38.04	
	28.00	5.791	5.666	.0256	39.12	
	*29.00	5.761	5.636	.0252	39.64	
	32.00	5.675	5.550	.0243	41.20	
	7.000	17.00	6.538	6.413	.0345	28.98
		20.00	6.456	6.331	.0335	29.87
*22.00		6.398	6.273	.0328	30.53	
23.00		6.366	6.241	.0324	30.91	
*24.00		6.336	6.211	.0320	31.27	
26.00		6.276	6.151	.0312	32.00	
*28.00		6.214	6.089	.0305	32.79	
29.00		6.184	6.059	.0301	33.18	
*30.00		6.154	6.029	.0298	33.58	
32.00		6.094	5.969	.0291	34.41	
*33.70		6.048	5.923	.0285	35.06	
35.00		6.004	5.879	.0280	35.71	
38.00		5.920	5.795	.0270	36.99	
*40.00	5.836	5.711	.0261	38.36		
7.625	*20.00	7.125	7.000	.0423	23.64	
	24.00	7.025	6.900	.0409	24.43	
	26.40	6.969	6.844	.0402	24.90	
	29.70	6.875	6.750	.0389	25.71	
	33.70	6.765	6.640	.0374	26.71	
	39.00	6.625	6.500	.0356	28.07	
	*45.30	6.435	6.310	.0332	30.11	
*7.750	46.10	6.560	6.500	.0348	28.74	
*8.000	26.00	7.386	7.261	.0460	21.75	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 48.26 mm		
				TWO STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
127.00	17.11	115.82	112.65	.0069	145.34	
	19.35	114.15	110.97	.0066	152.03	
	22.32	111.96	108.79	.0062	161.56	
	26.79	108.61	105.44	.0056	178.30	
	*30.21	106.27	103.10	.0052	191.79	
	*30.95	105.56	102.39	.0051	196.25	
	*34.53	102.72	99.54	.0046	215.98	
	*36.01	101.60	98.43	.0045	224.69	
	139.70	*19.35	128.12	124.94	.0092	108.26
		20.83	127.31	124.13	.0091	110.21
*22.32		126.34	123.16	.0089	112.60	
23.07		125.73	122.56	.0088	114.15	
25.30		124.26	121.08	.0085	118.05	
29.76		121.36	118.19	.0079	126.38	
34.23		118.62	115.44	.0074	135.22	
*38.69		115.52	112.34	.0068	146.52	
*146.05		20.83	134.37	131.19	.0105	95.01
	25.30	131.83	128.65	.0100	100.06	
	29.02	129.29	126.11	.0095	105.56	
	33.48	126.75	123.57	.0090	111.58	
*152.40	22.32	140.31	137.13	.0118	84.69	
	23.81	139.70	136.53	.0117	85.66	
	25.30	138.43	135.26	.0114	87.75	
	26.79	137.77	134.59	.0113	88.86	
	29.76	135.94	132.77	.0109	92.08	
	34.23	133.10	129.92	.0103	97.48	
	38.69	130.56	127.38	.0097	102.75	
168.28	*25.30	155.83	152.65	.0154	64.85	
	29.76	153.64	150.47	.0149	67.17	
	*32.74	152.12	148.95	.0145	68.86	
	35.72	150.39	147.22	.0141	70.87	
	*38.69	148.72	145.54	.0137	72.90	
	41.67	147.09	143.92	.0133	74.97	
	*43.16	146.33	143.15	.0132	75.97	
	47.62	144.15	140.97	.0127	78.96	
	177.80	25.30	166.07	162.89	.0180	55.53
29.76		163.98	160.81	.0175	57.25	
*32.74		162.51	159.33	.0171	58.51	
34.23		161.70	158.52	.0169	59.23	
*35.72		160.93	157.76	.0167	59.92	
38.69		159.41	156.24	.0163	61.33	
*41.67		157.84	154.66	.0159	62.84	
43.16		157.07	153.90	.0157	63.59	
*44.64		156.31	153.14	.0155	64.36	
47.62		154.79	151.61	.0152	65.94	
*50.15		153.62	150.44	.0149	67.20	
52.09		152.50	149.33	.0146	68.43	
56.55		150.37	147.19	.0141	70.90	
*59.53	148.23	145.06	.0136	73.50		
193.68	*29.76	180.98	177.80	.0221	45.30	
	35.72	178.44	175.26	.0214	46.82	
	39.29	177.01	173.84	.0210	47.71	
	44.20	174.63	171.45	.0203	49.26	
	50.15	171.83	168.66	.0195	51.18	
	58.04	168.28	165.10	.0186	53.80	
	*67.41	163.45	160.27	.0173	57.70	
	*196.85	68.60	166.62	165.10	.0182	55.08
*203.20		38.69	187.60	184.43	.0240	41.68

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT	
O.D. 1.900"					
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
5.500	*13.00	5.044	4.919	.0142	70.45
	14.00	5.012	4.887	.0139	72.04
	*15.00	4.974	4.849	.0135	74.00
	15.50	4.950	4.825	.0133	75.29
	17.00	4.892	4.767	.0127	78.57
	20.00	4.778	4.653	.0117	85.79
	23.00	4.670	4.545	.0107	93.76
	*26.00	4.548	4.423	.0096	104.46
	*5.750	14.00	5.290	5.165	.0167
17.00		5.190	5.065	.0156	63.91
19.50		5.090	4.965	.0146	68.27
22.50		4.990	4.865	.0137	73.16
*6.000	15.00	5.524	5.399	.0191	52.30
	16.00	5.500	5.375	.0189	53.01
	17.00	5.450	5.325	.0183	54.55
	18.00	5.424	5.299	.0181	55.38
	20.00	5.352	5.227	.0173	57.79
	23.00	5.240	5.115	.0162	61.91
	26.00	5.140	5.015	.0151	66.03
6.625	*17.00	6.135	6.010	.0260	38.40
	20.00	6.049	5.924	.0250	39.96
	*22.00	5.989	5.864	.0243	41.11
	24.00	5.921	5.796	.0235	42.49
	*26.00	5.855	5.730	.0228	43.90
	28.00	5.791	5.666	.0221	45.34
	*29.00	5.761	5.636	.0217	46.04
	32.00	5.675	5.550	.0208	48.16
	7.000	17.00	6.538	6.413	.0310
20.00		6.456	6.331	.0300	33.37
*22.00		6.398	6.273	.0292	34.19
23.00		6.366	6.241	.0288	34.67
*24.00		6.336	6.211	.0285	35.12
26.00		6.276	6.151	.0277	36.05
*28.00		6.214	6.089	.0270	37.05
29.00		6.184	6.059	.0266	37.55
*30.00		6.154	6.029	.0263	38.07
32.00		6.094	5.969	.0256	39.13
*33.70		6.048	5.923	.0250	39.98
35.00		6.004	5.879	.0245	40.82
38.00		5.920	5.795	.0235	42.51
*40.00	5.836	5.711	.0226	44.32	
7.625	*20.00	7.125	7.000	.0388	25.78
	24.00	7.025	6.900	.0374	26.72
	26.40	6.969	6.844	.0367	27.28
	29.70	6.875	6.750	.0354	28.25
	33.70	6.765	6.640	.0339	29.47
	39.00	6.625	6.500	.0321	31.14
	*45.30	6.435	6.310	.0297	33.66
	*7.750	46.10	6.560	6.500	.0313
26.00		7.386	7.261	.0425	23.54
*8.000	28.00	7.485	7.360	.0439	22.78
	32.00	7.385	7.260	.0425	23.55
	35.50	7.285	7.160	.0410	24.37
	39.50	7.185	7.060	.0396	25.23

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 48.26 mm		
				THREE STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
139.70	*19.35	128.12	124.94	.0074	135.01	
	20.63	127.31	124.13	.0072	138.05	
	*22.32	126.34	123.16	.0071	141.82	
	23.07	125.73	122.56	.0069	144.29	
	25.30	124.26	121.08	.0066	150.57	
	29.76	121.36	118.19	.0061	164.41	
	34.23	118.62	115.44	.0056	179.69	
	*38.69	115.52	112.34	.0050	200.19	
	*146.05	20.83	134.37	131.19	.0087	115.00
		25.30	131.83	128.65	.0082	122.49
29.02		129.29	126.11	.0076	130.84	
33.48		126.75	123.57	.0071	140.21	
*152.40	22.32	140.31	137.13	.0100	100.22	
	23.81	139.70	136.53	.0098	101.58	
	25.30	138.43	135.26	.0096	104.53	
	26.79	137.77	134.59	.0094	106.12	
	29.76	135.94	132.77	.0090	110.74	
	34.23	133.10	129.92	.0084	118.64	
	38.69	130.56	127.38	.0079	126.54	
168.28	*25.30	155.83	152.65	.0136	73.59	
	29.76	153.64	150.47	.0131	76.58	
	*32.74	152.12	148.95	.0127	78.79	
	35.72	150.39	147.22	.0123	81.42	
	*38.69	148.72	145.54	.0119	84.12	
	41.67	147.09	143.92	.0115	86.88	
	*43.16	146.33	143.15	.0113	88.23	
	47.62	144.15	140.97	.0108	92.29	
	177.80	25.30	166.07	162.89	.0162	61.81
29.76		163.98	160.81	.0156	63.95	
*32.74		162.51	159.33	.0153	65.53	
34.23		161.70	158.52	.0151	66.43	
*35.72		160.93	157.76	.0149	67.30	
38.69		159.41	156.24	.0145	69.08	
*41.67		157.84	154.66	.0141	71.00	
43.16		157.07	153.90	.0139	71.97	
*44.64		156.31	153.14	.0137	72.95	
47.62		154.79	151.61	.0133	74.99	
*50.15		153.62	150.44	.0131	76.62	
52.09		152.50	149.33	.0128	78.23	
56.55		150.37	147.19	.0123	81.46	
*59.53	148.23	145.06	.0118	84.93		
193.68	*29.76	180.98	177.80	.0202	49.40	
	35.72	178.44	175.26	.0195	51.21	
	39.29	177.01	173.84	.0191	52.28	
	44.20	174.63	171.45	.0185	54.14	
	50.15	171.83	168.66	.0177	56.47	
	58.04	168.28	165.10	.0168	59.67	
	*67.41	163.45	160.27	.0155	64.51	
	*196.85	68.60	166.62	165.10	.0163	61.26
38.69		187.60	184.43	.0222	45.12	
*206.38	41.67	190.12	186.94	.0229	43.65	
	47.62	187.58	184.40	.0222	45.13	
	52.83	185.04	181.86	.0214	46.70	
	58.78	182.50	179.32	.0207	48.36	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.900"		VOLUME & HEIGHT			
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0532	18.81
	28.00	8.017	7.892	.0519	19.26
	32.00	7.921	7.796	.0504	19.83
	36.00	7.825	7.700	.0490	20.42
	*38.00	7.775	7.650	.0482	20.75
	40.00	7.725	7.600	.0474	21.07
	*43.00	7.651	7.526	.0463	21.58
	44.00	7.625	7.500	.0460	21.76
	49.00	7.511	7.386	.0443	22.58
	*8.750	49.70	7.636	7.500	.0461
*9.000	34.00	8.290	8.134	.0562	17.78
	38.00	8.196	8.040	.0547	18.27
	40.00	8.150	7.994	.0540	18.52
	45.00	8.032	7.876	.0521	19.18
	55.00	7.812	7.656	.0488	20.51
9.625	*29.30	9.063	8.907	.0693	14.44
	32.30	9.001	8.845	.0682	14.67
	36.00	8.921	8.765	.0668	14.97
	*38.00	8.885	8.760	.0662	15.11
	40.00	8.835	8.679	.0653	15.31
	43.50	8.755	8.599	.0639	15.64
	47.00	8.681	8.525	.0627	15.95
	53.50	8.535	8.379	.0602	16.60
	*58.40	8.435	8.279	.0586	17.07
	*61.10	8.375	8.219	.0576	17.36
*71.80	8.125	7.969	.0536	18.65	
*9.750	59.20	8.560	8.500	.0607	16.49
*9.875	62.80	8.625	8.500	.0617	16.20
*10.000	33.00	9.384	9.228	.0750	13.33
10.750	32.75	10.192	10.036	.0904	11.06
	*35.75	10.136	9.980	.0893	11.20
	40.50	10.050	9.894	.0876	11.42
	45.50	9.950	9.794	.0857	11.68
	51.00	9.850	9.694	.0837	11.94
	*54.00	9.784	9.628	.0825	12.13
	55.50	9.760	9.604	.0820	12.19
	*60.70	9.660	9.504	.0801	12.48
	*65.70	9.560	9.404	.0783	12.78
	*71.10	9.450	9.294	.0762	13.12
11.750	*38.00	11.150	10.994	.1102	9.07
	42.00	11.084	10.928	.1088	9.19
	47.00	11.000	10.844	.1070	9.34
	54.00	10.880	10.724	.1045	9.57
	60.00	10.772	10.616	.1022	9.78
	*65.00	10.682	10.526	.1003	9.97
	*71.00	10.586	10.430	.0983	10.17
*11.875	71.80	10.711	10.625	.1009	9.91
*12.000	40.00	11.384	11.228	.1154	8.67
*13.000	40.00	12.438	12.282	.1398	7.15
	45.00	12.360	12.204	.1379	7.25
	50.00	12.282	12.126	.1360	7.35
	54.00	12.220	12.064	.1345	7.43
13.375	48.00	12.715	12.559	.1465	6.82
	54.50	12.615	12.459	.1441	6.94
	61.00	12.515	12.359	.1416	7.06
	68.00	12.415	12.259	.1392	7.18

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 48.26 mm		
				THREE STRINGS		
OUTSIDE CASING						
Size O.D. mm	Wt. With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ² /m	Lin. Meters Per Cu. Meter m/m ²	
219.08	35.72	205.66	202.49	.0277	36.04	
	41.67	203.63	200.46	.0273	36.91	
	47.62	201.19	198.02	.0263	38.00	
	53.57	198.76	195.58	.0255	39.14	
	*56.55	197.49	194.31	.0252	39.76	
	59.53	196.22	193.04	.0248	40.39	
	*63.99	194.34	191.16	.0242	41.35	
	65.48	193.68	190.50	.0240	41.70	
	72.92	190.78	187.60	.0231	43.28	
	*222.25	73.96	193.95	190.50	.0241	41.55
	*228.60	50.60	210.57	206.60	.0293	34.08
56.55		208.18	204.22	.0286	35.01	
59.53		207.01	203.05	.0282	35.49	
66.97		204.01	200.05	.0272	36.75	
81.85		198.43	194.46	.0254	39.30	
244.48	*43.60	230.20	226.24	.0361	27.67	
	48.07	228.63	224.66	.0356	28.11	
	53.57	226.59	222.63	.0349	28.69	
	*56.55	225.68	222.50	.0345	28.96	
	59.53	224.41	220.45	.0341	29.34	
	64.74	222.38	218.42	.0334	29.97	
	69.94	220.50	216.54	.0327	30.57	
	79.62	216.79	212.83	.0314	31.81	
	*86.91	214.25	210.29	.0306	32.71	
	*90.93	212.73	208.76	.0301	33.26	
	*106.85	206.38	202.41	.0280	35.75	
	*247.65	88.10	217.42	215.90	.0317	31.59
	*250.83	93.46	219.08	215.90	.0322	31.04
*254.00	49.11	238.35	234.39	.0391	25.54	
273.05	48.74	258.88	254.91	.0472	21.20	
	*53.20	257.45	253.49	.0466	21.46	
	60.27	255.27	251.31	.0457	21.88	
	67.71	252.73	248.77	.0447	22.37	
	75.90	250.19	246.23	.0437	22.89	
	*80.36	248.51	244.55	.0430	23.24	
	82.59	247.90	243.94	.0428	23.37	
	*90.33	245.36	241.40	.0418	23.92	
	*97.77	242.82	238.86	.0408	24.49	
	*105.81	240.03	236.07	.0398	25.14	
	298.45	*56.55	283.21	279.25	.0575	17.38
62.50		281.53	277.57	.0568	17.61	
69.94		279.40	275.44	.0558	17.91	
80.36		276.35	272.39	.0545	18.34	
89.29		273.61	269.65	.0533	18.75	
*96.73		271.32	267.36	.0524	19.10	
*105.66		268.88	264.92	.0513	19.49	
*301.63	106.85	272.06	269.88	.0527	18.99	
*304.80	59.53	289.15	285.19	.0602	16.61	
*330.20	59.53	315.93	311.96	.0729	13.71	
	66.97	313.94	309.98	.0719	13.90	
	74.41	311.96	308.00	.0710	14.09	
	80.36	310.39	306.43	.0702	14.24	
339.73	71.43	322.96	319.00	.0765	13.08	
	81.10	320.42	316.46	.0752	13.30	
	90.78	317.88	313.92	.0739	13.53	
	101.20	315.34	311.38	.0726	13.77	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 1.900"		VOLUME & HEIGHT			
FOUR STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*6.000	15.00	5.524	5.399	.0156	64.04
	16.00	5.500	5.375	.0154	65.11
	17.00	5.450	5.325	.0148	67.45
	18.00	5.424	5.299	.0146	68.72
	20.00	5.352	5.227	.0138	72.47
	23.00	5.240	5.115	.0126	79.08
	26.00	5.140	5.015	.0116	85.93
6.625	*17.00	6.135	6.010	.0225	44.37
	20.00	6.049	5.924	.0215	46.47
	*22.00	5.989	5.864	.0208	48.04
	24.00	5.921	5.796	.0200	49.93
	*26.00	5.855	5.730	.0193	51.88
	28.00	5.791	5.666	.0186	53.91
	*29.00	5.761	5.636	.0182	54.90
	32.00	5.675	5.550	.0173	57.94
	7.000	17.00	6.538	6.413	.0275
20.00		6.456	6.331	.0265	37.79
*22.00		6.398	6.273	.0257	38.85
23.00		6.366	6.241	.0253	39.46
*24.00		6.336	6.211	.0250	40.05
26.00		6.276	6.151	.0242	41.26
*28.00		6.214	6.089	.0235	42.58
29.00		6.184	6.059	.0231	43.25
*30.00		6.154	6.029	.0228	43.93
32.00		6.094	5.969	.0220	45.35
*33.70		6.048	5.923	.0215	46.50
35.00		6.004	5.879	.0210	47.64
38.00		5.920	5.795	.0200	49.96
*40.00	5.836	5.711	.0191	52.47	
7.625	*20.00	7.125	7.000	.0353	28.34
	24.00	7.025	6.900	.0339	29.49
	26.40	6.969	6.844	.0332	30.16
	29.70	6.875	6.750	.0319	31.36
	33.70	6.765	6.640	.0304	32.86
	39.00	6.625	6.500	.0286	34.95
	*45.30	6.435	6.310	.0262	38.17
*7.750	46.10	6.560	6.500	.0278	36.00
*8.000	26.00	7.386	7.261	.0390	25.66
*8.125	28.00	7.485	7.360	.0404	24.75
	32.00	7.385	7.260	.0390	25.67
	35.50	7.285	7.160	.0375	26.65
	39.50	7.185	7.060	.0361	27.68
8.625	24.00	8.097	7.972	.0497	20.14
	28.00	8.017	7.892	.0484	20.66
	32.00	7.921	7.796	.0469	21.31
	36.00	7.825	7.700	.0455	22.00
	*38.00	7.775	7.650	.0447	22.37
	40.00	7.725	7.600	.0439	22.76
	*43.00	7.651	7.526	.0428	23.34
	44.00	7.625	7.500	.0425	23.56
	49.00	7.511	7.386	.0408	24.52
*8.750	49.70	7.636	7.500	.0426	23.47
*9.000	34.00	8.290	8.134	.0527	18.96
	38.00	8.196	8.040	.0512	19.52
	40.00	8.150	7.994	.0505	19.80
	45.00	8.032	7.876	.0486	20.56
	55.00	7.812	7.656	.0453	22.10

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 48.26 mm	
				FOUR STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*152.40	22.32	140.31	137.13	.0081	122.73
	23.81	139.70	136.53	.0080	124.78
	25.30	138.43	135.26	.0077	129.26
	26.79	137.77	134.59	.0076	131.69
	29.76	135.94	132.77	.0072	138.89
	34.23	133.10	129.92	.0066	151.55
	38.69	130.56	127.38	.0061	164.68
168.28	*25.30	155.83	152.65	.0118	85.04
	29.76	153.64	150.47	.0112	89.06
	*32.74	152.12	148.95	.0109	92.06
	35.72	150.39	147.22	.0105	95.68
	*38.69	148.72	145.54	.0101	99.43
	41.67	147.09	143.92	.0097	103.31
	*43.16	146.33	143.15	.0095	105.22
	47.62	144.15	140.97	.0090	111.04
177.80	25.30	166.07	162.89	.0143	69.70
	29.76	163.98	160.81	.0138	72.42
	*32.74	162.51	159.33	.0134	74.46
	34.23	161.70	158.52	.0132	75.63
	*35.72	160.93	157.76	.0130	76.75
	38.69	159.41	156.24	.0126	79.07
	*41.67	157.84	154.66	.0123	81.61
	43.16	157.07	153.90	.0121	82.88
	*44.64	156.31	153.14	.0119	84.19
	47.62	154.79	151.61	.0115	86.92
	*50.15	153.62	150.44	.0112	89.11
	52.09	152.50	149.33	.0110	91.30
56.55	150.37	147.19	.0104	95.74	
*59.53	148.23	145.06	.0099	100.55	
193.68	*29.76	180.98	177.80	.0184	54.31
	35.72	178.44	175.26	.0177	56.51
	39.29	177.01	173.84	.0173	57.81
	44.20	174.63	171.45	.0166	60.10
	50.15	171.83	168.66	.0159	62.98
	58.04	168.28	165.10	.0149	66.99
	*67.41	163.45	160.27	.0137	73.15
*196.85	68.60	166.62	165.10	.0145	68.99
*203.20	38.69	187.60	184.43	.0203	49.18
*206.38	41.67	190.12	186.94	.0211	47.44
	47.62	187.58	184.40	.0203	49.20
	52.83	185.04	181.86	.0196	51.07
	58.78	182.50	179.32	.0188	53.05
	219.08	35.72	205.66	202.49	.0259
	41.67	203.63	200.46	.0253	39.59
	47.62	201.19	198.02	.0245	40.84
	53.57	198.76	195.58	.0237	42.16
	*56.55	197.49	194.31	.0233	42.88
	59.53	196.22	193.04	.0229	43.61
	*63.99	194.34	191.16	.0224	44.74
	65.48	193.68	190.50	.0222	45.14
	72.92	190.78	187.60	.0213	47.00
*222.25	73.96	193.95	190.50	.0222	44.97
*228.60	50.60	210.57	206.60	.0275	36.34
	56.55	208.18	204.22	.0267	37.41
	59.53	207.01	203.05	.0264	37.95
	66.97	204.01	200.05	.0254	39.40
	81.85	198.43	194.46	.0236	42.35

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT		
O.D. 1.900"						
FOUR STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
9.625	*29.30	9.063	8.907	.0658	15.21	
	32.30	9.001	8.845	.0647	15.46	
	36.00	8.921	8.765	.0633	15.80	
	*38.00	8.885	8.760	.0627	15.96	
	40.00	8.835	8.679	.0618	16.18	
	43.50	8.755	8.599	.0604	16.55	
	47.00	8.681	8.525	.0592	16.90	
	53.50	8.535	8.379	.0567	17.63	
	*58.40	8.435	8.279	.0551	18.15	
	*61.10	8.375	8.219	.0541	18.48	
	*71.80	8.125	7.969	.0501	19.96	
	*9.750	59.20	8.560	8.500	.0572	17.50
	*9.875	62.80	8.625	8.500	.0582	17.17
*10.000	33.00	9.384	9.228	.0715	13.98	
10.750	32.75	10.192	10.036	.0869	11.51	
	*35.75	10.136	9.980	.0858	11.66	
	40.50	10.050	9.894	.0841	11.89	
	45.50	9.950	9.794	.0821	12.17	
	51.00	9.850	9.694	.0802	12.47	
	*54.00	9.784	9.628	.0790	12.66	
	55.50	9.760	9.604	.0785	12.74	
	*60.70	9.660	9.504	.0766	13.05	
	*65.70	9.560	9.404	.0748	13.38	
	*71.10	9.450	9.294	.0727	13.75	
11.750	*38.00	11.150	10.994	.1067	9.37	
	42.00	11.084	10.928	.1053	9.50	
	47.00	11.000	10.844	.1035	9.66	
	54.00	10.880	10.724	.1010	9.90	
	60.00	10.772	10.616	.0987	10.13	
	*65.00	10.682	10.526	.0968	10.33	
	*71.00	10.586	10.430	.0948	10.54	
*11.875	71.80	10.711	10.625	.0974	10.26	
*12.000	40.00	11.384	11.228	.1119	8.94	
*13.000	40.00	12.438	12.282	.1363	7.34	
	45.00	12.360	12.204	.1344	7.44	
	50.00	12.282	12.126	.1325	7.55	
	54.00	12.220	12.064	.1310	7.63	
	13.375	48.00	12.715	12.559	.1430	6.99
54.50		12.615	12.459	.1406	7.11	
61.00		12.515	12.359	.1381	7.24	
68.00		12.415	12.259	.1357	7.37	
72.00		12.347	12.191	.1341	7.46	
*77.00		12.275	12.119	.1323	7.56	
*80.70		12.215	12.059	.1309	7.64	
*83.00		12.175	12.019	.1300	7.69	
*85.00		12.159	12.003	.1296	7.72	
*86.00		12.125	11.969	.1288	7.76	
*92.00		12.031	11.875	.1266	7.90	
*98.00	11.937	11.781	.1244	8.04		
*13.500	81.40	12.340	12.250	.1339	7.47	
*13.625	88.20	12.375	12.250	.1347	7.42	
*14.000	50.00	13.344	13.156	.1589	6.29	
16.000	*55.00	15.375	15.187	.2156	4.64	
	65.00	15.250	15.062	.2119	4.72	
	*70.00	15.198	15.010	.2104	4.75	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 48.26 mm		
				FOUR STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
244.48	*43.60	230.20	226.24	.0343	29.14	
	48.07	228.63	224.66	.0337	29.63	
	53.57	226.59	222.63	.0330	30.28	
	*56.55	225.68	222.50	.0327	30.58	
	59.53	224.41	220.45	.0322	31.01	
	64.74	222.38	218.42	.0315	31.71	
	69.94	220.50	216.54	.0309	32.38	
	79.62	216.79	212.83	.0296	33.78	
	*86.91	214.25	210.29	.0287	34.79	
	*90.93	212.73	208.76	.0282	35.42	
	*106.85	206.38	202.41	.0261	38.25	
	*247.65	88.10	217.42	215.90	.0298	33.53
	*250.83	93.46	219.08	215.90	.0304	32.91
*254.00	49.11	238.35	234.39	.0373	26.80	
273.05	48.74	258.88	254.91	.0453	22.06	
	*53.20	257.45	253.49	.0448	22.34	
	60.27	255.27	251.31	.0439	22.79	
	67.71	252.73	248.77	.0429	23.33	
	75.90	250.19	246.23	.0419	23.89	
	*80.36	248.51	244.55	.0412	24.27	
	82.59	247.90	243.94	.0410	24.41	
	*90.33	245.36	241.40	.0400	25.01	
	*97.77	242.82	238.86	.0390	25.64	
	*105.81	240.03	236.07	.0379	26.35	
	298.45	*56.55	283.21	279.25	.0557	17.95
62.50		281.53	277.57	.0550	18.20	
69.94		279.40	275.44	.0540	18.51	
80.36		276.35	272.39	.0527	18.98	
89.29		273.61	269.65	.0515	19.42	
*96.73		271.32	267.36	.0505	19.79	
*105.66		268.88	264.92	.0495	20.21	
*301.63		106.85	272.06	269.88	.0508	19.67
*304.80	59.53	289.15	285.19	.0584	17.13	
*330.20	59.53	315.93	311.96	.0711	14.06	
	66.97	313.94	309.98	.0701	14.26	
	74.41	311.96	308.00	.0691	14.46	
	80.36	310.39	306.43	.0684	14.63	
	339.73	71.43	322.96	319.00	.0746	13.40
81.10		320.42	316.46	.0733	13.63	
90.78		317.88	313.92	.0721	13.87	
101.20		315.34	311.38	.0708	14.12	
107.15		313.61	309.65	.0700	14.29	
*114.59		311.79	307.82	.0691	14.48	
*120.09		310.26	306.30	.0683	14.64	
*123.52		309.25	305.28	.0678	14.75	
*126.49		308.84	304.88	.0676	14.79	
*127.98		307.98	304.01	.0672	14.88	
*136.91		305.59	301.63	.0661	15.14	
*145.84		303.20	299.24	.0649	15.41	
*342.90		121.14	313.44	311.15	.0699	14.31
*346.08		131.26	314.33	311.15	.0703	14.22
*355.60	74.41	338.94	334.16	.0829	12.06	
406.40	*81.85	390.53	385.75	.1125	8.89	
	96.73	387.35	382.58	.1106	9.04	
	*104.17	386.03	381.25	.1098	9.11	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
"O.D. 2.063"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0121	82.54
	10.50	4.052	3.927	.0118	84.64
	11.60	4.000	3.875	.0114	87.65
	13.50	3.920	3.795	.0108	92.65
	*15.10	3.826	3.701	.0101	99.15
	*16.60	3.754	3.629	.0096	104.65
	*18.80	3.640	3.515	.0087	114.46
*4.750	16.00	4.082	3.957	.0121	82.97
5.000	11.50	4.560	4.435	.0161	62.25
	13.00	4.494	4.369	.0155	64.58
	15.00	4.408	4.283	.0147	67.84
	18.00	4.276	4.151	.0136	73.38
	*20.30	4.184	4.059	.0129	77.69
	*20.80	4.156	4.031	.0126	79.09
	*23.20	4.044	3.919	.0118	85.09
	*24.20	4.000	3.875	.0114	87.65
5.500	*13.00	5.044	4.919	.0206	48.59
	14.00	5.012	4.887	.0203	49.34
	*15.00	4.974	4.849	.0199	50.25
	15.50	4.950	4.825	.0197	50.84
	17.00	4.892	4.767	.0191	52.32
	20.00	4.778	4.653	.0180	55.42
	23.00	4.670	4.545	.0171	58.65
	*26.00	4.548	4.423	.0160	62.66
*5.750	14.00	5.290	5.165	.0231	43.38
	17.00	5.190	5.065	.0220	45.39
	19.50	5.090	4.965	.0210	47.54
	22.50	4.990	4.865	.0201	49.86
*6.000	15.00	5.524	5.399	.0255	39.20
	16.00	5.500	5.375	.0253	39.60
	17.00	5.450	5.325	.0247	40.45
	18.00	5.424	5.299	.0244	40.91
	20.00	5.352	5.227	.0237	42.21
	23.00	5.240	5.115	.0225	44.37
	26.00	5.140	5.015	.0215	46.45
6.625	*17.00	6.135	6.010	.0324	30.84
	20.00	6.049	5.924	.0314	31.84
	*22.00	5.989	5.864	.0307	32.56
	24.00	5.921	5.796	.0299	33.42
	*26.00	5.855	5.730	.0292	34.29
	28.00	5.791	5.666	.0284	35.16
	*29.00	5.761	5.636	.0281	35.58
	32.00	5.675	5.550	.0272	36.83
7.000	17.00	6.538	6.413	.0374	26.75
	20.00	6.456	6.331	.0364	27.51
	*22.00	6.398	6.273	.0356	28.07
	23.00	6.366	6.241	.0352	28.38
	*24.00	6.336	6.211	.0349	28.68
	26.00	6.276	6.151	.0341	29.30
	*28.00	6.214	6.089	.0334	29.96
	29.00	6.184	6.059	.0330	30.29
	*30.00	6.154	6.029	.0327	30.62
	32.00	6.094	5.969	.0319	31.31
	*33.70	6.048	5.923	.0314	31.85
	35.00	6.004	5.879	.0309	32.38
	38.00	5.920	5.795	.0299	33.43
	*40.00	5.836	5.711	.0290	34.54

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
				*O.D. 52.40 mm	
BETWEEN TUBING & CASING**				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0063	158.17
	15.63	102.92	99.75	.0062	162.20
	17.26	101.60	98.43	.0060	167.98
	20.09	99.57	96.39	.0056	177.56
	*22.47	97.18	94.01	.0053	190.01
	*24.70	95.35	92.18	.0050	200.55
	*27.98	92.46	89.28	.0046	219.35
	*120.65	23.81	103.68	100.51	.0063
127.00	17.11	115.82	112.65	.0084	119.29
	19.35	114.15	110.97	.0081	123.76
	22.32	111.96	108.79	.0077	130.01
	26.79	108.61	105.44	.0071	140.63
	*30.21	106.27	103.10	.0067	148.89
	*30.95	105.56	102.39	.0066	151.56
	*34.53	102.72	99.54	.0061	163.07
	*36.01	101.60	98.43	.0060	167.98
139.70	*19.35	128.12	124.94	.0107	93.12
	20.83	127.31	124.13	.0106	94.55
	*22.32	126.34	123.16	.0104	96.30
	23.07	125.73	122.56	.0103	97.44
	25.30	124.26	121.08	.0100	100.26
	29.76	121.36	118.19	.0094	106.21
	34.23	118.62	115.44	.0089	112.39
	*38.69	115.52	112.34	.0083	120.08
*146.05	20.83	134.37	131.19	.0120	83.14
	25.30	131.83	128.65	.0115	86.98
	29.02	129.29	126.11	.0110	91.11
	33.48	126.75	123.57	.0105	95.56
*152.40	22.32	140.31	137.13	.0133	75.13
	23.81	139.70	136.53	.0132	75.89
	25.30	138.43	135.26	.0129	77.53
	26.79	137.77	134.59	.0128	78.40
	29.76	135.94	132.77	.0124	80.89
	34.23	133.10	129.92	.0118	85.03
	38.69	130.56	127.38	.0112	89.01
168.28	*25.30	155.83	152.65	.0169	59.10
	29.76	153.64	150.47	.0164	61.01
	*32.74	152.12	148.95	.0160	62.41
	35.72	150.39	147.22	.0156	64.05
	*38.69	148.72	145.54	.0152	65.70
	41.67	147.09	143.92	.0148	67.38
	*43.16	146.33	143.15	.0147	68.18
	47.62	144.15	140.97	.0142	70.58
177.80	25.30	166.07	162.89	.0195	51.25
	29.76	163.98	160.81	.0190	52.71
	*32.74	162.51	159.33	.0186	53.79
	34.23	161.70	158.52	.0184	54.39
	*35.72	160.93	157.76	.0182	54.97
	38.69	159.41	156.24	.0178	56.15
	*41.67	157.84	154.66	.0174	57.42
	43.16	157.07	153.90	.0172	58.05
	*44.64	156.31	153.14	.0170	58.69
	47.62	154.79	151.61	.0167	60.00
	*50.15	153.62	150.44	.0164	61.03
	52.09	152.50	149.33	.0161	62.05
	56.55	150.37	147.19	.0156	64.07
*59.53	148.23	145.06	.0151	66.19	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS				
"O.D. 2.063"		VOLUME & HEIGHT				
TWO STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
5.500	*13.00	5.044	4.919	.0164	60.80	
	14.00	5.012	4.887	.0161	61.98	
	*15.00	4.974	4.849	.0158	63.43	
	15.50	4.950	4.825	.0155	64.38	
	17.00	4.892	4.767	.0150	66.76	
	20.00	4.778	4.653	.0139	71.90	
	23.00	4.670	4.545	.0129	77.42	
	*26.00	4.548	4.423	.0118	84.57	
	*5.750	14.00	5.290	5.165	.0189	52.87
17.00		5.190	5.065	.0179	55.87	
19.50		5.090	4.965	.0169	59.17	
22.50		4.990	4.865	.0159	62.81	
*6.000	15.00	5.524	5.399	.0214	46.79	
	16.00	5.500	5.375	.0211	47.36	
	17.00	5.450	5.325	.0206	48.58	
	18.00	5.424	5.299	.0203	49.24	
	20.00	5.352	5.227	.0196	51.13	
	23.00	5.240	5.115	.0184	54.34	
	26.00	5.140	5.015	.0174	57.48	
6.625	*17.00	6.135	6.010	.0283	35.34	
	20.00	6.049	5.924	.0273	36.66	
	*22.00	5.989	5.864	.0266	37.63	
	24.00	5.921	5.796	.0258	38.78	
	*26.00	5.855	5.730	.0250	39.95	
	28.00	5.791	5.666	.0243	41.14	
	*29.00	5.761	5.636	.0240	41.72	
	32.00	5.675	5.550	.0230	43.45	
	7.000	17.00	6.538	6.413	.0333	30.07
20.00		6.456	6.331	.0322	31.04	
*22.00		6.398	6.273	.0315	31.75	
23.00		6.366	6.241	.0311	32.16	
*24.00		6.336	6.211	.0307	32.54	
26.00		6.276	6.151	.0300	33.34	
*28.00		6.214	6.089	.0292	34.20	
29.00		6.184	6.059	.0289	34.63	
*30.00		6.154	6.029	.0285	35.06	
32.00		6.094	5.969	.0278	35.96	
*33.70		6.048	5.923	.0273	36.68	
35.00		6.004	5.879	.0267	37.38	
38.00		5.920	5.795	.0258	38.80	
*40.00		5.836	5.711	.0248	40.29	
7.625	*20.00	7.125	7.000	.0410	24.36	
	24.00	7.025	6.900	.0397	25.21	
	26.40	6.969	6.844	.0389	25.70	
	29.70	6.875	6.750	.0376	26.56	
	33.70	6.765	6.640	.0362	27.63	
	39.00	6.625	6.500	.0344	29.10	
	*45.30	6.435	6.310	.0320	31.29	
	*7.750	46.10	6.560	6.500	.0335	29.82
	*8.000	26.00	7.386	7.261	.0447	22.36
*8.125	28.00	7.485	7.360	.0462	21.67	
	32.00	7.385	7.260	.0447	22.37	
	35.50	7.285	7.160	.0433	23.10	
	39.50	7.185	7.060	.0419	23.88	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 52.40 mm		
				TWO STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
139.70	*19.35	128.12	124.94	.0086	116.52	
	20.63	127.31	124.13	.0084	118.78	
	*22.32	126.34	123.16	.0082	121.56	
	23.07	125.73	122.56	.0081	123.37	
	25.30	124.26	121.08	.0078	127.94	
	29.76	121.36	118.19	.0073	137.79	
	34.23	118.62	115.44	.0067	148.36	
	*38.69	115.52	112.34	.0062	162.07	
	*146.05	20.83	134.37	131.19	.0099	101.31
		25.30	131.83	128.65	.0093	107.07
29.02		129.29	126.11	.0088	113.40	
33.48		126.75	123.57	.0083	120.38	
*152.40	22.32	140.31	137.13	.0112	89.66	
	23.81	139.70	136.53	.0110	91.75	
	25.30	138.43	135.26	.0107	93.10	
	26.79	137.77	134.59	.0106	94.36	
	29.76	135.94	132.77	.0102	97.99	
	34.23	133.10	129.92	.0096	104.13	
	38.69	130.56	127.38	.0091	110.16	
	168.28	*25.30	155.83	152.65	.0148	67.73
29.76		153.64	150.47	.0142	70.26	
*32.74		152.12	148.95	.0139	72.11	
35.72		150.39	147.22	.0135	74.31	
*38.69		148.72	145.54	.0131	76.56	
41.67		147.09	143.92	.0127	78.84	
*43.16		146.33	143.15	.0125	79.94	
47.62		144.15	140.97	.0120	83.26	
177.80		25.30	166.07	162.89	.0174	57.63
		29.76	163.98	160.81	.0168	59.48
	*32.74	162.51	159.33	.0164	60.85	
	34.23	161.70	158.52	.0162	61.62	
	*35.72	160.93	157.76	.0160	62.36	
	38.69	159.41	156.24	.0157	63.89	
	*41.67	157.84	154.66	.0153	65.54	
	43.16	157.07	153.90	.0151	66.36	
	*44.64	156.31	153.14	.0149	67.19	
	47.62	154.79	151.61	.0145	68.92	
	*50.15	153.62	150.44	.0142	70.29	
	52.09	152.50	149.33	.0140	71.64	
	56.55	150.37	147.19	.0135	74.35	
	*59.53	148.23	145.06	.0129	77.22	
193.68	*29.76	180.98	177.80	.0214	46.69	
	35.72	178.44	175.26	.0207	48.31	
	39.29	177.01	173.84	.0203	49.25	
	44.20	174.63	171.45	.0196	50.91	
	50.15	171.83	168.66	.0189	52.96	
	58.04	168.28	165.10	.0179	55.76	
	*67.41	163.45	160.27	.0167	59.97	
	*196.85	68.60	166.62	165.10	.0175	57.15
	*203.20	38.69	187.60	184.43	.0233	42.85
*206.38	41.67	190.12	186.94	.0241	41.52	
	47.62	187.58	184.40	.0233	42.86	
	52.83	185.04	181.86	.0226	44.27	
	58.78	182.50	179.32	.0219	45.76	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
"O.D. 2.063"		VOLUME & HEIGHT			
TWO STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0554	18.04
	28.00	8.017	7.892	.0542	18.46
	32.00	7.921	7.796	.0527	18.98
	36.00	7.825	7.700	.0512	19.53
	*38.00	7.775	7.650	.0505	19.82
	40.00	7.725	7.600	.0497	20.12
	*43.00	7.651	7.526	.0486	20.58
	44.00	7.625	7.500	.0482	20.74
	49.00	7.511	7.386	.0465	21.49
	*8.750	49.70	7.636	7.500	.0484
*9.000	34.00	8.290	8.134	.0585	17.10
	38.00	8.196	8.040	.0570	17.55
	40.00	8.150	7.994	.0563	17.78
	45.00	8.032	7.876	.0544	18.38
	55.00	7.812	7.656	.0510	19.60
9.625	*29.30	9.063	8.907	.0715	13.98
	32.30	9.001	8.845	.0704	14.20
	36.00	9.021	8.765	.0690	14.48
	*38.00	8.885	8.760	.0684	14.62
	40.00	8.835	8.679	.0676	14.80
	43.50	8.755	8.599	.0662	15.11
	47.00	8.681	8.525	.0649	15.40
	53.50	8.535	8.379	.0625	16.00
	*58.40	8.435	8.279	.0608	16.43
	*61.10	8.375	8.219	.0599	16.70
	*71.80	8.125	7.969	.0559	17.90
*9.750	59.20	8.560	8.500	.0629	15.90
*9.875	62.80	8.625	8.500	.0640	15.63
*10.000	33.00	9.384	9.228	.0773	12.94
10.750	32.75	10.192	10.036	.0926	10.79
	*35.75	10.136	9.980	.0915	10.92
	40.50	10.050	9.894	.0898	11.13
	45.50	9.950	9.794	.0879	11.38
	51.00	9.850	9.694	.0860	11.63
	*54.00	9.784	9.628	.0847	11.80
	55.50	9.760	9.604	.0843	11.87
	*60.70	9.660	9.504	.0824	12.14
	*65.70	9.560	9.404	.0805	12.42
	*71.10	9.450	9.294	.0785	12.74
11.750	*38.00	11.150	10.994	.1125	8.89
	42.00	11.084	10.928	.1111	9.00
	47.00	11.000	10.844	.1093	9.15
	54.00	10.880	10.724	.1067	9.37
	60.00	10.772	10.616	.1045	9.57
	*65.00	10.682	10.526	.1026	9.75
	*71.00	10.586	10.430	.1006	9.94
*11.875	71.80	10.711	10.625	.1032	9.69
*12.000	40.00	11.384	11.228	.1176	8.50
*13.000	40.00	12.438	12.282	.1420	7.04
	45.00	12.360	12.204	.1401	7.14
	50.00	12.282	12.126	.1383	7.23
	54.00	12.220	12.064	.1368	7.31
	13.375	48.00	12.715	12.559	.1488
54.50	12.615	12.459	.1463	6.83	
61.00	12.515	12.359	.1439	6.95	
68.00	12.415	12.259	.1415	7.07	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
				*O.D. 52.40 mm		
BETWEEN TUBING & CASING**				TWO STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
219.08	35.72	205.66	202.49	.0289	34.58	
	41.67	203.63	200.46	.0283	35.38	
	41.62	201.19	198.02	.0275	36.38	
	53.57	198.76	195.58	.0267	37.42	
	*56.55	197.49	194.31	.0263	37.98	
	59.53	196.22	193.04	.0259	38.56	
	*63.99	194.34	191.16	.0254	39.43	
	65.48	193.68	190.50	.0252	39.75	
	72.92	190.78	187.60	.0243	41.18	
	*222.25	73.96	193.95	190.50	.0252	39.62
	*228.60	50.60	210.57	206.60	.0305	32.76
56.55		208.18	204.22	.0297	33.63	
59.53		207.01	203.05	.0294	34.07	
66.97		204.01	200.05	.0284	35.23	
81.85		198.43	194.46	.0266	37.57	
244.48	*43.60	230.20	226.24	.0373	26.79	
	48.07	228.63	224.66	.0368	27.21	
	53.57	226.59	222.63	.0360	27.76	
	*56.55	225.68	222.50	.0357	28.01	
	59.53	224.41	220.45	.0353	28.37	
	64.74	222.38	218.42	.0345	28.95	
	69.94	220.50	216.54	.0339	29.51	
	79.62	216.79	212.83	.0326	30.66	
	*86.91	214.25	210.29	.0318	31.49	
	*90.93	212.73	208.76	.0312	32.01	
	*106.85	206.38	202.41	.0291	34.31	
	*247.65	88.10	217.42	215.90	.0328	30.46
	*250.83	93.46	219.08	215.90	.0334	29.95
*254.00	49.11	238.35	234.39	.0403	24.80	
273.05	48.74	258.88	254.91	.0483	20.69	
	*53.20	257.45	253.49	.0478	20.94	
	60.27	255.27	251.31	.0469	21.33	
	67.71	252.73	248.77	.0459	21.80	
	75.90	250.19	246.23	.0449	22.29	
	*80.36	248.51	244.55	.0442	22.62	
	82.59	247.90	243.94	.0440	22.74	
	*90.33	245.36	241.40	.0430	23.26	
	*91.77	242.82	238.86	.0420	23.80	
	*105.81	240.03	236.07	.0410	24.42	
	298.45	*56.55	283.21	279.25	.0587	17.03
62.50		281.53	277.57	.0580	17.25	
69.94		279.40	275.44	.0570	17.54	
80.36		276.35	272.39	.0557	17.96	
89.29		273.61	269.65	.0545	18.35	
*96.73		271.32	267.36	.0535	18.68	
*105.66		268.88	264.92	.0525	19.05	
*301.63	106.85	272.06	269.88	.0538	18.57	
*304.80	59.53	289.15	285.19	.0614	16.29	
*330.20	59.53	315.93	311.96	.0741	13.49	
	66.97	313.94	309.98	.0731	13.68	
	74.41	311.96	308.00	.0722	13.86	
	80.36	310.39	306.43	.0714	14.01	
339.73	71.43	322.96	319.00	.0776	12.88	
	81.10	320.42	316.46	.0764	13.10	
	90.78	317.88	313.92	.0751	13.32	
	101.20	315.34	311.38	.0738	13.55	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT		
"O.D. 2.063"						
THREE STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
5.500	*13.00	5.044	4.919	.0123	81.22	
	14.00	5.012	4.887	.0120	83.34	
	*15.00	4.974	4.849	.0116	85.98	
	15.50	4.950	4.825	.0114	87.72	
	17.00	4.892	4.767	.0108	92.21	
	20.00	4.778	4.653	.0098	102.31	
	23.00	4.670	4.545	.0088	113.86	
	*26.00	4.548	4.423	.0077	130.04	
	*5.750	14.00	5.290	5.165	.0148	67.65
		17.00	5.190	5.065	.0138	72.66
19.50		5.090	4.965	.0128	78.34	
22.50		4.990	4.865	.0118	84.85	
*6.000	15.00	5.524	5.399	.0172	58.01	
	16.00	5.500	5.375	.0170	58.88	
	17.00	5.450	5.325	.0165	60.79	
	18.00	5.424	5.299	.0162	61.82	
	20.00	5.352	5.227	.0154	64.84	
	23.00	5.240	5.115	.0143	70.08	
	26.00	5.140	5.015	.0133	75.41	
6.625	*17.00	6.135	6.010	.0242	41.39	
	20.00	6.049	5.924	.0231	43.21	
	*22.00	5.989	5.864	.0224	44.56	
	24.00	5.921	5.796	.0217	46.18	
	*26.00	5.855	5.730	.0209	47.85	
	28.00	5.791	5.666	.0202	49.57	
	*29.00	5.761	5.636	.0198	50.41	
	32.00	5.675	5.550	.0189	52.96	
	7.000	17.00	6.538	6.413	.0291	34.34
20.00		6.456	6.331	.0281	35.61	
*22.00		6.398	6.273	.0274	36.55	
23.00		6.366	6.241	.0270	37.09	
*24.00		6.336	6.211	.0266	37.60	
26.00		6.276	6.151	.0259	38.67	
*28.00		6.214	6.089	.0251	39.83	
29.00		6.184	6.059	.0247	40.41	
*30.00		6.154	6.029	.0244	41.01	
32.00		6.094	5.969	.0237	42.24	
*33.70		6.048	5.923	.0231	43.23	
35.00		6.004	5.879	.0226	44.22	
38.00		5.920	5.795	.0216	46.21	
*40.00		5.836	5.711	.0207	48.35	
7.625	*20.00	7.125	7.000	.0369	27.09	
	24.00	7.025	6.900	.0355	28.14	
	26.40	6.969	6.844	.0348	28.76	
	29.70	6.875	6.750	.0335	29.84	
	33.70	6.765	6.640	.0321	31.20	
	39.00	6.625	6.500	.0302	33.08	
	*45.30	6.435	6.310	.0278	35.94	
	*7.750	46.10	6.560	6.500	.0294	34.01
26.00		7.386	7.261	.0406	24.64	
*8.125	28.00	7.485	7.360	.0420	23.80	
	32.00	7.385	7.260	.0406	24.64	
	35.50	7.285	7.160	.0392	25.54	
	39.50	7.185	7.060	.0377	26.49	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing *O.D. 52.40 mm THREE STRINGS		
BETWEEN TUBING & CASING**						
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
139.70	*19.35	128.12	124.94	.0064	155.65	
	20.63	127.31	124.13	.0063	159.71	
	*22.32	126.34	123.16	.0061	164.77	
	23.07	125.73	122.56	.0059	168.12	
	25.30	124.26	121.08	.0057	176.71	
	29.76	121.36	118.19	.0061	196.07	
	34.23	118.62	115.44	.0046	218.20	
	*38.69	115.52	112.34	.0040	249.20	
	*146.05	20.83	134.37	131.19	.0077	129.65
		25.30	131.83	128.65	.0072	139.24
29.02		129.29	126.11	.0067	150.13	
33.48		126.75	123.57	.0061	162.61	
*152.40	22.32	140.31	137.13	.0090	111.16	
	23.81	139.70	136.53	.0089	112.84	
	25.30	138.43	135.26	.0086	116.49	
	26.79	137.77	134.59	.0084	118.47	
	29.76	135.94	132.77	.0080	124.26	
	34.23	133.10	129.92	.0074	134.30	
	38.69	130.56	127.38	.0069	144.51	
168.28	*25.30	155.83	152.65	.0126	79.32	
	29.76	153.64	150.47	.0121	82.81	
	*32.74	152.12	148.95	.0117	85.40	
	35.72	150.39	147.22	.0113	88.50	
	*38.69	148.72	145.54	.0109	91.70	
	41.67	147.09	143.92	.0105	94.99	
	*43.16	146.33	143.15	.0104	96.60	
	47.62	144.15	140.97	.0099	101.49	
	177.80	25.30	166.07	162.89	.0152	65.81
		29.76	163.98	160.81	.0147	68.23
*32.74		162.51	159.33	.0143	70.04	
34.23		161.70	158.52	.0141	71.07	
*35.72		160.93	157.76	.0139	72.06	
38.69		159.41	156.24	.0135	74.11	
*41.67		157.84	154.66	.0131	76.33	
43.16		157.07	153.90	.0129	77.44	
*44.64		156.31	153.14	.0127	78.58	
47.62		154.79	151.61	.0124	80.95	
*50.15		153.62	150.44	.0121	82.86	
52.09		152.50	149.33	.0118	84.74	
56.55		150.37	147.19	.0113	88.55	
*59.53	148.23	145.06	.0108	92.66		
193.68	*29.76	180.98	177.80	.0193	51.92	
	35.72	178.44	175.26	.0185	53.93	
	39.29	177.01	173.84	.0181	55.11	
	44.20	174.63	171.45	.0175	57.19	
	50.15	171.83	168.66	.0167	59.79	
	58.04	168.28	165.10	.0158	63.39	
	*67.41	163.45	160.27	.0145	68.88	
	*196.85	68.60	166.62	165.10	.0153	65.18
*203.20	38.69	187.60	184.43	.0212	47.21	
*206.38	41.67	190.12	186.94	.0219	45.61	
	47.62	187.58	184.40	.0212	47.23	
	52.83	185.04	181.86	.0204	48.95	
	58.78	182.50	179.32	.0197	50.77	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
"O.D. 2.063"		VOLUME & HEIGHT			
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0513	19.50
	28.00	8.017	7.892	.0500	19.99
	32.00	7.921	7.796	.0485	20.60
	36.00	7.825	7.700	.0471	21.24
	*38.00	7.775	7.650	.0463	21.59
	40.00	7.725	7.600	.0456	21.95
	*43.00	7.651	7.526	.0445	22.49
	44.00	7.625	7.500	.0441	22.69
	49.00	7.511	7.386	.0424	23.58
	*8.750	49.70	7.636	7.500	.0442
*9.000	34.00	8.290	8.134	.0544	18.40
	38.00	8.196	8.040	.0529	18.92
	40.00	8.150	7.994	.0521	19.19
	45.00	8.032	7.876	.0503	19.89
	55.00	7.812	7.656	.0469	21.33
9.625	*29.30	9.063	8.907	.0674	14.84
	32.30	9.001	8.845	.0663	15.08
	36.00	8.921	8.765	.0649	15.41
	*38.00	8.885	8.760	.0643	15.56
	40.00	8.835	8.679	.0634	15.77
	43.50	8.755	8.599	.0621	16.11
	47.00	8.681	8.525	.0608	16.45
	53.50	8.535	8.379	.0584	17.13
	*58.40	8.435	8.279	.0567	17.63
	*61.10	8.375	8.219	.0557	17.94
	*71.80	8.125	7.969	.0517	19.33
*9.750	59.20	8.560	8.500	.0588	17.01
*9.875	62.80	8.625	8.500	.0599	16.71
.10.000	33.00	9.384	9.228	.0731	13.67
10.750	32.75	10.192	10.036	.0885	11.30
	*35.75	10.136	9.980	.0874	11.44
	40.50	10.050	9.894	.0857	11.67
	45.50	9.950	9.794	.0838	11.94
	51.00	9.850	9.694	.0818	12.22
	*54.00	9.784	9.628	.0806	12.41
	55.50	9.760	9.604	.0801	12.48
	*60.70	9.660	9.504	.0782	12.78
	*65.70	9.560	9.404	.0764	13.09
	*71.10	9.450	9.294	.0743	13.45
11.750	*38.00	11.150	10.994	.1084	9.23
	42.00	11.084	10.928	.1069	9.35
	47.00	11.000	10.844	.1051	9.51
	54.00	10.880	10.724	.1026	9.75
	60.00	10.772	10.616	.1003	9.97
	*65.00	10.682	10.526	.0984	10.16
	*71.00	10.586	10.430	.0965	10.37
*11.875	71.80	10.711	10.625	.0990	10.10
*12.000	40.00	11.384	11.228	.1135	8.81
*13.000	40.00	12.438	12.282	.1379	7.25
	45.00	12.360	12.204	.1360	7.35
	50.00	12.282	12.126	.1341	7.46
	54.00	12.220	12.064	.1327	7.54
13.375	48.00	12.715	12.559	.1446	6.91
	54.50	12.615	12.459	.1422	7.03
	61.00	12.515	12.359	.1397	7.16
	68.00	12.415	12.259	.1373	7.28

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				*O.D. 52.40 mm		
				THREE STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
219.08	35.72	205.66	202.49	.0268	37.37	
	41.67	203.63	200.46	.0261	38.30	
	47.62	201.19	198.02	.0253	39.48	
	53.57	198.76	195.58	.0246	40.71	
	*56.55	197.49	194.31	.0242	41.37	
	59.53	196.22	193.04	.0238	42.06	
	*63.99	194.34	191.16	.0232	43.10	
	65.48	193.68	190.50	.0230	43.48	
	72.92	190.78	187.60	.0221	45.20	
	*222.25	73.96	193.95	190.50	.0231	43.32
*228.60	50.60	210.57	206.60	.0284	35.26	
	56.55	208.18	204.22	.0276	36.26	
	59.53	207.01	203.05	.0272	36.77	
	66.97	204.01	200.05	.0262	38.12	
	81.85	198.43	194.46	.0245	40.88	
244.48	*43.60	230.20	226.24	.0352	28.44	
	48.07	228.63	224.66	.0346	28.90	
	53.57	226.59	222.63	.0339	29.53	
	*56.55	225.68	222.50	.0335	29.81	
	59.53	224.41	220.45	.0331	30.22	
	64.74	222.38	218.42	.0324	30.88	
	69.94	220.50	216.54	.0317	31.52	
	79.62	216.79	212.83	.0305	32.84	
	*86.91	214.25	210.29	.0296	33.79	
	*90.93	212.73	208.76	.0291	34.39	
	*106.85	206.38	202.41	.0270	37.05	
	*247.65	88.10	217.42	215.90	.0301	32.60
	*250.83	93.46	219.08	215.90	.0312	32.01
*254.00	49.11	238.35	234.39	.0382	26.20	
273.05	48.74	258.88	254.91	.0462	21.65	
	*53.20	257.45	253.49	.0456	21.93	
	60.27	255.27	251.31	.0447	22.36	
	67.71	252.73	248.77	.0437	22.88	
	75.90	250.19	246.23	.0427	23.41	
	*80.36	248.51	244.55	.0421	23.78	
	82.59	247.90	243.94	.0418	23.92	
	*90.33	245.36	241.40	.0408	24.49	
	*97.77	242.82	238.86	.0399	25.09	
	*105.81	240.03	236.07	.0388	25.78	
	298.45	*56.55	283.21	279.25	.0565	17.68
62.50		281.53	277.57	.0558	17.92	
69.94		279.40	275.44	.0549	18.23	
80.36		276.35	272.39	.0535	18.68	
89.29		273.61	269.65	.0523	19.10	
*96.73		271.32	267.36	.0514	19.47	
*105.66		268.88	264.92	.0503	19.87	
*301.63	106.85	272.06	269.88	.0517	19.35	
*304.80	59.53	289.15	285.19	.0592	16.89	
*330.20	59.53	315.93	311.96	.0719	13.90	
	66.97	313.94	309.98	.0710	14.09	
	74.41	311.96	308.00	.0700	14.29	
	80.36	310.39	306.43	.0692	14.45	
339.73	71.43	322.96	319.00	.0755	13.25	
	81.10	320.42	316.46	.0742	13.48	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS				
"O.D. 2.063"		VOLUME & HEIGHT				
FOUR STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
6.625	*17.00	6.135	6.010	.0200	49.94	
	20.00	6.049	5.924	.0190	52.61	
	*22.00	5.989	5.864	.0183	54.63	
	24.00	5.921	5.796	.0175	57.08	
	*26.00	5.855	5.730	.0168	59.65	
	28.00	5.791	5.666	.0160	62.34	
	*29.00	5.761	5.636	.0157	63.68	
	32.00	5.675	5.550	.0147	67.81	
	7.000	17.00	6.538	6.413	.0250	40.02
		20.00	6.456	6.331	.0240	41.75
*22.00		6.398	6.273	.0232	43.05	
23.00		6.366	6.241	.0228	43.80	
*24.00		6.336	6.211	.0225	44.52	
26.00		6.276	6.151	.0217	46.03	
*28.00		6.214	6.089	.0210	47.68	
29.00		6.184	6.059	.0206	48.52	
*30.00		6.154	6.029	.0203	49.38	
32.00		6.094	5.969	.0195	51.18	
*33.70		6.048	5.923	.0190	52.64	
35.00		6.004	5.879	.0185	54.11	
*38.00		5.920	5.795	.0175	57.12	
40.00		5.836	5.711	.0165	60.43	
7.625	*20.00	7.125	7.000	.0328	30.51	
	24.00	7.025	6.900	.0314	31.84	
	26.40	6.969	6.844	.0306	32.64	
	29.70	6.875	6.750	.0294	34.04	
	33.70	6.765	6.640	.0279	35.82	
	39.00	6.625	6.500	.0261	38.32	
*45.30	6.435	6.310	.0237	42.21		
*7.750	46.10	6.560	6.500	.0253	39.58	
*8.000	26.00	7.386	7.261	.0365	27.43	
*8.125	28.00	7.485	7.360	.0379	26.39	
	32.00	7.385	7.260	.0364	27.44	
	35.50	7.285	7.160	.0350	28.56	
	39.50	7.185	7.060	.0336	29.75	
8.625	24.00	8.097	7.972	.0472	21.21	
	28.00	8.017	7.892	.0459	21.79	
	32.00	7.921	7.796	.0444	22.52	
	36.00	7.825	7.700	.0429	23.29	
	*38.00	7.775	7.650	.0422	23.70	
	40.00	7.725	7.600	.0414	24.14	
	*43.00	7.651	7.526	.0403	24.80	
	44.00	7.625	7.500	.0399	25.04	
	49.00	7.511	7.386	.0383	26.13	
*8.750	49.70	7.636	7.500	.0401	24.93	
*9.000	34.00	8.290	8.134	.0502	19.91	
	38.00	8.196	8.040	.0487	20.53	
	40.00	8.150	7.994	.0480	20.84	
	45.00	8.032	7.876	.0461	21.68	
	55.00	7.812	7.656	.0427	23.39	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing *O.D. 52.40 mm		
BETWEEN TUBING & CASING**						
FOUR STRINGS						
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
168.28	*25.30	155.83	152.65	.0104	95.70	
	29.76	153.64	150.47	.0099	100.82	
	*32.74	152.12	148.95	.0096	104.69	
	35.72	150.39	147.22	.0091	109.39	
	*38.69	148.72	145.54	.0087	114.32	
	41.67	147.09	143.92	.0084	119.48	
	*43.16	146.33	143.15	.0082	122.04	
	47.62	144.15	140.97	.0077	129.94	
	177.80	25.30	166.07	162.89	.0130	76.70
		29.76	163.98	160.81	.0125	80.01
*32.74		162.51	159.33	.0121	82.51	
34.23		161.70	158.52	.0119	83.94	
*35.72		160.93	157.76	.0117	85.32	
38.69		159.41	156.24	.0113	88.21	
*41.67		157.84	154.66	.0109	91.37	
43.16		157.07	153.90	.0108	92.98	
*44.64		156.31	153.14	.0106	94.63	
47.62		154.79	151.61	.0102	98.08	
*50.15		153.62	150.44	.0099	100.89	
52.09		152.50	149.33	.0096	103.70	
*56.55		150.37	147.19	.0091	109.46	
*59.53		148.23	145.06	.0086	115.81	
193.68	*29.76	180.98	177.80	.0171	58.47	
	35.72	178.44	175.26	.0164	61.03	
	39.29	177.01	173.84	.0160	62.54	
	44.20	174.63	171.45	.0153	65.23	
	50.15	171.83	168.66	.0146	68.64	
	58.04	168.28	165.10	.0136	73.43	
	*67.41	163.45	160.27	.0124	80.90	
*196.85	68.60	166.62	165.10	.0132	75.85	
*203.20	38.69	187.60	184.43	.0190	52.57	
*206.38	41.67	190.12	186.94	.0198	50.58	
	47.62	187.58	184.40	.0190	52.59	
	52.83	185.04	181.86	.0183	54.73	
	58.78	182.50	179.32	.0175	57.02	
219.08	35.72	205.66	202.49	.0246	40.64	
	41.67	203.63	200.46	.0240	41.75	
	47.62	201.19	198.02	.0232	43.15	
	53.57	198.76	195.58	.0224	44.63	
	*56.55	197.49	194.31	.0220	45.43	
	59.53	196.22	193.04	.0216	46.25	
	*63.99	194.34	191.16	.0210	47.52	
	65.48	193.68	190.50	.0208	47.98	
	72.92	190.78	187.60	.0200	50.08	
	*222.25	73.96	193.95	190.50	.0209	47.78
*228.60	50.60	210.57	206.60	.0262	38.16	
	56.55	208.18	204.22	.0254	39.34	
	59.53	207.01	203.05	.0250	39.94	
	66.97	204.01	200.05	.0241	41.54	
	81.85	198.43	194.46	.0223	44.83	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT		
"O.D. 2.063"						
FOUR STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
9.625	*29.30	9.063	8.907	.0633	15.81	
	32.30	9.001	8.845	.0622	16.09	
	36.00	8.921	8.765	.0608	16.45	
	*38.00	8.885	8.760	.0602	16.63	
	40.00	8.835	8.679	.0593	16.87	
	43.50	8.755	8.599	.0579	17.26	
	47.00	8.681	8.525	.0567	17.65	
	53.50	8.535	8.379	.0542	18.44	
	*58.40	8.435	8.279	.0526	19.02	
	*61.10	8.375	8.219	.0516	19.38	
	*71.80	8.125	7.969	.0476	21.01	
	*9.750	59.20	8.560	8.500	.0546	18.30
	*9.875	62.80	8.625	8.500	.0557	17.94
*10.000	33.00	9.384	9.228	.0690	14.49	
10.750	32.75	10.192	10.036	.0844	11.85	
	*35.75	10.136	9.980	.0833	12.01	
	40.50	10.050	9.894	.0816	12.26	
	45.50	9.950	9.794	.0796	12.56	
	51.00	9.850	9.694	.0777	12.87	
	*54.00	9.784	9.628	.0765	13.08	
	55.50	9.760	9.604	.0760	13.16	
	*60.70	9.660	9.504	.0741	13.49	
	*65.70	9.560	9.404	.0722	13.84	
*71.10	9.450	9.294	.0702	14.24		
11.750	*38.00	11.150	10.994	.1042	9.59	
	42.00	11.084	10.928	.1028	9.73	
	47.00	11.000	10.844	.1010	9.90	
	54.00	10.880	10.724	.0985	10.16	
	60.00	10.772	10.616	.0962	10.40	
	*65.00	10.682	10.526	.0943	10.60	
	*71.00	10.586	10.430	.0923	10.83	
*11.875	71.80	10.711	10.625	.0949	10.54	
*12.000	40.00	11.384	11.228	.1094	9.14	
*13.000	40.00	12.438	12.282	.1337	7.48	
	45.00	12.360	12.204	.1319	7.58	
	50.00	12.282	12.126	.1300	7.69	
	54.00	12.220	12.064	.1285	7.78	
	13.375	48.00	12.715	12.559	.1405	7.12
54.50		12.615	12.459	.1381	7.24	
61.00		12.515	12.359	.1356	7.37	
68.00		12.415	12.259	.1332	7.51	
72.00		12.347	12.191	.1316	7.60	
*77.00		12.275	12.119	.1298	7.70	
*80.70		12.215	12.059	.1284	7.79	
*83.00		12.175	12.019	.1275	7.85	
*85.00		12.159	12.003	.1271	7.87	
*86.00		12.125	11.969	.1263	7.92	
*92.00		12.031	11.875	.1241	8.06	
*98.00	11.937	11.781	.1219	8.20		
*13.500	81.40	12.340	12.250	.1314	7.61	
*13.625	88.20	12.375	12.250	.1322	7.56	
*14.000	50.00	13.344	13.156	.1564	6.39	
16.000	*55.00	15.375	15.187	.2131	4.69	
	65.00	15.250	15.062	.2094	4.78	
	*70.00	15.198	15.010	.2078	4.81	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				*O.D. 52.40 mm		
OUTSIDE CASING				FOUR STRINGS		
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
244.48	*43.60	230.20	226.24	.0330	30.30	
	48.07	228.63	224.66	.0324	30.83	
	53.57	226.59	222.63	.0317	31.53	
	*56.55	225.68	222.50	.0314	31.86	
	59.53	224.41	220.45	.0309	32.32	
	64.74	222.38	218.42	.0302	33.09	
	69.94	220.50	216.54	.0296	33.82	
	79.62	216.79	212.83	.0283	35.34	
	*86.91	214.25	210.29	.0274	36.45	
	*90.93	212.73	208.76	.0269	37.14	
	*106.85	206.38	202.41	.0248	40.27	
	*247.65	88.10	217.42	215.90	.0285	35.07
	*250.83	93.46	219.08	215.90	.0291	34.39
*254.00	49.11	238.35	234.39	.0360	27.77	
273.05	48.74	258.88	254.91	.0440	22.71	
	*53.20	257.45	253.49	.0434	23.02	
	60.27	255.27	251.31	.0426	23.49	
	67.71	252.73	248.77	.0416	24.06	
	75.90	250.19	246.23	.0406	24.66	
	*80.36	248.51	244.55	.0399	25.07	
	82.59	247.90	243.94	.0397	25.22	
	*90.33	245.36	241.40	.0387	25.86	
	*97.77	242.82	238.86	.0377	26.53	
	*105.81	240.03	236.07	.0366	27.29	
	298.45	*56.55	283.21	279.25	.0544	18.39
62.50		281.53	277.57	.0536	18.64	
69.94		279.40	275.44	.0527	18.97	
80.36		276.35	272.39	.0514	19.46	
89.29		273.61	269.65	.0502	19.92	
*96.73		271.32	267.36	.0492	20.32	
*105.66		268.88	264.92	.0482	20.76	
*301.63	106.85	272.06	269.88	.0495	20.19	
*304.80	59.53	289.15	285.19	.0571	17.52	
*330.20	59.53	315.93	311.96	.0698	14.33	
	66.97	313.94	309.98	.0688	14.53	
	74.41	311.96	308.00	.0678	14.74	
	80.36	310.39	306.43	.0671	14.91	
	339.73	71.43	322.96	319.00	.0733	13.64
81.10		320.42	316.46	.0720	13.88	
90.78		317.88	313.92	.0708	14.13	
101.20		315.34	311.38	.0695	14.39	
107.15		313.61	309.65	.0686	14.57	
*114.59		311.79	307.82	.0677	14.76	
*120.09		310.26	306.30	.0670	14.92	
*123.52		309.25	305.28	.0665	15.04	
*126.49		308.84	304.88	.0663	15.08	
*127.98		307.98	304.01	.0659	15.18	
*136.91		305.59	301.63	.0647	15.45	
*145.84		303.20	299.24	.0636	15.72	
*342.90		121.14	313.44	311.15	.0686	14.59
*346.08	131.26	314.33	311.15	.0690	14.49	
*355.60	74.41	338.94	334.16	.0816	12.25	
406.40	*81.85	390.53	385.75	.1112	8.99	
	96.73	387.35	382.58	.1093	9.15	
	*104.17	386.03	381.25	.1085	9.22	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.375"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0108	92.84
	10.50	4.052	3.927	.0105	95.51
	11.60	4.000	3.875	.0101	99.37
	13.50	3.920	3.795	.0094	105.84
	*15.10	3.826	3.701	.0087	114.41
	*16.60	3.754	3.629	.0082	121.80
	*18.80	3.640	3.515	.0074	135.29
	*4.750	16.00	4.082	3.957	.0107
5.000	11.50	4.560	4.435	.0147	67.93
	13.00	4.494	4.369	.0141	70.72
	15.00	4.408	4.283	.0134	74.65
	18.00	4.276	4.151	.0123	81.42
	*20.30	4.184	4.059	.0115	86.76
	*20.80	4.156	4.031	.0113	88.50
	*23.20	4.044	3.919	.0104	96.09
	*24.20	4.000	3.875	.0101	99.37
5.500	*13.00	5.044	4.919	.0192	51.99
	14.00	5.012	4.887	.0189	52.85
	*15.00	4.974	4.849	.0186	53.90
	15.50	4.950	4.825	.0183	54.58
	17.00	4.892	4.767	.0178	56.28
	20.00	4.778	4.653	.0167	59.89
	23.00	4.670	4.545	.0157	63.67
	*26.00	4.548	4.423	.0146	68.43
*5.750	14.00	5.290	5.165	.0217	46.07
	17.00	5.190	5.065	.0207	48.34
	19.50	5.090	4.965	.0197	50.79
	22.50	4.990	4.865	.0187	53.45
*6.000	15.00	5.524	5.399	.0242	41.39
	16.00	5.500	5.375	.0239	41.83
	17.00	5.450	5.325	.0234	42.78
	18.00	5.424	5.299	.0231	43.29
	20.00	5.352	5.227	.0223	44.75
	23.00	5.240	5.115	.0212	47.18
	26.00	5.140	5.015	.0202	49.54
6.625	*17.00	6.135	6.010	.0311	32.17
	20.00	6.049	5.924	.0301	33.26
	*22.00	5.989	5.864	.0294	34.06
	24.00	5.921	5.796	.0286	34.99
	*26.00	5.855	5.730	.0278	35.94
	28.00	5.791	5.666	.0271	36.90
	*29.00	5.761	5.636	.0268	37.37
	32.00	5.675	5.550	.0258	38.75
7.000	17.00	6.538	6.413	.0360	27.74
	20.00	6.456	6.331	.0350	28.56
	*22.00	6.398	6.273	.0343	29.17
	23.00	6.366	6.241	.0339	29.51
	*24.00	6.336	6.211	.0335	29.83
	26.00	6.276	6.151	.0328	30.50
	*28.00	6.214	6.089	.0320	31.22
	29.00	6.184	6.059	.0317	31.58
	*30.00	6.154	6.029	.0313	31.94
	32.00	6.094	5.969	.0306	32.68
	*33.70	6.048	5.923	.0301	33.27
	35.00	6.004	5.879	.0295	33.85
	38.00	5.920	5.795	.0286	35.01
	*40.00	5.836	5.711	.0276	36.22

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 60.33 mm	
				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0056	177.93
	15.63	102.92	99.75	.0055	183.03
	17.26	101.60	98.43	.0053	190.43
	20.09	99.57	96.39	.0049	202.84
	*22.47	97.18	94.01	.0046	219.25
	*24.70	95.35	92.18	.0043	233.41
	*27.98	92.46	89.28	.0039	259.27
	*120.65	23.81	103.68	100.51	.0056
127.00	17.11	115.82	112.65	.0077	130.19
	19.35	114.15	110.97	.0074	135.53
	22.32	111.96	108.79	.0070	143.06
	26.79	108.61	105.44	.0064	156.03
	*30.21	106.27	103.10	.0060	166.26
	*30.95	105.56	102.39	.0059	169.60
	*34.53	102.72	99.54	.0054	184.14
	*36.01	101.60	98.43	.0053	190.43
139.70	*19.35	128.12	124.94	.0100	99.63
	20.83	127.31	124.13	.0099	101.27
	*22.32	126.34	123.16	.0097	103.29
	23.07	125.73	122.56	.0096	104.59
	25.30	124.26	121.08	.0093	107.85
	29.76	121.36	118.19	.0087	114.77
	34.23	118.62	115.44	.0082	122.01
	*38.69	115.52	112.34	.0076	131.14
*146.05	20.83	134.37	131.19	.0113	88.29
	25.30	131.83	128.65	.0108	92.64
	29.02	129.29	126.11	.0103	97.34
	33.48	126.75	123.57	.0098	102.43
*152.40	22.32	140.31	137.13	.0126	79.31
	23.81	139.70	136.53	.0125	80.16
	25.30	138.43	135.26	.0122	81.99
	26.79	137.77	134.59	.0121	82.96
	29.76	135.94	132.77	.0117	85.76
	34.23	133.10	129.92	.0111	90.42
	38.69	130.56	127.38	.0105	94.94
	168.28	*25.30	155.83	152.65	.0162
29.76		153.64	150.47	.0157	63.74
*32.74		152.12	148.95	.0153	65.26
35.72		150.39	147.22	.0149	67.06
*38.69		148.72	145.54	.0145	68.88
41.61		147.09	143.92	.0141	70.72
*43.16		146.33	143.15	.0140	71.61
47.62		144.15	140.97	.0135	74.26
177.80	25.30	166.07	162.89	.0188	53.17
	29.76	163.98	160.81	.0183	54.74
	*32.74	162.51	159.33	.0179	55.90
	34.23	161.70	158.52	.0177	56.55
	*35.72	160.93	157.76	.0175	57.17
	38.69	159.41	156.24	.0171	58.46
	*41.67	157.84	154.66	.0167	59.83
	43.16	157.07	153.90	.0165	60.51
	*44.64	156.31	153.14	.0163	61.21
	47.62	154.79	151.61	.0160	62.63
	*50.15	153.62	150.44	.0157	63.77
	52.09	152.50	149.33	.0154	64.88
	56.55	150.37	147.19	.0149	67.09
*59.53	148.23	145.06	.0144	69.42	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.375"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
7.625	*20.00	7.125	7.000	.0438	22.81
	24.00	7.025	6.900	.0425	23.55
	26.40	6.969	6.844	.0417	23.98
	29.70	6.875	6.750	.0404	24.73
	33.70	6.765	6.640	.0390	25.66
	39.00	6.625	6.500	.0372	26.91
	*45.30	6.435	6.310	.0347	28.78
*7.750	46.10	6.560	6.500	.0363	27.53
*8.000	26.00	7.386	7.261	.0475	21.05
*8.125	28.00	7.485	7.360	.0489	20.43
	32.00	7.385	7.260	.0475	21.05
	35.50	7.285	7.160	.0461	21.70
	39.50	7.185	7.060	.0447	22.39
8.625	24.00	8.097	7.972	.0582	17.18
	28.00	8.017	7.892	.0570	17.56
	32.00	7.921	7.796	.0555	18.03
	36.00	7.825	7.700	.0540	18.52
	*38.00	7.775	7.650	.0532	18.78
	40.00	7.725	7.600	.0525	19.05
	*43.00	7.651	7.526	.0514	19.46
	44.00	7.625	7.500	.0510	19.61
	49.00	7.511	7.386	.0493	20.27
*8.750	49.70	7.636	7.500	.0512	19.55
*9.000	34.00	8.290	8.134	.0613	16.32
	38.00	8.196	8.040	.0598	16.73
	40.00	8.150	7.994	.0590	16.94
	45.00	8.032	7.876	.0572	17.49
	55.00	7.812	7.656	.0538	18.59
9.625	*29.30	9.063	8.907	.0743	13.46
	32.30	9.001	8.845	.0732	13.66
	36.00	8.921	8.765	.0718	13.92
	*38.00	8.885	8.760	.0712	14.04
	40.00	8.835	8.679	.0703	14.22
	43.50	8.755	8.599	.0690	14.50
	47.00	8.681	8.525	.0677	14.77
	53.50	8.535	8.379	.0653	15.32
	*58.40	8.435	8.279	.0636	15.71
	*61.10	8.375	8.219	.0627	15.96
	*71.80	8.125	7.969	.0586	17.05
*9.750	59.20	8.560	8.500	.0657	15.22
*9.875	62.80	8.625	8.500	.0668	14.97
*10.000	33.00	9.384	9.228	.0801	12.49
10.750	32.75	10.192	10.036	.0954	10.48
	*35.75	10.136	9.980	.0943	10.60
	40.50	10.050	9.894	.0926	10.79
	45.50	9.950	9.794	.0907	11.03
	51.00	9.850	9.694	.0888	11.26
	*54.00	9.784	9.628	.0875	11.43
	55.50	9.760	9.604	.0871	11.49
	*60.70	9.660	9.504	.0852	11.74
	*65.70	9.560	9.404	.0833	12.00
	*71.10	9.450	9.294	.0813	12.30

*Not API Standard. Shown for information only

METRIC UNITS Inside Tubing

BETWEEN TUBING & CASING** **O.D. 60.33 mm**

ONE STRING

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
193.68	*29.76	180.98	177.80	.0229	43.72
	35.72	178.44	175.26	.0222	45.13
	39.29	177.01	173.84	.0218	45.96
	44.20	174.63	171.45	.0211	47.39
	50.15	171.83	168.66	.0203	49.17
	58.04	168.28	165.10	.0194	51.58
	*67.41	163.45	160.27	.0181	55.18
	*196.85	68.60	166.62	165.10	.0190
*203.20	38.69	187.60	184.43	.0248	40.33
*206.38	41.67	190.12	186.94	.0255	39.15
	47.62	187.58	184.40	.0248	40.34
	52.83	185.04	181.86	.0240	41.59
	58.78	182.50	179.32	.0233	42.90
219.08	35.72	205.66	202.49	.0304	32.92
	41.67	203.63	200.46	.0297	33.65
	47.62	201.19	198.02	.0289	34.55
	53.57	198.76	195.58	.0282	35.49
	*56.55	197.49	194.31	.0278	35.99
	59.53	196.22	193.04	.0274	36.51
	*63.99	194.34	191.16	.0268	37.29
	65.48	193.68	190.50	.0266	37.58
72.92	190.78	187.60	.0257	38.85	
422.25	73.96	193.95	190.50	.0267	37.45
*228.60	50.60	210.57	206.60	.0320	31.27
	56.55	208.18	204.22	.0312	32.06
	59.53	207.01	203.05	.0308	32.46
	66.97	204.01	200.05	.0298	33.51
	81.85	198.43	194.46	.0281	35.62
244.48	*43.60	230.20	226.24	.0388	25.79
	48.07	228.63	224.66	.0382	26.17
	53.57	226.59	222.63	.0375	26.68
	*56.55	225.68	222.50	.0372	26.91
	59.53	224.41	220.45	.0367	27.24
	64.74	222.38	218.42	.0360	27.78
	69.94	220.50	216.54	.0353	28.30
	79.62	216.79	212.83	.0341	29.35
	*86.91	214.25	210.29	.0332	30.11
	*90.93	212.73	208.76	.0327	30.59
	*106.85	206.38	202.41	.0306	32.68
*247.65	88.10	217.42	215.90	.0343	29.17
*250.83	93.46	219.08	215.90	.0348	28.69
*254.00	49.11	238.35	234.39	.0418	23.94
273.05	48.74	258.88	254.91	.0498	20.08
	*53.20	257.45	253.49	.0492	20.32
	60.27	255.27	251.31	.0483	20.69
	67.71	252.73	248.77	.0473	21.13
	75.90	250.19	246.23	.0463	21.59
	*80.36	248.51	244.55	.0457	21.90
	82.59	247.90	243.94	.0454	22.01
	*90.33	245.36	241.40	.0444	22.50
	*97.77	242.82	238.86	.0435	23.01
	*105.81	240.03	236.07	.0424	23.58

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.375"		VOLUME & HEIGHT			
TWO STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*6.000	15.00	5.524	5.399	.0187	53.52
	16.00	5.500	5.375	.0184	54.27
	17.00	5.450	5.325	.0179	55.88
	18.00	5.424	5.299	.0176	56.75
	20.00	5.352	5.227	.0169	59.29
	23.00	5.240	5.115	.0157	63.64
	26.00	5.140	5.015	.0147	68.00
6.625	*17.00	6.135	6.010	.0256	39.06
	20.00	6.049	5.924	.0246	40.67
	*22.00	5.989	5.864	.0239	41.87
	24.00	5.921	5.796	.0231	43.29
	*26.00	5.855	5.730	.0223	44.76
	28.00	5.791	5.666	.0216	46.26
	*29.00	5.761	5.636	.0213	46.99
	32.00	5.675	5.550	.0203	49.20
7.000	17.00	6.538	6.413	.0306	32.72
	20.00	6.456	6.331	.0295	33.86
	*22.00	6.398	6.273	.0288	34.72
	23.00	6.366	6.241	.0284	35.20
	*24.00	6.336	6.211	.0280	35.66
	26.00	6.276	6.151	.0273	36.62
	*28.00	6.214	6.089	.0266	37.66
	29.00	6.184	6.059	.0262	38.18
	*30.00	6.154	6.029	.0258	38.71
	32.00	6.094	5.969	.0251	39.81
	*33.70	6.048	5.923	.0246	40.69
	35.00	6.004	5.879	.0241	41.56
38.00	5.920	5.795	.0231	43.32	
*40.00	5.836	5.711	.0221	45.19	
7.625	*20.00	7.125	7.000	.0384	26.07
	24.00	7.025	6.900	.0370	27.04
	26.40	6.969	6.844	.0362	27.61
	29.70	6.875	6.750	.0350	28.61
	33.70	6.765	6.640	.0335	29.85
	39.00	6.625	6.500	.0317	31.57
	*45.30	6.435	6.310	.0293	34.17
*7.750	46.10	6.560	6.50Q	.0308	32.42
*8.000	26.00	7.386	7.261	.0420	23.79
*8.125	28.00	7.485	7.360	.0435	23.01
	32.00	7.385	7.260	.0420	23.80
	35.50	7.285	7.160	.0406	24.63
	39.50	7.185	7.060	.0392	25.52
8.625	24.00	8.097	7.972	.0527	18.96
	28.00	8.017	7.892	.0515	19.43
	32.00	7.921	7.796	.0500	20.00
	36.00	7.825	7.700	.0485	20.61
	*38.00	7.775	7.650	.0478	20.94
	40.00	7.725	7.600	.0470	21.27
	*43.00	7.651	7.526	.0459	21.78
	44.00	7.625	7.500	.0455	21.97
	49.00	7.511	7.386	.0438	22.81
*8.750	49.70	7.636	7.500	.0457	21.89
*9.000	34.00	8.290	8.134	.0558	17.92
	38.00	8.196	8.040	.0543	18.42
	40.00	8.150	7.994	.0536	18.67
	45.00	8.032	7.876	.0517	19.34
	55.00	7.812	7.656	.0483	20.69

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 60.33 mm	
				TWO STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*152.40	22.32	140.31	137.13	.0097	102.57
	23.81	139.70	136.53	.0096	104.00
	25.30	138.43	135.26	.0093	107.09
	26.79	137.77	134.59	.0092	108.76
	29.76	135.94	132.77	.0088	113.62
	34.23	133.10	129.92	.0082	121.95
	38.69	130.56	127.38	.0077	130.32
	168.28	*25.30	155.83	152.65	.0134
29.76		153.64	150.47	.0128	77.95
*32.74		152.12	148.95	.0125	80.24
35.72		150.39	147.22	.0121	82.97
*38.69		148.72	145.54	.0117	85.77
41.67		147.09	143.92	.0113	88.65
*43.16		146.33	143.15	.0111	90.05
47.62		144.15	140.97	.0106	94.28
177.80	25.30	166.07	162.89	.0159	62.70
	29.76	163.98	160.81	.0154	64.90
	*32.74	162.51	159.33	.0150	66.53
	34.23	161.70	158.52	.0148	67.46
	*35.72	160.93	157.76	.0146	68.35
	38.69	159.41	156.24	.0142	70.19
	*41.67	157.84	154.66	.0139	72.18
	43.16	157.07	153.90	.0137	73.17
	*44.64	156.31	153.14	.0135	74.19
	47.62	154.79	151.61	.0131	76.30
	*50.15	153.62	150.44	.0128	77.98
	52.09	152.50	149.33	.0126	79.65
56.55	150.37	147.19	.0120	83.01	
*59.53	148.23	145.06	.0115	86.61	
193.68	*29.76	180.98	177.80	.0200	49.96
	35.72	178.44	175.26	.0193	51.82
	39.29	177.01	173.84	.0189	52.91
	44.20	174.63	171.45	.0182	54.82
	50.15	171.83	168.66	.0175	57.21
	58.04	168.28	165.10	.0165	60.50
	*67.41	163.45	160.27	.0153	65.48
*196.85	68.60	166.62	165.10	.0161	62.13
*203.20	38.69	187.60	184.43	.0219	45.59
*206.38	41.67	190.12	186.94	.0227	44.09
	47.62	187.58	184.40	.0219	45.61
	52.83	185.04	181.86	.0212	47.21
	58.78	182.50	179.32	.0205	48.90
	219.08	35.72	205.66	202.49	.0275
41.67		203.63	200.46	.0269	37.23
47.62		201.19	198.02	.0261	38.34
53.57		198.76	195.58	.0253	39.50
*56.55		197.49	194.31	.0249	40.12
59.53		196.22	193.04	.0245	40.76
*63.99		194.34	191.16	.0240	41.75
65.48		193.68	190.50	.0238	42.10
72.92		190.78	187.60	.0229	43.71
*222.25	73.96	193.95	190.50	.0238	41.95

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS				
O.D. 2.375"		VOLUME & HEIGHT				
TWO STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
9.625	*29.30	9.063	8.907	.0688	14.53	
	32.30	9.001	8.845	.0677	14.76	
	36.00	8.921	8.765	.0664	15.07	
	*38.00	8.885	8.760	.0657	15.21	
	40.00	8.835	8.679	.0649	15.42	
	43.50	8.755	8.599	.0635	15.75	
	47.00	8.681	8.525	.0622	16.06	
	53.50	8.535	8.379	.0598	16.72	
	*58.40	8.435	8.279	.0582	17.19	
	*61.10	8.375	8.219	.0572	17.49	
	*71.80	8.125	7.969	.0532	18.81	
	*9.750	59.20	8.560	8.500	.0602	16.61
	*9.875	62.80	8.625	8.500	.0613	16.31
*10.000	33.00	9.384	9.228	.0746	13.41	
10.750	32.75	10.192	10.036	.0899	11.12	
	*35.75	10.136	9.980	.0888	11.26	
	40.50	10.050	9.894	.0872	11.47	
	45.50	9.950	9.794	.0852	11.74	
	51.00	9.850	9.694	.0833	12.01	
	*54.00	9.784	9.628	.0820	12.19	
	55.50	9.760	9.604	.0816	12.26	
	*60.70	9.660	9.504	.0797	12.55	
	*65.70	9.560	9.404	.0778	12.85	
*71.10	9.450	9.294	.0758	13.19		
11.750	*38.00	11.150	10.994	.1098	9.11	
	42.00	11.084	10.928	.1084	9.23	
	47.00	11.000	10.844	.1066	9.38	
	54.00	10.880	10.724	.1040	9.61	
	60.00	10.772	10.616	.1018	9.83	
	*65.00	10.682	10.526	.0999	10.01	
	*71.00	10.586	10.430	.0979	10.21	
*11.875	71.80	10.711	10.625	.1005	9.95	
*12.000	40.00	11.384	11.228	.1149	8.70	
*13.000	40.00	12.438	12.282	.1393	7.18	
	45.00	12.360	12.204	.1374	7.28	
	50.00	12.282	12.126	.1356	7.38	
	54.00	12.220	12.064	.1341	7.46	
	13.375	48.00	12.715	12.559	.1461	6.84
54.50		12.615	12.459	.1436	6.96	
61.00		12.515	12.359	.1412	7.08	
68.00		12.415	12.259	.1388	7.21	
72.00		12.347	12.191	.1371	7.29	
*77.00		12.275	12.119	.1354	7.38	
*80.70		12.215	12.059	.1340	7.46	
*83.00		12.175	12.019	.1330	7.52	
*85.00		12.159	12.003	.1327	7.54	
*86.00		12.125	11.969	.1319	7.58	
*92.00		12.031	11.875	.1297	7.71	
*98.00	11.937	11.781	.1275	7.85		
*13.500	81.40	12.340	12.250	.1370	7.30	
*13.625	88.20	12.375	12.250	.1378	7.26	
*14.000	50.00	13.344	13.156	.1620	6.17	
16.000	*55.00	15.375	15.187	.2187	4.57	
	65.00	15.250	15.062	.2150	4.65	
	*70.00	15.198	15.010	.2134	4.69	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 60.33 mm	
OUTSIDE CASING				TWO STRINGS	
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
244.48	*43.60	230.20	226.24	.0359	27.84
	48.07	228.63	224.66	.0353	28.29
	53.57	226.59	222.63	.0346	28.88
	*56.55	225.68	222.50	.0343	29.16
	59.53	224.41	220.45	.0338	29.54
	64.74	222.38	218.42	.0331	30.18
	69.94	220.50	216.54	.0325	30.79
	79.62	216.79	212.83	.0312	32.04
	*86.91	214.25	210.29	.0303	32.95
	*90.93	212.73	208.76	.0298	33.52
	*106.85	206.38	202.41	.0277	36.04
	*247.65	88.10	217.42	215.90	.0314
*250.83	93.46	219.08	215.90	.0320	31.26
*254.00	49.11	238.35	234.39	.0389	25.69
273.05	48.74	258.88	254.91	.0469	21.31
	*53.20	257.45	253.49	.0464	21.57
	60.21	255.27	251.31	.0455	21.99
	67.71	252.73	248.77	.0445	22.49
	75.90	250.19	246.23	.0435	23.01
	*80.36	248.51	244.55	.0428	23.36
	82.59	247.90	243.94	.0426	23.49
	*90.33	245.36	241.40	.0416	24.05
	*97.77	242.82	238.86	.0406	24.62
	*105.81	240.03	236.07	.0395	25.28
298.45	*56.55	283.21	279.25	.0573	17.45
	62.50	281.53	277.57	.0566	17.68
	69.94	279.40	275.44	.0556	17.98
	80.36	276.35	272.39	.0543	18.42
	89.29	273.61	269.65	.0531	18.83
	*96.73	271.32	267.36	.0521	19.19
	*105.66	268.88	264.92	.0511	19.57
*301.63	106.85	272.06	269.88	.0524	19.07
*304.80	59.53	289.15	285.19	.0600	16.67
*330.20	59.53	315.93	311.96	.0727	13.75
	66.97	313.94	309.98	.0717	13.94
	74.41	311.96	308.00	.0707	14.13
	80.36	310.39	306.43	.0700	14.29
	339.73	71.43	322.96	319.00	.0762
81.10	320.42	316.46	316.46	.0749	13.34
90.78	317.88	313.92	313.92	.0737	13.57
101.20	315.34	311.38	311.38	.0724	13.81
107.15	313.61	309.65	309.65	.0716	13.97
*114.59	311.79	307.82	307.82	.0707	14.15
*120.09	310.26	306.30	306.30	.0699	14.30
*123.52	309.25	305.28	305.28	.0694	14.41
*126.49	308.84	304.88	304.88	.0692	14.45
*127.98	307.98	304.01	304.01	.0688	14.53
*136.91	305.59	301.63	301.63	.0677	14.78
*145.84	303.20	299.24	299.24	.0665	15.04
*342.90	121.14	313.44	311.15	.0715	13.99
*346.08	131.26	314.33	311.15	.0719	13.91
*355.60	74.41	338.94	334.16	.0845	11.83
406.40	*81.85	390.53	385.75	.1141	8.76
	96.73	387.35	382.58	.1122	8.92
	*104.17	386.03	381.25	.1114	8.98

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.375"		VOLUME & HEIGHT			
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
6.625	*17.00	6.135	6.010	.0201	49.69
	20.00	6.049	5.924	.0191	52.34
	*22.00	5.989	5.864	.0184	54.33
	24.00	5.921	5.796	.0176	56.76
	*26.00	5.855	5.730	.0169	59.30
	28.00	5.791	5.666	.0161	61.90
	*29.00	5.761	5.636	.0158	63.28
	32.00	5.675	5.550	.0148	67.35
	7.000	17.00	6.538	6.413	.0251
20.00		6.456	6.331	.0241	41.58
*22.00		6.398	6.273	.0233	42.87
23.00		6.366	6.241	.0229	43.61
*24.00		6.336	6.211	.0226	44.33
26.00		6.276	6.151	.0218	45.82
*28.00		6.214	6.089	.0211	47.46
29.00		6.184	6.059	.0207	48.28
*30.00		6.154	6.029	.0204	49.14
32.00		6.094	5.969	.0196	50.92
*33.70		6.048	5.923	.0191	52.37
35.00		6.004	5.879	.0186	53.82
38.00		5.920	5.795	.0176	56.80
*40.00		5.836	5.711	.0166	60.07
7.625	*20.00	7.125	7.000	.0329	30.42
	24.00	7.025	6.900	.0315	31.74
	26.40	6.969	6.844	.0307	32.53
	29.70	6.875	6.750	.0295	33.93
	33.70	6.765	6.640	.0280	35.69
	39.00	6.625	6.500	.0262	38.17
*45.30	6.435	6.310	.0238	42.04	
*7.750	46.10	6.560	6.500	.0254	39.42
*8.000	26.00	7.386	7.261	.0366	27.36
*8.125	28.00	7.485	7.360	.0380	26.33
	32.00	7.385	7.260	.0365	27.37
	35.50	7.285	7.160	.0351	28.48
	39.50	7.185	7.060	.0337	29.66
8.625	24.00	8.097	7.972	.0472	21.16
	28.00	8.017	7.892	.0460	21.74
	32.00	7.921	7.796	.0445	22.47
	36.00	7.825	7.700	.0430	23.23
	*38.00	7.775	7.650	.0423	23.65
	40.00	7.725	7.600	.0415	24.08
	*43.00	7.651	7.526	.0404	24.74
	44.00	7.625	7.500	.0400	24.97
	49.00	7.511	7.386	.0384	26.07
*8.750	49.70	7.636	7.500	.0402	24.87
*9.000	34.00	8.290	8.134	.0503	19.87
	38.00	8.196	8.040	.0488	20.48
	40.00	8.150	7.994	.0481	20.80
	45.00	8.032	7.876	.0462	21.63
	55.00	7.812	7.656	.0428	23.34

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 60.33 mm		
				THREE STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
168.28	*25.30	155.83	152.65	.0105	95.23	
	29.76	153.64	150.47	.0100	100.30	
	*32.74	152.12	148.95	.0096	104.12	
	35.72	150.39	147.22	.0092	108.71	
	*38.69	148.72	145.54	.0088	113.64	
	41.67	147.09	143.92	.0084	118.74	
	*43.16	146.33	143.15	.0082	121.27	
	47.62	144.15	140.97	.0077	129.08	
	177.80	25.30	166.07	162.89	.0131	76.39
		29.76	163.98	160.81	.0125	79.68
*32.74		162.51	159.33	.0122	82.16	
34.23		161.70	158.52	.0120	83.58	
*35.72		160.93	157.76	.0118	84.95	
38.69		159.41	156.24	.0114	87.81	
*41.67		157.84	154.66	.0110	90.94	
43.16		157.07	153.90	.0108	92.53	
*44.64		156.31	153.14	.0106	94.17	
47.62		154.79	151.61	.0102	97.59	
*50.15		153.62	150.44	.0100	100.36	
52.09		152.50	149.33	.0097	103.14	
56.55		150.37	147.19	.0092	108.84	
*59.53		148.23	145.06	.0087	115.12	
193.68	*29.76	180.98	177.80	.0172	58.29	
	35.72	178.44	175.26	.0164	60.83	
	39.29	177.01	173.84	.0160	62.34	
	44.20	174.63	171.45	.0154	65.01	
	50.15	171.83	168.66	.0146	68.40	
	58.04	168.28	165.10	.0137	73.15	
	*67.41	163.45	160.27	.0124	80.56	
*196.85	68.60	166.62	165.10	.0132	75.55	
*203.20	38.69	187.60	184.43	.0191	52.42	
*206.38	41.67	190.12	186.94	.0198	50.45	
	47.62	187.58	184.40	.0191	52.44	
	52.83	185.04	181.86	.0183	54.57	
	58.78	182.50	179.32	.0176	56.85	
219.08	35.72	205.66	202.49	.0247	40.56	
	41.67	203.63	200.46	.0240	41.86	
	47.62	201.19	198.02	.0232	43.05	
	53.57	198.76	195.58	.0225	44.52	
	*56.55	197.49	194.31	.0221	45.32	
	59.53	196.22	193.04	.0217	46.14	
	*63.99	194.34	191.16	.0211	47.40	
	65.48	193.68	190.50	.0209	47.86	
	72.92	190.78	187.60	.0200	49.95	
	*222.25	73.96	193.95	190.50	.0210	47.67
*228.60	50.60	210.57	206.60	.0263	38.08	
	56.55	208.18	204.22	.0255	39.26	
	59.53	207.01	203.05	.0251	39.85	
	66.97	204.01	200.05	.0241	41.45	
	81.85	198.43	194.46	.0224	44.73	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS				
O.D. 2.375"		VOLUME & HEIGHT				
THREE STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
9.625	*29.30	9.063	8.907	.0634	15.78	
	32.30	9.001	8.845	.0623	16.06	
	36.00	8.921	8.765	.0609	16.43	
	*38.00	8.885	8.760	.0602	16.60	
	40.00	8.835	8.679	.0594	16.84	
	43.50	8.755	8.599	.0580	17.23	
	47.00	8.681	8.525	.0568	17.62	
	53.50	8.535	8.379	.0543	18.41	
	*58.40	8.435	8.279	.0527	18.98	
	*61.10	8.375	8.219	.0517	19.34	
	*71.80	8.125	7.969	.0477	20.97	
	*9.750	59.20	8.560	8.500	.0547	18.27
	*9.875	62.80	8.625	8.500	.0558	17.91
*10.000	33.00	9.384	9.228	.0691	14.47	
10.750	32.75	10.192	10.036	.0845	11.84	
	*35.75	10.136	9.980	.0834	12.00	
	40.50	10.050	9.894	.0817	12.24	
	45.50	9.950	9.794	.0797	12.54	
	51.00	9.850	9.694	.0778	12.85	
	*54.00	9.784	9.628	.0766	13.06	
	55.50	9.760	9.604	.0761	13.14	
	*60.70	9.660	9.504	.0742	13.48	
	*65.70	9.560	9.404	.0723	13.82	
	*71.10	9.450	9.294	.0703	14.22	
11.750	*38.00	11.150	10.994	.1043	9.58	
	42.00	11.084	10.928	.1029	9.72	
	47.00	11.000	10.844	.1011	9.89	
	54.00	10.880	10.724	.0986	10.15	
	60.00	10.772	10.616	.0963	10.39	
	*65.00	10.682	10.526	.0944	10.59	
	*71.00	10.586	10.430	.0924	10.82	
*11.875	71.80	10.711	10.625	.0950	10.53	
*12.000	40.00	11.384	11.228	.1095	9.14	
*13.000	40.00	12.438	12.282	.1338	7.47	
	45.00	12.360	12.204	.1320	7.58	
	50.00	12.282	12.126	.1301	7.69	
	54.00	12.220	12.064	.1286	7.77	
	13.375	48.00	12.715	12.559	.1406	7.11
54.50		12.615	12.459	.1382	7.24	
61.00		12.515	12.359	.1357	7.37	
68.00		12.415	12.259	.1333	7.50	
72.00		12.347	12.191	.1317	7.60	
*77.00		12.275	12.119	.1299	7.70	
*80.70		12.215	12.059	.1285	7.78	
*83.00		12.175	12.019	.1276	7.84	
*85.00		12.159	12.003	.1272	7.86	
*86.00		12.125	11.969	.1264	7.91	
*92.00		12.031	11.875	.1242	8.05	
*98.00		11.937	11.781	.1220	8.20	
*13.500	81.40	12.340	12.250	.1315	7.61	
*13.625	88.20	12.375	12.250	.1323	7.56	
*14.000	50.00	13.344	13.156	.1565	6.39	
16.000	*55.00	15.375	15.187	.2132	4.69	
	65.00	15.250	15.062	.2095	4.77	
	*70.00	15.198	15.010	.2079	4.81	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 60.33 mm		
				THREE STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
244.48	*43.60	230.20	226.24	.0331	30.25	
	48.07	228.63	224.66	.0325	30.78	
	53.57	226.59	222.63	.0318	31.48	
	*56.55	225.68	222.50	.0314	31.81	
	59.53	224.41	220.45	.0310	32.27	
	64.74	222.38	218.42	.0303	33.03	
	69.94	220.50	216.54	.0296	33.76	
	79.62	216.79	212.83	.0283	35.28	
	*86.91	214.25	210.29	.0275	36.38	
	*90.93	212.73	208.76	.0270	37.07	
	*106.85	206.38	202.41	.0249	40.18	
	*247.65	88.10	217.42	215.90	.0286	35.01
	*250.83	93.46	219.08	215.90	.0291	34.33
*254.00	49.11	238.35	234.39	.0361	27.73	
273.05	48.74	258.88	254.91	.0441	22.69	
	*53.20	257.45	253.49	.0435	22.99	
	60.27	255.27	251.31	.0426	23.46	
	67.71	252.73	248.77	.0416	24.03	
	75.90	250.19	246.23	.0406	24.63	
	*80.36	248.51	244.55	.0399	25.03	
	82.59	247.90	243.94	.0397	25.18	
	*90.33	245.36	241.40	.0387	25.82	
	*97.77	242.82	238.86	.0377	26.49	
	*105.81	240.03	236.07	.0367	27.26	
	298.45	*56.55	283.21	279.25	.0544	18.37
62.50		281.53	277.57	.0537	18.62	
69.94		279.40	275.44	.0528	18.95	
80.36		276.35	272.39	.0514	19.45	
89.29		273.61	269.65	.0502	19.90	
*96.73		271.32	267.36	.0493	20.30	
*105.66		268.88	264.92	.0482	20.74	
*301.63	106.85	272.06	269.88	.0496	20.17	
*304.80	59.53	289.15	285.19	.0571	17.51	
*330.20	59.53	315.93	311.96	.0698	14.32	
	66.97	313.94	309.98	.0689	14.52	
	74.41	311.96	308.00	.0679	14.73	
	80.36	310.39	306.43	.0671	14.90	
	339.73	71.43	322.96	319.00	.0734	13.63
81.10		320.42	316.46	.0721	13.87	
90.78		317.88	313.92	.0708	14.12	
101.20		315.34	311.38	.0696	14.38	
107.15		313.61	309.65	.0687	14.56	
*114.59		311.79	307.82	.0678	14.75	
*120.09		310.26	306.30	.0671	14.91	
*123.52		309.25	305.28	.0666	15.02	
*126.49		308.84	304.88	.0664	15.07	
*127.98		307.98	304.01	.0659	15.16	
*136.91		305.59	301.63	.0648	15.43	
*145.84		303.20	299.24	.0637	15.71	
*342.90		121.14	313.44	311.15	.0686	14.57
*346.08	131.26	314.33	311.15	.0690	14.48	
*355.60	74.41	338.94	334.16	.0817	12.24	
406.40	*81.85	390.53	385.75	.1112	8.99	
	96.73	387.35	382.58	.1093	9.15	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT	
O.D. 2.375"		FOUR STRINGS			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
7.000	17.00	6.538	6.413	.0196	51.00
	20.00	6.456	6.331	.0186	53.85
	*22.00	6.398	6.273	.0178	56.03
	23.00	6.366	6.241	.0175	57.31
	*24.00	6.336	6.211	.0171	58.55
	26.00	6.276	6.151	.0163	61.18
	*28.00	6.214	6.089	.0156	64.13
	29.00	6.184	6.059	.0152	65.65
	*30.00	6.154	6.029	.0149	67.24
	32.00	6.094	5.969	.0142	70.63
	*33.70	6.048	5.923	.0136	73.45
	35.00	6.004	5.879	.0131	76.33
	38.00	5.920	5.795	.0121	82.46
	*40.00	5.836	5.711	.0112	89.54
	7.625	*20.00	7.125	7.000	.0274
24.00		7.025	6.900	.0260	38.43
26.40		6.969	6.844	.0253	39.59
29.70		6.875	6.750	.0240	41.67
33.70		6.765	6.640	.0225	44.37
39.00		6.625	6.500	.0207	48.27
*45.30		6.435	6.310	.0183	54.62
*7.750	46.10	6.560	6.500	.0199	50.29
*8.000	26.00	7.386	7.261	.0311	32.18
*8.125	28.00	7.485	7.360	.0325	30.76
	32.00	7.385	7.260	.0311	32.19
	35.50	7.285	7.160	.0296	33.74
	39.50	7.185	7.060	.0282	35.42
	8.625	24.00	8.097	7.972	.0418
28.00	8.017	7.892	.0405	24.68	
32.00	7.921	7.796	.0390	25.62	
36.00	7.825	7.700	.0376	26.62	
*38.00	7.775	7.650	.0368	27.17	
40.00	7.725	7.600	.0361	27.74	
*43.00	7.651	7.526	.0349	28.61	
44.00	7.625	7.500	.0346	28.93	
49.00	7.511	7.386	.0329	30.41	
*8.750	49.70	7.636	7.500	.0347	28.80
*9.000	34.00	8.290	8.134	.0448	22.30
	38.00	8.196	8.040	.0433	23.07
	40.00	8.150	7.994	.0426	23.47
	45.00	8.032	7.876	.0408	24.54
	55.00	7.812	7.656	.0374	26.76
9.625	*29.30	9.063	8.907	.0579	17.28
	32.30	9.001	8.845	.0568	17.61
	36.00	8.921	8.765	.0554	18.05
	*38.00	8.885	8.760	.0548	18.26
	40.00	8.835	8.679	.0539	18.55
	43.50	8.755	8.599	.0525	19.03
	47.00	8.681	8.525	.0513	19.50
	53.50	8.535	8.379	.0488	20.47
	*58.40	8.435	8.279	.0472	21.19
	*61.10	8.375	8.219	.0462	21.64
	*71.80	8.125	7.969	.0422	23.69
	*9.750	59.20	8.560	8.500	.0493
*9.875	62.80	8.625	8.500	.0503	19.86
*10.000	33.00	9.384	9.228	.0636	15.72

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 60.33 mm		
				FOUR STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
177.80	25.30	166.07	162.89	.0102	97.74	
	*29.76	163.98	160.81	.0097	103.19	
	*32.74	162.51	159.33	.0093	107.38	
	34.23	161.70	158.52	.0091	109.82	
	*35.72	160.93	157.76	.0089	112.20	
	38.69	159.41	156.24	.0085	117.25	
	*41.67	157.84	154.66	.0081	122.90	
	43.16	157.01	153.90	.0079	125.82	
	*44.64	156.31	153.14	.0078	128.86	
	47.62	154.79	151.61	.0074	135.36	
	*50.15	153.62	150.44	.0071	140.75	
	52.09	152.50	149.33	.0068	146.29	
	56.55	150.37	147.19	.0063	158.02	
	*59.53	148.23	145.06	.0058	171.60	
	193.68	*29.76	180.98	177.80	.0143	69.95
35.72		178.44	175.26	.0136	73.64	
39.29		177.01	173.84	.0132	75.86	
44.20		174.63	171.45	.0125	79.86	
50.15		171.83	168.66	.0118	85.02	
58.04		168.28	165.10	.0108	92.50	
*67.41		163.45	160.27	.0096	104.67	
*196.85	68.60	166.62	165.10	.0104	96.37	
*203.20	38.69	187.60	184.43	.0162	61.67	
*206.38	41.67	190.12	186.94	.0170	58.95	
	47.62	187.58	184.40	.0162	61.70	
	52.83	185.04	181.86	.0155	64.66	
	58.78	182.50	179.32	.0147	67.88	
	219.08	35.72	205.66	202.49	.0218	45.88
	41.67	203.63	200.46	.0211	47.30	
	47.62	201.19	198.02	.0204	49.10	
	53.51	198.76	195.58	.0196	51.02	
	*56.55	197.49	194.31	.0192	52.07	
	59.53	196.22	193.04	.0188	53.16	
	*63.99	194.34	191.16	.0182	54.84	
	65.48	193.68	190.50	.0180	55.45	
	72.92	190.78	187.60	.0172	58.27	
*222.25	73.96	193.95	190.50	.0181	55.19	
*228.60	50.60	210.57	206.60	.0234	42.74	
	56.55	208.18	204.22	.0226	44.22	
	59.53	207.01	203.05	.0222	44.98	
	66.97	204.01	200.05	.0213	47.03	
	81.85	198.43	194.46	.0195	51.29	
244.48	*43.60	230.20	226.24	.0302	33.11	
	48.07	228.63	224.66	.0296	33.75	
	53.57	226.59	222.63	.0289	34.60	
	*56.55	225.68	222.50	.0286	34.99	
	59.53	224.41	220.45	.0281	35.55	
	64.74	222.38	218.42	.0274	36.47	
	69.94	220.50	216.54	.0268	37.36	
	79.62	216.79	212.83	.0255	39.23	
	*86.91	214.25	210.29	.0246	40.60	
	*90.93	212.73	208.76	.0241	41.46	
	*106.85	206.38	202.41	.0220	45.40	
	*247.65	88.10	217.42	215.90	.0257	38.90
	*250.83	93.46	219.08	215.90	.0263	38.06
*254.00	49.11	238.35	234.39	.0332	30.12	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT	
O.D. 2.375"					
FOUR STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
10.750	32.75	10.192	10.036	.0790	12.66
	*35.75	10.136	9.980	.0779	12.84
	40.50	10.050	9.894	.0762	13.12
	45.50	9.950	9.794	.0743	13.47
	51.00	9.850	9.694	.0723	13.83
	*54.00	9.784	9.628	.0711	14.07
	55.50	9.760	9.604	.0706	14.16
	*60.70	9.660	9.504	.0687	14.55
	*65.70	9.560	9.404	.0669	14.96
	*71.10	9.450	9.294	.0648	15.42
	11.750	*38.00	11.150	10.994	.0989
42.00		11.084	10.928	.0974	10.26
47.00		11.000	10.844	.0956	10.46
54.00		10.880	10.724	.0931	10.74
60.00		10.772	10.616	.0908	11.01
*65.00		10.682	10.526	.0889	11.25
*71.00		10.586	10.430	.0869	11.50
*11.875	71.80	10.711	10.625	.0895	11.17
*12.000	40.00	11.384	11.228	.1040	9.62
*13.000	40.00	12.438	12.282	.1284	7.79
	45.00	12.360	12.204	.1265	7.91
	50.00	12.282	12.126	.1246	8.02
	54.00	12.220	12.064	.1231	8.12
13.375	48.00	12.715	12.559	.1351	7.40
	54.50	12.615	12.459	.1327	7.54
	61.00	12.515	12.359	.1302	7.68
	68.00	12.415	12.259	.1278	7.82
	72.00	12.347	12.191	.1262	7.93
	*77.00	12.275	12.119	.1245	8.04
	*80.70	12.215	12.059	.1230	8.13
	*83.00	12.175	12.019	.1221	8.19
	*85.00	12.159	12.003	.1217	8.22
	*86.00	12.125	11.969	.1209	8.27
	*92.00	12.031	11.875	.1187	8.43
*98.00	11.937	11.781	.1165	8.58	
*13.500	81.40	12.340	12.250	.1260	7.94
*13.625	88.20	12.375	12.250	.1268	7.88
*14.000	50.00	13.344	13.156	.1511	6.62
16.000	*55.00	15.375	15.187	.2077	4.81
	65.00	15.250	15.062	.2040	4.90
	*70.00	15.198	15.010	.2025	4.94
	75.00	15.124	14.936	.2003	4.99
	84.00	15.010	14.822	.1969	5.08
	*109.00	14.688	14.500	.1877	5.33
18.625	*78.00	17.855	17.667	.2878	3.47
	87.50	17.755	17.567	.2843	3.52
	*96.50	17.655	17.467	.2809	3.56
20.000	94.00	19.124	18.936	.3334	3.00
	106.50	19.000	18.812	.3288	3.04
	133.00	18.730	18.542	.3189	3.14

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 60.33 mm	
OUTSIDE CASING				FOUR STRINGS	
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
273.05	48.74	258.88	254.91	.0412	24.26
	*53.20	257.45	253.49	.0406	24.61
	60.27	255.27	251.31	.0398	25.15
	67.71	252.73	248.77	.0387	25.81
	75.90	250.19	246.23	.0377	26.49
	*80.36	248.51	244.55	.0371	26.96
	82.59	247.90	243.94	.0368	27.14
	*90.33	245.36	241.40	.0359	27.88
	*97.77	242.82	238.86	.0349	28.66
	*105.81	240.03	236.07	.0338	29.56
	298.45	*56.55	283.21	279.25	.0516
62.50		281.53	277.57	.0508	19.67
69.94		279.40	275.44	.0499	20.04
80.36		276.35	272.39	.0486	20.59
89.29		273.61	269.65	.0474	21.11
*96.73		271.32	267.36	.0464	21.55
*105.66		268.88	264.92	.0454	22.04
*301.63	106.85	272.06	269.88	.0467	21.41
*304.80	59.53	289.15	285.19	.0543	18.43
*330.20	59.53	315.93	311.96	.0670	14.93
	66.97	313.94	309.98	.0660	15.15
	74.41	311.96	308.00	.0650	15.38
	80.36	310.39	306.43	.0643	15.56
339.73	71.43	322.96	319.00	.0705	14.18
	81.10	320.42	316.46	.0692	14.44
	90.78	317.88	313.92	.0680	14.72
	101.20	315.34	311.38	.0667	14.99
	107.15	313.61	309.65	.0658	15.19
	*114.59	311.79	307.82	.0649	15.40
	*120.09	310.26	306.30	.0642	15.58
	*123.52	309.25	305.28	.0637	15.70
	*126.49	308.84	304.88	.0635	15.75
	*127.98	307.98	304.01	.0631	15.85
	*136.91	305.59	301.63	.0619	16.15
*145.84	303.20	299.24	.0608	16.45	
*342.90	121.14	313.44	311.15	.0658	15.21
*346.08	131.26	314.33	311.15	.0662	15.11
*355.60	74.41	338.94	334.16	.0788	12.69
406.40	*81.85	390.53	385.75	.1084	9.23
	96.73	387.35	382.58	.1064	9.39
	*104.17	386.03	381.25	.1056	9.47
	111.61	384.15	379.38	.1045	9.57
	125.01	381.25	376.48	.1028	9.73
	*162.21	373.08	368.30	.0979	10.21
473.08	*116.08	453.52	448.74	.1502	6.66
	130.21	450.98	446.20	.1484	6.74
	*143.61	448.44	443.66	.1466	6.82
508.00	139.89	485.75	480.98	.1740	5.75
	158.49	482.60	477.83	.1716	5.83
	197.93	475.74	470.97	.1664	6.01

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.875"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
4.500	9.50	4.090	3.965	.0082	121.64
	10.50	4.052	3.927	.0079	126.26
	11.60	4.000	3.875	.0075	133.10
	13.50	3.920	3.795	.0069	144.97
	*15.10	3.826	3.701	.0062	161.54
	*16.60	3.754	3.629	.0057	176.67
	*18.80	3.640	3.515	.0048	206.54
*4.750	16.00	4.082	3.957	.0082	122.59
5.000	11.50	4.560	4.435	.0122	82.17
	13.00	4.494	4.369	.0116	86.28
	15.00	4.408	4.283	.0108	92.20
	18.00	4.276	4.151	.0097	102.75
	*20.30	4.184	4.059	.0090	111.41
	*20.80	4.156	4.031	.0087	114.29
	*23.20	4.044	3.919	.0079	127.27
*24.20	4.000	3.875	.0075	133.10	
5.500	*13.00	5.044	4.919	.0167	59.93
	14.00	5.012	4.887	.0164	61.08
	*15.00	4.974	4.849	.0160	62.48
	15.50	4.950	4.825	.0158	63.40
	17.00	4.892	4.767	.0152	65.71
	20.00	4.778	4.653	.0141	70.68
	23.00	4.670	4.545	.0132	76.01
*26.00	4.548	4.423	.0121	82.89	
*5.750	14.00	5.290	5.165	.0192	52.21
	17.00	5.190	5.065	.0181	55.14
	19.50	5.090	4.965	.0171	58.35
	22.50	4.990	4.865	.0162	61.88
*6.000	15.00	5.524	5.399	.0216	46.27
	16.00	5.500	5.375	.0214	46.82
	17.00	5.450	5.325	.0208	48.02
	18.00	5.424	5.299	.0205	48.66
	20.00	5.352	5.227	.0198	50.52
	23.00	5.240	5.115	.0186	53.64
	26.00	5.140	5.015	.0176	56.70
6.625	*17.00	6.135	6.010	.0285	35.05
	20.00	6.049	5.924	.0275	36.34
	*22.00	5.989	5.864	.0268	37.29
	24.00	5.921	5.796	.0260	38.42
	*26.00	5.855	5.730	.0253	39.57
	28.00	5.791	5.666	.0245	40.74
	*29.00	5.761	5.636	.0242	41.30
	32.00	5.675	5.550	.0233	43.00
7.000	17.00	6.538	6.413	.0335	29.86
	20.00	6.456	6.331	.0325	30.81
	*22.00	6.398	6.273	.0317	31.51
	23.00	6.366	6.241	.0313	31.91
	*24.00	6.336	6.211	.0310	32.29
	26.00	6.276	6.151	.0302	33.08
	*28.00	6.214	6.089	.0295	33.92
	29.00	6.184	6.059	.0291	34.34
	*30.00	6.154	6.029	.0288	34.77
	32.00	6.094	5.969	.0280	35.66
	*33.70	6.048	5.923	.0275	36.36
	35.00	6.004	5.879	.0270	37.05
	38.00	5.920	5.795	.0260	38.44
*40.00	5.836	5.711	.0251	39.91	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 73.03 mm	
				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
114.30	14.14	103.89	100.71	.0043	233.12
	15.63	102.92	99.75	.0041	241.97
	17.26	101.60	98.43	.0039	255.06
	20.09	99.57	96.39	.0036	277.82
	*22.47	97.18	94.01	.0032	309.57
	*24.70	95.35	92.18	.0030	333.56
	*27.98	92.46	89.28	.0025	395.82
	*120.65	23.81	103.68	100.51	.0043
127.00	17.11	115.82	112.65	.0064	157.47
	19.35	114.15	110.97	.0060	165.36
	22.32	111.96	108.79	.0057	176.69
	26.79	108.61	105.44	.0051	196.91
	*30.21	106.27	103.10	.0047	213.50
	*30.95	105.56	102.39	.0046	219.03
	*34.53	102.72	99.54	.0041	243.90
	*36.01	101.60	98.43	.0039	255.06
139.70	*19.35	128.12	124.94	.0087	114.85
	20.83	127.31	124.13	.0085	117.05
	*22.32	126.34	123.16	.0084	119.74
	23.07	125.73	122.56	.0082	121.50
	25.30	124.26	121.08	.0079	125.93
	29.76	121.36	118.19	.0074	135.46
	34.23	118.62	115.44	.0069	145.66
	*38.69	115.52	112.34	.0063	158.85
*146.05	20.83	134.37	131.19	.0100	100.05
	25.30	131.83	128.65	.0095	105.66
	29.02	129.29	126.11	.0089	111.82
	33.48	126.75	123.57	.0084	118.59
*152.40	22.32	140.31	137.13	.0113	88.67
	23.81	139.70	136.53	.0111	89.73
	25.30	138.43	135.26	.0109	92.03
	26.79	137.77	134.59	.0107	93.26
	29.76	135.94	132.77	.0103	96.81
	34.23	133.10	129.92	.0097	102.79
	38.69	130.56	127.38	.0092	108.67
168.28	*25.30	155.83	152.65	.0149	67.16
	29.76	153.64	150.47	.0144	69.65
	*32.74	152.12	148.95	.0140	71.47
	35.72	150.39	147.22	.0136	73.63
	*38.69	148.72	145.54	.0132	75.83
	41.67	147.09	143.92	.0128	78.07
	*43.16	146.33	143.15	.0126	79.15
	47.62	144.15	140.97	.0121	82.40
177.80	25.30	166.07	162.89	.0175	57.21
	29.76	163.98	160.81	.0169	59.04
	*32.74	162.51	159.33	.0166	60.39
	34.23	161.70	158.52	.0164	61.15
	*35.72	160.93	157.76	.0162	61.88
	38.69	159.41	156.24	.0158	63.39
	*41.67	157.84	154.66	.0154	65.00
	43.16	157.07	153.90	.0152	65.81
	*44.64	156.31	153.14	.0150	66.63
	47.62	154.79	151.61	.0146	68.33
	*50.15	153.62	150.44	.0144	69.68
	52.09	152.50	149.33	.0141	71.01
	56.55	150.37	147.19	.0136	73.66
*59.53	148.23	145.06	.0131	76.48	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.875"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
7.625	*20.00	7.125	7.000	.0413	24.22
	24.00	7.025	6.900	.0399	25.06
	26.40	6.969	6.844	.0391	25.54
	29.70	6.875	6.750	.0379	26.40
	33.70	6.765	6.640	.0364	27.45
	39.00	6.625	6.500	.0346	28.90
	*45.30	6.435	6.310	.0322	31.06
	*7.750	46.10	6.560	6.500	.0338
*8.000	26.00	7.386	7.261	.0450	22.24
*8.125	28.00	7.485	7.360	.0464	21.55
	32.00	7.385	7.260	.0450	22.25
	35.50	7.285	7.160	.0435	22.98
	39.50	7.185	7.060	.0421	23.74
8.625	24.00	8.097	7.972	.0557	17.97
	28.00	8.017	7.892	.0544	18.38
	32.00	7.921	7.796	.0529	18.90
	36.00	7.825	7.700	.0515	19.44
	*38.00	7.775	7.650	.0507	19.73
	40.00	7.725	7.600	.0499	20.02
	*43.00	7.651	7.526	.0488	20.48
	44.00	7.625	7.500	.0484	20.64
49.00	7.511	7.386	.0468	21.38	
*8.750	49.70	7.636	7.500	.0486	20.57
*9.000	34.00	8.290	8.134	.0587	17.03
	38.00	8.196	8.040	.0572	17.47
	40.00	8.150	7.994	.0565	17.70
	45.00	8.032	7.876	.0546	18.30
	55.00	7.812	7.656	.0513	19.51
9.625	*29.30	9.063	8.907	.0718	13.94
	32.30	9.001	8.845	.0707	14.15
	36.00	8.921	8.765	.0693	14.43
	*38.00	8.885	8.760	.0687	14.56
	40.00	8.835	8.679	.0678	14.75
	43.50	8.755	8.599	.0664	15.05
	47.00	8.681	8.525	.0652	15.34
	53.50	8.535	8.379	.0627	15.94
	*58.40	8.435	8.279	.0611	16.37
	*61.10	8.375	8.219	.0601	16.64
	*71.80	8.125	7.969	.0561	17.83
*9.750	59.20	8.560	8.500	.0632	15.84
*9.875	62.80	8.625	8.500	.0642	15.57
*10.000	33.00	9.384	9.228	.0775	12.90
10.750	32.75	10.192	10.036	.0929	10.77
	*35.75	10.136	9.980	.0918	10.90
	40.50	10.050	9.894	.0901	11.10
	45.50	9.950	9.794	.0881	11.35
	51.00	9.850	9.694	.0862	11.60
	*54.00	9.784	9.628	.0850	11.77
	55.50	9.760	9.604	.0845	11.83
	*60.70	9.660	9.504	.0826	12.10
	*65.70	9.560	9.404	.0808	12.38
	*71.10	9.450	9.294	.0787	12.70

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 73.03 mm	
				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ² /m	Lin. Meters Per Cu. Meter m/m ³
193.68	*29.76	180.98	177.80	.0215	46.42
	35.72	178.44	175.26	.0208	48.02
	39.29	177.01	173.84	.0204	48.95
	44.20	174.63	171.45	.0198	50.58
	50.15	171.83	168.66	.0190	52.61
	58.04	168.28	165.10	.0181	55.38
	*67.41	163.45	160.27	.0168	59.52
	*196.85	68.60	166.62	165.10	.0176
*203.20	38.69	187.60	184.43	.0235	42.62
*206.38	41.67	190.12	186.94	.0242	41.31
	47.62	187.58	184.40	.0235	42.63
	52.83	185.04	181.86	.0227	44.03
	58.78	182.50	179.32	.0220	45.50
219.08	35.12	205.66	202.49	.0290	34.43
	41.67	203.63	200.46	.0284	35.22
	47.62	201.19	198.02	.0276	36.21
	53.57	198.76	195.58	.0268	37.25
	*56.55	197.49	194.31	.0265	37.80
	59.53	196.22	193.04	.0261	38.37
	*63.99	194.34	191.16	.0255	39.24
	65.48	193.68	190.50	.0253	39.55
72.92	190.78	187.60	.0244	40.97	
*222.25	73.96	193.95	190.50	.0254	39.42
*228.60	50.60	210.57	206.60	.0306	32.63
	56.55	208.18	204.22	.0299	33.49
	59.53	207.01	203.05	.0295	33.92
	66.97	204.01	200.05	.0285	35.07
	81.85	198.43	194.46	.0267	37.39
244.48	*43.60	230.20	226.24	.0374	26.71
	48.07	228.63	224.66	.0369	27.12
	53.57	226.59	222.63	.0362	27.66
	*56.55	225.68	222.50	.0358	27.91
	59.53	224.41	220.45	.0354	28.27
	64.74	222.38	218.42	.0347	28.85
	69.94	220.50	216.54	.0340	29.40
	79.62	216.79	212.83	.0327	30.55
	*86.91	214.25	210.29	.0319	31.37
	*90.93	212.73	208.76	.0314	31.88
	*106.85	206.38	202.41	.0293	34.16
*247.65	88.10	217.42	215.90	.0330	30.35
*250.83	93.46	219.08	215.90	.0335	29.83
*254.00	49.11	238.35	234.39	.0404	24.72
273.05	48.74	258.88	254.91	.0485	20.63
	*53.20	257.45	253.49	.0479	20.88
	60.27	255.27	251.31	.0470	21.27
	67.71	252.73	248.77	.0460	21.74
	75.90	250.19	246.23	.0450	22.23
	*80.36	248.51	244.55	.0443	22.56
	82.59	247.90	243.94	.0441	22.68
	*90.33	245.36	241.40	.0431	23.20
	*97.77	242.82	238.86	.0421	23.73
	*105.81	240.03	236.07	.0411	24.34

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS				
O.D. 2.875"		VOLUME & HEIGHT				
TWO STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
7.000	17.00	6.538	6.413	.0255	39.27	
	20.00	6.456	6.331	.0244	40.93	
	*22.00	6.398	6.273	.0237	42.18	
	23.00	6.366	6.241	.0233	42.90	
	*24.00	6.336	6.211	.0229	43.59	
	26.00	6.276	6.151	.0222	45.04	
	*28.00	6.214	6.089	.0215	46.62	
	29.00	6.184	6.059	.0211	47.42	
	*30.00	6.154	6.029	.0207	48.24	
	32.00	6.094	5.969	.0200	49.96	
	*33.70	6.048	5.923	.0195	51.35	
	35.00	6.004	5.879	.0190	52.75	
	38.00	5.920	5.795	.0180	55.60	
	*40.00	5.836	5.711	.0170	58.73	
	7.625	*20.00	7.125	7.000	.0333	30.07
		24.00	7.025	6.900	.0319	31.37
26.40		6.969	6.844	.0311	32.13	
29.70		6.875	6.750	.0299	33.49	
33.70		6.765	6.640	.0284	35.21	
39.00		6.625	6.500	.0266	37.63	
*45.30		6.435	6.310	.0242	41.38	
*7.750	46.10	6.560	6.500	.0257	38.84	
*8.000	26.00	7.386	7.261	.0369	27.07	
*8.125	28.00	7.485	7.360	.0384	26.07	
	32.00	7.385	7.260	.0369	27.08	
	35.50	7.285	7.160	.0355	28.17	
	39.50	7.185	7.060	.0341	29.33	
8.625	24.00	8.097	7.972	.0476	21.00	
	28.00	8.017	7.892	.0464	21.56	
	32.00	7.921	7.796	.0449	22.28	
	36.00	7.825	7.700	.0434	23.03	
	*38.00	7.775	7.650	.0427	23.44	
	40.00	7.725	7.600	.0419	23.86	
	*43.00	7.651	7.526	.0408	24.51	
	44.00	7.625	7.500	.0404	24.74	
49.00	7.511	7.386	.0387	25.81		
*8.750	49.70	7.636	7.500	.0406	24.64	
*9.000	34.00	8.290	8.134	.0507	19.72	
	38.00	8.196	8.040	.0492	20.33	
	40.00	8.150	7.994	.0485	20.63	
	45.00	8.032	7.876	.0466	21.45	
	55.00	7.812	7.656	.0432	23.13	
9.625	*29.30	9.063	8.907	.0637	15.69	
	32.30	9.001	8.845	.0626	15.96	
	36.00	8.921	8.765	.0613	16.33	
	*38.00	8.885	8.760	.0606	16.49	
	40.00	8.835	8.679	.0598	16.73	
	43.50	8.755	8.599	.0584	17.12	
	47.00	8.681	8.525	.0571	17.50	
	53.50	8.535	8.379	.0547	18.28	
	*58.40	8.435	8.279	.0531	18.85	
	*61.10	8.375	8.219	.0521	19.20	
	*71.80	8.125	7.969	.0481	20.80	
*9.750	59.20	8.560	8.500	.0551	18.14	
*9.875	62.80	8.625	8.500	.0562	17.79	
*10.000	33.00	9.384	9.228	.0695	14.39	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 7303 mm		
				TWO STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
177.80	25.30	166.07	162.89	.0133	75.26	
	*29.76	163.98	160.81	.0127	78.44	
	*32.74	162.51	159.33	.0124	80.84	
	34.23	161.70	158.52	.0122	82.22	
	*35.72	160.93	157.76	.0120	83.54	
	38.69	159.41	156.24	.0116	86.31	
	*41.67	157.84	154.66	.0112	89.34	
	43.16	157.07	153.90	.0110	90.87	
	*44.64	156.31	153.14	.0108	92.44	
	47.62	154.79	151.61	.0104	95.74	
	*50.15	153.62	150.44	.0102	98.41	
	52.09	152.50	149.33	.0099	101.08	
	56.55	150.37	147.19	.0094	106.55	
	*59.53	148.23	145.06	.0089	112.55	
	193.68	*29.76	180.98	117.80	.0174	57.63
		35.72	178.44	175.26	.0166	60.11
39.29		177.01	173.84	.0162	61.58	
44.20		174.63	171.45	.0156	64.19	
50.15		171.83	168.66	.0148	67.48	
58.04		168.28	165.10	.0139	72.11	
*67.41		163.45	160.27	.0126	79.30	
*196.85	68.60	166.62	165.10	.0134	74.44	
*203.20	38.69	187.60	184.43	.0193	51.89	
*206.38	41.67	190.12	186.94	.0200	49.95	
	47.62	187.58	184.40	.0193	51.91	
	52.83	185.04	181.86	.0185	53.99	
	58.78	182.50	179.32	.0178	56.22	
	219.08	35.72	205.66	202.49	.0249	40.24
	41.67	203.63	200.46	.0242	41.32	
	47.62	201.19	198.02	.0234	42.69	
	53.57	198.76	195.58	.0227	44.13	
	*56.55	197.49	194.31	.0223	44.92	
	59.53	196.22	193.04	.0219	45.72	
	*63.99	194.34	191.16	.0213	46.96	
	65.48	193.68	190.50	.0211	47.41	
	72.92	190.78	187.60	.0202	49.46	
*222.25	73.96	193.95	190.50	.0212	47.22	
*228.60	50.60	210.57	206.60	.0265	37.80	
	56.55	208.18	204.22	.0257	38.95	
	59.53	207.01	203.05	.0253	39.54	
	66.97	204.01	200.05	.0243	41.11	
	81.85	198.43	194.46	.0226	44.34	
	244.48	*43.60	230.20	226.24	.0333	30.07
	48.07	228.63	224.66	.0327	30.59	
	53.57	226.59	222.63	.0320	31.29	
	*56.55	225.68	222.50	.0316	31.61	
	59.53	224.41	220.45	.0312	32.06	
	64.74	222.38	218.42	.0305	32.81	
	69.94	220.50	216.54	.0298	33.53	
	79.62	216.79	212.83	.0285	35.03	
	*86.91	214.25	210.29	.0277	36.12	
	*90.93	212.73	208.76	.0272	36.80	
	*106.85	206.38	202.41	.0251	39.87	
*247.65	88.10	217.42	215.90	.0288	34.77	
*250.83	93.46	219.08	215.90	.0293	34.10	
*254.00	49.11	238.35	234.39	.0363	27.58	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.875"		VOLUME & HEIGHT			
TWO STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
10.750	32.75	10.192	10.036	.0848	11.79
	*35.75	10.136	9.980	.0837	11.94
	40.50	10.050	9.894	.0821	12.19
	45.50	9.950	9.794	.0801	12.48
	51.00	9.850	9.694	.0782	12.79
	*54.00	9.784	9.628	.0769	13.00
	55.50	9.760	9.604	.0765	13.08
	*60.70	9.660	9.504	.0746	13.41
	*65.70	9.560	9.404	.0727	13.75
	*71.10	9.450	9.294	.0707	14.15
	11.750	*38.00	11.150	10.994	.1047
42.00		11.084	10.928	.1033	9.68
47.00		11.000	10.844	.1015	9.85
54.00		10.880	10.724	.0989	10.11
60.00		10.772	10.616	.0967	10.35
*65.00		10.682	10.526	.0948	10.55
*71.00		10.586	10.430	.0928	10.78
*11.875		71.80	10.711	10.625	.0954
*12.000	40.00	11.384	11.228	.1098	9.10
*13.000	40.00	12.438	12.282	.1342	7.45
	45.00	12.360	12.204	.1323	7.56
	50.00	12.282	12.126	.1305	7.66
	54.00	12.220	12.064	.1290	7.75
13.375	48.00	12.715	12.559	.1410	7.09
	54.50	12.615	12.459	.1385	7.22
	61.00	12.515	12.359	.1361	7.35
	68.00	12.415	12.259	.1337	7.48
	72.00	12.347	12.191	.1320	7.57
	*77.00	12.275	12.119	.1303	7.67
	*80.70	12.215	12.059	.1289	7.76
	*83.00	12.175	12.019	.1279	7.82
	*85.00	12.159	12.003	.1276	7.84
	*86.00	12.125	11.969	.1268	7.89
	*92.00	12.031	11.875	.1246	8.03
*98.00	11.937	11.781	.1224	8.17	
*13.500	81.40	12.340	12.250	.1319	7.58
*13.625	88.20	12.375	12.250	.1327	7.54
*14.000	50.00	13.344	13.156	.1569	6.37
16.000	*55.00	15.375	15.187	.2136	4.68
	65.00	15.250	15.062	.2099	4.77
	*70.00	15.198	15.010	.2083	4.80
	75.00	15.124	14.936	.2061	4.85
	84.00	15.010	14.822	.2028	4.93
	*109.00	14.688	14.500	.1935	5.17
18.625	*78.00	17.855	17.667	.2936	3.41
	87.50	17.755	17.567	.2902	3.45
	*96.50	17.655	17.467	.2867	3.49
20.000	94.00	19.124	18.936	.3392	2.95
	106.50	19.000	18.812	.3346	2.99
	133.00	18.730	18.542	.3247	3.08

*Not API Standard. Shown for information only

METRIC UNITS Inside Tubing

BETWEEN TUBING & CASING** **O.D. 73.03 mm**

TWO STRINGS

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
273.05	48.74	258.88	254.91	.0443	22.59
	*53.20	257.45	253.49	.0437	22.88
	60.27	255.27	251.31	.0428	23.35
	67.71	252.73	248.77	.0418	23.92
	75.90	250.19	246.23	.0408	24.51
	*80.36	248.51	244.55	.0401	24.91
	82.59	247.90	243.94	.0399	25.06
	*90.33	245.36	241.40	.0389	25.69
	*97.77	242.82	238.86	.0379	26.35
	*105.81	240.03	236.07	.0369	27.11
	298.45	*56.55	283.21	279.25	.0546
62.50		281.53	277.57	.0539	18.55
69.94		279.40	275.44	.0530	18.88
80.36		276.35	272.39	.0516	19.37
89.29		273.61	269.65	.0504	19.83
*96.73		271.32	267.36	.0495	20.22
*105.66		268.88	264.92	.0484	20.65
*301.63	106.85	272.06	269.88	.0498	20.09
*304.80	59.53	289.15	285.19	.0573	17.45
*330.20	59.53	315.93	311.96	.0700	14.28
	66.97	313.94	309.98	.0691	14.48
	74.41	311.96	308.00	.0681	14.69
	80.36	310.39	306.43	.0673	14.86
339.73	71.43	322.96	319.00	.0736	13.59
	81.10	320.42	316.46	.0723	13.83
	90.78	317.88	313.92	.0710	14.08
	101.20	315.34	311.38	.0698	14.34
	107.15	313.61	309.65	.0689	14.51
	*114.59	311.79	307.82	.0680	14.71
	*120.09	310.26	306.30	.0673	14.87
	*123.52	309.25	305.28	.0668	14.98
	*126.49	308.84	304.88	.0666	15.02
	*127.98	307.98	304.01	.0661	15.12
	*136.91	305.59	301.63	.0650	15.39
*145.84	303.20	299.24	.0638	15.66	
*342.90	121.14	313.44	311.15	.0688	14.53
*346.08	131.26	314.33	311.15	.0692	14.44
*355.60	74.41	338.94	334.16	.0819	12.21
406.40	*81.85	390.53	385.75	.1114	8.97
	96.73	387.35	382.58	.1095	9.13
	*104.17	386.03	381.25	.1087	9.20
	111.61	384.15	379.38	.1076	9.30
	125.01	381.25	376.48	.1058	9.45
	*162.21	373.08	368.30	.1010	9.90
473.08	*116.08	453.52	448.74	.1532	6.53
	130.21	450.98	446.20	.1514	6.60
	*143.61	448.44	443.66	.1496	6.68
508.00	139.89	485.75	480.98	.1770	5.65
	158.49	482.60	477.83	.1746	5.73
	197.93	475.74	470.97	.1694	5.90

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.875"		VOLUME & HEIGHT			
THREE STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*8.000	26.00	7.386	7.261	.0289	34.60
*8.125	28.00	7.485	7.360	.0303	32.96
	32.00	7.385	7.260	.0289	34.61
	35.50	7.285	7.160	.0275	36.41
	39.50	7.185	7.060	.0261	38.37
8.625	24.00	8.097	7.972	.0396	25.25
	28.00	8.017	7.892	.0383	26.08
	32.00	7.921	7.796	.0369	27.13
	36.00	7.825	7.700	.0354	28.25
	*38.00	7.775	7.650	.0346	28.87
	40.00	7.725	7.600	.0339	29.51
	*43.00	7.651	7.526	.0328	30.51
	44.00	7.625	7.500	.0324	30.87
49.00	7.511	7.386	.0307	32.56	
*8.750	49.70	7.636	7.500	.0326	30.72
*9.000	34.00	8.290	8.134	.0427	23.43
	38.00	8.196	8.040	.0412	24.29
	40.00	8.150	7.994	.0404	24.73
	45.00	8.032	7.876	.0386	25.92
55.00	7.812	7.656	.0352	28.41	
9.625	*29.30	9.063	8.907	.0557	17.95
	32.30	9.001	8.845	.0546	18.31
	36.00	8.921	8.765	.0532	18.79
	*38.00	8.885	8.760	.0526	19.01
	40.00	8.835	8.679	.0517	19.33
	43.50	8.755	8.599	.0504	19.85
	47.00	8.681	8.525	.0491	20.36
	53.50	8.535	8.379	.0467	21.42
	*58.40	8.435	8.279	.0450	22.21
	*61.10	8.375	8.219	.0440	22.70
*71.80	8.125	7.969	.0400	24.97	
*9.750	59.20	8.560	8.500	.0471	21.24
*9.875	62.80	8.625	8.500	.0482	20.76
*10.000	33.00	9.384	9.228	.0615	16.27
10.750	32.75	10.192	10.036	.0768	13.02
	*35.75	10.136	9.980	.0757	13.21
	40.50	10.050	9.894	.0740	13.51
	45.50	9.950	9.794	.0721	13.87
	51.00	9.850	9.694	.0702	14.25
	*54.00	9.784	9.628	.0689	14.51
	55.50	9.760	9.604	.0684	14.61
	*60.70	9.660	9.504	.0666	15.02
	*65.70	9.560	9.404	.0647	15.46
	*71.10	9.450	9.294	.0627	15.96
11.750	*38.00	11.150	10.994	.0967	10.34
	42.00	11.084	10.928	.0953	10.50
	47.00	11.000	10.844	.0935	10.70
	54.00	10.880	10.724	.0909	11.00
	60.00	10.772	10.616	.0886	11.28
	*65.00	10.682	10.526	.0868	11.53
	*71.00	10.586	10.430	.0848	11.80
*11.875	71.80	10.711	10.625	.0874	11.45
*12.000	40.00	11.384	11.228	.1018	9.82
*13.000	40.00	12.438	12.282	.1262	7.92
	45.00	12.360	12.204	.1243	8.04
	50.00	12.282	12.126	.1224	8.17

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 73.03 mm	
				THREE STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*203.20	38.69	187.60	184.43	.0151	66.30
*206.38	41.67	190.12	186.94	.0158	63.17
	47.62	187.58	184.40	.0151	66.33
	52.83	185.04	181.86	.0143	69.77
	58.78	182.50	179.32	.0136	73.54
219.08	35.72	205.66	202.49	.0207	48.39
	41.67	203.63	200.46	.0200	49.97
	47.62	201.19	198.02	.0192	51.99
	53.57	198.76	195.58	.0185	54.15
	*56.55	197.49	194.31	.0181	55.33
	59.53	196.22	193.04	.0177	56.56
	*63.99	194.34	191.16	.0171	58.47
	65.48	193.68	190.50	.0169	59.16
	72.92	190.78	187.60	.0160	62.39
*222.25	73.96	193.95	190.50	.0170	58.87
*228.60	50.60	210.57	206.60	.0223	44.91
	56.55	208.18	204.22	.0215	46.55
	59.53	207.01	203.05	.0211	47.39
	66.97	204.01	200.05	.0201	49.67
	81.85	198.43	194.46	.0184	54.45
244.48	*43.60	230.20	226.24	.0291	34.40
	48.07	228.63	224.66	.0285	35.09
	53.57	226.59	222.63	.0278	36.01
	*56.55	225.68	222.50	.0274	36.43
	59.53	224.41	220.45	.0270	37.04
	64.74	222.38	218.42	.0263	38.05
	69.94	220.50	216.54	.0256	39.02
	79.62	216.79	212.83	.0244	41.06
	*86.91	214.25	210.29	.0235	42.56
	*90.93	212.73	208.76	.0230	43.51
	*106.85	206.38	202.41	.0209	47.86
	*247.65	88.10	217.42	215.90	.0246
*250.83	93.46	219.08	215.90	.0251	39.78
*254.00	49.11	238.35	234.39	.0321	31.18
273.05	48.74	258.88	254.91	.0401	24.95
	*53.20	257.45	253.49	.0395	25.31
	60.27	255.27	251.31	.0386	25.89
	67.71	252.73	248.77	.0376	26.59
	75.90	250.19	246.23	.0366	27.31
	*80.36	248.51	244.55	.0360	27.81
	82.59	247.90	243.94	.0357	28.00
	*90.33	245.36	241.40	.0347	28.79
	*97.77	242.82	238.86	.0338	29.62
	*105.81	240.03	236.07	.0327	30.58
	298.45	*56.55	283.21	279.25	.0504
62.50		281.53	277.57	.0497	20.12
69.94		279.40	275.44	.0488	20.51
80.36		276.35	272.39	.0474	21.08
89.29		273.61	269.65	.0462	21.62
*96.73		271.32	267.36	.0453	22.09
*105.66		268.88	264.92	.0442	22.61
*301.63	106.85	272.06	269.88	.0456	21.94
*304.80	59.53	289.15	285.19	.0531	18.82
*330.20	59.53	315.93	311.96	.0659	15.19

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 2.875"		VOLUME & HEIGHT			
FOUR STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0316	31.68
	28.00	8.017	7.892	.0303	32.98
	32.00	7.921	7.796	.0288	34.68
	36.00	7.825	7.700	.0274	36.55
	*38.00	7.775	7.650	.0266	37.59
	40.00	7.725	7.600	.0259	38.68
	*43.00	7.651	7.526	.0247	40.41
	44.00	7.625	7.500	.0244	41.05
	49.00	7.511	7.386	.0227	44.08
	*8.750	49.70	7.636	7.500	.0245
*9.000	34.00	8.290	8.134	.0346	28.87
	38.00	8.196	8.040	.0331	30.18
	40.00	8.150	7.994	.0324	30.86
	45.00	8.032	7.876	.0306	32.73
	55.00	7.812	7.656	.0272	36.81
9.625	*29.30	9.063	8.907	.0477	20.98
	32.30	9.001	8.845	.0466	21.47
	36.00	8.921	8.765	.0452	22.13
	*38.00	8.885	8.760	.0446	22.44
	40.00	8.835	8.679	.0437	22.88
	43.50	8.755	8.599	.0423	23.62
	47.00	8.681	8.525	.0411	24.34
	53.50	8.535	8.379	.0386	25.88
	*58.40	8.435	8.279	.0370	27.03
	*61.10	8.375	8.219	.0360	27.76
	*71.80	8.125	7.969	.0320	31.24
*9.750	59.20	8.560	8.500	.0391	25.60
*9.875	62.80	8.625	8.500	.0401	24.91
*10.000	33.00	9.384	9.228	.0534	18.72
10.750	32.75	10.192	10.036	.0688	14.54
	*35.75	10.136	9.980	.0677	14.77
	40.50	10.050	9.894	.0660	15.15
	45.50	9.950	9.794	.0641	15.61
	51.00	9.850	9.694	.0621	16.09
	*54.00	9.784	9.628	.0609	16.43
	55.50	9.760	9.604	.0604	16.55
	*60.70	9.660	9.504	.0585	17.08
	*65.70	9.560	9.404	.0567	17.65
	*71.10	9.450	9.294	.0546	18.30
11.750	*38.00	11.150	10.994	.0887	11.28
	42.00	11.084	10.928	.0872	11.46
	47.00	11.000	10.844	.0854	11.71
	54.00	10.880	10.724	.0829	12.07
	60.00	10.772	10.616	.0806	12.41
	*65.00	10.682	10.526	.0787	12.70
	*71.00	10.586	10.430	.0767	13.03
*11.875	71.80	10.711	10.625	.0793	12.61
*12.000	40.00	11.384	11.228	.0938	10.66
*13.000	40.00	12.438	12.282	.1182	8.46
	45.00	12.360	12.204	.1163	8.60
	50.00	12.282	12.126	.1144	8.74
	54.00	12.220	12.064	.1129	8.85
	13.375	48.00	12.715	12.559	.1249
54.50		12.615	12.459	.1225	8.17
61.00		12.515	12.359	.1200	8.33
68.00		12.415	12.259	.1176	8.50

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 73.03 mm		
				FOUR STRINGS		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
219.08	35.72	205.66	202.49	.0165	60.70	
	41.67	203.63	200.46	.0158	63.21	
	47.62	201.19	198.02	.0150	66.47	
	53.57	198.76	195.58	.0143	70.04	
	*56.55	197.49	194.31	.0139	72.03	
	59.53	196.22	193.04	.0135	74.13	
	*63.99	194.34	191.16	.0129	77.44	
	65.48	193.68	190.50	.0127	78.66	
	72.92	190.78	187.60	.0118	84.48	
	*222.25	73.96	193.95	190.50	.0128	78.14
*228.60	50.60	210.57	206.60	.0181	55.32	
	56.55	208.18	204.22	.0173	57.83	
	59.53	207.01	203.05	.0169	59.14	
	66.97	204.01	200.05	.0159	62.73	
	81.85	198.43	194.46	.0142	70.54	
244.48	*43.60	230.20	226.24	.0249	40.20	
	48.07	228.63	224.66	.0243	41.14	
	53.57	226.59	222.63	.0236	42.41	
	*56.55	225.68	222.50	.0233	43.00	
	59.53	224.41	220.45	.0228	43.84	
	64.74	222.38	218.42	.0221	45.26	
	69.94	220.50	216.54	.0214	46.64	
	79.62	216.79	212.83	.0202	49.59	
	*86.91	214.25	210.29	.0193	51.80	
	*90.93	212.73	208.76	.0188	53.21	
	*106.85	206.38	202.41	.0167	59.87	
	*247.65	88.10	217.42	215.90	.0204	49.06
	*250.83	93.46	219.08	215.90	.0209	47.73
*254.00	49.11	238.35	234.39	.0279	35.87	
273.05	48.74	258.88	254.91	.0359	27.86	
	*53.20	257.45	253.49	.0353	28.31	
	60.27	255.27	251.31	.0344	29.04	
	67.71	252.73	248.77	.0334	29.92	
	75.90	250.19	246.23	.0324	30.84	
	*80.36	248.51	244.55	.0318	31.48	
	82.59	247.90	243.94	.0315	31.72	
	*90.33	245.36	241.40	.0305	32.74	
	*97.77	242.82	238.86	.0296	33.82	
	*105.81	240.03	236.07	.0285	35.08	
	298.45	*56.55	283.21	279.25	.0463	21.62
62.50		281.53	277.57	.0455	21.97	
69.94		279.40	275.44	.0446	22.43	
80.36		276.35	272.39	.0432	23.12	
89.29		273.61	269.65	.0421	23.78	
*96.73		271.32	267.36	.0411	24.34	
*105.66		268.88	264.92	.0400	24.97	
*301.63	106.85	272.06	269.88	.0414	24.16	
*304.80	59.53	289.15	285.19	.0489	20.44	
*336.20	59.53	315.93	311.96	.0617	16.22	
	66.97	313.94	309.98	.0607	16.48	
	74.41	311.96	308.00	.0597	16.75	
	80.36	310.39	306.43	.0589	16.97	
339.73	71.43	322.96	319.00	.0652	15.34	
	81.10	320.42	316.46	.0639	15.65	
	90.78	317.88	313.92	.0626	15.97	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 3.500"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
5.500	*13.00	5.044	4.919	.0128	78.03
	14.00	5.012	4.887	.0125	79.98
	*15.00	4.974	4.849	.0121	82.41
	15.50	4.950	4.825	.0119	84.02
	17.00	4.892	4.767	.0113	88.12
	20.00	4.778	4.653	.0103	97.30
	23.00	4.670	4.545	.0093	107.69
	*26.00	4.548	4.423	.0082	122.05
	*5.750	14.00	5.290	5.165	.0153
17.00		5.190	5.065	.0143	70.09
19.50		5.090	4.965	.0133	75.37
22.50		4.990	4.865	.0123	81.38
*6.000	15.00	5.524	5.399	.0177	56.36
	16.00	5.500	5.375	.0175	57.19
	17.00	5.450	5.325	.0170	58.98
	18.00	5.424	5.299	.0167	59.96
	20.00	5.352	5.227	.0159	62.79
	23.00	5.240	5.115	.0148	67.69
	26.00	5.140	5.015	.0138	72.65
6.625	*17.00	6.135	6.010	.0247	40.55
	20.00	6.049	5.924	.0236	42.29
	*22.00	5.989	5.864	.0229	43.59
	24.00	5.921	5.796	.0222	45.13
	*26.00	5.855	5.730	.0214	46.73
	28.00	5.791	5.666	.0207	48.36
	*29.00	5.761	5.636	.0203	49.16
	32.00	5.675	5.550	.0194	51.59
	7.000	17.00	6.538	6.413	.0296
20.00		6.456	6.331	.0286	34.98
*22.00		6.398	6.273	.0279	35.89
23.00		6.366	6.241	.0275	36.41
*24.00		6.336	6.211	.0271	36.90
26.00		6.276	6.151	.0264	37.93
*28.00		6.214	6.089	.0256	39.05
29.00		6.184	6.059	.0252	39.61
*30.00		6.154	6.029	.0249	40.18
32.00		6.094	5.969	.0242	41.36
*33.70		6.048	5.923	.0236	42.31
35.00		6.004	5.879	.0231	43.26
38.00		5.920	5.795	.0221	45.16
*40.00	5.836	5.711	.0212	47.20	
7.625	*20.00	7.125	7.000	.0374	26.73
	24.00	7.025	6.900	.0360	27.75
	26.40	6.969	6.844	.0353	28.35
	29.70	6.875	6.750	.0340	29.40
	33.70	6.765	6.640	.0326	30.71
	39.00	6.625	6.500	.0307	32.53
	*45.30	6.435	6.310	.0283	35.30
	*7.750	46.10	6.560	6.500	.0299
*8.000		26.00	7.386	7.261	.0411
*8.125	28.00	7.485	7.360	.0425	23.52
	32.00	7.385	7.260	.0411	24.34
	35.50	7.285	7.160	.0397	25.22
	39.50	7.185	7.060	.0382	26.14

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 88.90 mm		
				ONE STRING		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
139.70	*19.35	128.12	124.94	.0067	149.54	
	20.63	127.31	124.13	.0065	153.28	
	*22.32	126.34	123.16	.0063	157.94	
	23.07	125.73	122.56	.0062	161.01	
	25.30	124.26	121.08	.0059	168.88	
	29.76	121.36	118.19	.0054	186.47	
	34.23	118.62	115.44	.0048	206.38	
	*38.69	115.52	112.34	.0043	233.90	
	*146.05	20.83	134.37	131.19	.0080	125.38
		25.30	131.83	128.65	.0074	134.33
29.02		129.29	126.11	.0069	144.44	
33.48		126.75	123.57	.0064	155.95	
*152.40	22.32	140.31	137.13	.0093	108.01	
	23.81	139.70	136.53	.0091	109.60	
	25.30	138.43	135.26	.0088	113.04	
	26.79	137.77	134.59	.0087	114.90	
	29.76	135.94	132.77	.0083	120.34	
	34.23	133.10	129.92	.0077	129.72	
	38.69	130.56	127.38	.0072	139.22	
168.28	*25.30	155.83	152.65	.0129	77.70	
	29.76	153.64	150.47	.0123	81.05	
	*32.74	152.12	148.95	.0120	83.53	
	35.72	150.39	147.22	.0116	86.49	
	*38.69	148.72	145.54	.0112	89.54	
	41.67	147.09	143.92	.0108	92.68	
	*43.16	146.33	143.15	.0106	94.21	
	47.62	144.15	140.97	.0101	98.86	
	177.80	25.30	166.07	162.89	.0155	64.69
		29.76	163.98	160.81	.0149	67.03
*32.74		162.51	159.33	.0145	68.77	
34.23		161.70	158.52	.0143	69.77	
*35.72		160.93	157.76	.0141	70.72	
38.69		159.41	156.24	.0138	72.69	
*41.67		157.84	154.66	.0134	74.83	
43.16		157.07	153.90	.0132	75.90	
*44.64		156.31	153.14	.0130	77.00	
47.62		154.79	151.61	.0126	79.27	
*50.15		153.62	150.44	.0123	81.09	
52.09		152.50	149.33	.0121	82.90	
56.55		150.37	147.19	.0116	86.54	
*59.53	148.23	145.06	.0111	90.46		
193.68	*29.76	180.98	177.80	.0195	51.22	
	35.72	178.44	175.26	.0188	53.17	
	39.29	177.01	173.84	.0184	54.32	
	44.20	174.63	171.45	.0177	56.34	
	50.15	171.83	168.66	.0170	58.86	
	58.04	168.28	165.10	.0160	62.35	
	*67.41	163.45	160.27	.0148	67.65	
	*196.85	68.60	166.62	165.10	.0156	64.08
*203.20	38.69	187.60	184.43	.0214	46.63	
*206.38	41.67	190.12	186.94	.0222	45.07	
	47.62	187.58	184.40	.0214	46.65	
	52.83	185.04	181.86	.0207	48.33	
	58.78	182.50	179.32	.0200	50.10	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 3.500"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0518	19.31
	28.00	8.017	7.892	.0505	19.79
	32.00	7.921	7.796	.0490	20.39
	36.00	7.825	7.700	.0476	21.02
	*38.00	7.775	7.650	.0468	21.36
	40.00	7.725	7.600	.0461	21.71
	*43.00	7.651	7.526	.0450	22.24
	44.00	7.625	7.500	.0446	22.43
	49.00	7.511	7.386	.0429	23.31
	*8.750	49.70	7.636	7.500	.0447
*9.000	34.00	8.290	8.134	.0549	18.23
	38.00	8.196	8.040	.0534	18.74
	40.00	8.150	7.994	.0526	19.00
	45.00	8.032	7.876	.0508	19.70
	55.00	7.812	7.656	.0474	21.10
9.625	*29.30	9.063	8.907	.0679	14.73
	32.30	9.001	8.845	.0668	14.97
	36.00	8.921	8.765	.0654	15.29
	*38.00	8.885	8.760	.0648	15.44
	40.00	8.835	8.679	.0639	15.64
	43.50	8.755	8.599	.0626	15.98
	47.00	8.681	8.525	.0613	16.31
	53.50	8.535	8.379	.0589	16.99
	*58.40	8.435	8.279	.0572	17.48
	*61.10	8.375	8.219	.0562	17.78
	*71.80	8.125	7.969	.0522	19.15
*9.750	59.20	8.560	8.500	.0593	16.87
*9.875	62.80	8.625	8.500	.0604	16.57
*10.000	33.00	9.384	9.228	.0736	13.58
10.750	32.75	10.192	10.036	.0890	11.23
	*35.75	10.136	9.980	.0879	11.38
	40.50	10.050	9.894	.0862	11.60
	45.50	9.950	9.794	.0843	11.87
	51.00	9.850	9.694	.0824	12.14
	*54.00	9.784	9.628	.0811	12.33
	55.50	9.760	9.604	.0806	12.40
	*60.70	9.660	9.504	.0787	12.70
	*65.70	9.560	9.404	.0769	13.01
	*71.10	9.450	9.294	.0749	13.36
11.750	*38.00	11.150	10.994	.1089	9.19
	42.00	11.084	10.928	.1074	9.31
	47.00	11.000	10.844	.1056	9.47
	54.00	10.880	10.724	.1031	9.70
	60.00	10.772	10.616	.1008	9.92
	*65.00	10.682	10.526	.0989	10.11
	*71.00	10.586	10.430	.0970	10.31
*11.875	71.80	10.711	10.625	.0995	10.05
*12.000	40.00	11.384	11.228	.1140	8.77

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 88.90 mm		
				ONE STRING		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
219.08	35.72	205.66	202.49	.0210	37.00	
	41.61	203.63	200.46	.0264	37.92	
	47.62	201.19	198.02	.0256	39.07	
	53.57	198.76	195.58	.0248	40.28	
	*56.55	197.49	194.31	.0244	40.93	
	59.53	196.22	193.04	.0240	41.60	
	*63.99	194.34	191.16	.0235	42.62	
	65.48	193.68	190.50	.0233	42.99	
	72.92	190.78	187.60	.0224	44.67	
	*222.25	73.96	193.95	190.50	.0233	42.83
	*228.60	50.60	210.57	206.60	.0286	34.93
56.55		208.18	204.22	.0278	35.92	
59.53		207.01	203.05	.0275	36.42	
66.97		204.01	200.05	.0265	37.75	
81.85		198.43	194.46	.0247	40.44	
244.48	*43.60	230.20	226.24	.0354	28.23	
	48.07	228.63	224.66	.0349	28.69	
	53.57	226.59	222.63	.0341	29.30	
	*56.55	225.68	222.50	.0338	29.58	
	59.53	224.41	220.45	.0334	29.98	
	64.74	222.38	218.42	.0326	30.63	
	69.94	220.50	216.54	.0320	31.26	
	79.62	216.79	212.83	.0307	32.56	
	*86.91	214.25	210.29	.0299	33.49	
	*90.93	212.73	208.76	.0293	34.08	
	*106.85	206.38	202.41	.0273	36.69	
	*247.65	88.10	217.42	215.90	.0309	32.33
	*250.83	93.46	219.08	215.90	.0315	31.75
*254.00	49.11	238.35	234.39	.0384	26.02	
273.05	48.74	258.88	254.91	.0464	21.53	
	*53.20	257.45	253.49	.0459	21.80	
	60.27	255.27	251.31	.0450	22.23	
	67.71	252.73	248.77	.0440	22.74	
	75.90	250.19	246.23	.0430	23.27	
	*80.36	248.51	244.55	.0423	23.63	
	82.59	247.90	243.94	.0421	23.77	
	*90.33	245.36	241.40	.0411	24.34	
	*97.77	242.82	238.86	.0401	24.93	
	*105.81	240.03	236.07	.0391	25.60	
	298.45	*56.55	283.21	279.25	.0568	17.60
		62.50	281.53	277.57	.0561	11.84
69.94		279.40	275.44	.0551	18.14	
80.36		276.35	272.39	.0538	18.59	
89.29		273.61	269.65	.0526	19.01	
*96.73		271.32	267.36	.0516	19.37	
*105.66		268.88	264.92	.0506	19.76	
*301.63		106.85	272.06	269.88	.0519	19.25
*304.80	59.53	289.15	285.19	.0595	16.81	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 3.500"		VOLUME & HEIGHT			
TWO STRINGS					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0399	25.07
	28.00	8.017	7.892	.0386	25.88
	32.00	7.921	7.796	.0371	26.92
	36.00	7.825	7.700	.0357	28.03
	*38.00	7.775	7.650	.0349	28.63
	40.00	7.725	7.600	.0342	29.26
	*43.00	7.651	7.526	.0331	30.24
	44.00	7.625	7.500	.0327	30.60
	49.00	7.511	7.386	.0310	32.25
	*8.750	49.70	7.636	7.500	.0328
*9.000	34.00	8.290	8.134	.0430	23.28
	38.00	8.196	8.040	.0415	24.12
	40.00	8.150	7.994	.0407	24.56
	45.00	8.032	7.876	.0389	25.73
	55.00	7.812	7.656	.0355	28.18
9.625	*29.30	9.063	8.907	.0560	17.86
	32.30	9.001	8.845	.0549	18.21
	36.00	9.021	8.765	.0535	18.69
	*38.00	8.885	8.760	.0529	18.91
	40.00	8.835	8.679	.0520	19.22
	43.50	8.755	8.599	.0507	19.74
	47.00	8.681	8.525	.0494	20.24
	53.50	8.535	8.379	.0470	21.29
	*58.40	8.435	8.279	.0453	22.07
	*61.10	8.375	8.219	.0443	22.55
	*71.80	8.125	7.969	.0403	24.80
*9.750	59.20	8.560	8.500	.0474	21.11
*9.875	62.80	8.625	8.500	.0485	20.63
*10.000	33.00	9.384	9.228	.0617	16.20
10.750	32.75	10.192	10.036	.0771	12.97
	*35.75	10.136	9.980	.0760	13.16
	40.50	10.050	9.894	.0743	13.46
	45.50	9.950	9.794	.0724	13.82
	51.00	9.850	9.694	.0705	14.19
	*54.00	9.784	9.628	.0692	14.45
	55.50	9.760	9.604	.0687	14.55
	*60.70	9.660	9.504	.0668	14.96
	*65.70	9.560	9.404	.0650	15.39
	*71.10	9.450	9.294	.0630	15.89
11.750	*38.00	11.150	10.994	.0970	10.31
	42.00	11.084	10.928	.0955	10.47
	47.00	11.000	10.844	.0937	10.67
	54.00	10.880	10.724	.0912	10.97
	60.00	10.772	10.616	.0889	11.25
	*65.00	10.682	10.526	.0870	11.49
	*71.00	10.586	10.430	.0851	11.76
*11.875	71.80	10.711	10.625	.0876	11.41
*12.000	40.00	11.384	11.228	.1021	9.80
*13.000	40.00	12.438	12.282	.1265	7.91
	45.00	12.360	12.204	.1246	8.03
	50.00	12.282	12.126	.1227	8.15
	54.00	12.220	12.064	.1213	8.25
13.375	48.00	12.715	12.559	.1333	7.50
	54.50	12.615	12.459	.1308	7.65
	61.00	12.515	12.359	.1283	7.79
	68.00	12.415	12.259	.1259	7.94

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 88.90 mm		
OUTSIDE CASING				TWO STRINGS		
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
219.08	35.72	205.66	202.49	.0208	48.04	
	41.67	203.63	200.46	.0202	49.60	
	47.62	201.19	198.02	.0194	51.59	
	53.57	198.76	195.58	.0186	53.71	
	*56.55	197.49	194.31	.0182	54.87	
	59.53	196.22	193.04	.0178	56.08	
	*63.99	194.34	191.16	.0173	57.96	
	65.48	193.68	190.50	.0171	58.64	
	72.92	190.78	187.60	.0162	61.81	
	*222.25	73.96	193.95	190.50	.0171	58.35
	*228.60	50.60	210.57	206.60	.0224	44.61
56.55		208.18	204.22	.0216	46.23	
59.53		207.01	203.05	.0213	47.06	
66.97		204.01	200.05	.0203	49.30	
81.85		198.43	194.46	.0185	54.01	
244.48	*43.60	230.20	226.24	.0292	34.23	
	48.07	228.63	224.66	.0286	34.91	
	53.57	226.59	222.63	.0279	35.81	
	*56.55	225.68	222.50	.0276	36.24	
	59.53	224.41	220.45	.0271	36.83	
	64.74	222.38	218.42	.0264	37.83	
	69.94	220.50	216.54	.0258	38.79	
	79.62	216.79	212.83	.0245	40.80	
	*86.91	214.25	210.29	.0236	42.29	
	*90.93	212.73	208.76	.0231	43.22	
	*106.85	206.38	202.41	.0210	47.52	
	*247.65	88.10	217.42	215.90	.0247	40.45
	*250.83	93.46	219.08	215.90	.0253	39.54
*254.00	49.11	238.35	234.39	.0322	31.04	
273.05	48.74	258.88	254.91	.0402	24.85	
	*53.20	257.45	253.49	.0397	25.21	
	60.27	255.27	251.31	.0388	25.79	
	67.71	252.73	248.77	.0378	26.48	
	75.90	250.19	246.23	.0368	27.20	
	*80.36	248.51	244.55	.0361	27.70	
	82.59	247.90	243.94	.0359	27.88	
	*90.33	245.36	241.40	.0349	28.67	
	*97.77	242.82	238.86	.0339	29.49	
	*105.81	240.03	236.07	.0328	30.44	
	298.45	*56.55	283.21	279.25	.0506	19.76
62.50		281.53	277.57	.0499	20.06	
69.94		279.40	275.44	.0489	20.44	
80.36		276.35	272.39	.0476	21.01	
89.29		273.61	269.65	.0464	21.55	
*96.73		271.32	267.36	.0454	22.02	
*105.66		268.88	264.92	.0444	22.53	
*301.63	106.85	272.06	269.88	.0457	21.86	
*304.80	59.53	289.15	285.19	.0533	18.77	
*330.20	59.53	315.93	311.96	.0660	15.15	
	66.97	313.94	309.98	.0650	15.38	
	74.41	311.96	308.00	.0640	15.61	
	80.36	310.39	306.43	.0633	15.80	
339.73	71.43	322.96	319.00	.0695	14.38	
	81.10	320.42	316.46	.0682	14.65	
	90.78	317.88	313.92	.0670	14.93	
	101.20	315.34	311.38	.0657	15.22	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS				
O.D. 3.500"		VOLUME & HEIGHT				
THREE STRINGS						
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
9.625	*29.30	9.063	8.907	.0441	22.68	
	32.30	9.001	8.845	.0430	23.25	
	36.00	8.921	8.765	.0416	24.03	
	*38.00	8.885	8.760	.0410	24.40	
	40.00	8.835	8.679	.0401	24.92	
	43.50	8.755	8.599	.0388	25.80	
	47.00	8.681	8.525	.0375	26.66	
	53.50	8.535	8.379	.0351	28.52	
	*58.40	8.435	8.279	.0334	29.93	
	*61.10	8.375	8.219	.0324	30.83	
	*71.80	8.125	7.969	.0284	35.17	
	*9.750	59.20	8.560	8.500	.0355	28.18
	*9.875	62.80	8.625	8.500	.0366	27.35
*10.000	33.00	9.384	9.228	.0498	20.06	
10.750	32.75	10.192	10.036	.0652	15.34	
	*35.75	10.136	9.980	.0641	15.60	
	40.50	10.050	9.894	.0624	16.02	
	45.50	9.950	9.794	.0605	16.54	
	51.00	9.850	9.694	.0586	17.08	
	*54.00	9.784	9.628	.0573	17.45	
	55.50	9.760	9.604	.0568	17.59	
	*60.70	9.660	9.504	.0549	18.20	
	*65.70	9.560	9.404	.0531	18.84	
	*71.10	9.450	9.294	.0511	19.59	
11.750	*38.00	11.150	10.994	.0851	11.75	
	42.00	11.084	10.928	.0836	11.96	
	47.00	11.000	10.844	.0818	12.22	
	54.00	10.880	10.724	.0793	12.61	
	60.00	10.772	10.616	.0770	12.98	
	*65.00	10.682	10.526	.0751	13.31	
	*71.00	10.586	10.430	.0732	13.67	
*11.875	71.80	10.711	10.625	.0757	13.20	
*12.000	40.00	11.384	11.228	.0902	11.09	
*13.000	40.00	12.438	12.282	.1146	8.73	
	45.00	12.360	12.204	.1127	8.87	
	50.00	12.282	12.126	.1108	9.02	
	54.00	12.220	12.064	.1094	9.14	
13.375	48.00	12.715	12.559	.1214	8.24	
	54.50	12.615	12.459	.1189	8.41	
	61.00	12.515	12.359	.1164	8.59	
	68.00	12.415	12.259	.1140	8.77	
	72.00	12.347	12.191	.1124	8.90	
	*77.00	12.275	12.119	.1107	9.04	
	*80.70	12.215	12.059	.1092	9.15	
	*83.00	12.175	12.019	.1083	9.23	
	*85.00	12.159	12.003	.1079	9.27	
	*86.00	12.125	11.969	.1071	9.34	
	*92.00	12.031	11.875	.1049	9.53	
	*98.00	11.937	11.781	.1027	9.74	
	*13.500	81.40	12.340	12.250	.1122	8.91
*13.625	88.20	12.375	12.250	.1131	8.84	
*14.000	50.00	13.344	13.156	.1373	7.28	
16.000	*55.00	15.375	15.187	.1939	5.16	
	65.00	15.250	15.062	.1902	5.26	
	*70.00	15.198	15.010	.1887	5.30	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 88.90 mm	
				THREE STRINGS	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
244.48	*43.60	230.20	226.24	.0230	43.46
	48.07	228.63	224.66	.0224	44.56
	53.57	226.59	222.63	.0217	46.06
	*56.55	225.68	222.50	.0214	46.76
	59.53	224.41	220.45	.0209	47.76
	64.74	222.38	218.42	.0202	49.44
	69.94	220.50	216.54	.0196	51.09
	79.62	216.79	212.83	.0183	54.65
	*86.91	214.25	210.29	.0174	57.35
	*90.93	212.73	208.76	.0169	59.08
	*106.85	206.38	202.41	.0148	67.41
	*247.65	88.10	217.42	215.90	.0185
*250.83	93.46	219.08	215.90	.0191	52.41
*254.00	49.11	238.35	234.39	.0260	38.45
273.05	48.74	258.88	254.91	.0340	29.39
	*53.20	257.45	253.49	.0334	29.90
	60.27	255.27	251.31	.0326	30.70
	67.71	252.73	248.77	.0316	31.69
	75.90	250.19	246.23	.0306	32.73
	*80.36	248.51	244.55	.0299	33.45
	82.59	247.90	243.94	.0297	33.72
	*90.33	245.36	241.40	.0287	34.88
	*97.77	242.82	238.86	.0277	36.10
	*105.81	240.03	236.07	.0266	37.54
298.45	*56.55	283.21	279.25	.0444	22.53
	62.50	281.53	277.57	.0436	22.91
	69.94	279.40	275.44	.0427	23.42
	80.36	276.35	272.39	.0414	24.17
	89.29	273.61	269.65	.0402	24.88
	*96.73	271.32	267.36	.0392	25.50
	*105.66	268.88	264.92	.0382	26.19
	*301.63	106.85	272.06	269.88	.0395
*304.80	59.53	289.15	285.19	.0471	21.25
*330.20	59.53	315.93	311.96	.0598	16.72
	66.97	313.94	309.98	.0588	17.00
	74.41	311.96	308.00	.0578	17.29
	80.36	310.39	306.43	.0571	17.52
339.73	71.43	322.96	319.00	.0633	15.79
	81.10	320.42	316.46	.0620	16.12
	90.78	317.88	313.92	.0608	16.46
	101.20	315.34	311.38	.0595	16.81
	107.15	313.61	309.65	.0586	17.05
	*114.59	311.79	307.82	.0577	17.32
	*120.09	310.26	306.30	.0570	17.54
	*123.52	309.25	305.28	.0565	17.70
	*126.49	308.84	304.88	.0563	17.76
	*127.98	307.98	304.01	.0559	17.89
	*136.91	305.59	301.63	.0547	18.27
	*145.84	303.20	299.24	.0536	18.66
	*342.90	121.14	313.44	311.15	.0586
*346.08	131.26	314.33	311.15	.0590	16.95
*355.60	74.41	338.94	334.16	.0716	13.96
406.40	*81.85	390.53	385.75	.1012	9.88
	96.73	387.35	382.58	.0993	10.07
	*104.17	386.03	381.25	.0985	10.16

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS		VOLUME & HEIGHT	
O.D. 3.500"		FOUR STRINGS			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
10.750	32.75	10.192	10.036	.0533	18.76
	*35.75	10.136	9.980	.0522	19.16
	40.50	10.050	9.894	.0505	19.80
	45.50	9.950	9.794	.0486	20.59
	51.00	9.850	9.694	.0467	21.44
	*54.00	9.784	9.628	.0454	22.03
	55.50	9.760	9.604	.0449	22.25
	*60.70	9.660	9.504	.0430	23.23
	*65.70	9.560	9.404	.0412	24.28
	*71.10	9.450	9.294	.0392	25.54
	11.750	*38.00	11.150	10.994	.0732
42.00		11.084	10.928	.0717	13.94
47.00		11.000	10.844	.0699	14.30
54.00		10.880	10.724	.0674	14.84
60.00		10.772	10.616	.0651	15.36
*65.00		10.682	10.526	.0632	15.81
*71.00		10.586	10.430	.0613	16.32
*11.875		71.80	10.711	10.625	.0638
*12.000	40.00	11.384	11.228	.0783	12.77
*13.000	40.00	12.438	12.282	.1027	9.74
	45.00	12.360	12.204	.1008	9.92
	50.00	12.282	12.126	.0989	10.11
	54.00	12.220	12.064	.0975	10.26
13.375	48.00	12.715	12.559	.1095	9.14
	54.50	12.615	12.459	.1070	9.35
	61.00	12.515	12.359	.1045	9.56
	68.00	12.415	12.259	.1021	9.79
	72.00	12.347	12.191	.1005	9.95
	*77.00	12.275	12.119	.0988	10.12
	*80.70	12.215	12.059	.0973	10.27
	*83.00	12.175	12.019	.0964	10.37
	*85.00	12.159	12.003	.0960	10.41
	*86.00	12.125	11.969	.0952	10.50
	*92.00	12.031	11.875	.0930	10.75
*98.00	11.937	11.781	.0908	11.01	
*13.500	81.40	12.340	12.250	.1003	9.97
*13.625	88.20	12.375	12.250	.1012	9.88
*14.000	50.00	13.344	13.156	.1254	7.98
16.000	*55.00	15.375	15.187	.1820	5.49
	65.00	15.250	15.062	.1783	5.61
	*70.00	15.198	15.010	.1768	5.66
	75.00	15.124	14.936	.1746	5.73
	84.00	15.010	14.822	.1713	5.84
	*109.00	14.688	14.500	.1620	6.17
18.625	*78.00	17.855	17.667	.2621	3.82
	87.50	17.755	17.567	.2586	3.87
	*96.50	17.655	17.467	.2552	3.92
20.000	94.00	19.124	18.936	.3077	3.25
	106.50	19.000	18.812	.3031	3.30
	133.00	18.730	18.542	.2932	3.41

*Not API Standard. Shown for information only

METRIC UNITS Inside Tubing

BETWEEN TUBING & CASING** **O.D. 88.90 mm**

FOUR STRINGS

OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
273.05	48.74	258.88	254.91	.0278	35.95	
	*53.20	257.45	253.49	.0272	36.71	
	60.27	255.27	251.31	.0264	37.94	
	67.71	252.73	248.77	.0253	39.45	
	75.90	250.19	246.23	.0243	41.08	
	*80.36	248.51	244.55	.0237	42.22	
	82.59	247.90	243.94	.0234	42.65	
	*90.33	245.36	241.40	.0225	44.52	
	*97.77	242.82	238.86	.0215	46.53	
	*105.81	240.03	236.07	.0204	48.95	
	298.45	*56.55	283.21	279.25	.0382	26.19
62.50		281.53	277.57	.0374	26.71	
69.94		279.40	275.44	.0365	27.40	
80.36		276.35	272.39	.0352	28.44	
89.29		273.61	269.65	.0340	29.43	
*96.73		271.32	267.36	.0330	30.30	
*105.66		268.88	264.92	.0320	31.28	
*301.63		106.85	272.06	269.88	.0333	30.02
*304.80		59.53	289.15	285.19	.0409	24.48
*330.20	59.53	315.93	311.96	.0536	18.66	
	66.97	313.94	309.98	.0526	19.01	
	74.41	311.96	308.00	.0516	19.37	
	80.36	310.39	306.43	.0509	19.66	
	339.73	71.43	322.96	319.00	.0571	17.51
81.10		320.42	316.46	.0558	17.91	
90.78		317.88	313.92	.0546	18.33	
101.20		315.34	311.38	.0533	18.76	
107.15		313.61	309.65	.0524	19.07	
*114.59		311.79	307.82	.0515	19.40	
*120.09		310.26	306.30	.0508	19.69	
*123.52		309.25	305.28	.0503	19.88	
*126.49		308.84	304.88	.0501	19.96	
*127.98		307.98	304.01	.0497	20.13	
*136.91		305.59	301.63	.0485	20.60	
*145.84		303.20	299.24	.0474	21.10	
*342.90		121.14	313.44	311.15	.0524	19.10
*346.08	131.26	314.33	311.15	.0528	18.94	
*355.60	74.41	338.94	334.16	.0654	15.29	
406.40	*81.85	390.53	385.75	.0950	10.53	
	96.73	387.35	382.58	.0930	10.75	
	*104.17	386.03	381.25	.0922	10.84	
	111.61	384.15	379.38	.0911	10.98	
	125.01	381.25	376.48	.0894	11.19	
	*162.21	373.08	368.30	.0845	11.83	
473.08	*116.08	453.52	448.74	.1368	7.31	
	130.21	450.98	446.20	.1350	7.41	
	*143.61	448.44	443.66	.1332	7.51	
508.00	139.89	485.75	480.98	.1606	6.23	
	158.49	482.60	477.83	.1582	6.32	
	197.93	475.74	470.97	.1530	6.54	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 4.000"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
5.500	*13.00	5.044	4.919	.0092	109.03
	14.00	5.012	4.887	.0089	112.87
	*15.00	4.974	4.849	.0085	117.77
	15.50	4.950	4.825	.0083	121.07
	17.00	4.892	4.767	.0077	129.79
	20.00	4.778	4.653	.0066	150.74
	23.00	4.670	4.545	.0056	177.21
	*26.00	4.548	4.423	.0046	219.76
	*5.750	14.00	5.290	5.165	.0116
17.00		5.190	5.065	.0106	94.13
19.50		5.090	4.965	.0096	103.90
22.50		4.990	4.865	.0086	115.66
*6.000	15.00	5.524	5.399	.0141	70.92
	16.00	5.500	5.375	.0138	72.24
	17.00	5.450	5.325	.0133	75.13
	18.00	5.424	5.299	.0130	76.71
	20.00	5.352	5.227	.0123	81.42
	23.00	5.240	5.115	.0111	89.85
	26.00	5.140	5.015	.0101	98.80
6.625	*17.00	6.135	6.010	.0210	47.57
	20.00	6.049	5.924	.0200	49.99
	*22.00	5.989	5.864	.0193	51.81
	24.00	5.921	5.796	.0185	54.01
	*26.00	5.855	5.730	.0178	56.31
	28.00	5.791	5.666	.0170	58.70
	*29.00	5.761	5.636	.0167	59.89
	32.00	5.675	5.550	.0157	63.52
	7.000	17.00	6.538	6.413	.0260
20.00		6.456	6.331	.0249	40.09
*22.00		6.398	6.273	.0242	41.28
23.00		6.366	6.241	.0238	41.97
*24.00		6.336	6.211	.0235	42.63
26.00		6.276	6.151	.0227	44.01
*28.00		6.214	6.089	.0220	45.52
29.00		6.184	6.059	.0216	46.28
*30.00		6.154	6.029	.0212	47.07
32.00		6.094	5.969	.0205	48.70
*33.70		6.048	5.923	.0200	50.02
35.00		6.004	5.879	.0195	51.35
38.00		5.920	5.795	.0185	54.05
*40.00		5.836	5.711	.0175	57.00
7.625	*20.00	7.125	7.000	.0338	29.61
	24.00	7.025	6.900	.0324	30.87
	26.40	6.969	6.844	.0316	31.61
	29.70	6.875	6.750	.0304	32.92
	33.70	6.765	6.640	.0289	34.58
	39.00	6.625	6.500	.0271	36.91
	*45.30	6.435	6.310	.0247	40.51
	*7.750	46.10	6.560	6.500	.0263
*8.000		26.00	7.386	7.261	.0375
*8.125	28.00	7.485	7.360	.0389	25.72
	32.00	7.385	7.260	.0374	26.71
	35.50	7.285	7.160	.0360	27.77
	39.50	7.185	7.060	.0346	28.90

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing		
BETWEEN TUBING & CASING**				O.D. 101.60 mm		
				ONE STRING		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
139.70	*19.35	123.12	124.94	.0048	208.94	
	20.63	127.31	124.13	.0046	216.31	
	*22.32	126.34	123.16	.0044	225.70	
	23.07	125.73	122.56	.0043	232.02	
	25.30	124.26	121.08	.0040	248.72	
	29.76	121.36	118.19	.0035	288.87	
	34.23	118.62	115.44	.0029	339.61	
	*38.69	115.52	112.34	.0024	421.14	
	*146.05	20.83	134.37	131.19	.0061	164.61
		25.30	131.83	128.65	.0055	180.39
29.02		129.29	126.11	.0050	199.11	
33.48		126.75	123.57	.0045	221.66	
*152.40	22.32	140.31	137.13	.0074	135.92	
	23.81	139.70	136.53	.0072	138.44	
	25.30	138.43	135.26	.0069	143.97	
	26.79	137.77	134.59	.0068	147.00	
	29.76	135.94	132.77	.0064	156.02	
	34.23	133.10	129.92	.0058	172.18	
	38.69	130.56	127.38	.0053	189.33	
168.28	*25.30	155.83	152.65	.0110	91.17	
	29.76	153.64	150.47	.0104	95.81	
	*32.74	152.12	148.95	.0101	99.29	
	35.72	150.39	147.22	.0097	103.51	
	*38.69	148.72	145.54	.0093	107.91	
	41.67	147.09	143.92	.0089	112.50	
	*43.16	146.33	143.15	.0087	114.77	
	47.62	144.15	140.97	.0082	121.13	
	177.80	25.30	166.07	162.89	.0136	73.76
		29.76	163.98	160.81	.0130	76.82
*32.74		162.51	159.33	.0126	79.12	
34.23		161.70	158.52	.0124	80.44	
*35.72		160.93	157.76	.0122	81.71	
38.69		159.41	156.24	.0119	84.35	
*41.67		157.84	154.66	.0115	87.24	
43.16		157.07	153.90	.0113	88.70	
*44.64		156.31	153.14	.0111	90.20	
47.62		154.79	151.61	.0107	93.33	
*50.15		153.62	150.44	.0104	95.87	
52.09		152.50	149.33	.0102	98.40	
56.55		150.37	147.19	.0097	103.58	
*59.53	148.23	145.06	.0092	109.24		
193.68	*29.76	180.98	177.80	.0176	56.74	
	35.72	178.44	175.26	.0169	59.15	
	39.29	177.01	173.84	.0165	60.58	
	44.20	174.63	171.45	.0158	63.10	
	50.15	171.83	168.66	.0151	66.28	
	58.04	168.28	165.10	.0141	70.73	
	*67.41	163.45	160.27	.0129	77.64	
	*196.85	68.60	166.62	165.10	.0137	72.97
*203.20	38.69	187.60	184.43	.0195	51.17	
*206.38	41.67	190.12	186.94	.0203	49.29	
	47.62	187.58	184.40	.0195	51.19	
	52.83	185.04	181.86	.0188	53.22	
	58.78	182.50	179.32	.0181	55.38	

**Note: No allowance made for couplings.

Inside Tubing		ENGLISH UNITS			
O.D. 4.000"		VOLUME & HEIGHT			
ONE STRING					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	24.00	8.097	7.972	.0481	20.77
	28.00	8.017	7.892	.0469	21.33
	32.00	7.921	7.796	.0454	22.02
	36.00	7.825	7.700	.0439	22.76
	*38.00	7.775	7.650	.0432	23.16
	40.00	7.725	7.600	.0424	23.57
	*43.00	7.651	7.526	.0413	24.20
	44.00	7.625	7.500	.0409	24.43
	49.00	7.511	7.386	.0393	25.47
	*8.750	49.70	7.636	7.500	.0411
*9.000	34.00	8.290	8.134	.0512	19.52
	38.00	8.196	8.040	.0497	20.12
	40.00	8.150	7.994	.0490	20.42
	45.00	8.032	7.876	.0471	21.22
	55.00	7.812	7.656	.0437	22.86
9.625	*29.30	9.063	8.907	.0642	15.56
	32.30	9.001	8.845	.0632	15.83
	36.00	8.921	8.765	.0618	16.19
	*38.00	8.885	8.760	.0611	16.35
	40.00	8.835	8.679	.0603	16.59
	43.50	8.755	8.599	.0589	16.97
	47.00	8.681	8.525	.0577	17.34
	53.50	8.535	8.379	.0552	18.11
	*58.40	8.435	8.279	.0536	18.67
	*61.10	8.375	8.219	.0526	19.01
	*71.80	8.125	7.969	.0486	20.58
*9.750	59.20	8.560	8.500	.0556	17.97
*9.875	62.80	8.625	8.500	.0567	17.63
*10.000	33.00	9.384	9.228	.0700	14.29
10.750	32.75	10.192	10.036	.0854	11.71
	*35.75	10.136	9.980	.0843	11.87
	40.50	10.050	9.894	.0826	12.11
	45.50	9.950	9.794	.0806	12.40
	51.00	9.850	9.694	.0787	12.71
	*54.00	9.784	9.628	.0774	12.91
	55.50	9.760	9.604	.0770	12.99
	*60.70	9.660	9.504	.0751	13.31
	*65.70	9.560	9.404	.0732	13.65
	*71.10	9.450	9.294	.0712	14.04
11.750	*38.00	11.150	10.994	.1052	9.50
	42.00	11.084	10.928	.1038	9.63
	47.00	11.000	10.844	.1020	9.80
	54.00	10.880	10.724	.0994	10.06
	60.00	10.772	10.616	.0972	10.29
	*65.00	10.682	10.526	.0953	10.49
	*71.00	10.586	10.430	.0933	10.72
	*11.875	71.80	10.711	10.625	.0959
*12.000	40.00	11.384	11.228	.1103	9.06

*Not API Standard. Shown for information only

METRIC UNITS				Inside Tubing	
BETWEEN TUBING & CASING**				O.D. 101.60 mm	
				ONE STRING	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
219.08	35.72	205.66	202.49	.0251	39.80
	41.67	203.63	200.46	.0245	40.87
	47.62	201.19	198.02	.0237	42.21
	53.57	198.76	195.58	.0229	43.62
	*56.55	197.49	194.31	.0225	44.38
	59.53	196.22	193.04	.0221	45.17
	*63.99	194.34	191.16	.0216	46.38
	65.48	193.68	190.50	.0214	46.81
	72.92	190.78	187.60	.0205	48.81
	*222.25	73.96	193.95	190.50	.0214
*228.60	50.60	210.57	206.60	.0267	37.42
	56.55	208.18	204.22	.0259	38.55
	59.53	207.01	203.05	.0256	39.12
	66.97	204.01	200.05	.0246	40.66
	81.85	198.43	194.46	.0228	43.81
244.48	*43.60	230.20	226.24	.0335	29.83
	48.07	228.63	224.66	.0330	30.34
	53.57	226.59	222.63	.0322	31.03
	*56.55	225.68	222.50	.0319	31.34
	59.53	224.41	220.45	.0315	31.79
	64.74	222.38	218.42	.0307	32.53
	69.94	220.50	216.54	.0301	33.23
	79.62	216.79	212.83	.0288	34.70
	*86.91	214.25	210.29	.0280	35.77
	*90.93	212.73	208.76	.0274	36.44
	*106.85	206.38	202.41	.0254	39.44
	*247.65	88.10	217.42	215.90	.0290
*250.83	93.46	219.08	215.90	.0296	33.79
*254.00	49.11	238.35	234.39	.0365	27.38
273.05	48.74	258.88	254.91	.0445	22.45
	*53.20	257.45	253.49	.0440	22.74
	60.27	255.27	251.31	.0431	23.21
	67.71	252.73	248.77	.0421	23.77
	75.90	250.19	246.23	.0411	24.35
	*80.36	248.51	244.55	.0404	24.74
	82.59	247.90	243.94	.0402	24.89
	*90.33	245.36	241.40	.0392	25.52
	*97.77	242.82	238.86	.0382	26.17
	*105.81	240.03	236.07	.0372	26.91
	298.45	*56.55	283.21	279.25	.0549
62.50		281.53	277.57	.0542	18.46
69.94		279.40	275.44	.0532	18.79
80.36		276.35	272.39	.0519	19.27
89.29		273.61	269.65	.0507	19.72
*96.73		271.32	267.36	.0497	20.11
*105.66		268.88	264.92	.0487	20.54
*301.63		106.85	272.06	269.88	.0500
*304.80	59.53	289.15	285.19	.0576	17.37

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
O.D. 4.500"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
5.500	*13.00	5.044	4.919	.0050	198.27
	14.00	5.012	4.887	.0047	211.37
	*15.00	4.974	4.849	.0044	229.23
	15.50	4.950	4.825	.0041	242.07
	17.00	4.892	4.767	.0036	279.61
	20.00	4.778	4.653	.0025	399.11
	23.00	4.670	4.545	.0015	660.35
*5.750	14.00	5.290	5.165	.0075	133.10
	17.00	5.190	5.065	.0065	153.96
	19.50	5.090	4.965	.0055	181.94
	22.50	4.990	4.865	.0045	221.37
*6.000	15.00	5.524	5.399	.0100	100.29
	16.00	5.500	5.375	.0097	102.94
	17.00	5.450	5.325	.0092	108.90
	18.00	5.424	5.299	.0089	112.26
	20.00	5.352	5.227	.0082	122.64
	23.00	5.240	5.115	.0070	142.82
26.00	5.140	5.015	.0060	166.85	
6.625	*17.00	6.135	6.010	.0169	59.20
	20.00	6.049	5.924	.0159	63.00
	*22.00	5.989	5.864	.0152	65.91
	24.00	5.921	5.796	.0144	69.52
	*26.00	5.855	5.730	.0136	73.37
	28.00	5.791	5.666	.0129	77.48
	*29.00	5.761	5.636	.0126	79.56
	32.00	5.675	5.550	.0116	86.10
7.000	17.00	6.538	6.413	.0219	45.76
	20.00	6.456	6.331	.0208	48.04
	*22.00	6.398	6.273	.0201	49.77
	23.00	6.366	6.241	.0197	50.77
	*24.00	6.336	6.211	.0193	51.74
	26.00	6.276	6.151	.0186	53.79
	*28.00	6.214	6.089	.0178	56.06
	29.00	6.184	6.059	.0175	57.22
	*30.00	6.154	6.029	.0171	58.42
	32.00	6.094	5.969	.0164	60.96
	*33.70	6.048	5.923	.0159	63.04
	35.00	6.004	5.879	.0153	65.16
	38.00	5.920	5.795	.0144	69.57
*40.00	5.836	5.711	.0134	74.55	
7.625	*20.00	7.125	7.000	.0296	33.73
	24.00	7.025	6.900	.0283	35.37
	26.40	6.969	6.844	.0275	36.35
	29.70	6.875	6.750	.0262	38.10
	33.70	6.765	6.640	.0248	40.35
	39.00	6.625	6.500	.0230	43.54
	*45.30	6.435	6.310	.0206	48.65
*7.750	46.10	6.560	6.500	.0221	45.18
*8.000	26.00	7.386	7.261	.0333	30.01
*8.125	28.00	7.485	7.360	.0348	28.77
	32.00	7.385	7.260	.0333	30.02
	35.50	7.285	7.160	.0319	31.36
	39.50	7.185	7.060	.0305	32.81
8.625	*20.00	8.191	8.066	.0455	21.98
	24.00	8.097	7.972	.0440	22.72
	28.00	8.017	7.892	.0428	23.38
	32.00	7.921	7.796	.0413	24.23

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 114.30 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
139.70	*19.35	128.12	124.94	.0026	379.97
	20.63	127.31	124.13	.0025	405.07
	*22.32	126.34	123.16	.0023	439.30
	23.07	125.73	122.56	.0022	463.91
	25.30	124.26	121.08	.0019	535.83
	29.76	121.36	118.19	.0013	764.85
	34.23	118.62	115.44	.0008	1265.48
*146.05	20.83	134.37	131.19	.0039	255.07
	25.30	131.83	128.65	.0034	295.05
	29.02	129.29	126.11	.0029	348.66
	33.48	126.75	123.57	.0024	424.24
*152.40	22.32	140.31	137.13	.0052	192.19
	23.81	139.70	136.53	.0051	197.28
	25.30	138.43	135.26	.0048	208.70
	26.79	137.77	134.59	.0046	215.14
	29.76	135.94	132.77	.0043	235.02
	34.23	133.10	129.92	.0037	213.71
	38.69	130.56	127.38	.0031	319.76
168.28	*25.30	155.83	152.65	.0088	113.45
	29.76	153.64	150.47	.0083	120.73
	*32.74	152.12	148.95	.0079	126.31
	35.72	150.39	147.22	.0075	133.22
	*38.69	148.72	145.54	.0071	140.60
	41.67	147.09	143.92	.0067	148.49
	*43.16	146.33	143.15	.0066	152.46
	47.62	144.15	140.97	.0061	165.01
	177.80	25.30	166.07	162.89	.0114
29.76		163.98	160.81	.0109	92.06
*32.74		162.51	159.33	.0105	95.37
34.23		161.70	158.52	.0103	97.30
*35.72		160.93	157.76	.0101	99.16
38.69		159.41	156.24	.0097	103.08
*41.67		157.84	154.66	.0093	107.43
43.16		157.07	153.90	.0091	109.65
*44.64		156.31	153.14	.0089	111.95
47.62		154.19	151.61	.0086	116.82
*50.15		153.62	150.44	.0083	120.82
52.09		152.50	149.33	.0080	124.87
56.55		150.37	147.19	.0075	133.33
*59.53		148.23	145.06	.0070	142.86
193.68	*29.76	180.98	177.80	.0155	64.65
	35.72	178.44	175.26	.0148	67.79
	39.29	177.01	173.84	.0144	69.67
	44.20	174.63	171.45	.0137	73.02
	50.15	171.83	168.66	.0129	77.32
	58.04	168.28	165.10	.0120	83.45
	*67.41	163.45	160.27	.0107	93.23
*196.85	68.60	166.62	165.10	.0115	86.59
*203.20	38.69	187.60	184.43	.0174	57.51
*206.38	41.67	190.12	186.94	.0181	55.14
	47.62	187.58	184.40	.0174	57.53
	52.83	185.04	181.86	.0166	60.11
	58.78	182.50	179.32	.0159	62.88
219.08	*29.76	208.05	204.88	.0237	42.11
	35.72	205.66	202.49	.0230	43.54

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 4.750"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*6.000	15.00	5.524	5.399	.0077	129.45
	16.00	5.500	5.375	.0075	133.91
	17.00	5.450	5.325	.0069	144.18
	18.00	5.424	5.299	.0067	150.12
	20.00	5.352	5.227	.0059	169.27
	23.00	5.240	5.115	.0048	210.29
	26.00	5.140	5.015	.0037	266.89
6.625	*17.00	6.135	6.010	.0146	68.28
	20.00	6.049	5.924	.0136	73.38
	*22.00	5.989	5.864	.0129	77.37
	24.00	5.921	5.796	.0121	82.38
	*26.00	5.855	5.730	.0114	87.85
	28.00	5.791	5.666	.0107	93.81
	*29.00	5.761	5.636	.0103	96.87
	32.00	5.675	5.550	.0094	106.75
7.000	17.00	6.538	6.413	.0196	51.00
	20.00	6.456	6.331	.0186	53.85
	*22.00	6.398	6.273	.0178	56.03
	23.00	6.366	6.241	.0175	57.31
	*24.00	6.336	6.211	.0171	58.55
	26.00	6.276	6.151	.0163	61.18
	*28.00	6.214	6.089	.0156	64.13
	29.00	6.184	6.059	.0152	65.65
	*30.00	6.154	6.029	.0149	67.24
	32.00	6.094	5.969	.0142	70.63
	*33.70	6.048	5.923	.0136	73.45
	35.00	6.004	5.879	.0131	76.33
	38.00	5.920	5.795	.0121	82.46
*40.00	5.836	5.711	.0112	89.54	
7.625	*20.00	7.125	7.000	.0274	36.50
	24.00	7.025	6.900	.0260	38.43
	26.40	6.969	6.844	.0253	39.59
	29.70	6.875	6.750	.0240	41.67
	33.70	6.765	6.640	.0225	44.37
	39.00	6.625	6.500	.0207	48.27
*45.30	6.435	6.310	.0183	54.62	
*7.750	46.10	6.560	6.500	.0199	50.29
*8.000	26.00	7.386	7.261	.0311	32.18
*8.125	28.00	7.485	7.360	.0325	30.76
	32.00	7.385	7.260	.0311	32.19
	35.50	7.285	7.160	.0296	33.74
	39.50	7.185	7.060	.0282	35.42
8.625	*20.00	8.191	8.066	.0433	23.12
	24.00	8.097	7.972	.0418	23.94
	28.00	8.017	7.892	.0405	24.68
	32.00	7.921	7.796	.0390	25.62
	36.00	7.825	7.700	.0376	26.62
	*38.00	7.775	7.650	.0368	27.17
	40.00	7.725	7.600	.0361	27.74
	*43.00	7.651	7.526	.0349	28.61
	44.00	7.625	7.500	.0346	28.93
	49.00	7.511	7.386	.0329	30.41
*8.750	49.70	7.636	7.500	.0347	28.80

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing	
BETWEEN CASINGS**				*O.D. 120.65 mm	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*152.40	22.32	140.31	137.13	.0040	248.08
	23.81	139.70	136.53	.0039	256.62
	25.30	138.43	135.26	.0036	276.30
	26.79	137.77	134.59	.0035	287.69
	29.76	135.94	132.77	.0031	324.39
	34.23	133.10	129.92	.0025	403.01
	38.69	130.56	127.38	.0020	511.46
168.28	*25.30	155.83	152.65	.0076	130.86
	29.76	153.64	150.47	.0071	140.63
	*32.74	152.12	148.95	.0067	148.27
	35.72	150.39	147.22	.0063	157.87
	*38.69	148.72	145.54	.0059	168.35
	41.67	147.09	143.92	.0056	179.78
	*43.16	146.33	143.15	.0054	135.64
	47.62	144.15	140.97	.0049	204.58
177.80	25.30	166.07	162.89	.0102	97.74
	29.76	163.98	160.81	.0097	103.19
	*32.74	162.51	159.33	.0093	107.38
	34.23	161.70	158.52	.0091	109.82
	*35.72	160.93	157.76	.0089	112.20
	38.69	159.41	156.24	.0085	117.25
	*41.67	157.84	154.66	.0081	122.90
	43.16	157.07	153.90	.0079	125.82
	*44.64	156.31	153.14	.0078	128.86
	47.62	154.79	151.61	.0074	135.36
	*50.15	153.62	150.44	.0071	140.75
52.09	152.50	149.33	.0068	146.29	
56.55	150.37	147.19	.0063	158.02	
*59.53	148.23	145.06	.0058	171.60	
193.68	*29.76	180.98	177.80	.0143	69.95
	35.72	178.44	175.26	.0136	73.64
	39.29	177.01	173.84	.0132	75.86
	44.20	174.63	171.45	.0125	79.86
	50.15	171.83	168.66	.0118	85.02
	58.04	168.28	165.10	.0108	92.50
	*67.41	163.45	160.27	.0096	104.67
*196.85	68.60	166.62	165.10	.0104	96.37
*203.20	38.69	187.60	184.43	.0162	61.67
*206.38	41.67	190.12	186.94	.0170	58.95
	47.62	187.58	184.40	.0162	61.70
	52.83	185.04	181.86	.0155	64.66
	58.78	182.50	179.32	.0147	67.88
	219.08	*29.76	208.05	204.88	.0226
35.12	205.66	202.49	.0218	45.88	
41.67	203.63	200.46	.0211	47.30	
47.62	201.19	198.02	.0204	49.10	
53.57	198.76	195.58	.0196	51.02	
*56.55	197.49	194.31	.0192	52.07	
59.53	196.22	193.04	.0188	53.16	
*63.99	194.34	191.16	.0182	54.84	
65.48	193.68	190.50	.0180	55.45	
72.92	190.78	187.60	.0172	58.27	
*222.25	73.96	193.95	190.50	.0181	55.19

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS				
O.D. 5.000"		VOLUME & HEIGHT				
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
7.000	17.00	6.538	6.413	.0172	58.01	
	20.00	6.456	6.331	.0162	61.72	
	*22.00	6.398	6.273	.0155	64.60	
	23.00	6.366	6.241	.0151	66.30	
	*24.00	6.336	6.211	.0147	67.97	
	26.00	6.276	6.151	.0140	71.55	
	*28.00	6.214	6.089	.0132	75.62	
	29.00	6.184	6.059	.0129	77.74	
	*30.00	6.154	6.029	.0125	79.97	
	32.00	6.094	5.969	.0118	84.82	
	*33.70	6.048	5.923	.0112	88.91	
	35.00	6.004	5.879	.0107	93.18	
	38.00	5.920	5.795	.0098	102.47	
	*40.00	5.836	5.711	.0088	113.64	
	7.625	*20.00	7.125	7.000	.0250	39.95
		24.00	7.025	6.900	.0237	42.27
26.40		6.969	6.844	.0229	43.68	
29.70		6.875	6.750	.0216	46.23	
33.70		6.765	6.640	.0202	49.57	
39.00		6.625	6.500	.0184	54.49	
*45.30		6.435	6.310	.0159	62.73	
*7.750	46.10	6.560	6.500	.0175	57.08	
*8.000	26.00	7.386	7.261	.0287	34.83	
*8.125	28.00	7.485	7.360	.0301	33.18	
	32.00	7.385	7.260	.0287	34.85	
	35.50	7.285	7.160	.0273	36.67	
	39.50	7.185	7.060	.0259	38.66	
8.625	*20.00	8.191	8.066	.0409	24.46	
	24.00	8.097	7.972	.0394	25.38	
	28.00	8.017	7.892	.0382	26.21	
	32.00	7.921	7.796	.0367	27.27	
	36.00	7.825	7.700	.0352	28.41	
	*38.00	7.775	7.650	.0344	29.04	
	40.00	7.725	7.600	.0337	29.69	
	*43.00	7.651	7.526	.0326	30.69	
	44.00	7.625	7.500	.0322	31.06	
	49.00	7.511	7.386	.0305	32.77	
*8.750	49.70	7.636	7.500	.0324	30.91	
*9.000	34.00	8.290	8.134	.0425	23.54	
	38.00	8.196	8.040	.0410	24.41	
	40.00	8.150	7.994	.0402	24.85	
	45.00	8.032	7.876	.0384	26.05	
	55.00	7.812	7.656	.0350	28.57	
9.625	*29.30	9.063	8.907	.0555	18.02	
	32.30	9.001	8.845	.0544	18.38	
	36.00	8.921	8.765	.0530	18.86	
	*38.00	8.885	8.760	.0524	19.08	
	40.00	8.835	8.679	.0515	19.40	
	43.50	8.755	8.599	.0502	19.93	
	47.00	8.681	8.525	.0489	20.44	
	53.50	8.535	8.379	.0465	21.52	
	*58.40	8.435	8.279	.0448	22.31	
	*61.10	8.375	8.219	.0439	22.80	
	*71.80	8.125	7.969	.0398	25.10	
	*9.750	59.20	8.560	8.500	.0469	21.32
	*9.875	62.80	8.625	8.500	.0480	20.84

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing
O.D. 127.0 mm**BETWEEN CASINGS****

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
177.80	25.30	166.07	162.89	.0090	111.17
	29.76	163.98	160.81	.0085	118.27
	*32.74	162.51	159.33	.0081	123.81
	34.23	161.70	158.52	.0079	127.06
	*35.72	160.93	157.76	.0077	130.26
	38.69	159.41	156.24	.0073	137.11
	*41.67	157.84	154.66	.0069	144.91
	43.16	157.07	153.90	.0067	148.98
	*44.64	156.31	153.14	.0065	153.26
	47.62	154.79	151.61	.0062	162.54
	*50.15	153.62	150.44	.0059	170.38
	52.09	152.50	149.33	.0056	178.56
	56.55	150.37	147.19	.0051	196.36
	*59.53	148.23	145.06	.0046	217.77
	193.68	*29.76	180.98	177.80	.0131
35.72		178.44	175.26	.0123	81.01
39.29		177.01	173.84	.0119	83.71
44.20		174.63	171.45	.0113	88.60
50.15		171.83	168.66	.0105	95.00
58.04		168.28	165.10	.0096	104.43
*67.41		163.45	160.27	.0083	120.22
*196.85	68.60	166.62	165.10	.0091	109.39
*203.20	38.69	187.60	184.43	.0150	66.75
*206.38	41.67	190.12	186.94	.0157	63.59
	47.62	187.58	184.40	.0150	66.79
	52.83	185.04	181.86	.0142	70.28
	58.78	182.50	179.32	.0135	74.10
	219.08	*29.76	208.05	204.88	.0213
	35.72	205.66	202.49	.0206	48.64
	41.67	203.63	200.46	.0199	50.23
	47.62	201.19	198.02	.0191	52.27
	53.57	198.76	195.58	.0184	54.45
	*56.55	197.49	194.31	.0180	55.65
	59.53	196.22	193.04	.0176	56.89
	*63.99	194.34	191.16	.0170	58.82
	65.48	193.68	190.50	.0168	59.53
	72.92	190.78	187.60	.0159	62.80
*222.25	73.96	193.95	190.50	.0169	59.23
*228.60	50.60	210.57	206.60	.0222	45.12
	56.55	208.18	204.22	.0214	46.78
	59.53	207.01	203.05	.0210	47.63
	66.97	204.01	200.05	.0200	49.93
	81.85	198.43	194.46	.0183	54.76
	244.48	*43.60	230.20	226.24	.0290
	48.07	228.63	224.66	.0284	35.22
	53.57	226.59	222.63	.0277	36.14
	*56.55	225.68	222.50	.0273	36.57
	59.53	224.41	220.45	.0269	37.18
	64.74	222.38	218.42	.0262	38.19
	69.94	220.50	216.54	.0255	39.17
	79.62	216.79	212.83	.0243	41.23
	*86.91	214.25	210.29	.0234	42.75
	*90.93	212.73	208.76	.0229	43.70
	*106.85	206.38	202.41	.0208	48.10
*247.65	88.10	217.42	215.90	.0245	40.87

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS				
O.D. 5.500"		VOLUME & HEIGHT				
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
7.000	17.00	6.538	6.413	0121	82.38	
	20.00	6.456	6.331	0111	90.06	
	*22.00	6.398	6.273	0104	96.35	
	23.00	6.366	6.241	0100	100.18	
	*24.00	6.336	6.211	0096	104.03	
	26.00	6.276	6.151	0089	112.65	
	*28.00	6.214	6.089	0081	123.08	
	29.00	6.184	6.059	0078	128.81	
	*30.00	6.154	6.029	0074	135.06	
	32.00	6.094	5.969	0067	149.48	
	*33.70	6.048	5.923	0061	162.67	
	35.00	6.004	5.879	0056	177.55	
	38.00	5.920	5.795	0047	214.62	
	*40.00	5.836	5.711	0037	270.27	
	7.625	*20.00	7.125	7.000	0199	50.18
24.00		7.025	6.900	0186	53.89	
26.40		6.969	6.844	0178	56.20	
29.70		6.875	6.750	0165	60.50	
33.70		6.765	6.640	0151	66.35	
39.00		6.625	6.500	0133	75.47	
*45.30	6.435	6.310	0108	92.25		
*7.750	46.10	6.560	6.500	0124	80.53	
*8.000	26.00	7.386	7.261	0236	42.36	
*8.125	28.00	7.485	7.360	0250	39.94	
	32.00	7.385	7.260	0236	42.38	
	35.50	7.285	7.160	0222	45.11	
	39.50	7.185	7.060	0208	48.16	
8.625	*20.00	8.191	8.066	0358	27.94	
	24.00	8.097	7.972	0343	29.15	
	28.00	8.017	7.892	0331	30.26	
	32.00	7.921	7.796	0316	31.68	
	36.00	7.825	7.700	0301	33.23	
	*38.00	7.775	7.650	0293	34.09	
	40.00	7.725	7.600	0286	34.98	
	*43.00	7.651	7.526	0275	36.39	
	44.00	7.625	7.500	0271	36.91	
	49.00	7.511	7.386	0254	39.34	
*8.750	49.70	7.636	7.500	0273	36.69	
*9.000	34.00	8.290	8.134	0374	26.76	
	38.00	8.196	8.040	0359	27.88	
	40.00	8.150	7.994	0351	28.46	
	45.00	8.032	7.876	0333	30.04	
	55.00	7.812	7.656	0299	33.45	
9.625	*29.30	9.063	8.907	0504	19.84	
	32.30	9.001	8.845	0493	20.28	
	36.00	8.921	8.765	0479	20.87	
	*38.00	8.885	8.760	0473	21.14	
	40.00	8.835	8.679	0464	21.53	
	43.50	8.755	8.599	0451	22.19	
	47.00	8.681	8.525	0438	22.82	
	53.50	8.535	8.379	0414	24.17	
	*58.40	8.435	8.279	0397	25.17	
	*61.10	8.375	8.219	0388	25.81	
	*71.80	8.125	7.969	0347	28.78	
	*9.750	59.20	8.560	8.500	0418	23.93
	*9.875	62.80	8.625	8.500	0429	23.32

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 139.70 mm

BETWEEN CASINGS**

OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
177.80	25.30	166.07	162.89	.0063	157.88	
	29.76	163.98	160.81	.0058	172.60	
	*32.74	162.51	159.33	.0054	184.64	
	34.23	161.70	158.52	.0052	191.98	
	*35.72	160.93	157.76	.0050	199.37	
	38.69	159.41	156.24	.0046	215.88	
	*41.67	157.84	154.66	.0042	235.87	
	43.16	157.07	153.90	.0041	246.85	
	*44.64	156.31	153.14	.0039	258.83	
	47.62	154.79	151.61	.0035	286.45	
	*50.15	153.62	150.44	.0032	311.74	
	52.09	152.50	149.33	.0029	340.25	
	56.55	150.37	147.19	.0024	411.30	
	*59.53	148.23	145.06	.0019	517.94	
	193.68	*29.76	180.98	177.80	.0104	96.16
35.72		178.44	175.26	.0097	103.28	
39.29		177.01	173.84	.0093	107.70	
44.20		174.63	171.45	.0086	115.94	
50.15		171.83	168.66	.0079	127.15	
58.04		168.28	165.10	.0069	144.62	
*67.41		163.45	160.27	.0057	176.78	
*196.85	68.60	166.62	165.10	.0065	154.32	
*203.20	38.69	187.60	184.43	.6123	81.17	
*206.38	41.67	190.12	186.94	.0131	76.54	
	47.62	187.58	184.40	.0123	81.22	
	52.83	185.04	181.86	.0116	86.44	
	58.78	182.50	179.32	.0108	92.30	
	219.08	*29.76	208.05	204.88	.0187	53.55
35.72		205.66	202.49	.0179	55.87	
41.67		203.63	200.46	.0172	57.98	
47.62		201.19	198.02	.0165	60.71	
53.57		198.76	195.58	.0157	63.68	
*56.55		197.49	194.31	.0153	65.32	
59.53		196.22	193.04	.0149	67.04	
*63.99		194.34	191.16	.0143	69.74	
65.48		193.68	190.50	.0141	70.73	
72.92		190.78	187.60	.0133	75.40	
*222.25	73.96	193.95	190.50	.0142	70.31	
*228.60	50.60	210.57	206.60	.0195	51.28	
	56.55	208.18	204.22	.0187	53.43	
	59.53	207.01	203.05	.0183	54.54	
	66.97	204.01	200.05	.0174	57.58	
	81.85	198.43	194.46	.0156	64.10	
	244.48	*43.60	230.20	226.24	.0263	38.02
48.07		228.63	224.66	.0257	38.86	
53.57		226.59	222.63	.0250	39.99	
*56.55		225.68	222.50	.0247	40.51	
59.53		224.41	220.45	.0242	41.26	
64.74		222.38	218.42	.0235	42.52	
69.94		220.50	216.54	.0229	43.73	
79.62		216.79	212.83	.0216	46.31	
*86.91		214.25	210.29	.0207	48.23	
*90.93		212.73	208.76	.0202	49.45	
*106.85		206.38	202.41	.0181	55.16	
*247.65		88.10	217.42	215.90	.0218	45.85
*250.83		93.46	219.08	215.90	.0224	44.69

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS				
"O.D. 5.750"		VOLUME & HEIGHT				
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
7.000	17.00	6.538	6.413	.0094	106.31	
	20.00	6.456	6.331	.0084	119.46	
	*22.00	6.398	6.273	.0076	130.77	
	23.00	6.366	6.241	.0073	137.93	
	*24.00	6.336	6.211	.0069	145.35	
	26.00	6.276	6.151	.0061	162.74	
	*28.00	6.214	6.089	.0054	185.44	
	29.00	6.184	6.059	.0050	198.75	
	*30.00	6.154	6.029	.0047	214.05	
	32.00	6.094	5.969	.0040	252.66	
	*33.70	6.048	5.923	.0034	292.80	
	35.00	6.004	5.879	.0029	344.80	
	38.00	5.920	5.795	.0019	518.88	
	7.625	*20.00	7.125	7.000	.0172	58.15
		24.00	7.025	6.900	.0158	63.20
26.40		6.969	6.844	.0151	66.39	
29.70		6.875	6.750	.0138	72.48	
33.70		6.765	6.640	.0123	81.04	
39.00		6.625	6.500	.0105	95.07	
*45.30		6.435	6.310	.0081	123.33	
*7.750	46.10	6.560	6.500	.0097	103.24	
*8.000	26.00	7.386	7.261	.0209	47.90	
*8.125	28.00	7.485	7.360	.0223	44.83	
	32.00	7.385	7.260	.0209	47.93	
	35.50	7.285	7.160	.0194	51.45	
	39.50	7.185	7.060	.0180	55.46	
8.625	*20.00	8.191	8.066	.0331	30.25	
	24.00	8.097	7.972	.0316	31.68	
	28.00	8.017	7.892	.0303	32.98	
	32.00	7.921	7.796	.0288	34.68	
	36.00	7.825	7.700	.0274	36.55	
	*38.00	7.775	7.650	.0266	37.59	
	40.00	7.725	7.600	.0259	38.68	
	*43.00	7.651	7.526	.0247	40.41	
	44.00	7.625	7.500	.0244	41.05	
49.00	7.511	7.386	.0227	44.08		
*8.750	49.70	7.636	7.500	.0245	40.78	
*9.000	34.00	8.290	8.134	.0346	28.87	
	38.00	8.196	8.040	.0331	30.18	
	40.00	8.150	7.994	.0324	30.86	
	45.00	8.032	7.876	.0306	32.73	
	55.00	7.812	7.656	.0272	36.81	
9.625	*29.30	9.063	8.907	.0477	20.98	
	32.30	9.001	8.845	.0466	21.47	
	36.00	8.921	8.765	.0452	22.13	
	*38.00	8.885	8.760	.0446	22.44	
	40.00	8.835	8.679	.0437	22.88	
	43.50	8.755	8.599	.0423	23.62	
	47.00	8.681	8.525	.0411	24.34	
	53.50	8.535	8.379	.0386	25.88	
	*58.40	8.435	8.279	.0370	27.03	
	*61.10	8.375	8.219	.0360	27.76	
	*71.80	8.125	7.969	.0320	31.24	
*9.750	59.20	8.560	8.500	.0391	25.60	
*9.875	62.80	8.625	8.500	.0401	24.91	
*10.000	33.00	9.384	9.228	.0534	18.72	

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing		
BETWEEN CASINGS**				*O.D. 146.05 mm		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
177.80	25.30	166.07	162.89	.0049	203.74	
	*29.76	163.98	160.81	.0044	228.93	
	*32.74	162.51	159.33	.0040	250.61	
	34.23	161.70	158.52	.0038	264.32	
	*35.72	160.93	157.76	.0036	278.54	
	38.69	159.41	156.24	.0032	311.87	
	*41.67	157.84	154.66	.0028	355.37	
	43.16	157.07	153.90	.0026	380.89	
	*44.64	156.31	153.14	.0024	410.20	
	47.62	154.79	151.61	.0021	484.19	
	*50.15	153.62	150.44	.0018	561.11	
	52.09	152.50	149.33	.0015	660.78	
	56.55	150.37	147.19	.0010	994.39	
	193.68	*29.76	180.98	177.80	.0090	111.44
		35.72	178.44	175.26	.0083	121.12
39.29		177.01	173.84	.0079	127.24	
44.20		174.63	171.45	.0072	138.90	
50.15		171.83	168.66	.0064	155.30	
58.04		168.28	165.10	.0055	182.19	
*67.41		163.45	160.27	.0042	236.35	
*196.85	68.60	166.62	165.10	.0051	197.85	
*203.20	38.69	187.60	184.43	.0109	91.80	
*206.38	41.67	190.12	186.94	.0116	85.91	
	47.62	187.58	184.40	.0109	91.86	
	52.83	185.04	181.86	.0101	98.60	
	58.78	182.50	179.32	.0094	106.28	
219.08	*29.76	208.05	204.88	.0172	51.97	
	35.72	205.66	202.49	.0165	60.70	
	41.67	203.63	200.46	.0158	63.21	
	47.62	201.19	198.02	.0150	66.47	
	53.57	198.76	195.58	.0143	70.04	
	*56.55	197.49	194.31	.0139	72.03	
	59.53	196.22	193.04	.0135	74.13	
	*63.99	194.34	191.16	.0129	77.44	
	65.48	193.68	190.50	.0127	78.66	
	72.92	190.78	187.60	.0118	84.48	
*222.25	73.96	193.95	190.50	.0128	78.14	
*228.60	50.60	210.57	206.60	.0181	55.32	
	56.55	208.18	204.22	.0173	57.83	
	59.53	207.01	203.05	.0169	59.14	
	66.97	204.01	200.05	.0159	62.73	
	81.85	198.43	194.46	.0142	70.54	
244.48	*43.60	230.20	226.24	.0249	40.20	
	48.07	228.63	224.66	.0243	41.14	
	53.57	226.59	222.63	.0236	42.41	
	*56.55	225.68	222.50	.0233	43.00	
	59.53	224.41	220.45	.0228	43.84	
	64.74	222.38	218.42	.0221	45.26	
	69.94	220.50	216.54	.0214	46.64	
	79.62	216.79	212.83	.0202	49.59	
	*86.91	214.25	210.29	.0193	51.80	
	*90.93	212.73	208.76	.0188	53.21	
	*106.85	206.38	202.41	.0167	59.87	
	*247.65	88.10	217.42	215.90	.0204	49.06
	*250.83	93.46	219.08	215.90	.0209	47.73
*254.00	49.11	238.35	234.39	.0279	35.87	

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 6.000"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
7.000	17.00	6.538	6.413	.0066	152.61
	20.00	6.456	6.331	.0055	181.24
	*22.00	6.398	6.273	.0048	208.62
	23.00	6.366	6.241	.0044	227.45
	*24.00	6.336	6.211	.0040	248.36
	26.00	6.276	6.151	.0033	303.83
	*28.00	6.214	6.089	.0025	393.84
	29.00	6.184	6.059	.0022	459.18
	*30.00	6.154	6.029	.0018	549.98
	7.625	*20.00	7.125	7.000	.0143
24.00		7.025	6.900	.0130	77.11
26.40		6.969	6.844	.0122	81.91
29.70		6.875	6.750	.0109	91.38
33.70		6.765	6.640	.0095	105.42
39.00		6.625	6.500	.0077	130.46
*45.30		6.435	6.310	.0053	190.31
*7.750	46.10	6.560	6.500	.0068	146.36
*8.000	26.00	7.386	7.261	.0180	55.49
*8.125	28.00	7.485	7.360	.0195	51.41
	32.00	7.385	7.260	.0180	55.53
	35.50	7.285	7.160	.0166	60.30
	39.50	7.185	7.060	.0152	65.89
8.625	*20.00	8.191	8.066	.0302	33.11
	24.00	8.097	7.972	.0287	34.82
	28.00	8.017	7.892	.0275	36.41
	32.00	7.921	7.796	.0260	38.49
	36.00	7.825	7.700	.0245	40.80
	*38.00	7.775	7.650	.0238	42.10
	40.00	7.725	7.600	.0230	43.48
	*43.00	7.651	7.526	.0219	45.68
	44.00	7.625	7.500	.0215	46.49
	49.00	7.511	7.386	.0198	50.42
*8.750	49.70	7.636	7.500	.0217	46.14
*9.000	34.00	8.290	8.134	.0318	31.46
	38.00	8.196	8.040	.0303	33.02
	40.00	8.150	7.994	.0296	33.84
	45.00	8.032	7.876	.0277	36.10
	55.00	7.812	7.656	.0243	41.13
9.625	*29.30	9.063	8.907	.0448	22.31
	32.30	9.001	8.845	.0437	22.87
	36.00	8.921	8.765	.0423	23.62
	*38.00	8.885	8.760	.0417	23.97
	40.00	8.835	8.679	.0409	24.48
	43.50	8.755	8.599	.0395	25.32
	47.00	8.681	8.525	.0382	26.15
	53.50	8.535	8.379	.0358	27.94
	*58.40	8.435	8.279	.0341	29.29
	*61.10	8.375	8.219	.0332	30.15
	*71.80	8.125	7.969	.0292	34.30
*9.750	59.20	8.560	8.500	.0362	27.62
*9.875	62.80	8.625	8.500	.0373	26.81
*10.000	33.00	9.384	9.228	.0506	19.77
10.750	32.75	10.192	10.036	.0659	15.17
	*35.75	10.136	9.980	.0648	15.42
	40.50	10.050	9.894	.0631	15.84
	45.50	9.950	9.794	.0612	16.34

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing		
BETWEEN CASINGS**				*O.D. 152.40 mm		
OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
177.80	25.30	166.07	162.89	.0034	292.46	
	*29.76	163.98	160.81	.0029	347.32	
	*32.74	162.51	159.33	.0025	399.80	
	34.23	161.70	158.52	.0023	435.88	
	*35.72	160.93	157.76	.0021	475.95	
	38.69	159.41	156.24	.0017	582.25	
	*41.67	157.84	154.66	.0013	754.75	
	43.16	157.07	153.90	.0011	879.97	
	*44.64	156.31	153.14	.0009	1053.99	
	193.68	*29.76	180.98	177.80	.0075	133.60
35.72		178.44	175.26	.0068	147.77	
39.29		177.01	173.84	.0064	156.98	
44.20		174.63	171.45	.0057	175.11	
50.15		171.83	168.66	.0050	202.02	
58.04		168.28	165.10	.0040	250.01	
*67.41		163.45	160.27	.0027	364.70	
*196.85		68.60	166.62	165.10	.0036	280.48
*203.20	38.69	187.60	184.43	.0094	106.33	
*206.38	41.67	190.12	186.94	.0102	98.51	
	47.62	187.58	184.40	.0094	106.42	
	52.83	185.04	181.86	.0081	115.56	
	58.78	182.50	179.32	.0079	126.26	
219.08	*29.76	208.05	204.88	.0158	63.45	
	35.72	205.66	202.49	.0150	66.73	
	41.67	203.63	200.46	.0143	69.78	
	47.62	201.19	198.02	.0136	73.77	
	53.57	198.76	195.58	.0128	78.19	
	*56.55	197.49	194.31	.0124	80.68	
	59.53	196.22	193.04	.0120	83.32	
	*63.99	194.34	191.16	.0114	87.53	
	65.48	193.68	190.50	.0112	89.10	
	72.92	190.78	187.60	.0103	96.63	
*222.25	73.96	193.95	190.50	.0113	88.43	
*228.60	50.60	210.57	206.60	.0166	60.28	
	56.55	208.18	204.22	.0158	63.28	
	59.53	207.01	203.05	.0154	64.85	
	66.97	204.01	200.05	.0145	69.19	
	81.85	198.43	194.46	.0127	78.82	
244.48	*43.60	230.20	226.24	.0234	42.76	
	48.07	228.63	224.66	.0228	43.82	
	53.57	226.59	222.63	.0221	45.26	
	*56.55	225.68	222.50	.0218	45.94	
	59.53	224.41	220.45	.0213	46.91	
	64.74	222.38	218.42	.0206	48.53	
	69.94	220.50	216.54	.0200	50.12	
	79.62	216.79	212.83	.0187	53.54	
	*86.91	214.25	210.29	.0178	56.13	
	*90.93	212.73	208.76	.0173	57.78	
	*106.85	206.38	202.41	.0152	65.72	
	*247.65	88.10	217.42	215.90	.0189	52.93
	*250.83	93.46	219.08	215.90	.0195	51.39
*254.00	49.11	238.35	234.39	.0264	37.89	
273.05	48.74	258.88	254.91	.0344	29.06	
	*53.20	257.45	253.49	.0338	29.56	
	60.27	255.27	251.31	.0330	30.35	
	67.71	252.73	248.77	.0319	31.31	

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
O.D. 6.625"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
7.625	*20.00	7.125	7.000	.0067	149.73
	24.00	7.025	6.900	.0053	188.54
	26.40	6.969	6.844	.0045	220.13
	29.70	6.875	6.750	.0033	305.01
	33.70	6.765	6.640	.0018	549.14
*8.000	26.00	7.386	7.261	.0104	96.55
*8.125	28.00	7.485	7.360	.0118	84.83
	32.00	7.385	7.260	.0103	96.68
	35.50	7.285	7.160	.0089	112.13
	39.50	7.185	7.060	.0075	133.11
8.625	*20.00	8.191	8.066	.0225	44.37
	24.00	8.097	7.972	.0211	47.50
	28.00	8.017	7.892	.0198	50.51
	32.00	7.921	7.796	.0183	54.61
	36.00	7.825	7.700	.0168	59.37
	*38.00	7.775	7.650	.0161	62.16
	40.00	7.725	7.600	.0153	65.21
	*43.00	7.651	7.526	.0142	70.28
	44.00	7.625	7.500	.0138	72.24
	49.00	7.511	7.386	.0122	82.19
*8.750	49.70	7.636	7.500	.0140	71.40
*9.000	34.00	8.290	8.134	.0241	41.45
	38.00	8.196	8.040	.0226	44.21
	40.00	8.150	7.994	.0219	45.69
	45.00	8.032	7.876	.0200	49.92
	55.00	7.812	7.656	.0166	60.07
9.625	*29.30	9.063	8.907	.0372	26.91
	32.30	9.001	8.845	.0361	27.73
	36.00	8.921	8.765	.0347	28.84
	*38.00	8.885	8.760	.0341	29.37
	40.00	8.835	8.679	.0332	30.13
	43.50	8.755	8.599	.0318	31.42
	47.00	8.681	8.525	.0306	32.71
	53.50	8.535	8.379	.0281	35.55
	*58.40	8.435	8.279	.0265	37.76
	*61.10	8.375	8.219	.0255	39.22
	*71.80	8.125	7.969	.0215	46.53
*9.750	59.20	8.560	8.500	.0285	35.03
*9.875	62.80	8.625	8.500	.0296	33.75
*10.000	33.00	9.384	9.228	.0429	23.31
10.750	32.75	10.192	10.036	.0583	17.16
	*35.75	10.136	9.980	.0572	17.49
	40.50	10.050	9.894	.0555	18.02
	45.50	9.950	9.794	.0535	18.68
	51.00	9.850	9.694	.0516	19.37
	*54.00	9.784	9.628	.0504	19.86
	55.50	9.760	9.604	.0499	20.04
	*60.70	9.660	9.504	.0480	20.83
	*65.70	9.560	9.404	.0461	21.67
	*71.10	9.450	9.294	.0441	22.67

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing	
BETWEEN CASINGS**				O.D. 168.28 mm	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
193.68	*29.76	180.98	177.80	.0035	286.95
	35.72	178.44	175.26	.0028	361.31
	39.29	177.01	173.84	.0024	421.86
	44.20	174.63	171.45	.0017	584.52
	50.15	171.83	168.66	.0010	1052.36
*203.20	38.69	187.60	184.43	.0054	185.02
*206.38	41.67	190.12	186.94	.0062	162.57
	47.62	187.58	184.40	.0054	185.28
	52.83	185.04	181.86	.0047	214.88
	58.78	182.50	179.32	.0039	255.09
219.08	*29.76	208.05	204.88	.0118	85.03
	35.72	205.66	202.49	.0110	91.03
	41.67	203.63	200.46	.0103	96.79
	47.62	201.19	198.02	.0096	104.65
	53.57	198.76	195.58	.0088	113.77
	*56.55	197.49	194.31	.0084	119.13
	59.53	196.22	193.04	.0080	124.98
	*63.99	194.34	191.16	.0074	134.69
	65.48	193.68	190.50	.0072	138.44
	72.92	190.78	187.60	.0063	157.51
*222.25	73.96	193.95	190.50	.0073	136.83
*228.60	50.60	210.57	206.60	.0126	79.44
	56.55	208.18	204.22	.0118	84.73
	59.53	207.01	203.05	.0114	87.55
	66.97	204.01	200.05	.0105	95.66
	81.85	198.43	194.46	.0087	115.12
244.48	*43.60	230.20	226.24	.0194	51.58
	48.07	228.63	224.66	.0188	53.13
	53.57	226.59	222.63	.0181	55.27
	*56.55	225.68	222.50	.0178	56.28
	59.53	224.41	220.45	.0173	57.74
	64.74	222.38	218.42	.0166	60.22
	69.94	220.50	216.54	.0160	62.69
	79.62	216.79	212.83	.0147	68.13
	*86.91	214.25	210.29	.0138	72.37
	*90.93	212.73	208.76	.0133	75.15
	*106.85	206.38	202.41	.0112	89.16
	*247.65	88.10	217.42	215.90	.0149
*250.83	93.46	219.08	215.90	.0155	64.68
*254.00	49.11	238.35	234.39	.0224	44.66
273.05	48.74	258.88	254.91	.0304	32.89
	*53.20	257.45	253.49	.0298	33.52
	60.27	255.27	251.31	.0290	34.54
	67.71	252.73	248.77	.0279	35.80
	75.90	250.19	246.23	.0269	37.13
	*80.36	248.51	244.55	.0263	38.06
	82.59	247.90	243.94	.0260	38.41
	*90.33	245.36	241.40	.0251	39.91
	*97.77	242.82	238.86	.0241	41.53
	*105.81	240.03	236.07	.0230	43.44

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS				
O.D. 7.000"		VOLUME & HEIGHT				
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
8.625	*20.00	8.191	8.066	.0176	56.90	
	24.00	8.097	7.972	.0161	62.16	
	28.00	8.017	7.892	.0148	67.40	
	32.00	7.921	7.796	.0133	74.91	
	36.00	7.825	7.700	.0119	84.17	
	*38.00	7.775	7.650	.0111	89.90	
	40.00	7.725	7.600	.0104	96.43	
	*43.00	7.651	7.526	.0093	107.93	
	44.00	7.625	7.500	.0089	112.62	
	49.00	7.511	7.386	.0072	138.83	
	*8.750	49.70	7.636	7.500	.0090	110.59
	*9.000	34.00	8.290	8.134	.0192	52.19
38.00		8.196	8.040	.0177	56.64	
40.00		8.150	7.994	.0169	59.09	
45.00		8.032	7.876	.0151	66.36	
55.00		7.812	7.656	.0117	85.59	
9.625	*29.30	9.063	8.907	.0322	31.06	
	32.30	9.001	8.845	.0311	32.15	
	36.00	8.921	8.765	.0297	33.66	
	*38.00	8.885	8.760	.0291	34.38	
	40.00	8.835	8.679	.0282	35.43	
	43.50	8.755	8.599	.0269	37.23	
	47.00	8.681	8.525	.0256	39.05	
	53.50	8.535	8.379	.0232	43.17	
	*58.40	8.435	8.279	.0215	46.48	
	*61.10	8.375	8.219	.0205	48.69	
	*71.80	8.125	7.969	.0165	60.50	
	*9.750	59.20	8.560	8.500	.0236	42.41
*9.875	62.80	8.625	8.500	.0247	40.54	
*10.000	33.00	9.384	9.228	.0379	26.36	
10.750	32.75	10.192	10.036	.0533	18.76	
	*35.75	10.136	9.980	.0522	19.16	
	40.50	10.050	9.894	.0505	19.80	
	45.50	9.950	9.794	.0486	20.59	
	51.00	9.850	9.694	.0467	21.44	
	*54.00	9.784	9.628	.0454	22.03	
	55.50	9.760	9.604	.0449	22.25	
	*60.70	9.660	9.504	.0430	23.23	
	*65.70	9.560	9.404	.0412	24.28	
	*71.10	9.450	9.294	.0392	25.54	
11.750	*38.00	11.150	10.994	.0732	13.67	
	42.00	11.084	10.928	.0717	13.94	
	47.00	11.000	10.844	.0699	14.30	
	54.00	10.880	10.724	.0674	14.84	
	60.00	10.772	10.616	.0651	15.36	
	*65.00	10.682	10.526	.0632	15.81	
	*71.00	10.586	10.430	.0613	16.32	
	*11.875	71.80	10.711	10.625	.0638	15.66
*12.000	40.00	11.384	11.228	.0783	12.77	
*13.000	40.00	12.438	12.282	.1027	9.74	
	45.00	12.360	12.204	.1008	9.92	
	50.00	12.282	12.126	.0989	10.11	
	54.00	12.220	12.064	.0975	10.26	
	13.375	48.00	12.715	12.559	.1095	9.14
54.50		12.615	12.459	.1070	9.35	
61.00		12.515	12.359	.1045	9.56	

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 177.80 mm

BETWEEN CASINGS**

OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
219.08	*29.76	208.05	204.88	.0092	109.04	
	35.72	205.66	202.49	.0084	119.12	
	41.67	203.63	200.46	.0077	129.17	
	47.62	201.19	198.02	.0070	143.55	
	53.57	198.76	195.58	.0062	161.30	
	*56.55	197.49	194.31	.0058	172.28	
	59.53	196.22	193.04	.0054	184.79	
	*63.99	194.34	191.16	.0048	206.84	
	65.48	193.68	190.50	.0046	215.82	
	72.92	190.78	187.60	.0038	266.05	
*222.25	73.96	193.95	190.50	.0047	211.93	
*228.60	50.60	210.57	206.60	.0100	100.02	
	56.55	208.18	204.22	.0092	108.55	
	59.53	207.01	203.05	.0088	113.23	
	66.97	204.01	200.05	.0079	127.17	
	81.85	198.43	194.46	.0061	164.02	
244.48	*43.60	230.20	226.24	.0168	59.53	
	48.07	228.63	224.66	.0162	61.61	
	53.57	226.59	222.63	.0155	64.50	
	*56.55	225.68	222.50	.0152	65.88	
	59.53	224.41	220.45	.0147	67.89	
	64.74	222.38	218.42	.0140	71.35	
	69.94	220.50	216.54	.0134	74.84	
	79.62	216.79	212.83	.0121	82.73	
	*86.91	214.25	210.29	.0112	89.07	
	*90.93	212.73	208.76	.0107	93.32	
	*106.85	206.38	202.41	.0086	115.94	
	*247.65	88.10	217.42	215.90	.0123	81.27
	*250.83	93.46	219.08	215.90	.0129	77.70
*254.00	49.11	238.35	234.39	.0198	50.51	
273.05	48.74	258.88	254.91	.0278	35.95	
	*53.20	257.45	253.49	.0272	36.71	
	60.27	255.27	251.31	.0264	37.94	
	67.71	252.73	248.77	.0253	39.45	
	75.90	250.19	246.23	.0243	41.08	
	*80.36	248.51	244.55	.0237	42.22	
	82.59	247.90	243.94	.0234	42.65	
	*90.33	245.36	241.40	.0225	44.52	
	*97.77	242.82	238.86	.0215	46.53	
	*105.81	240.03	236.07	.0204	48.95	
298.45	*56.55	283.21	279.25	.0382	26.19	
	62.50	281.53	277.57	.0374	26.71	
	69.94	279.40	275.44	.0365	27.40	
	80.36	276.35	272.39	.0352	28.44	
	89.29	273.61	269.65	.0340	29.43	
	*96.73	271.32	267.36	.0330	30.30	
	*105.66	268.88	264.92	.0320	31.28	
*301.63	106.85	272.06	269.88	.0333	30.02	
*304.80	59.53	289.15	285.19	.0409	24.48	
*330.20	59.53	315.93	311.96	.0536	18.66	
	66.97	313.94	309.98	.0526	19.01	
	74.41	311.96	308.00	.0516	19.37	
	80.36	310.39	306.43	.0509	19.66	
339.73	71.43	322.96	319.00	.0571	17.51	
	81.10	320.42	316.46	.0558	17.91	
	90.78	317.88	313.92	.0546	18.33	

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
O.D. 7.625"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
8.625	*20.00	8.191	8.066	.0087	114.99
	24.00	8.097	7.972	.0072	138.72
	28.00	8.017	7.892	.0060	167.88
	32.00	7.921	7.796	.0045	223.71
	36.00	7.825	7.700	.0030	333.14
	*38.00	7.775	7.650	.0022	445.63
*9.000	34.00	8.290	8.134	.0103	97.27
	38.00	8.196	8.040	.0088	113.95
	40.00	8.150	7.994	.0080	124.30
	45.00	8.032	7.876	.0062	161.54
	55.00	7.812	7.656	.0028	356.60
9.625	*29.30	9.063	8.907	.0233	42.90
	32.30	9.001	8.845	.0222	45.00
	36.00	8.921	8.765	.0208	48.01
	*38.00	8.885	8.760	.0202	49.48
	40.00	8.835	8.679	.0193	51.69
	43.50	8.755	8.599	.0180	55.62
	47.00	8.681	8.525	.0167	59.78
	53.50	8.535	8.379	.0143	70.00
	*58.40	8.435	8.279	.0126	79.13
	*61.10	8.375	8.219	.0117	85.78
	*71.80	8.125	7.969	.0076	130.72
*9.750	59.20	8.560	8.500	.0147	68.02
*9.875	62.80	8.625	8.500	.0158	63.35
*10.000	33.00	9.384	9.228	.0291	34.41
10.750	32.75	10.192	10.036	.0444	22.51
	*35.75	10.136	9.980	.0433	23.08
	40.50	10.050	9.894	.0416	24.02
	45.50	9.950	9.794	.0397	25.19
	51.00	9.850	9.694	.0378	26.48
	*54.00	9.784	9.628	.0365	27.39
	55.50	9.760	9.604	.0361	27.73
	*60.70	9.660	9.504	.0342	29.27
	*65.70	9.560	9.404	.0323	30.96
*71.10	9.450	9.294	.0303	33.03	
11.750	*38.00	11.150	10.994	.0643	15.55
	42.00	11.084	10.928	.0629	15.91
	47.00	11.000	10.844	.0611	16.38
	54.00	10.880	10.724	.0585	17.09
	60.00	10.772	10.616	.0562	17.78
	*65.00	10.682	10.526	.0544	18.39
*71.00	10.586	10.430	.0524	19.09	
*11.875	71.80	10.711	10.625	.0550	18.19
*12.000	40.00	11.384	11.228	.0694	14.41
*13.000	40.00	12.438	12.282	.0938	10.66
	45.00	12.360	12.204	.0919	10.88
	50.00	12.282	12.126	.0901	11.10
	54.00	12.220	12.064	.0886	11.29
13.375	48.00	12.715	12.559	.1006	9.94
	54.50	12.615	12.459	.0981	10.19
	61.00	12.515	12.359	.0957	10.45
	68.00	12.415	12.259	.0932	10.72
	72.00	12.347	12.191	.0916	10.92
	*77.00	12.275	12.119	.0899	11.12
	*80.70	12.215	12.059	.0885	11.30
	*83.00	12.175	12.019	.0875	11.43

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing	
BETWEEN CASINGS**				O.D. 193.68 mm	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m ³ /m
219.08	*29.76	208.05	204.88	.0045	220.37
	35.72	205.66	202.49	.0038	265.84
	41.67	203.63	200.46	.0031	321.73
	47.62	201.19	198.02	.0023	428.71
	53.57	198.76	195.58	.0016	638.43
	*56.55	197.49	194.31	.0012	854.01
*228.60	50.60	210.57	206.60	.0054	186.40
	56.55	208.18	204.22	.0046	218.38
	59.53	207.01	203.05	.0042	238.20
	66.97	204.01	200.05	.0032	309.58
	81.85	198.43	194.46	.0015	683.39
	244.48	*43.60	230.20	226.24	.0122
48.07		228.63	224.66	.0116	86.23
53.57		226.59	222.63	.0109	92.00
*56.55		225.68	222.50	.0105	94.83
59.53		224.41	220.45	.0101	99.05
64.74		222.38	218.42	.0094	106.58
69.94		220.50	216.54	.0087	114.57
79.62		216.79	212.83	.0075	134.15
*86.91		214.25	210.29	.0066	151.65
*90.93		212.73	208.76	.0061	164.40
*106.85		206.38	202.41	.0040	250.51
*247.65		88.10	217.42	215.90	.0077
*250.83	93.46	219.08	215.90	.0082	121.40
*254.00	49.11	238.35	234.39	.0152	65.94
273.05	48.74	258.88	254.91	.0232	43.13
	*53.20	257.45	253.49	.0226	44.23
	60.27	255.27	251.31	.0217	46.03
	67.71	252.73	248.77	.0207	48.28
	75.90	250.19	246.23	.0197	50.74
	*80.36	248.51	244.55	.0191	52.49
	82.59	247.90	243.94	.0188	53.15
	*90.33	245.36	241.40	.0178	56.08
	*97.77	242.82	238.86	.0169	59.33
	*105.81	240.03	236.07	.0158	63.31
298.45	*56.55	283.21	279.25	.0335	29.81
	62.50	281.53	277.57	.0328	30.48
	69.94	279.40	275.44	.0319	31.38
	80.36	276.35	272.39	.0305	32.75
	89.29	273.61	269.65	.0293	34.07
	*96.73	271.32	267.36	.0284	35.25
*105.66	268.88	264.92	.0273	36.58	
*301.63	106.85	272.06	269.88	.0287	34.86
*304.80	59.53	289.15	285.19	.0362	27.61
*330.20	59.53	315.93	311.96	.0489	20.43
	66.97	313.94	309.98	.0480	20.85
	74.41	311.96	308.00	.0470	21.28
	80.36	310.39	306.43	.0462	21.63
339.73	71.43	322.96	319.00	.0525	19.05
	81.10	320.42	316.46	.0512	19.53
	90.78	317.88	313.92	.0499	20.03
	101.20	315.34	311.38	.0487	20.55
	107.15	313.61	309.65	.0478	21.32
	*114.59	311.79	307.62	.0469	21.32
	*120.09	310.26	306.00	.0462	21.66
	*123.52	309.25	305.28	.0457	21.90

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 7.750"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*9.000	34.00	8.290	8.134	.0084	118.85
	38.00	8.196	8.040	.0069	144.74
	40.00	8.150	7.994	.0062	161.86
	45.00	8.032	7.876	.0043	231.30
9.625	*29.30	9.063	8.907	.0214	46.63
	32.30	9.001	8.845	.0204	49.12
	36.00	8.921	8.765	.0190	52.73
	*38.00	8.885	8.760	.0183	54.52
	40.00	8.835	8.679	.0175	57.21
	43.50	8.755	8.599	.0161	62.06
	47.00	8.681	8.525	.0149	67.29
	53.50	8.535	8.379	.0124	80.53
	*58.40	8.435	8.279	.0108	92.85
	*61.10	8.375	8.219	.0098	102.14
	*71.80	8.125	7.969	.0058	172.92
*9.750	59.20	8.560	8.500	.0128	77.92
*9.875	62.80	8.625	8.500	.0139	71.85
*10.000	33.00	9.384	9.228	.0272	36.77
10.750	32.75	10.192	10.036	.0426	23.49
	*35.75	10.136	9.980	.0415	24.12
	40.50	10.050	9.894	.0398	25.14
	45.50	9.950	9.794	.0378	26.44
	51.00	9.850	9.694	.0359	27.85
	*54.00	9.784	9.628	.0346	28.86
	55.50	9.760	9.604	.0342	29.25
	*60.70	9.660	9.504	.0323	30.96
	*65.70	9.560	9.404	.0304	32.86
	*71.10	9.450	9.294	.0284	35.21
11.750	*38.00	11.150	10.994	.0624	16.02
	42.00	11.084	10.928	.0610	16.39
	47.00	11.000	10.844	.0592	16.89
	54.00	10.880	10.724	.0566	17.65
	60.00	10.772	10.616	.0544	18.39
	*65.00	10.682	10.526	.0525	19.05
	*71.00	10.586	10.430	.0505	19.80
*11.875	71.80	10.711	10.625	.0531	18.83
*12.000	40.00	11.384	11.228	.0675	14.80
*13.000	40.00	12.438	12.282	.0919	10.88
	45.00	12.360	12.204	.0901	11.10
	50.00	12.282	12.126	.0882	11.34
	54.00	12.220	12.064	.0867	11.53
13.375	48.00	12.715	12.559	.0987	10.13
	54.50	12.615	12.459	.0962	10.39
	61.00	12.515	12.359	.0938	10.66
	68.00	12.415	12.259	.0914	10.94
	72.00	12.347	12.191	.0897	11.14
	*77.00	12.275	12.119	.0880	11.36
	*80.70	12.215	12.059	.0866	11.55
	*83.00	12.175	12.019	.0856	11.68
	*85.00	12.159	12.003	.0853	11.73
	*86.00	12.125	11.969	.0845	11.84
	*92.00	12.031	11.875	.0823	12.16
*98.00	11.937	11.781	.0801	12.49	
*13.500	81.40	12.340	12.250	.0896	11.16

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing	
BETWEEN CASINGS**				*O.D. 196.85 mm	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*228.60	50.60	210.57	206.60	.0044	227.76
	56.55	208.18	204.22	.0036	277.39
	59.53	207.01	203.05	.0032	310.18
	66.97	204.01	200.05	.0023	443.26
244.48	*43.60	230.20	226.24	.0112	89.36
	48.07	228.63	224.66	.0106	94.14
	53.57	226.59	222.63	.0099	101.05
	*56.55	225.68	222.50	.0096	104.49
	59.53	224.41	220.45	.0091	109.63
	64.74	222.38	218.42	.0084	118.93
	69.94	220.50	216.54	.0078	128.96
	79.62	216.79	212.83	.0065	154.32
	*86.91	214.25	210.29	.0056	177.94
	*90.93	212.73	208.76	.0051	195.75
	*106.85	206.38	202.41	.0030	331.38
	*247.65	88.10	217.42	215.90	.0067
*250.83	93.46	219.08	215.90	.0073	137.68
*254.00	49.11	238.35	234.39	.0142	70.46
273.05	48.74	258.88	254.91	.0222	45.03
	*53.20	257.45	253.49	.0216	46.23
	60.27	255.27	251.31	.0208	48.19
	67.71	252.73	248.77	.0197	50.66
	75.90	250.19	246.23	.0187	53.38
	*80.36	248.51	244.55	.0181	55.31
	82.59	247.90	243.94	.0178	56.05
	*90.33	245.36	241.40	.0169	59.33
	*97.77	242.82	238.86	.0159	62.96
	*105.81	240.03	236.07	.0148	67.47
	298.45	*56.55	283.21	279.25	.0326
62.50		281.53	277.57	.0318	31.42
69.94		279.40	275.44	.0309	32.37
80.36		276.35	272.39	.0296	33.83
89.29		273.61	269.65	.0284	35.24
*96.73		271.32	267.36	.0274	36.50
*105.66		268.88	264.92	.0264	37.94
*301.63		106.85	272.06	269.88	.0277
*304.80	59.53	289.15	285.19	.0352	28.37
*330.20	59.53	315.93	311.96	.0480	20.84
	66.97	313.94	309.98	.0470	21.28
	74.41	311.96	308.00	.0460	21.73
	80.36	310.39	306.43	.0452	22.10
339.73	71.43	322.96	319.00	.0515	19.42
	81.10	320.42	316.46	.0502	19.91
	90.78	317.88	313.92	.0489	20.43
	101.20	315.34	311.38	.0477	20.97
	107.15	313.61	309.65	.0468	21.35
	*114.59	311.79	307.82	.0459	21.77
	*120.09	310.26	306.30	.0452	22.13
	*123.52	309.25	305.28	.0447	22.37
	*126.49	308.84	304.88	.0445	22.47
	*127.98	307.98	304.01	.0441	22.69
	*136.91	305.59	301.63	.0429	23.30
	*145.84	303.20	299.24	.0418	23.93
	*342.90	121.14	313.44	311.15	.0467

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 8.000"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*9.000	34.00 38.00	8.290 8.196	8.134 8.040	.0046 .0031	217.91 324.28
9.625	*29.30 32.30 36.00 *38.00 40.00 43.50 47.00 53.50 *58.40 *61.10	9.063 9.001 8.921 8.885 8.835 8.755 8.681 8.535 8.435 8.375	8.907 8.845 8.765 8.760 8.679 8.599 8.525 8.379 8.279 8.219	.0176 .0165 .0151 .0145 .0137 .0123 .0110 .0086 .0069 .0060	56.75 60.49 66.05 68.89 73.23 81.38 90.62 116.37 143.99 167.64
*9.750	59.20	8.560	8.500	.0090	111.00
*9.875	62.80	8.625	8.500	.0101	99.07
*10.000	33.00	9.384	9.228	.0234	42.79
10.750	32.75 *35.75 40.50 45.50 51.00 *54.00 55.50 *60.70 *65.70 *71.10	10.192 10.136 10.050 9.950 9.850 9.784 9.760 9.660 9.560 9.450	10.036 9.980 9.894 9.794 9.694 9.628 9.604 9.504 9.404 9.294	.0387 .0376 .0359 .0340 .0321 .0308 .0304 .0285 .0266 .0246	25.81 26.57 27.62 29.41 31.17 32.45 32.93 35.11 37.58 40.68
11.750	*38.00 42.00 47.00 54.00 60.00 *65.00 *71.00	11.150 11.084 11.000 10.880 10.772 10.682 10.586	10.994 10.928 10.844 10.724 10.616 10.526 10.430	.0586 .0572 .0554 .0528 .0505 .0487 .0467	17.07 17.49 18.06 18.93 19.78 20.55 21.42
*11.875	71.80	10.711	10.625	.0493	20.29
*12.000	40.00	11.384	11.228	.0637	15.69
*13.000	40.00 45.00 50.00 54.00	12.438 12.360 12.282 12.220	12.282 12.204 12.126 12.064	.0881 .0862 .0844 .0829	11.35 11.60 11.85 12.06
13.375	48.00 54.50 61.00 68.00 72.00 *77.00 *80.70 *83.00 *85.00 *86.00 *92.00 *98.00	12.715 12.615 12.515 12.415 12.347 12.275 12.215 12.175 12.159 12.125 12.031 11.937	12.559 12.459 12.359 12.259 12.191 12.119 12.059 12.019 12.003 11.969 11.875 11.781	.0949 .0924 .0900 .0876 .0859 .0842 .0828 .0818 .0814 .0806 .0784 .0762	10.54 10.82 11.11 11.42 11.64 11.88 12.08 12.22 12.28 12.40 12.75 13.11
*13.500	81.40	12.340	12.250	.0858	11.66

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 203.20 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*228.60	50.60 56.55	210.57 208.18	206.60 204.22	.0024 .0016	417.60 621.46
244.48	*43.60 48.07 53.57 *56.55 59.53 64.74 69.94 79.62 *86.91 *90.93	230.20 228.63 226.59 225.68 224.41 222.38 220.50 216.79 214.25 212.73	226.24 224.66 222.63 222.50 218.42 216.54 212.83 210.29 208.76	.0092 .0086 .0079 .0076 .0071 .0064 .0058 .0045 .0036 .0031	108.76 115.92 126.59 132.02 140.34 155.95 173.66 223.01 275.94 321.26
*247.65	88.10	217.42	215.90	.0047	212.73
*250.83	93.46	219.08	215.90	.0053	189.86
*254.00	49.11	238.35	234.39	.0122	82.00
273.05	48.74 *53.20 60.27 67.71 75.90 *80.36 82.59 *90.33 *97.77 *105.81	258.88 257.45 255.27 252.73 250.19 248.51 247.90 245.36 242.82 240.03	254.91 253.49 251.31 248.77 246.23 244.55 243.94 241.40 238.86 236.07	.0202 .0196 .0188 .0177 .0167 .0161 .0158 .0149 .0139 .0128	49.47 50.93 53.31 56.36 59.74 62.18 63.11 67.29 72.02 77.97
298.45	*56.55 62.50 69.94 80.36 89.29 *96.73 *105.66	283.21 281.53 279.40 276.35 273.61 271.32 268.88	279.25 277.57 275.44 272.39 269.65 267.36 264.92	.0306 .0298 .0289 .0276 .0264 .0254 .0244	32.70 33.52 34.61 36.28 37.91 39.37 41.04
*301.63	106.85	272.06	269.88	.0257	38.89
*304.80	59.53	289.15	285.19	.0333	30.07
*330.20	59.53 66.97 74.41 80.36	315.93 313.94 311.96 310.39	311.96 309.98 308.00 306.43	.0460 .0450 .0440 .0433	21.75 22.22 22.72 23.12
339.73	71.43 81.10 90.78 101.20 107.15 *114.59 *120.09 *123.52 *126.49 *127.98 *136.91 *145.84	322.96 320.42 317.88 315.34 313.61 311.79 310.26 309.25 308.84 307.98 305.59 303.20	319.00 316.46 313.92 311.38 309.65 307.82 306.30 305.28 304.88 304.01 301.63 299.24	.0495 .0482 .0470 .0457 .0448 .0439 .0432 .0427 .0425 .0421 .0409 .0398	20.20 20.74 21.30 21.89 22.30 22.76 23.15 23.42 23.53 23.76 24.43 25.13
*342.90	121.14	313.44	311.15	.0447	22.35

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 8.125"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*9.000	34.00	8.290	8.134	.0026	380.07
9.625	*29.30 32.30 36.00 *38.00 40.00 43.50 47.00 53.50 *58.40 *61.10	9.063 9.001 8.921 8.885 8.835 8.755 8.681 8.535 8.435 8.375	8.907 8.845 8.765 8.760 8.679 8.599 8.525 8.379 8.279 8.219	.0157 .0146 .0132 .0126 .0117 .0103 .0091 .0066 .0050 .0040	63.85 68.62 75.87 79.63 85.49 96.80 110.17 150.71 200.52 249.55
*9.750	59.20	8.560	8.500	.0071	141.83
*9.875	62.80	8.625	8.500	.0081	122.92
*10.000	33.00	9.384	9.228	.0214	46.70
10.750	32.75 *35.75 40.50 45.50 51.00 *54.00 55.50 *60.70 *65.70 *71.10	10.192 10.136 10.050 9.950 9.850 9.784 9.760 9.660 9.560 9.450	10.036 9.980 9.894 9.794 9.694 9.628 9.604 9.504 9.404 9.294	.0368 .0357 .0340 .0320 .0301 .0289 .0284 .0265 .0247 .0226	27.19 28.03 29.42 31.21 33.20 34.65 35.20 37.71 40.56 44.21
11.150	*38.00 42.00 47.00 54.00 60.00 *65.00 *71.00	11.150 11.084 11.000 10.880 10.772 10.682 10.586	10.994 10.928 10.844 10.724 10.616 10.526 10.430	.0566 .0552 .0534 .0509 .0486 .0467 .0447	17.66 18.11 18.72 19.66 20.58 21.41 22.36
*11.875	71.80	10.711	10.625	.0473	21.13
*12.000	40.00	11.384	11.228	.0618	16.19
*13.000	40.00 45.00 50.00 54.00	12.438 12.360 12.282 12.220	12.282 12.204 12.126 12.064	.0862 .0843 .0824 .0809	11.61 11.87 12.13 12.36
13.375	48.00 54.50 61.00 68.00 72.00 *77.00 *80.70 *83.00 *85.00 *86.00 *92.00 *98.00	12.715 12.615 12.515 12.415 12.347 12.275 12.215 12.175 12.159 12.125 12.031 11.937	12.559 12.459 12.359 12.259 12.191 12.119 12.059 12.019 12.003 11.969 11.875 11.781	.0929 .0905 .0880 .0856 .0840 .0822 .0808 .0799 .0795 .0787 .0765 .0743	10.76 11.05 11.36 11.68 11.91 12.16 12.37 12.52 12.58 12.71 13.08 13.46
*13.500	81.40	12.340	12.250	.0838	11.93

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 206.38 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*228.60	50.60	210.57	206.60	.0014	728.37
244.48	*43.60 48.07 53.57 *56.55 59.53 64.74 69.94 79.62 *86.91 *90.93	230.20 228.63 226.59 225.68 224.41 222.38 220.50 216.79 214.25 212.73	226.24 224.66 222.63 222.50 220.45 218.42 216.54 212.83 210.29 208.76	.0082 .0076 .0069 .0066 .0061 .0054 .0047 .0035 .0026 .0021	122.36 131.50 145.39 152.60 163.83 185.51 211.12 288.81 384.28 478.25
*247.65	88.10	217.42	215.90	.0037	271.81
*250.83	93.46	219.08	215.90	.0042	235.55
*254.00	49.11	238.35	234.39	.0112	89.49
273.05	48.74 *53.20 60.27 67.71 75.90 *80.36 82.59 *90.33 *97.77 *105.81	258.88 257.45 255.27 252.73 250.19 248.51 247.90 245.36 242.82 240.03	254.91 253.49 251.31 248.77 246.23 244.55 243.94 241.40 238.86 236.07	.0192 .0186 .0177 .0167 .0157 .0151 .0148 .0138 .0129 .0118	52.11 53.72 56.39 59.80 63.62 66.40 67.46 72.26 77.74 84.72
298.45	*56.55 62.50 69.94 80.36 89.29 *96.73 *105.66	283.21 281.53 279.40 276.35 273.61 271.32 268.88	279.25 277.57 275.44 272.39 269.65 267.36 264.92	.0296 .0288 .0279 .0265 .0254 .0244 .0233	33.83 34.71 35.88 37.68 39.44 41.02 42.84
*301.63	106.85	272.06	269.88	.0247	40.50
*304.80	59.53	289.15	285.19	.0322	31.03
*330.20	59.53 66.97 74.41 80.36	315.93 313.94 311.96 310.39	311.96 309.98 308.00 306.43	.0450 .0440 .0430 .0422	22.24 22.74 23.25 23.68
339.73	71.43 81.10 90.78 101.20 107.15 *114.59 *120.09 *123.52 *126.49 *127.98 *136.91 *145.84	322.96 320.42 317.88 315.34 313.61 311.79 310.26 309.25 308.84 307.98 305.59 303.20	319.00 316.46 313.92 311.38 309.65 307.82 306.30 305.28 304.88 304.01 301.63 299.24	.0485 .0472 .0459 .0447 .0438 .0429 .0422 .0417 .0415 .0411 .0399 .0388	20.62 21.18 21.77 22.39 22.82 23.30 23.71 24.00 24.11 24.36 25.06 25.80
*342.90	121.14	313.44	311.15	.0437	22.87

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
O.D. 8.625"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
9.625	*29.30	9.063	8.907	.0075	132.87
	32.30	9.001	8.845	.0064	155.33
	36.00	8.921	8.765	.0050	198.21
	*38.00	8.885	8.760	.0044	226.12
	40.00	8.835	8.679	.0036	280.75
*10.000	33.00	9.384	9.228	.0133	75.31
10.750	32.75	10.192	10.036	.0286	34.91
	*35.75	10.136	9.980	.0275	36.31
	40.50	10.050	9.894	.0259	38.68
	45.50	9.950	9.794	.0239	41.83
	51.00	9.850	9.694	.0220	45.49
	*54.00	9.784	9.628	.0207	48.25
	55.50	9.760	9.604	.0203	49.33
	*60.70	9.660	9.504	.0184	54.39
	*65.70	9.560	9.404	.0165	60.54
	*71.10	9.450	9.294	.0145	69.03
11.750	*38.00	11.150	10.994	.0485	20.62
	42.00	11.084	10.928	.0471	21.24
	47.00	11.000	10.844	.0453	22.09
	54.00	10.880	10.724	.0427	23.40
	60.00	10.772	10.616	.0405	24.72
	*65.00	10.682	10.526	.0386	25.92
	*71.00	10.586	10.430	.0366	27.33
	*11.875	71.80	10.711	10.625	.0392
*12.000	40.00	11.384	11.228	.0536	18.65
*13.000	40.00	12.438	12.282	.0780	12.82
	45.00	12.360	12.204	.0761	13.13
	50.00	12.282	12.126	.0743	13.46
	54.00	12.220	12.064	.0728	13.74
13.375	48.00	12.715	12.559	.0848	11.79
	54.50	12.615	12.459	.0823	12.15
	61.00	12.515	12.359	.0799	12.52
	68.00	12.415	12.259	.0775	12.91
	72.00	12.347	12.191	.0758	13.19
	*77.00	12.275	12.119	.0741	13.49
	*80.70	12.215	12.059	.0727	13.76
	*83.00	12.175	12.019	.0717	13.94
	*85.00	12.159	12.003	.0714	14.02
	*86.00	12.125	11.969	.0705	14.17
	*92.00	12.031	11.875	.0683	14.63
	*98.00	11.937	11.781	.0662	15.12
	*13.500	81.40	12.340	12.250	.0757
*13.625	88.20	12.375	12.250	.0765	13.07

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 219.08 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
244.48	*43.60	230.20	226.24	.0039	254.64
	48.07	228.63	224.66	.0034	297.67
	53.57	226.59	222.63	.0026	379.84
	*56.55	225.68	222.50	.0023	433.33
	59.53	224.41	220.45	.0019	538.04
*254.00	49.11	238.35	234.39	.0069	144.33
273.05	48.74	258.88	254.91	.0149	66.90
	*53.20	257.45	253.49	.0144	69.59
	60.27	255.27	251.31	.0135	74.13
	67.71	252.73	248.77	.0125	80.15
	75.90	250.19	246.23	.0115	87.17
	*80.36	248.51	244.55	.0108	92.46
	82.59	247.90	243.94	.0106	94.54
	*90.33	245.36	241.40	.0096	104.24
	*97.77	242.82	238.86	.0086	116.02
	*105.81	240.03	236.07	.0076	132.29
	298.45	*56.55	283.21	279.25	.0253
62.50		281.53	277.57	.0246	40.71
69.94		279.40	275.44	.0236	42.33
80.36		276.35	272.39	.0223	44.85
89.29		273.61	269.65	.0211	47.37
*96.73		271.32	267.36	.0201	49.67
*105.66		268.88	264.92	.0191	52.37
*301.63	106.85	272.06	269.88	.0204	48.91
*304.80	59.53	289.15	285.19	.0280	35.74
*330.20	59.53	315.93	311.96	.0407	24.56
	66.97	313.94	309.98	.0397	25.17
	74.41	311.96	308.00	.0388	25.80
	80.36	310.39	306.43	.0380	26.33
339.73	71.43	322.96	319.00	.0442	22.60
	81.10	320.42	316.46	.0430	23.28
	90.78	317.88	313.92	.0417	23.99
	101.20	315.34	311.38	.0404	24.74
	107.15	313.61	309.65	.0396	25.27
	*114.59	311.79	307.82	.0387	25.86
	*120.09	310.26	306.30	.0379	26.37
	*123.52	309.25	305.28	.0374	26.72
	*126.49	308.84	304.88	.0372	26.86
	*127.98	307.98	304.01	.0368	27.16
	*136.91	305.59	301.63	.0357	28.04
	*145.84	303.20	299.24	.0345	28.97
	*342.90	121.14	313.44	311.15	.0395
*346.08	131.26	314.33	311.15	.0399	25.05

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 8.750"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*10.000	33.00	9.384	9.228	.0112	89.54
10.750	32.75	10.192	10.036	.0265	37.69
	*35.75	10.136	9.980	.0254	39.33
	40.50	10.050	9.894	.0237	42.12
	45.50	9.950	9.794	.0218	45.87
	51.00	9.850	9.694	.0199	50.31
	*54.00	9.784	9.628	.0186	53.72
	55.50	9.760	9.604	.0182	55.06
	*60.70	9.660	9.504	.0163	61.45
	*65.70	9.560	9.404	.0144	69.41
	*71.10	9.450	9.294	.0124	80.80
11.750	*38.00	11.150	10.994	.0464	21.55
	42.00	11.084	10.928	.0450	22.24
	47.00	11.000	10.844	.0432	23.17
	54.00	10.880	10.724	.0406	24.62
	60.00	10.772	10.616	.0383	26.08
	*65.00	10.682	10.526	.0365	27.42
	*71.00	10.586	10.430	.0345	29.00
*11.875	71.80	10.711	10.625	.0371	26.97
*12.000	40.00	11.384	11.228	.0515	19.41
*13.000	40.00	12.438	12.282	.0759	13.17
	45.00	12.360	12.204	.0740	13.51
	50.00	12.282	12.126	.0722	13.86
	54.00	12.220	12.064	.0707	14.15
13.375	48.00	12.715	12.559	.0827	12.10
	54.50	12.615	12.459	.0802	12.47
	61.00	12.515	12.359	.0778	12.86
	68.00	12.415	12.259	.0754	13.27
	72.00	12.347	12.191	.0737	13.57
	*77.00	12.275	12.119	.0720	13.89
	*80.70	12.215	12.059	.0706	14.17
	*83.00	12.175	12.019	.0696	14.36
	*85.00	12.159	12.003	.0692	14.44
	*86.00	12.125	11.969	.0684	14.61
	*92.00	12.031	11.875	.0662	15.10
	*98.00	11.937	11.781	.0640	15.61
*13.500	81.40	12.340	12.250	.0735	13.60
*13.625	88.20	12.375	12.250	.0744	13.44
*14.000	50.00	13.344	13.156	.0986	10.14
16.000	*55.00	15.375	15.187	.1553	6.44
	65.00	15.250	15.062	.1515	6.60
	*70.00	15.198	15.010	.1500	6.67
	75.00	15.124	14.936	.1478	6.76
	84.00	15.010	14.822	.1445	6.92
	*109.00	14.688	14.500	.1352	7.40

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 222.25 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*254.00	49.11	238.35	234.39	.0058	171.59
273.05	48.74	258.88	254.91	.0138	72.22
	*53.20	257.45	253.49	.0133	75.37
	60.27	255.27	251.31	.0124	80.72
	67.71	252.73	248.77	.0114	87.91
	75.90	250.19	246.23	.0104	96.42
	*80.36	248.51	244.55	.0097	102.94
	82.59	247.90	243.94	.0095	105.52
	*90.33	245.36	241.40	.0085	117.76
	*97.77	242.82	238.86	.0075	133.02
	*105.81	240.03	236.07	.0065	154.85
298.45	*56.55	283.21	279.25	.0242	41.31
	62.50	281.53	277.57	.0235	42.62
	69.94	279.40	275.44	.0225	44.39
	80.36	276.35	272.39	.0212	47.18
	89.29	273.61	269.65	.0200	49.98
	*96.73	271.32	267.36	.0190	52.55
	*105.66	268.88	264.92	.0180	55.57
	*301.63	106.85	272.06	269.88	.0193
*304.80	59.53	289.15	285.19	.0269	37.20
*330.20	59.53	315.93	311.96	.0396	25.25
	66.97	313.94	309.98	.0386	25.89
	74.41	311.96	308.00	.0377	26.56
	80.36	310.39	306.43	.0369	27.11
339.73	71.43	322.96	319.00	.0431	23.18
	81.10	320.42	316.46	.0419	23.89
	90.78	317.88	313.92	.0406	24.64
	101.20	315.34	311.38	.0393	25.43
	107.15	313.61	309.65	.0385	26.00
	*114.59	311.79	307.82	.0376	26.62
	*120.09	310.26	306.30	.0368	27.16
	*123.52	309.25	305.28	.0363	27.53
	*126.49	308.84	304.88	.0361	27.68
	*127.98	307.98	304.01	.0357	28.00
	*136.91	305.59	301.63	.0346	28.93
*145.84	303.20	299.24	.0334	29.92	
*342.90	121.14	313.44	311.15	.0384	26.06
*346.08	131.26	314.33	311.15	.0388	25.76
*355.60	74.41	338.94	334.16	.0515	19.44
406.40	*81.85	390.53	385.75	.0810	12.34
	96.73	387.35	382.58	.0791	12.65
	*104.17	386.03	381.25	.0783	12.78
	111.61	384.15	379.38	.0771	12.96
	125.01	381.25	376.48	.0754	13.26
	*162.21	373.08	368.30	.0705	14.17

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 9.000"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*10.000	33.00	9.384	9.228	.0069	145.82
10.750	32.75	10.192	10.036	.0222	45.00
	*35.75	10.136	9.980	.0211	47.35
	40.50	10.050	9.894	.0194	51.46
	45.50	9.950	9.794	.0175	57.18
	51.00	9.850	9.694	.0156	64.25
	*54.00	9.784	9.628	.0143	69.90
	55.50	9.760	9.604	.0139	72.20
	*60.70	9.660	9.504	.0120	83.59
	*65.70	9.560	9.404	.0101	99.04
	*71.10	9.450	9.294	.0081	123.99
11.750	*38.00	11.150	10.994	.0421	23.76
	42.00	11.084	10.928	.0407	24.59
	47.00	11.000	10.844	.0389	25.74
	54.00	10.880	10.724	.0363	27.54
	60.00	10.772	10.616	.0340	29.38
	*65.00	10.682	10.526	.0322	31.10
	*71.00	10.586	10.430	.0302	33.14
*11.875	71.80	10.711	10.625	.0328	30.52
*12.000	40.00	11.384	11.228	.0472	21.18
*13.000	40.00	12.438	12.282	.0716	13.97
	45.00	12.360	12.204	.0697	14.34
	50.00	12.282	12.126	.0679	14.74
	54.00	12.220	12.064	.0664	15.07
13.375	48.00	12.715	12.559	.0784	12.76
	54.50	12.615	12.459	.0759	13.17
	61.00	12.515	12.359	.0735	13.61
	68.00	12.415	12.259	.0710	14.08
	72.00	12.347	12.191	.0694	14.41
	*77.00	12.275	12.119	.0677	14.77
	*80.70	12.215	12.059	.0663	15.09
	*83.00	12.175	12.019	.0653	15.31
	*85.00	12.159	12.003	.0649	15.40
	*86.00	12.125	11.969	.0641	15.59
	*92.00	12.031	11.875	.0619	16.15
	*98.00	11.937	11.761	.0597	16.74
*13.500	81.40	12.340	12.250	.0692	14.44
*13.625	88.20	12.375	12.250	.0701	14.27
*14.000	50.00	13.344	13.156	.0943	10.61
16.000	*55.00	15.375	15.187	.1510	6.62
	65.00	15.250	15.062	.1472	6.79
	*70.00	15.198	15.010	.1457	6.86
	75.00	15.124	14.936	.1435	6.97
	84.00	15.010	14.822	.1402	7.13
	*109.00	14.688	14.500	.1309	7.64

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 228.60 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*254.00	49.11	238.35	234.39	.0036	279.45
273.05	48.74	258.88	254.91	.0116	86.23
	*53.20	257.45	253.49	.0110	90.75
	60.27	255.27	251.31	.0101	98.63
	67.71	252.73	248.77	.0091	109.58
	75.90	250.19	246.23	.0081	123.12
	*80.36	248.51	244.55	.0075	133.96
	82.59	247.90	243.94	.0072	138.37
	*90.33	245.36	241.40	.0062	160.18
	*97.77	242.82	238.86	.0053	189.81
	*105.81	240.03	236.07	.0042	237.61
298.45	*56.55	283.21	279.25	.0220	45.54
	62.50	281.53	277.57	.0212	47.13
	69.94	279.40	275.44	.0203	49.32
	80.36	276.35	272.39	.0189	52.78
	89.29	273.61	269.65	.0178	56.31
	*96.73	271.32	267.36	.0168	59.59
	*105.66	268.88	264.92	.0157	63.51
	*301.63	106.85	272.06	269.88	.0171
*304.80	59.53	289.15	285.19	.0246	40.60
*330.20	59.53	315.93	311.96	.0374	26.77
	66.97	313.94	309.98	.0364	27.49
	74.41	311.96	308.00	.0354	28.24
	80.36	310.39	306.43	.0346	28.87
339.73	71.43	322.96	319.00	.0409	24.45
	81.10	320.42	316.46	.0396	25.25
	90.78	317.88	313.92	.0383	26.09
	101.20	315.34	311.38	.0371	26.98
	107.15	313.61	309.65	.0362	27.61
	*114.59	311.79	307.82	.0353	28.31
	*120.09	310.26	306.30	.0346	28.92
	*123.52	309.25	305.28	.0341	29.34
	*126.49	308.84	304.88	.0339	29.51
	*127.98	307.98	304.01	.0335	29.88
	*136.91	305.59	301.63	.0323	30.95
	*145.84	303.20	299.24	.0312	32.08
*342.90	121.14	313.44	311.15	.0361	27.68
*346.08	131.26	314.33	311.15	.0366	27.35
*355.60	74.41	338.94	334.16	.0492	20.32
406.40	*81.85	390.53	385.75	.0788	12.70
	96.73	387.35	382.58	.0768	13.02
	*104.17	386.03	381.25	.0760	13.15
	111.61	384.15	379.38	.0749	13.35
	125.01	381.25	376.48	.0731	13.67
	*162.21	373.08	368.30	.0683	14.64

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
O.D. 9.625"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
10.750	32.75	10.192	10.036	.0109	91.62
	*35.75	10.136	9.980	.0098	101.94
	40.50	10.050	9.894	.0081	123.11
	45.50	9.950	9.794	.0062	161.81
	51.00	9.850	9.694	.0043	234.93
*54.00	9.784	9.628	.0030	333.57	
11.750	*38.00	11.150	10.994	.0308	32.49
	42.00	11.084	10.928	.0294	34.07
	47.00	11.000	10.844	.0275	36.30
	54.00	10.880	10.724	.0250	40.00
	60.00	10.772	10.616	.0227	44.00
	*65.00	10.682	10.526	.0209	47.96
	*71.00	10.586	10.430	.0189	53.00
*11.875	71.80	10.711	10.625	.0215	46.61
*12.000	40.00	11.384	11.228	.0359	27.86
*13.000	40.00	12.438	12.282	.0603	16.59
	45.00	12.360	12.204	.0584	17.12
	50.00	12.282	12.126	.0565	17.69
	54.00	12.220	12.064	.0551	18.16
13.375	48.00	12.715	12.559	.0671	14.91
	54.50	12.615	12.459	.0646	15.48
	61.00	12.515	12.359	.0622	16.09
	68.00	12.415	12.259	.0597	16.74
	72.00	12.347	12.191	.0581	17.21
	*77.00	12.275	12.119	.0564	17.74
	*80.70	12.215	12.059	.0549	18.20
	*83.00	12.175	12.019	.0540	18.52
	*85.00	12.159	12.003	.0536	18.65
	*86.00	12.125	11.969	.0528	18.93
	*92.00	12.031	11.875	.0506	19.76
*98.00	11.937	11.781	.0484	20.65	
*13.500	81.40	12.340	12.250	.0579	17.26
*13.625	88.20	12.375	12.250	.0588	17.02
*14.000	50.00	13.344	13.156	.0830	12.05
16.000	*55.00	15.375	15.187	.1396	7.16
	65.00	15.250	15.062	.1359	7.36
	*70.00	15.198	15.010	.1344	7.44
	75.00	15.124	14.936	.1322	7.56
	84.00	15.010	14.822	.1289	7.76
	*109.00	14.688	14.500	.1196	8.36
18.625	*78.00	17.855	17.667	.2197	4.55
	87.50	17.755	17.567	.2162	4.62
	*96.50	17.655	17.467	.2128	4.70
20.000	94.00	19.124	18.936	.2653	3.77
	106.50	19.000	18.812	.2607	3.84
	133.00	18.730	18.542	.2508	3.99

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 244.48 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
273.05	48.74	258.88	254.91	.0057	175.57
	*53.20	257.45	253.49	.0051	195.36
	60.27	255.27	251.31	.0042	235.92
	67.71	252.73	248.77	.0032	310.09
	75.90	250.19	246.23	.0022	450.21
	*80.36	248.51	244.55	.0016	639.26
298.45	*56.55	283.21	279.25	.0161	62.27
	62.50	281.53	277.57	.0153	65.29
	69.94	279.40	275.44	.0144	69.56
	80.36	276.35	272.39	.0130	76.66
	89.29	273.61	269.65	.0119	84.32
	*96.73	271.32	267.36	.0109	91.91
	*105.66	268.88	264.92	.0098	101.57
*301.63	106.85	272.06	269.88	.0112	89.33
*304.80	59.53	289.15	285.19	.0187	53.38
*330.20	59.53	315.93	311.96	.0315	31.79
	66.97	313.94	309.98	.0305	32.81
	74.41	311.96	308.00	.0295	33.89
	80.36	310.39	306.43	.0287	34.80
339.73	71.43	322.96	319.00	.0350	28.58
	81.10	320.42	316.46	.0337	29.67
	90.78	317.88	313.92	.0324	30.83
	101.20	315.34	311.38	.0312	32.08
	107.15	313.61	309.65	.0303	32.99
	*114.59	311.79	307.82	.0294	33.99
	*120.09	310.26	306.30	.0287	34.88
	*123.52	309.25	305.28	.0282	35.49
	*126.49	308.84	304.88	.0280	35.74
	*127.98	307.98	304.01	.0276	36.28
	*136.91	305.59	301.63	.0264	37.86
*145.84	303.20	299.24	.0253	39.57	
*342.90	121.14	313.44	311.15	.0302	33.08
*346.08	131.26	314.33	311.15	.0307	32.61
*355.60	74.41	338.94	334.16	.0433	23.09
406.40	*81.85	390.53	385.75	.0729	13.72
	96.73	387.35	382.58	.0709	14.10
	*104.17	386.03	381.25	.0701	14.26
	111.61	384.15	379.38	.0690	14.50
	125.01	381.25	376.48	.0672	14.87
	*162.21	373.08	368.30	.0624	16.03
473.08	*116.08	453.52	448.74	.1146	8.72
	130.21	450.98	446.20	.1128	8.86
	*143.61	448.44	443.66	.1110	9.01
508.00	139.89	485.75	480.98	.1384	7.22
	158.49	482.60	477.83	.1360	7.35
	197.93	475.74	470.97	.1309	7.64

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 9.750"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
10.750	32.75	10.192	10.036	.0086	116.79
	*35.75	10.136	9.980	.0075	134.11
	40.50	10.050	9.894	.0058	173.30
	45.50	9.950	9.794	.0038	261.27
11.750	*38.00	11.150	10.994	.0284	35.18
	42.00	11.084	10.928	.0270	37.04
	47.00	11.000	10.844	.0252	39.69
	54.00	10.880	10.724	.0226	44.16
	60.00	10.772	10.616	.0204	49.08
	*65.00	10.682	10.526	.0185	54.06
	*71.00	10.586	10.430	.0165	60.55
*11.875	71.80	10.711	10.625	.0191	52.35
*12.000	40.00	11.384	11.228	.0335	29.81
*13.000	40.00	12.438	12.282	.0579	17.26
	45.00	12.360	12.204	.0561	17.84
	50.00	12.282	12.126	.0542	18.45
	54.00	12.220	12.064	.0527	18.97
13.375	48.00	12.715	12.559	.0647	15.45
	54.50	12.615	12.459	.0622	16.07
	61.00	12.515	12.359	.0598	16.72
	68.00	12.415	12.259	.0574	17.43
	72.00	12.347	12.191	.0557	17.94
	*77.00	12.275	12.119	.0540	18.51
	*80.70	12.215	12.059	.0526	19.01
	*83.00	12.175	12.019	.0516	19.36
	*85.00	12.159	12.003	.0513	19.50
	*86.00	12.125	11.969	.0505	19.81
	*92.00	12.031	11.875	.0483	20.72
*98.00	11.937	11.781	.0461	21.70	
*13.500	81.40	12.340	12.250	.0556	17.99
*13.625	88.20	12.375	12.250	.0564	17.72
*14.000	50.00	13.344	13.156	.0806	12.40
16.000	*55.00	15.375	15.187	.1373	7.28
	65.00	15.250	15.062	.1336	7.49
	*70.00	15.198	15.010	.1320	7.57
	75.00	15.124	14.936	.1299	7.70
	84.00	15.010	14.822	.1265	7.90
	*109.00	14.688	14.500	.1172	8.53
18.625	*78.00	17.855	17.667	.2173	4.60
	87.50	17.755	17.567	.2139	4.68
	*96.50	17.655	17.467	.2104	4.75
20.000	94.00	19.124	18.936	.2629	3.80
	106.50	19.000	18.812	.2583	3.87
	133.00	18.730	18.542	.2484	4.03

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 247.65 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
273.05	48.74	258.88	254.91	.0045	223.81
	*53.20	257.45	253.49	.0039	257.00
	60.27	255.27	251.31	.0030	332.11
	67.71	252.73	248.77	.0020	500.70
298.45	*56.55	283.21	279.25	.0148	67.42
	62.50	281.53	277.57	.0141	70.98
	69.94	279.40	275.44	.0131	76.06
	80.36	276.35	272.39	.0118	84.62
	89.29	273.61	269.65	.0106	94.06
	*96.73	271.32	267.36	.0097	103.60
*105.66	268.88	264.92	.0086	116.04	
*301.63	106.85	272.06	269.88	.0100	100.33
*304.80	59.53	289.15	285.19	.0175	57.13
*330.20	59.53	315.93	311.96	.0302	33.08
	66.97	313.94	309.98	.0293	34.19
	74.41	311.96	308.00	.0283	35.36
	80.36	310.39	306.43	.0275	36.35
339.73	71.43	322.96	319.00	.0338	29.62
	81.10	320.42	316.46	.0325	30.79
	90.78	317.88	313.92	.0312	32.04
	101.20	315.34	311.38	.0299	33.40
	107.15	313.61	309.65	.0291	34.38
	*114.59	311.79	307.82	.0282	35.47
	*120.09	310.26	306.30	.0274	36.44
	*123.52	309.25	305.28	.0270	37.10
	*126.49	308.84	304.88	.0268	37.38
	*127.98	307.98	304.01	.0263	37.97
	*136.91	305.59	301.63	.0252	39.71
*145.84	303.20	299.24	.0240	41.59	
*342.90	121.14	313.44	311.15	.0290	34.48
*346.08	131.26	314.33	311.15	.0294	33.97
*355.60	74.41	338.94	334.16	.0421	23.77
406.40	*81.85	390.53	385.75	.0716	13.96
	96.73	387.35	382.58	.0697	14.35
	*104.17	386.03	381.25	.0689	14.51
	111.61	384.15	379.38	.0678	14.76
	125.01	381.25	376.48	.0660	15.15
	*162.21	373.08	368.30	.0612	16.35
473.08	*116.08	453.52	448.74	.1134	8.82
	130.21	450.98	446.20	.1116	8.96
	*143.61	448.44	443.66	.1098	9.11
508.00	139.89	485.75	480.98	.1372	7.29
	158.49	482.60	477.83	.1348	7.42
	197.93	475.74	470.97	.1296	7.71

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
"O.D. 9.875"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
11.750	*38.00	11.150	10.994	.0260	38.40
	42.00	11.084	10.928	.0246	40.62
	47.00	11.000	10.844	.0228	43.83
	54.00	10.880	10.724	.0203	49.35
	60.00	10.772	10.616	.0180	55.58
	*65.00	10.682	10.526	.0161	62.05
	*71.00	10.586	10.430	.0141	70.76
*11.875	71.80	10.711	10.625	.0167	59.82
*12.000	40.00	11.384	11.228	.0312	32.09
*13.000	40.00	12.438	12.282	.0556	18.00
	45.00	12.360	12.204	.0537	18.63
	50.00	12.282	12.126	.0518	19.30
	54.00	12.220	12.064	.0503	19.87
13.375	48.00	12.715	12.559	.0623	16.05
	54.50	12.615	12.459	.0599	16.71
	61.00	12.515	12.359	.0574	17.42
	68.00	12.415	12.259	.0550	18.18
	72.00	12.347	12.191	.0534	18.74
	*77.00	12.275	12.119	.0516	19.36
	*80.70	12.215	12.059	.0502	19.91
	*83.00	12.175	12.019	.0493	20.30
	*85.00	12.159	12.003	.0489	20.46
	*86.00	12.125	11.969	.0481	20.80
	*92.00	12.031	11.875	.0459	21.80
*98.00	11.937	11.781	.0437	22.89	
*13.500	81.40	12.340	12.250	.0532	18.80
*13.625	88.20	12.375	12.250	.0540	18.51
*14.000	50.00	13.344	13.156	.0782	12.78
16.000	*55.00	15.375	15.187	.1349	7.41
	65.00	15.250	15.062	.1312	7.62
	*70.00	15.198	15.010	.1297	7.71
	75.00	15.124	14.936	.1275	7.84
	84.00	15.010	14.822	.1241	8.06
	*109.00	14.688	14.500	.1148	8.71
18.625	*78.00	17.855	17.667	.2150	4.65
	87.50	17.755	17.567	.2115	4.73
	*96.50	17.655	17.467	.2081	4.81
20.000	94.00	19.124	18.936	.2605	3.84
	106.50	19.000	18.812	.2560	3.91
	133.00	18.730	18.542	.2461	4.06

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing	
BETWEEN CASINGS**				*O.D. 250.83 mm	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
298.45	*56.55	283.21	279.25	.0136	73.59
	62.50	281.53	277.57	.0128	77.85
	69.94	279.40	275.44	.0119	84.00
	80.36	276.35	272.39	.0106	94.58
	89.29	273.61	269.65	.0094	106.52
	*96.73	271.32	267.36	.0084	118.92
	*105.66	268.88	264.92	.0074	135.61
*301.63	106.85	272.06	269.88	.0087	114.63
*304.80	59.53	289.15	285.19	.0163	61.50
*330.20	59.53	315.93	311.96	.0290	34.50
	66.97	313.94	309.98	.0280	35.70
	74.41	311.96	308.00	.0270	36.99
	80.36	310.39	306.43	.0263	38.07
339.73	71.43	322.96	319.00	.0325	30.75
	81.10	320.42	316.46	.0312	32.01
	90.78	317.88	313.92	.0300	33.37
	101.20	315.34	311.38	.0287	34.84
	107.15	313.61	309.65	.0278	35.91
	*114.59	311.79	307.82	.0269	37.11
	*120.09	310.26	306.30	.0262	38.16
	*123.52	309.25	305.28	.0257	38.90
	*126.49	308.84	304.88	.0255	39.20
	*127.98	307.98	304.01	.0251	39.85
	*136.91	305.59	301.63	.0239	41.77
*145.84	303.20	299.24	.0228	43.86	
*342.90	121.14	313.44	311.15	.0278	36.03
*346.08	131.26	314.33	311.15	.0282	35.47
*355.60	74.41	338.94	334.16	.0408	24.49
406.40	*81.85	390.53	385.75	.0704	14.21
	96.73	387.35	382.58	.0685	14.61
	*104.17	386.03	381.25	.0677	14.78
	111.61	384.15	379.38	.0665	15.03
	125.01	381.25	376.48	.0648	15.44
	*162.21	373.08	368.30	.0599	16.69
473.08	*116.08	453.52	448.74	.1122	8.92
	130.21	450.98	446.20	.1104	9.06
	*143.61	448.44	443.66	.1086	9.21
508.00	139.89	485.75	480.98	.1360	7.36
	158.49	482.60	477.83	.1336	7.49
	197.93	475.74	470.97	.1284	7.79

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
*O.D. 10.000"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
11.750	*38.00	11.150	10.994	.0236	42.32
	42.00	11.084	10.928	.0222	45.04
	47.00	11.000	10.844	.0204	49.02
	54.00	10.880	10.724	.0178	56.02
	60.00	10.772	10.616	.0156	64.19
	*65.00	10.682	10.526	.0137	72.98
	*71.00	10.586	10.430	.0117	85.33
	*11.875	71.80	10.711	10.625	.0143
*12.000	40.00	11.384	11.228	.0287	34.78
*13.000	40.00	12.438	12.282	.0531	18.82
	45.00	12.360	12.204	.0513	19.51
	50.00	12.282	12.126	.0494	20.25
	54.00	12.220	12.064	.0479	20.87
13.375	48.00	12.715	12.559	.0599	16.69
	54.50	12.615	12.459	.0574	17.41
	61.00	12.515	12.359	.0550	18.18
	68.00	12.415	12.259	.0526	19.02
	72.00	12.347	12.191	.0509	19.63
	*77.00	12.275	12.119	.0492	20.31
	*80.70	12.215	12.059	.0478	20.92
	*83.00	12.175	12.019	.0469	21.34
	*85.00	12.159	12.003	.0465	21.52
	*86.00	12.125	11.969	.0457	21.90
	*92.00	12.031	11.875	.0435	23.01
*98.00	11.937	11.781	.0413	24.23	
*13.500	81.40	12.340	12.250	.0508	19.69
*13.625	88.20	12.375	12.250	.0516	19.37
*14.000	50.00	13.344	13.156	.0758	13.19
16.000	*55.00	15.375	15.187	.1325	7.55
	65.00	15.250	15.062	.1288	7.77
	*70.00	15.198	15.010	.1272	7.86
	75.00	15.124	14.936	.1251	8.00
	84.00	15.010	14.822	.1217	8.22
	*109.00	14.688	14.500	.1124	8.89
18.625	*78.00	17.855	17.667	.2125	4.70
	87.50	17.755	17.567	.2091	4.78
	*96.50	17.655	17.467	.2057	4.86
20.000	94.00	19.124	18.936	.2581	3.87
	106.50	19.000	18.812	.2535	3.94
	133.00	18.730	18.542	.2436	4.10

*Not API Standard. Shown for information only

METRIC UNITS				Inside Casing	
BETWEEN CASINGS**				*O.D. 254.00 mm	
OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
298.45	*56.55	283.21	279.25	.0123	81.11
	62.50	281.53	277.57	.0116	86.32
	69.94	279.40	275.44	.0106	93.94
	80.36	276.35	272.39	.0093	107.36
	89.29	273.61	269.65	.0081	123.02
	*96.73	271.32	267.36	.0071	139.86
	*105.66	268.88	264.92	.0061	163.53
*301.63	106.85	272.06	269.88	.0075	133.97
*304.80	59.53	289.15	285.19	.0150	66.66
*330.20	59.53	315.93	311.96	.0277	36.06
	66.97	313.94	309.98	.0267	37.38
	74.41	311.96	308.00	.0258	38.80
	80.36	310.39	306.43	.0250	39.99
339.73	71.43	322.96	319.00	.0313	31.99
	81.10	320.42	316.46	.0300	33.36
	90.78	317.88	313.92	.0287	34.84
	101.20	315.34	311.38	.0274	36.44
	107.15	313.61	309.65	.0266	37.61
	*114.59	311.79	307.82	.0257	38.93
	*120.09	310.26	306.30	.0249	40.09
	*123.52	309.25	305.28	.0244	40.90
	*126.49	308.84	304.88	.0243	41.24
	*127.98	307.98	304.01	.0238	41.96
	*136.91	305.59	301.63	.0227	44.09
	*145.84	303.20	299.24	.0215	46.43
*342.90	121.14	313.44	311.15	.0265	37.74
*346.08	131.26	314.33	311.15	.0269	37.12
*355.60	74.41	338.94	334.16	.0396	25.27
406.40	*81.85	390.53	385.75	.0691	14.46
	96.73	387.35	382.58	.0672	14.88
	*104.17	386.03	381.25	.0664	15.06
	111.61	384.15	379.38	.0653	15.32
	125.01	381.25	376.48	.0635	15.74
	*162.21	373.08	368.30	.0587	17.05
473.08	*116.08	453.52	448.74	.1109	9.02
	130.21	450.98	446.20	.1091	9.17
	*143.61	448.44	443.66	.1073	9.32
508.00	139.89	485.75	480.98	.1347	7.42
	158.49	482.60	477.83	.1323	7.56
	197.93	475.74	470.97	.1271	7.87

**Note: No allowance made for couplings.

Inside Casing
O.D. 10.750"

ENGLISH UNITS

VOLUME & HEIGHT

OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
11.750	*38.00	11.150	10.994	.0085	117.51
	42.00	11.084	10.928	.0071	141.16
	47.00	11.000	10.844	.0053	169.32
*12.000	40.00	11.384	11.228	.0136	73.36
*13.000	40.00	12.438	12.282	.0380	26.30
	45.00	12.360	12.204	.0361	27.67
	50.00	12.282	12.126	.0343	29.17
	54.00	12.220	12.064	.0328	30.49
13.375	48.00	12.715	12.559	.0448	22.33
	54.50	12.615	12.459	.0423	23.62
	61.00	12.515	12.359	.0399	25.07
	68.00	12.415	12.259	.0375	26.69
	72.00	12.347	12.191	.0358	27.91
	*77.00	12.275	12.119	.0341	29.32
	*80.70	12.215	12.059	.0327	30.60
	*83.00	12.175	12.019	.0317	31.51
	*85.00	12.159	12.003	.0314	31.89
	*86.00	12.125	11.969	.0306	32.73
	*92.00	12.031	11.875	.0283	35.28
*98.00	11.937	11.781	.0262	38.23	
*13.500	81.40	12.340	12.250	.0357	28.04
*13.625	88.20	12.375	12.250	.0365	27.39
*14.000	50.00	13.344	13.156	.0607	16.47
16.000	*55.00	15.375	15.187	.1174	8.52
	65.00	15.250	15.062	.1137	8.80
	*70.00	15.198	15.010	.1121	8.92
	75.00	15.124	14.936	.1099	9.10
	84.00	15.010	14.822	.1066	9.38
	*109.00	14.688	14.500	.0973	10.28
18.625	*78.00	17.855	17.667	.1974	5.07
	87.50	17.755	17.567	.1940	5.16
	*96.50	17.655	17.467	.1905	5.25
20.000	94.00	19.124	18.936	.2430	4.11
	106.50	19.000	18.812	.2384	4.19
	133.00	18.730	18.542	.2285	4.38
*21.500	92.50	20.710	20.522	.3044	3.29
	103.00	20.610	20.422	.3004	3.33
	114.00	20.510	20.322	.2964	3.37
*24.000	94.62	23.250	—	.4129	2.42
	125.49	23.000	—	.4016	2.49
	156.03	22.750	—	.3905	2.56
	186.23	22.500	—	.3795	2.63
*24.500	100.50	23.750	23.562	.4357	2.30
	113.00	23.650	23.462	.4311	2.32

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 273.05 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
298.45	*56.55	283.21	279.25	.0044	225.20
	62.50	281.53	277.57	.0037	270.52
	69.94	279.40	275.44	.0028	362.81
*304.80	59.53	289.15	285.19	.0071	140.58
*330.20	59.53	315.93	311.96	.0198	50.40
	66.97	313.94	309.98	.0189	53.02
	74.41	311.96	308.00	.0179	55.91
	80.36	310.39	306.43	.0171	58.42
339.73	71.43	322.96	319.00	.0234	42.78
	81.10	320.42	316.46	.0221	45.27
	90.78	317.88	313.92	.0208	48.04
	101.20	315.34	311.38	.0196	51.15
	107.15	313.61	309.65	.0187	53.48
	*114.59	311.79	307.82	.0178	56.18
	*120.09	310.26	306.30	.0171	58.64
	*123.52	309.25	305.28	.0166	60.39
	*126.49	308.84	304.88	.0164	61.12
	*127.98	307.98	304.01	.0159	62.72
	*136.91	305.59	301.63	.0148	67.60
*145.84	303.20	299.24	.0137	73.26	
*342.90	121.14	313.44	311.15	.0186	53.73
*346.08	131.26	314.33	311.15	.0190	52.50
*355.60	74.41	338.94	334.16	.0317	31.56
406.40	*81.85	390.53	385.75	.0612	16.33
	96.73	387.35	382.58	.0593	16.86
	*104.17	386.03	381.25	.0585	17.09
	111.61	384.15	379.38	.0574	17.43
	125.01	381.25	376.48	.0556	17.98
	*162.21	373.08	368.30	.0508	19.69
473.08	*116.08	453.52	448.74	.1030	9.71
	130.21	450.98	446.20	.1012	9.88
	*143.61	448.44	443.66	.0994	10.06
508.00	139.89	485.75	480.98	.1268	7.89
	158.49	482.60	477.83	.1244	8.04
	197.93	475.74	470.97	.1192	8.39
*546.10	137.66	526.04	521.26	.1588	6.30
	153.28	523.50	518.72	.1567	6.38
	169.65	520.96	516.18	.1547	6.47
*609.60	140.81	590.55	—	.2154	4.64
	186.75	584.20	—	.2096	4.77
	232.20	577.85	—	.2038	4.91
	277.14	571.50	—	.1980	5.05
*622.30	149.56	603.25	598.48	.2273	4.40
	168.16	600.71	595.94	.2249	4.45

**Note: No allowance made for couplings.

Inside Casing
O.D. 11.750"

ENGLISH UNITS

VOLUME & HEIGHT

OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
13.375	48.00	12.715	12.559	.0229	43.60	
	54.50	12.615	12.459	.0205	48.84	
	61.00	12.515	12.359	.0180	55.46	
	68.00	12.415	12.259	.0156	64.06	
	72.00	12.347	12.191	.0140	71.56	
	*77.00	12.275	12.119	.0123	81.61	
	*80.70	12.215	12.059	.0108	92.38	
	*83.00	12.175	12.019	.0099	101.24	
	*85.00	12.159	12.003	.0095	105.27	
	*86.00	12.125	11.969	.0087	114.98	
	*92.00	12.031	11.875	.0065	154.05	
	*98.00	11.937	11.781	.0043	232.40	
	*13.500	81.40	12.340	12.250	.0138	72.43
	*13.625	88.20	12.375	12.250	.0146	68.27
*14.000	50.00	13.344	13.156	.0389	25.74	
16.000	*55.00	15.375	15.187	.0955	10.47	
	65.00	15.250	15.062	.0918	10.89	
	*70.00	15.198	15.010	.0903	11.08	
	75.00	15.124	14.936	.0881	11.35	
	84.00	15.010	14.822	.0847	11.80	
	*109.00	14.688	14.500	.0755	13.25	
18.625	*78.00	17.855	17.667	.1756	5.70	
	87.50	17.755	17.567	.1721	5.81	
	*96.50	17.655	17.467	.1687	5.93	
20.000	94.00	19.124	18.936	.2212	4.52	
	106.50	19.000	18.812	.2166	4.62	
	133.00	18.730	18.542	.2067	4.84	
*21.500	92.50	20.710	20.522	.2825	3.54	
	103.00	20.610	20.422	.2785	3.59	
	114.00	20.510	20.322	.2745	3.64	
*24.000	94.62	23.250	—	.3910	2.56	
	125.49	23.000	—	.3798	2.63	
	156.03	22.750	—	.3687	2.71	
	186.23	22.500	—	.3577	2.80	
*24.500	100.50	23.750	23.562	.4138	2.42	
	113.00	23.650	23.462	.4092	2.44	

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 298.45 mm

BETWEEN CASINGS**

OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
339.73	71.43	322.96	319.00	.0120	83.56	
	81.10	320.42	316.46	.0107	93.60	
	90.76	317.88	313.92	.0094	106.28	
	101.20	315.34	311.38	.0081	122.76	
	107.15	313.61	309.65	.0073	137.13	
	*114.59	311.79	307.82	.0064	156.41	
	*120.09	310.26	306.30	.0056	177.03	
	*123.52	309.25	305.28	.0052	194.01	
	*126.49	308.84	304.88	.0050	201.74	
	*127.98	307.98	304.01	.0045	220.34	
	*136.91	305.59	301.63	.0034	295.21	
	*145.84	303.20	299.24	.0022	445.37	
	*342.90	121.14	313.44	311.15	.0072	138.80
	*346.08	131.26	314.33	311.15	.0076	130.84
*355.60	74.41	338.94	334.16	.0203	49.32	
406.40	*81.85	390.53	385.75	.0498	20.06	
	96.73	387.35	382.58	.0479	20.88	
	*104.17	386.03	381.25	.0471	21.23	
	111.61	384.15	379.38	.0460	21.76	
	125.01	381.25	376.48	.0442	22.61	
	*162.21	373.08	368.30	.0394	25.40	
473.08	*116.08	453.52	448.74	.0916	10.92	
	130.21	450.98	446.20	.0898	11.13	
	*143.61	448.44	443.66	.0880	11.36	
508.00	139.89	485.75	480.98	.1154	8.67	
	158.49	482.60	477.83	.1130	8.85	
	197.93	475.74	470.97	.1078	9.27	
*546.10	137.66	526.04	521.26	.1474	6.78	
	153.28	523.50	518.72	.1453	6.88	
	169.65	520.96	516.18	.1432	6.98	
*609.60	140.81	590.55	—	.2040	4.90	
	186.75	584.20	—	.1982	5.05	
	232.20	577.85	—	.1924	5.20	
	277.14	571.50	—	.1866	5.36	
*622.30	149.56	603.25	598.48	.2159	4.63	
	168.16	600.71	595.94	.2135	4.68	

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
*O.D. 11.875"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
13.375	48.00	12.715	12.559	.0201	49.84
	54.50	12.615	12.459	.0176	56.80
	61.00	12.515	12.359	.0152	65.95
	68.00	12.415	12.259	.0127	78.48
	72.00	12.347	12.191	.0111	90.04
	*77.00	12.275	12.119	.0094	106.56
	*80.70	12.215	12.059	.0080	125.68
	*83.00	12.175	12.019	.0070	142.68
	*85.00	12.159	12.003	.0066	150.82
	*86.00	12.125	11.969	.0058	171.57
	*13.500	81.40	12.340	12.250	.0109
*13.625	88.20	12.375	12.250	.0118	84.90
*14.000	50.00	13.344	13.156	.0360	27.79
16.000	*55.00	15.375	15.187	.0926	10.79
	65.00	15.250	15.062	.0889	11.24
	*70.00	15.198	15.010	.0874	11.44
	75.00	15.124	14.936	.0852	11.74
	84.00	15.010	14.822	.0819	12.21
*109.00	14.688	14.500	.0726	13.78	
18.625	*78.00	17.855	17.667	.1727	5.79
	87.50	17.755	17.567	.1692	5.91
	*96.50	17.655	17.467	.1658	6.03
20.000	94.00	19.124	18.936	.2183	4.58
	106.50	19.000	18.812	.2137	4.68
	133.00	18.730	18.542	.2038	4.91
*21.500	92.50	20.710	20.522	.2797	3.58
	103.00	20.610	20.422	.2756	3.63
	114.00	20.510	20.322	.2717	3.68
*24.000	94.62	23.250	—	.3881	2.58
	125.49	23.000	—	.3769	2.65
	156.03	22.750	—	.3658	2.73
	186.23	22.500	—	.3548	2.82
*24.500	100.50	23.750	23.562	.4110	2.43
	113.00	23.650	23.462	.4064	2.46

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 301.63 mm

BETWEEN CASINGS**

OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m ³ /m	
339.73	71.43	322.96	319.00	.0105	95.51	
	81.10	320.42	316.46	.0092	108.86	
	90.76	317.88	313.92	.0079	126.38	
	101.20	315.34	311.38	.0066	150.40	
	107.15	313.61	309.65	.0058	172.55	
	*114.59	311.79	307.82	.0049	204.22	
	*120.09	310.26	306.30	.0042	240.86	
	*123.52	309.25	305.28	.0037	273.42	
	*126.49	308.84	304.88	.0035	289.02	
	*127.98	307.98	304.01	.0030	328.79	
	*342.90	121.14	313.44	311.15	.0057	175.20
	*346.08	131.26	314.33	311.15	.0061	162.70
*355.60	74.41	338.94	334.16	.0188	53.25	
406.40	*81.85	390.53	385.75	.0483	20.68	
	96.73	387.35	382.58	.0464	21.55	
	*104.17	386.03	381.25	.0456	21.93	
	111.61	384.15	379.38	.0445	22.49	
	125.01	381.25	376.48	.0427	23.41	
	*162.21	373.08	368.30	.0379	26.40	
473.08	*116.08	453.52	448.74	.0901	11.10	
	130.21	450.98	446.20	.0883	11.32	
	*143.61	448.44	443.66	.0865	11.56	
508.00	139.89	485.75	480.98	.1139	8.78	
	158.49	482.60	477.83	.1115	8.97	
	197.93	475.74	470.97	.1063	9.40	
*546.10	137.66	526.04	521.26	.1459	6.85	
	153.28	523.50	518.72	.1438	6.95	
	169.65	520.96	516.18	.1418	7.05	
*609.60	140.81	590.55	—	.2025	4.94	
	186.75	584.20	—	.1967	5.08	
	232.20	577.85	—	.1909	5.24	
	277.14	571.50	—	.1851	5.40	
*622.30	149.56	603.25	598.48	.2144	4.66	
	168.16	600.71	595.94	.2120	4.72	

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
*O.D. 12.000"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
13.375	48.00	12.715	12.559	.0172	58.25
	54.50	12.615	12.459	.0147	68.00
	61.00	12.515	12.359	.0123	81.54
	68.00	12.415	12.259	.0098	101.60
	72.00	12.347	12.191	.0082	121.85
	*77.00	12.275	12.119	.0065	154.20
	*80.70	12.215	12.059	.0051	197.73
	*83.00	12.175	12.019	.0041	243.32
	*85.00	12.159	12.003	.0037	267.99
	*13.500	81.40	12.340	12.250	.0080
*13.625	88.20	12.375	12.250	.0089	112.62
*14.000	50.00	13.344	13.156	.0331	30.22
16.000	*55.00	15.375	15.187	.0898	11.14
	65.00	15.250	15.062	.0860	11.62
	*70.00	15.198	15.010	.0845	11.84
	75.00	15.124	14.936	.0823	12.15
	84.00	15.010	14.822	.0790	12.66
	*109.00	14.688	14.500	.0697	14.35
18.625	*78.00	17.855	17.667	.1698	5.89
	87.50	17.755	17.567	.1663	6.01
	*96.50	17.655	17.467	.1629	6.14
20.000	94.00	19.124	18.936	.2154	4.64
	106.50	19.000	18.812	.2108	4.74
	133.00	18.730	18.542	.2009	4.98
*21.500	92.50	20.710	20.522	.2768	3.61
	103.00	20.610	20.422	.2727	3.67
	114.00	20.510	20.322	.2688	3.72
*24.000	94.62	23.250	—	.3852	2.60
	125.49	23.000	—	.3740	2.67
	156.03	22.750	—	.3629	2.76
	186.23	22.500	—	.3519	2.84
*24.500	100.50	23.750	23.562	.4081	2.45
	113.00	23.650	23.462	.4035	2.48

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 304.80 mm

BETWEEN CASINGS**

OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
339.73	71.43	322.96	319.00	.0090	111.64	
	81.10	320.42	316.46	.0077	130.32	
	90.78	317.88	313.92	.0064	156.26	
	101.20	315.34	311.38	.0051	194.70	
	107.15	313.61	309.65	.0043	233.51	
	*114.59	311.79	307.82	.0034	295.52	
	*120.09	310.26	306.30	.0026	378.92	
	*123.52	309.25	305.28	.0021	466.30	
	*126.49	308.84	304.88	.0019	513.57	
	*342.90	121.14	313.44	311.15	.0042	238.38
	*346.08	131.26	314.33	311.15	.0046	215.82
*355.60	74.41	338.94	334.16	.0173	57.92	
406.40	*81.85	390.53	385.75	.0468	21.35	
	96.73	387.35	382.58	.0449	22.28	
	*104.17	386.03	381.25	.0441	22.68	
	111.61	384.15	379.38	.0430	23.28	
	125.01	381.25	376.48	.0412	24.27	
*162.21	373.08	368.30	.0364	27.50		
473.08	*116.08	453.52	448.74	.0886	11.29	
	130.21	450.98	446.20	.0868	11.52	
	*143.61	448.44	443.66	.0850	11.76	
508.00	139.89	485.75	480.98	.1124	8.90	
	158.49	482.60	477.83	.1100	9.09	
	197.93	475.74	470.97	.1048	9.54	
*546.10	137.66	526.04	521.26	.1444	6.92	
	153.28	523.50	518.72	.1423	7.03	
	169.65	520.96	516.18	.1402	7.13	
*609.60	140.81	590.55	—	.2010	4.97	
	186.75	584.20	—	.1952	5.12	
	232.20	577.85	—	.1894	5.28	
	277.14	571.50	—	.1836	5.45	
*622.30	149.56	603.25	598.48	.2129	4.10	
	168.16	600.71	595.94	.2105	4.75	

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
*O.D. 13.000"					
VOLUME & HEIGHT					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
16.000	*55.00	15.375	15.187	.0655	15.28
	65.00	15.250	15.062	.0617	16.20
	*70.00	15.198	15.010	.0602	16.61
	75.00	15.124	14.936	.0580	17.23
	84.00	15.010	14.822	.0547	18.28
*109.00	14.688	14.500	.0454	22.03	
18.625	*78.00	17.855	17.667	.1455	6.87
	87.50	17.755	17.567	.1421	7.04
	*96.50	17.655	17.467	.1386	7.21
20.000	94.00	19.124	18.936	.1911	5.23
	106.50	19.000	18.812	.1865	5.36
	133.00	18.730	18.542	.1766	5.66
*21.500	92.50	20.710	20.522	.2525	3.96
	103.00	20.610	20.422	.2485	4.02
	114.00	20.510	20.322	.2445	4.09
*24.000	94.62	23.250	—	.3609	2.77
	125.49	23.000	—	.3497	2.86
	156.03	22.750	—	.3386	2.95
	186.23	22.500	—	.3276	3.05
*24.500	100.50	23.750	23.562	.3838	2.61
	113.00	23.650	23.462	.3792	2.64

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 330.20 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
406.40	*81.85	390.53	385.75	.0342	29.27
	96.73	387.35	382.58	.0322	31.04
	*104.17	386.03	381.25	.0314	31.83
	111.61	384.15	379.38	.0303	33.03
	125.01	381.25	376.48	.0285	35.04
*162.21	373.08	368.30	.0237	42.21	
473.08	*116.08	453.52	448.74	.0759	13.17
	130.21	450.98	446.20	.0741	13.49
	*143.61	448.44	443.66	.0723	13.82
508.00	139.89	485.75	480.98	.0997	10.03
	158.49	482.60	477.83	.0973	10.27
	197.93	475.74	470.97	.0922	10.85
*546.10	137.66	526.04	521.26	.1317	7.59
	153.28	523.50	518.72	.1297	7.71
	169.65	520.96	516.18	.1276	7.84
*609.60	140.81	590.55	—	.1883	5.31
	186.75	584.20	—	.1825	5.48
	232.20	577.85	—	.1767	5.66
	277.14	571.50	—	.1710	5.85
*622.30	149.56	603.25	598.48	.2003	4.99
	168.16	600.71	595.94	.1979	5.05

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
O.D. 13.375"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
16.000	*55.00	15.375	15.187	.0559	17.90
	65.00	15.250	15.062	.0521	19.18
	*70.00	15.198	15.010	.0506	19.76
	75.00	15.124	14.936	.0484	20.65
	84.00	15.010	14.822	.0451	22.18
*109.00	14.688	14.500	.0358	27.94	
18.625	*78.00	17.855	17.667	.1359	7.36
	87.50	17.755	17.567	.1325	7.55
	*96.50	17.655	17.467	.1290	7.75
20.000	94.00	19.124	18.936	.1815	5.51
	106.50	19.000	18.812	.1769	5.65
	133.00	18.730	18.542	.1670	5.99
*21.500	92.50	20.710	20.522	.2429	4.12
	103.00	20.610	20.422	.2389	4.19
	114.00	20.510	20.322	.2349	4.26
*24.000	94.62	23.250	—	.3513	2.85
	125.49	23.000	—	.3401	2.94
	156.03	22.750	—	.3290	3.04
	186.23	22.500	—	.3180	3.14
*24.500	100.50	23.750	23.562	.3742	2.67
	113.00	23.650	23.462	.3696	2.71
*30.000	118.65	29.250	—	.6573	1.52
	157.53	29.000	—	.6432	1.55
	196.08	28.750	—	.6292	1.59
	234.29	28.500	—	.6153	1.63

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

O.D. 339.73 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
406.40	*81.85	390.53	385.75	.0291	34.31
	96.73	387.35	382.58	.0272	36.76
	*104.17	386.03	381.25	.0264	37.87
	111.61	384.15	379.38	.0253	39.58
	125.01	381.25	376.48	.0235	42.51
*162.21	373.08	368.30	.0187	53.54	
473.08	*116.08	453.52	448.74	.0709	14.10
	130.21	450.98	446.20	.0691	14.47
	*143.61	448.44	443.66	.0673	14.85
508.00	139.89	485.75	480.98	.0947	10.56
	158.49	482.60	477.83	.0923	10.83
	197.93	475.74	470.97	.0871	11.47
*546.10	137.66	526.04	521.26	.1267	7.89
	153.28	523.50	518.72	.1246	8.02
	169.65	520.96	516.18	.1226	8.16
*609.60	140.81	590.55	—	.1833	5.45
	186.75	584.20	—	.1775	5.63
	232.20	577.85	—	.1717	5.82
	277.14	571.50	—	.1659	6.03
*622.30	149.56	603.25	598.48	.1952	5.12
	168.16	600.71	595.94	.1928	5.19
*762.00	176.57	742.95	—	.3430	2.92
	234.43	736.60	—	.3356	2.98
	291.80	730.25	—	.3283	3.05
	348.66	723.90	—	.3211	3.11

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
*O.D. 13.500"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
16.000	*55.00	15.375	15.187	.0526	19.01
	65.00	15.250	15.062	.0489	20.46
	*70.00	15.198	15.010	.0473	21.13
	75.00	15.124	14.936	.0452	22.14
	84.00	15.010	14.822	.0418	23.91
*109.00	14.688	14.500	.0325	30.74	
18.625	*78.00	17.855	17.667	.1326	7.54
	87.50	17.755	17.567	.1292	7.74
	*96.50	17.655	17.467	.1258	7.95
20.000	94.00	19.124	18.936	.1782	5.61
	106.50	19.000	18.812	.1736	5.76
	133.00	18.730	18.542	.1637	6.11
*21.500	92.50	20.710	20.522	.2396	4.17
	103.00	20.610	20.422	.2356	4.24
	114.00	20.510	20.322	.2316	4.32
*24.000	94.62	23.250	—	.3481	2.87
	125.49	23.000	—	.3368	2.97
	156.03	22.750	—	.3257	3.07
	186.23	22.500	—	.3147	3.18
*24.500	100.50	23.750	23.562	.3709	2.70
	113.00	23.650	23.462	.3663	2.73
*30.000	118.65	29.250	—	.6541	1.53
	157.53	29.000	—	.6399	1.56
	196.08	28.750	—	.6259	1.60
	234.29	28.500	—	.6120	1.63

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 342.90 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
406.40	*81.85	390.53	385.75	.0274	36.44
	96.73	387.35	382.58	.0255	39.21
	*104.17	386.03	381.25	.0247	40.48
	111.61	384.15	379.38	.0236	42.44
	125.01	381.25	376.48	.0218	45.82
*162.21	373.08	368.30	.0170	58.91	
473.08	*116.08	453.52	448.74	.0692	14.45
	130.21	450.98	446.20	.0674	14.83
	*143.61	448.44	443.66	.0656	15.24
508.00	139.89	485.75	480.98	.0930	10.75
	158.49	482.60	477.83	.0906	11.04
	197.93	475.74	470.97	.0854	11.70
*546.10	137.66	526.04	521.26	.1250	8.00
	153.28	523.50	518.72	.1229	8.13
	169.65	520.96	516.18	.1209	8.27
*609.60	140.81	590.55	—	.1816	5.51
	186.75	584.20	—	.1758	5.69
	232.20	577.85	—	.1700	5.88
	277.14	571.50	—	.1642	6.09
*622.30	149.56	603.25	598.48	.1935	5.17
	168.16	600.71	595.94	.1911	5.23
*762.00	176.57	742.95	—	.3413	2.93
	234.43	736.60	—	.3339	2.99
	291.80	730.25	—	.3266	3.06
	348.66	723.90	—	.3193	3.13

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
*O.D. 13.625"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
16.000	*55.00	15.375	15.187	.0493	20.28
	65.00	15.250	15.062	.0456	21.94
	*70.00	15.198	15.010	.0440	22.71
	75.00	15.124	14.936	.0419	23.89
	84.00	15.010	14.822	.0385	25.96
*109.00	14.688	14.500	.0292	34.20	
18.625	*78.00	17.855	17.667	.1294	7.73
	87.50	17.755	17.567	.1259	7.94
	*96.50	17.655	17.467	.1225	8.17
20.000	94.00	19.124	18.936	.1749	5.72
	106.50	19.000	18.812	.1703	5.87
	133.00	18.730	18.542	.1605	6.23
*21.000	92.50	20.710	20.522	.2363	4.23
	103.00	20.610	20.422	.2323	4.30
	114.00	20.510	20.322	.2283	4.38
*24.000	94.62	23.250	—	3448	2.90
	125.49	23.000	—	3335	3.00
	156.03	22.750	—	3224	3.10
	186.23	22.500	—	3114	3.21
*24.500	100.50	23.750	23.562	.3676	2.72
	113.00	23.650	23.462	.3630	2.75
*30.000	118.65	29.250	—	6508	1.54
	157.53	29.000	—	6366	1.57
	196.08	28.750	—	6226	1.61
	234.29	28.500	—	6087	1.64

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 346.08 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
406.40	*81.85	390.53	385.75	.0257	38.87
	96.73	387.35	382.58	.0238	42.04
	*104.17	386.03	381.25	.0230	43.51
	111.61	384.15	379.38	.0218	45.78
	125.01	381.25	376.48	.0201	49.74
*162.21	373.08	368.30	.0153	65.55	
473.08	*116.08	453.52	448.74	.0675	14.81
	130.21	450.98	446.20	.0657	15.22
	*143.61	448.44	443.66	.0639	15.65
508.00	139.89	485.75	480.98	.0913	10.95
	158.49	482.60	477.83	.0889	11.25
	197.93	475.74	470.97	.0837	11.94
*546.10	137.66	526.04	521.26	.1233	8.11
	153.28	523.50	518.72	.1212	8.25
	169.65	520.96	516.18	.1191	8.39
*609.60	140.81	590.55	—	.1799	5.56
	186.75	584.20	—	.1141	5.75
	232.20	577.85	—	.1683	5.94
	277.14	571.50	—	.1625	6.15
*622.30	149.56	603.25	598.48	.1918	5.21
	168.16	600.71	595.94	.1894	5.28
*762.00	176.57	742.95	—	.3396	2.94
	234.43	736.60	—	.3322	3.01
	291.80	730.25	—	.3249	3.08
	348.66	723.90	—	.3176	3.15

**Note: No allowance made for couplings.

Inside Casing		ENGLISH UNITS			
*O.D. 14.000"		VOLUME & HEIGHT			
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
16.000	*55.00	15.375	15.187	.0392	25.49
	65.00	15.250	15.062	.0355	28.15
	*70.00	15.198	15.010	.0340	29.43
	75.00	15.124	14.936	.0318	31.45
	84.00	15.010	14.822	.0285	35.13
	*109.00	14.688	14.500	.0192	52.16
18.625	*78.00	17.855	17.667	.1193	8.38
	87.50	17.755	17.567	.1158	8.63
	*96.50	17.655	17.467	.1124	8.90
20.000	94.00	19.124	18.936	.1649	6.07
	106.50	19.000	18.812	.1603	6.24
	133.00	18.730	18.542	.1504	6.65
*21.500	92.50	20.710	20.522	.2262	4.42
	103.00	20.610	20.422	.2222	4.50
	114.00	20.510	20.322	.2182	4.58
*24.000	94.62	23.250	—	.3347	2.99
	125.49	23.000	—	.3235	3.09
	156.03	22.750	—	.3124	3.20
	186.23	22.500	—	.3014	3.32
*24.500	100.50	23.750	23.562	.3575	2.80
	113.00	23.650	23.462	.3529	2.83
*30.000	118.65	29.250	—	.6407	1.56
	157.53	29.000	—	.6266	1.60
	196.08	28.750	—	.6125	1.63
	234.29	28.500	—	.5986	1.67
Inside Casing					
*O.D. 16.000"					
OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
18.625	*78.00	17.855	17.667	.0610	16.39
	87.50	17.755	17.567	.0575	17.38
	*96.50	17.655	17.467	.0541	18.48
20.000	94.00	19.124	18.936	.1066	9.38
	106.50	19.000	18.812	.1020	9.80
	133.00	18.730	18.542	.0921	10.86
*21.500	92.50	20.710	20.522	.1680	5.95
	103.00	20.610	20.422	.1639	6.10
	114.00	20.510	20.322	.1600	6.25
*24.000	94.62	23.250	—	.2764	3.62
	125.49	23.000	—	.2652	3.77
	156.03	22.750	—	.2541	3.94
	186.23	22.500	—	.2431	4.11
*24.500	100.50	23.750	23.562	.2993	3.34
	113.00	23.650	23.462	.2947	3.39
*30.000	118.65	29.250	—	.5824	1.72
	157.53	29.000	—	.5683	1.76
	196.08	28.750	—	.5543	1.80
	234.29	28.500	—	.5404	1.85

*Not API Standard. Shown for information only

METRIC UNITS

Inside Casing

*O.D. 355.60 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m ³ /m ³
406.40	*81.85	390.53	385.75	.0205	48.84
	96.13	387.35	382.58	.0185	53.96
	*104.17	386.03	381.25	.0117	56.40
	111.61	384.15	379.38	.0166	60.26
	125.01	381.25	376.48	.0149	67.33
	*162.21	373.08	368.30	.0100	99.95
473.08	*116.08	453.52	448.14	.0622	16.06
	130.21	450.98	446.20	.0604	16.54
	*143.61	448.44	443.66	.0586	17.05
508.00	139.89	485.75	480.98	.0860	11.62
	158.49	482.60	477.83	.0836	11.96
	197.93	475.74	470.97	.0785	12.74
*546.10	137.66	526.04	521.26	.1181	8.47
	153.28	523.50	518.72	.1160	8.62
	169.65	520.96	516.18	.1139	8.78
*609.60	140.81	590.55	—	.1747	5.73
	186.75	584.20	—	.1688	5.92
	232.20	577.85	—	.1630	6.13
	277.14	571.50	—	.1513	6.36
*622.30	149.56	603.25	598.48	.1866	5.36
	168.16	600.71	595.94	.1842	5.43
*762.00	176.57	742.95	—	.3343	2.99
	234.43	736.60	—	.3270	3.06
	291.80	730.25	—	.3196	3.13
	348.66	723.90	—	.3124	3.20

Inside Casing

*O.D. 406.40 mm

OUTSIDE CASING					
Size O.D. mm	Wt. With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m ³ /m ³
473.08	*116.08	453.52	448.74	.0318	31.41
	130.21	450.98	446.20	.0300	33.30
	*143.61	448.44	443.66	.0282	35.42
508.00	139.89	485.75	480.98	.0556	17.98
	158.49	482.60	477.83	.0532	18.79
	197.93	475.74	470.97	.0481	20.81
*546.10	137.66	526.04	521.26	.0876	11.41
	153.28	523.50	518.72	.0856	11.69
	169.65	520.96	516.18	.0835	11.98
*609.60	140.81	590.55	—	.1442	6.93
	186.75	584.20	—	.1384	7.23
	232.20	577.85	—	.1326	7.54
	277.14	571.50	—	.1269	7.88
*622.30	149.56	603.25	598.48	.1562	6.40
	168.16	600.71	595.94	.1538	6.50
*762.00	176.57	742.95	—	.3039	3.29
	234.43	736.60	—	.2965	3.37
	291.80	730.25	—	.2892	3.46
	348.66	723.90	—	.2820	3.55

**Note: No allowance made for couplings.

Inside Casing
O.D. 18.625"

ENGLISH UNITS

VOLUME & HEIGHT

OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*21.500	92.50	20.710	20.522	.0797	12.55
	103.00	20.610	20.422	.0757	13.22
	114.00	20.510	20.322	.0717	13.95
*24.000	94.62	23.250	—	.1881	5.32
	125.49	23.000	—	.1769	5.65
	156.03	22.750	—	.1658	6.03
	186.23	22.500	—	.1548	6.46
*24.500	100.50	23.750	23.562	.2110	4.74
	113.00	23.650	23.462	.2064	4.85
*30.000	118.65	29.250	—	.4941	2.02
	157.53	29.000	—	.4800	2.08
	196.08	28.750	—	.4660	2.15
	234.29	28.500	—	.4521	2.21

Inside Casing
O.D. 20.000"

OUTSIDE CASING					
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel
*24.000	94.62	23.250	—	.1365	7.32
	125.49	23.000	—	.1253	7.98
	156.03	22.750	—	.1142	8.76
	186.23	22.500	—	.1032	9.69
*24.500	100.50	23.750	23.562	.1594	6.27
	113.00	23.650	23.462	.1548	6.46
*30.000	118.65	29.250	—	.4425	2.26
	157.53	29.000	—	.4284	2.33
	196.08	28.750	—	.4144	2.41
	234.29	28.500	—	.4005	2.50

METRIC UNITS

Inside Casing

O.D. 473.08 mm

BETWEEN CASINGS**

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*546.10	137.66	526.04	521.26	.0416	24.05
	153.28	523.50	518.72	.0395	25.33
	169.65	520.96	516.18	.0374	26.74
*609.60	140.81	590.55	—	.0982	10.19
	186.75	584.20	—	.0923	10.83
	232.20	577.85	—	.0865	11.56
	277.14	571.50	—	.0808	12.38
*622.30	149.56	603.25	598.48	.1101	9.08
	168.16	600.71	595.94	.1077	9.29
*762.00	176.57	742.95	—	.2578	3.88
	234.43	736.60	—	.2505	3.99
	291.80	730.25	—	.2431	4.11
	348.66	723.90	—	.2359	4.24

Inside Casing

O.D. 508.00 mm

OUTSIDE CASING					
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³
*609.60	140.81	590.55	—	.0713	14.03
	186.75	584.20	—	.0654	15.29
	232.20	577.85	—	.0596	16.78
	277.14	571.50	—	.0539	18.57
*622.30	149.56	603.25	598.48	.0832	12.02
	168.16	600.71	595.94	.0808	12.38
*762.00	176.57	742.95	—	.2309	4.33
	234.43	736.60	—	.2235	4.47
	291.80	730.25	—	.2162	4.62
	348.66	723.90	—	.2090	4.79

**Note: No allowance made for couplings.

ENGLISH UNITS

VOLUME & HEIGHT

2.375" OD DRILL PIPE-		
See 2.375" OD Tubing Pages		56 & 58
2.875" OD DRILL PIPE-		
See 2.875" OD Tubing Pages		72 & 74
3.500" OD DRILL PIPE-		
See 3.500" OD Tubing Pages		84 & 86
4.000" OD DRILL PIPE-		
See 4.000" OD Tubing Pages		94 & 96
4.500" OD DRILL PIPE-		
See 4.500" OD Tubing Page		98
5.000" OD DRILL PIPE-		
See 5.000" OD Casing Page		102
5.500" OD DRILL PIPE-		
See 5.500" OD Casing Page		104
5.562" OD DRILL PIPE-		
See Page		158
6.625" OD DRILL PIPE-		
See 6.625" OD Casing Page		110
7.625" OD DRILL PIPE-		
See 7.625" OD Casing Page		114
8.625" OD DRILL PIPE-		
See 8.625" OD Casing Page		122

METRIC UNITS

BETWEEN DRILL PIPE & CASING

60.33mm	OD DRILL PIPE- See 60.33mm OD Tubing Pages	57 & 59
73.03mm	OD DRILL PIPE- See 73.03mm OD Tubing Pages	73 & 75
88.90mm	OD DRILL PIPE- See 88.90mm OD Tubing Pages	85 & 87
101.60mm	OD DRILL PIPE- See 101.60mm OD Tubing Pages	95 & 97
114.30mm	OD DRILL PIPE- See 114.30mm OD Tubing Page	99
127.00mm	OD DRILL PIPE- See 127.00mm OD Casing Page	103
139.70mm	OD DRILL PIPE- See 139.70mm OD Casing Page	105
141.28mm	OD DRILL PIPE- See Page	159
168.28mm	OD DRILL PIPE- See 168.28mm OD Casing Page	111
193.68mm	OD DRILL PIPE- See 193.68mm OD Casing Page	115
219.08mm	OD DRILL PIPE- See 219.08mm OD Casing Page	123

Inside Drill Pipe		ENGLISH UNITS				
O.D. 5.562"		VOLUME & HEIGHT BETWEEN				
OUTSIDE CASING						
Size O.D. Inches	Wt. With Couplings Lbs./Ft.	Inside Diameter Inches	Drift Diameter Inches	Barrels Per Lin. Ft.	Lin. Ft. Per Barrel	
7.000	17.00	6.538	6.413	.0115	87.17	
	20.00	6.456	6.331	.0104	95.81	
	*22.00	6.398	6.273	.0097	102.96	
	23.00	6.366	6.241	.0093	107.34	
	*24.00	6.336	6.211	.0089	111.78	
	26.00	6.276	6.151	.0082	121.79	
	*28.00	6.214	6.089	.0075	134.07	
	29.00	6.184	6.059	.0071	140.90	
	*30.00	6.154	6.029	.0067	148.42	
	32.00	6.094	5.969	.0060	166.01	
	*33.70	6.048	5.923	.0055	182.44	
	35.00	6.004	5.879	.0050	201.37	
	38.00	5.920	5.795	.0040	250.43	
	*40.00	5.836	5.711	.0030	329.62	
	7.625	*20.00	7.125	7.000	.0193	51.91
24.00		7.025	6.900	.0179	55.90	
26.40		6.969	6.844	.0171	58.39	
29.70		6.875	6.750	.0159	63.04	
33.70		6.765	6.640	.0144	69.42	
39.00		6.625	6.500	.0126	79.46	
*45.30		6.435	6.310	.0102	98.29	
*7.750		46.10	6.560	6.500	.0118	85.09
*8.000	26.00	7.386	7.261	.0229	43.59	
*8.125	28.00	7.485	7.360	.0244	41.03	
	32.00	7.385	7.260	.0229	43.61	
	35.50	7.285	7.160	.0215	46.51	
	39.50	7.185	7.060	.0201	49.76	
	8.625	*20.00	8.191	8.066	.0351	28.47
24.00	8.097	7.972	.0336	29.73		
28.00	8.017	7.892	.0324	30.88		
32.00	7.921	7.796	.0309	32.37		
36.00	7.825	7.700	.0294	33.98		
*38.00	7.775	7.650	.0287	34.88		
40.00	7.725	7.600	.0279	35.82		
*43.00	7.651	7.526	.0268	37.29		
44.00	7.625	7.500	.0264	37.84		
49.00	7.511	7.386	.0248	40.40		
*8.750	49.70	7.636	7.500	.0266	37.61	
*9.000	34.00	8.290	8.134	.0367	27.24	
	38.00	8.196	8.040	.0352	28.41	
	40.00	8.150	7.994	.0345	29.01	
	45.00	8.032	7.876	.0326	30.66	
	55.00	7.812	7.656	.0292	34.21	
9.625	*29.30	9.063	8.907	.0497	20.10	
	32.30	9.001	8.845	.0487	20.55	
	36.00	8.921	8.765	.0473	21.16	
	*38.00	8.885	8.760	.0466	21.44	
	40.00	8.835	8.679	.0458	21.85	
	43.50	8.755	8.599	.0444	22.52	
	47.00	8.681	8.525	.0432	23.17	
	53.50	8.535	8.379	.0407	24.56	
	*58.40	8.435	8.279	.0391	25.60	
	*61.10	8.375	8.219	.0381	26.26	
	*71.80	8.125	7.969	.0341	29.34	
	*9.750	59.20	8.560	8.500	.0411	24.31
	*9.875	62.80	8.625	8.500	.0422	23.69

*Not API Standard. Shown for information only

METRIC UNITS

Inside Drill Pipe

O.D. 141.28 mm

DRILL PIPE, CASINGS**

OUTSIDE CASING						
Size O.D. mm	Mass With Couplings Lbs./Ft.	Inside Diameter mm	Drift Diameter mm	Cu. Meters Per Lin. Meter m ³ /m	Lin. Meters Per Cu. Meter m/m ³	
177.80	25.30	166.07	162.89	.0060	167.05	
	29.76	163.98	160.81	.0054	183.61	
	*32.74	162.51	159.33	.0051	197.30	
	34.23	161.70	158.52	.0049	205.71	
	*35.72	160.93	157.76	.0047	214.22	
	38.69	159.41	156.24	.0043	233.40	
	*41.67	157.84	154.66	.0039	256.94	
	43.16	157.07	153.90	.0037	270.02	
	*44.64	156.31	153.14	.0035	284.43	
	47.62	154.79	151.61	.0031	318.14	
	*50.15	153.62	150.44	.0029	349.63	
	52.09	152.50	149.33	.0026	385.89	
	56.55	150.37	147.19	.0021	479.93	
	*59.53	148.23	145.06	.0016	631.68	
	193.68	*29.76	180.98	177.80	.0101	99.48
35.72		178.44	175.26	.0093	107.13	
39.29		177.01	173.84	.0089	111.89	
44.20		174.63	171.45	.0083	120.81	
50.15		171.83	168.66	.0075	133.03	
58.04		168.28	165.10	.0066	152.28	
*67.41		163.45	160.27	.0053	188.36	
*196.85	68.60	166.62	165.10	.0061	163.07	
*203.20	38.69	187.60	184.43	.0120	83.53	
*206.38	41.67	190.12	186.94	.0127	78.63	
	47.62	187.58	184.40	.0120	83.58	
	52.83	185.04	181.86	.0112	89.12	
	58.78	182.50	179.32	.0105	95.36	
	219.08	*29.76	208.05	204.88	.0183	54.56
35.72		205.66	202.49	.0176	56.97	
41.67		203.63	200.46	.0169	59.18	
47.62		201.19	198.02	.0161	62.02	
53.57		198.76	195.58	.0154	65.12	
*56.55		197.49	194.31	.0150	66.84	
59.53		196.22	193.04	.0146	68.64	
*63.99		194.34	191.16	.0140	71.47	
65.48		193.68	190.50	.0138	72.52	
72.92		190.78	187.60	.0129	77.43	
*222.25	73.96	193.95	190.50	.0139	72.07	
*228.60	50.60	210.57	206.60	.0192	52.21	
	56.55	208.18	204.22	.0184	54.44	
	59.53	207.01	203.05	.0180	55.59	
	66.97	204.01	200.05	.0170	58.75	
	81.85	198.43	194.46	.0153	65.56	
	244.48	*43.60	230.20	226.24	.0260	38.53
48.07		228.63	224.66	.0254	39.39	
53.57		226.59	222.63	.0247	40.55	
*56.55		225.68	222.50	.0243	41.09	
59.53		224.41	220.45	.0239	41.87	
64.74		222.38	218.42	.0232	43.15	
69.94		220.50	216.54	.0225	44.41	
79.62		216.79	212.83	.0212	47.07	
*86.91		214.25	210.29	.0204	49.06	
*90.93		212.73	208.76	.0199	50.32	
*106.85		206.38	202.41	.0178	56.24	
*247.65		88.10	217.42	215.90	.0215	46.60
*250.83		93.46	219.08	215.90	.0220	45.40

**Note: No allowance made for couplings.