Tubing Data & Performance Sheet

1-1/2" 3.64# P-110 1-1/2" CS Hydril Type

TUBE BODY DATA

Tube OD	1.900	in.
Wall Thickness	0.200	in.
Tube ID	1.500	in.
Tensile Yield Strength	91,800	lbs. (80% RBW Inspection Class)
Torsional Yield Strength	3,400	ft-lbs. (80% RBW Inspection Class)
Tube Burst	18,500	psi. (80% RBW Inspection Class)
Tube Collapse	17,600	psi. (80% RBW Inspection Class)

TUBULAR ASSEMBLY

30	ft.		
3.64	lbs./ft.		
110,000	psi.		
1.406	in.		
0.0555	gal./ft.	0.0013	bbls./ft.
0.0918	gal./ft.	0.0022	bbls./ft.
94,000	lbs.		
212.0	degrees/100 f	t.	
	3.64 110,000 1.406 0.0555 0.0918 94,000	3.64 lbs./ft. 110,000 psi. 1.406 in. 0.0555 gal./ft. 0.0918 gal./ft. 94,000 lbs.	3.64 lbs./ft. 110,000 psi. 1.406 in. 0.0555 gal./ft. 0.0918 gal./ft. 0.0022 94,000 lbs.

CONNECTION DATA

Connection	CS Hydril Type
Connection OD	2.162 in.
Connection ID	1.440 in.
Threads per inch	8
Make-Up Loss	2.220 in.

MAKE-UP TORQUE

Make-Up Torque - Minimum	800	ft-lbs.
Make-Up Torque - Optimum	900	ft-lbs.
Make-Up Torque Maximum	1,000	ft-lbs.

CONNECTION PERFORMANCE

Connection Torsional Strength	Not Reported
Connection Tensile Strength	117,500 lbs.
External Pressure Capacity	20,700 psi.
Internal Pressure Capacity	20,300 psi.

FEATURES

Hardbanding	None

Notes:

- Referenced tube size, wall and assembly length are nominal, unless indicated otherwise. Values shown may vary with actual values due to OEM tolerances, rounding and other factors. Tubing is manufactured to API 5CT 87-1/2% RBW and inspected to minimum Premium Class (80% RBW).
- Maximum make-up torque is that value above which there is no additional benefit, or reason to exceed. It is not meant to indicate the maximum torque the connection can withstand.

The technical information contained herein, including the product performance sheet and other attached documents, has been extracted from information available from the manufacturer and is for reference only and not a recommendation. The user is fully responsible for the accuracy and suitability of use of the technical information. Patterson Servicers, Inc. cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended. Tubular assembly properties are calculated based on uniform OD and wall thickness. No safety factor is applied. Weight, displacement, and capacity are approximate and can vary by ± 10% (or more) depending on OD, specified wall, wall tolerance, and internal coating options. It is the responsibility of the customer and the end user to determine the appropriate performance ratings, acceptable use of the product, maintain safe operational practices, and to apply a prudent safety factor suitable for the application.

