

Materials List for:

Mechanical Expansion of Steel Tubing as a Solution to Leaky Wellbores

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Materials

Name	Company	Catalog Number	Comments
ASTM A53 Grade B ERW Schedule 40 Steel pipe - OD=10.16 cm, ID=10.04 cm, L=59.7 cm	Baker Sales	BPE-4.00BB40	
ASTM A53 Grade B ERW Schedule 10 Steel pipe - OD=6 cm, ID=5.94 cm, L=61 cm	Service Steel	n/a	
Expansion Cones - AISI D2 grade alloy steel (60 RC hardness)	Shell	Custom-made	
Pipe coupling - OD=6.35 cm, ID=6 cm, L=4.4 cm	LSU	Custom-made	
Steel plate ring - OD=10.16 cm, ID=5.76 cm, thickness=6.35 mm	Louisiana Cutting	Custom-made	
Class H Cement	LaFarge	04-16-12 / 14-18	
Defoaming agent - D-Air 3000L	Halliburton	n/a	
Bentonite clay	LSU	n/a	
Calcium hydroxide	LSU	n/a	
Expansion Fixture	Shell	Custom-made	
Pressure transducers	Omega	PX480A-200GV	
Teflon tubing	Swagelok	PB0754100	
Union tee	Swagelok	SS-400-3	
Elbow union	Swagelok	SS-400-9	
Female elbow	Swagelok	SS-400-8-8	
Port connector	Swagelok	SS-401-PC	
Forged body valve	Swagelok	SS-1RS4	
Tube adapter	Swagelok	SS-4-TA-1-2	
Pipe lubricant	E.F. Houghton & Co.	71323998	
Instant Galvanize Zinc Coating	CRC	78254184128	