Gas Storage Well (Example)

Casing-Design — 9 5/8"- Production String — Type: P

General Assumptions		(TVD)	(AHD)	gas bear. form. expected in next section ? (j/n)			J
Csg. Top Depth	m	0,0	0,0	Frac Depth	-	m	
Shoe Depth	m	1926,0	2184,0	empty Pipe (Losses) to (m)	1926,0	m	
Drill-out Depth	m	2096,0	2754,0	empty Pipe (Kick) to (m)	1926,0	m	
s.G. mud "r.i.h."		1,35	kg/l	Lead-Slurry	1,6	kg/l	
s.G. mud "next phase"		1,45	kg/l	Tail-Slurry	1,9	kg/l	
after Completion		1	kg/l	Mud behind Pipe	1	kg/l	
Mud Loss-Situation		1,2	kg/l	T.O.C. Lead	300	m	
Kick Gradient		1,4	kg/l	T.O.C. Tail	1700	m	
Frac Gradient		1,8	kg/l	relative Density of Gas	0,66508		
Salt Gradient		2,3	kg/l	Rpwarm=Rp/20^b*T^b; b =	-0,08		
Temperature at Surface		20	°C	additional Tension	-	kN	
Temperature at next Shoe Depth		80	°C	add. Burst Press. Reserve (top)	-	bar	

Casing String Sections	RS	1	2	3	4	5	6	7
from TVD	1926,0	1925,7	1905,0	1808,0	1581,0	908,0	499,0	80,0
to TVD	1925,7	1905,0	1808,0	1581,0	908,0	499,0	80,0	-
OD (inch)	9,625	9,625	10,75	9,625	9,625	9,625	9,625	10,75
nominal Weight (lbs/ft)	47	47	109	47	43,5	43,5	43,5	51
Grade	L-80	L-80	L-80	L-80	L-80	L-80	L-80	L-80
Quality (HC/API)	API	API	API	API	API	API	API	API
Connection Type	VAM	VAM	MUST	VAM	VAM	VAM	VAM	VAM
Salt formation (yes = 1)	-	-	1	-	-	-	-	-
avg. Inclination (°)	45,57	45,57	36,07	18,94	32,05	35,11	3,95	-
AHD down (m)	2184,0	2183,5	2154,0	2034,0	1794,0	1000,0	500,0	80,0
AHD top (m)	2183,5	2154,0	2034,0	1794,0	1000,0	500,0	80,0	-
Section Length (m)	0,5	29,5	120,0	240,0	794,0	500,0	420,0	80,0
Yield Strength Red. (bttm.)	10,0%	10,0%	10,0%	9,7%	9,0%	6,4%	4,2%	0,9%
max. DLS (°/10m)	1	1	1	1	1	1	1	1
additional Tension (kN)	-	-	-	-	-	-	-	-