Schlumberger

Gas Lift Design Report

File Name: S-734
Company:
Project: PIPESIM Project

Company Contact:
Design Engineer: User
Date: 03-April-2009

Input Data

Design Control

Design Spacing	*New Spacing*	Design Method	*IPO-Surface Close*
Manufacturer	*SLB (Camco)*	Valve Temperature	Top Valve *Unloading*
Production Pressure Curve	*Production Pressure Model*		Other Valves *Unloading*
Max. Allowable Depth (TVD)	*2600* *ft*		

Design Parameters

Kickoff Pressure	*1000*	*psig*	Surface Injection Temp.	*89*	*F*
Operating Injection Pressure	*900*	*psig*	Injection Gas S. G.	*0.64*	
Unloading Wellhead Pressure	*80*	*psig*	Unloading Gradient	*0.465*	*psi/ft*
Operating Production Pressure	*80*	*psig*	Min. Valve Spacing	*322*	*ft*
Static Reservoir Pressure	*865*	*psig*	Min. Valve Inj. DP	*150*	*psi*
Target Injection Gas Rate	*0.10*	*mmscf/d*			
Production Rate (Fixed Rate)	*60*	*STB/d*			

Design Bias

Closing Pressure Drop Between Valves	*25*	*psi*
Locating dP at Valve Location	*100*	*psi*
Transfer Factor (% of Pinj - Pprod)	*0.00*	*%*
Ptro Offset at Bottom Valve Location	*0*	*psi*

Model Data

Completion	*Vogel's Equation aofp = 95.526 STB/d*
GOR	*1600 scf/STB*
Watercut	*48 %*
API	*16*
Flow Corr	*Hagedorn & Brown*

Design Results

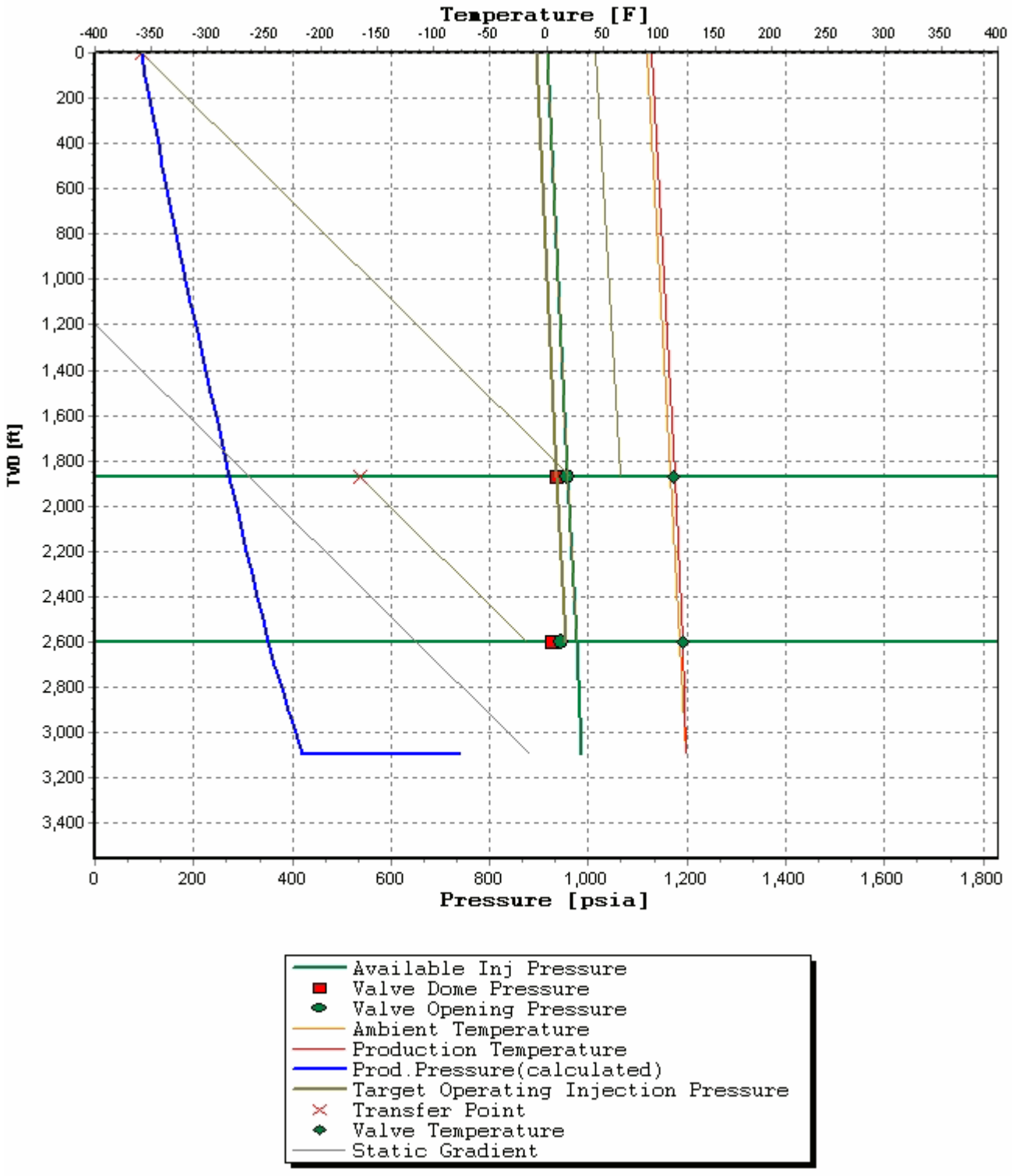
St. Num	Valve MD *(ft)*	Valve TVD *(ft)*	Valve Model	Port Size *(inches)*	Ptro (@60 F) *(psig)*	Valve Choke *(inches)*
1	*1869*	*1869*	*BK*	*1/8*	*853*	
2	*2600*	*2600*	*BK*	*1/8*	*831*	

St. Num	Valve Temp. *(F)*	Closing Pres at Surface *(psig)*	Open Press at Surface *(psig)*	Pdome *(psig)*	Pprod. *(psig)*	Inj Pres Drop b/w Valves *(psi)*
1	*113*	*879*	*900*	*921*	*258*	
2	*121*	*854*	*872*	*911*	*335*	*25*

St. Num	Unloading Rate (STB/d)	Calculated Gas rate (unloading) (mmscf/d)	Max Valve Thoughput (mmscf/d)	Valve CD
1	*60*	*0.1*	*0.214*	*0.65*
2	*60*	*0.1*	*0.212*	*0.65*

Target Unloading Injection Pressure (Surface)	*879*	*psig*
Target Operating Injection Pressure (Surface)	*879*	*psig*
Target Injection Gas Rate	*0.10*	*mmscf/d*
User Specified Production Rate	*60*	*STB/d*

Remarks



Target Unloading Injection Pressure (Surface)	*879*	*psig*
Target Operating Injection Pressure (Surface)	*879*	*psig*
Target Injection Gas Rate	*0.10*	*mmscf/d*
User Specified Production Rate	*60*	*STB/d*