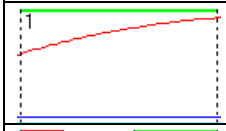
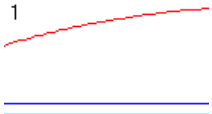
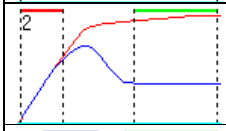
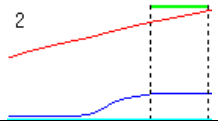
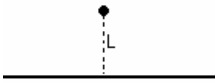
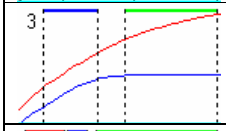
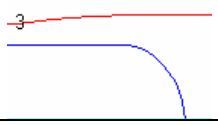
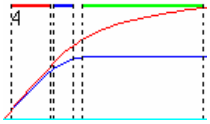
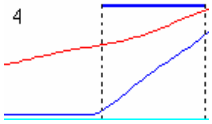
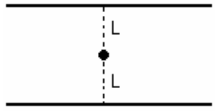
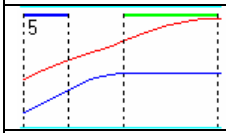
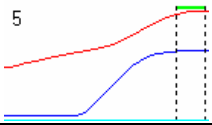
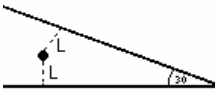
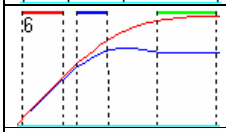
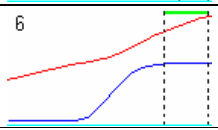
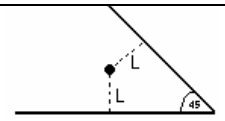
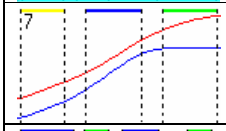
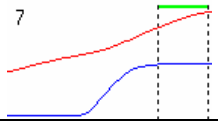
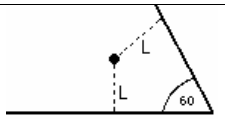
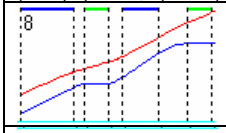
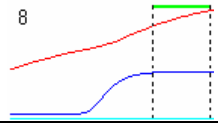
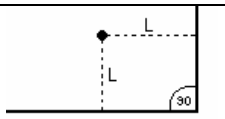
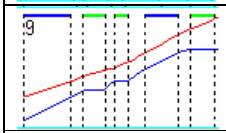
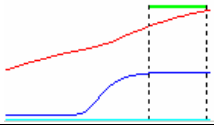
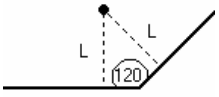
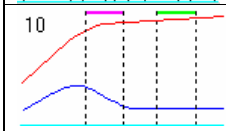
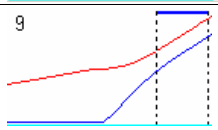
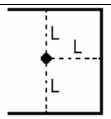
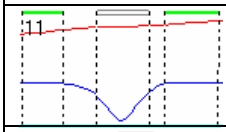
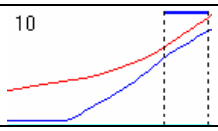
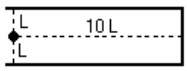
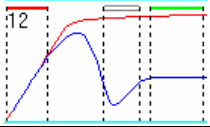
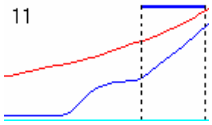
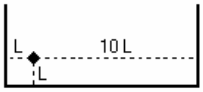
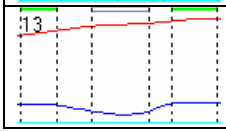
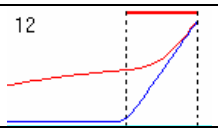
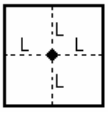
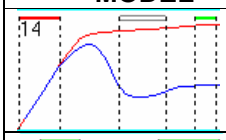
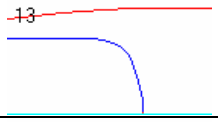
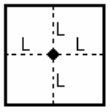
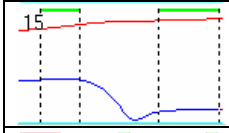
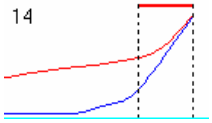
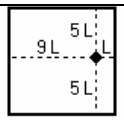
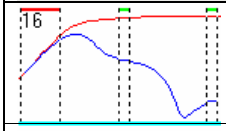
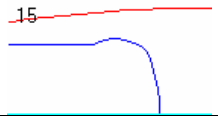
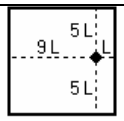
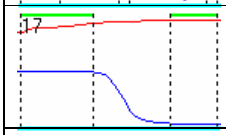
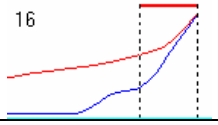
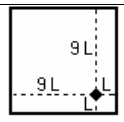
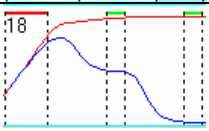
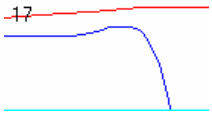
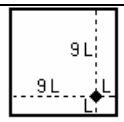
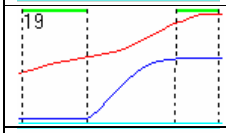
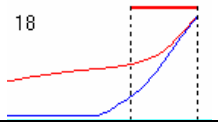
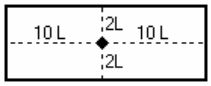
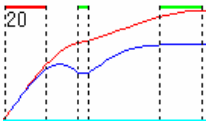
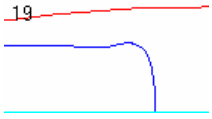
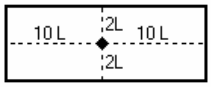
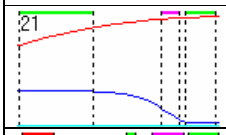
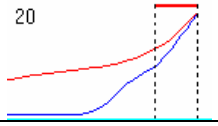
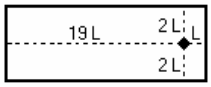
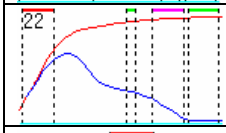
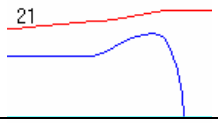
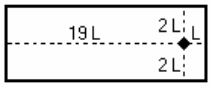
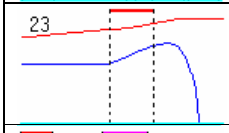
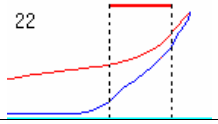
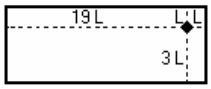
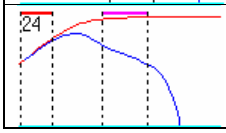
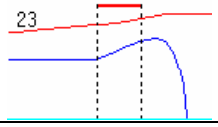
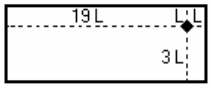
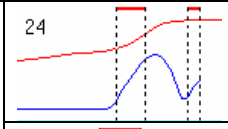
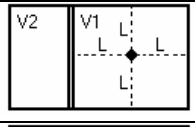
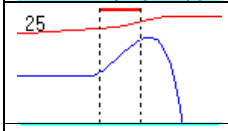
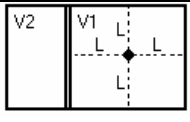
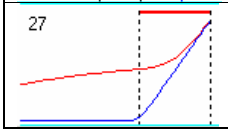
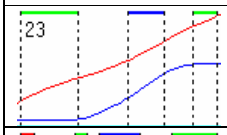
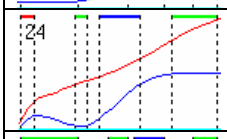
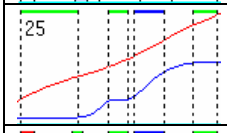
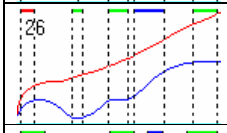
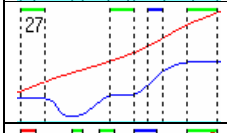
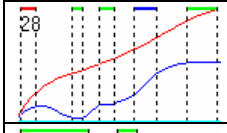
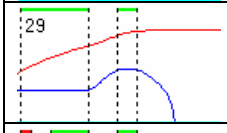
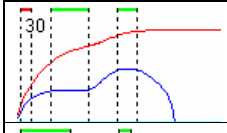
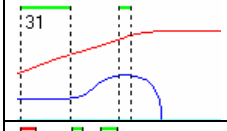
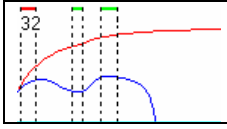
WELL TESTING TYPICAL RESPONSES
PANSYSTEM USER GUIDELINES

VERTICAL WELLS		BOUNDARY MODELS		
RESERVOIR FLOW MODEL	**NAME**	**BOUNDARY MODEL**	**NAME**	**BOUNDARY CONFIGURATION**
	Radial homogeneous		Infinite Acting or No Boundary	
	Radial homogeneous with wellbore storage		Single fault- No flow boundary	
	Vertical fracture – infinite conductivity		Constant pressure – (generic)	
	Vertical fracture – infinite conductivity with wellbore storage		Parallel faults (equidistant)	
	Vertical fracture – uniform flux		Intersecting faults 30 deg – (12 x slope)	
	Vertical fracture – uniform flux with wellbore storage		Intersecting faults 45 deg – (8 x slope)	
	Vertical fracture – finite conductivity		Intersecting faults 60 deg – (6 x slope)	
	Limited height fracture Zwdf = 0.5 – homogeneous		Intersecting faults 90 deg – (4 x slope)	
	Limited height fracture Zwdf < 0.5 - homogeneous		Intersecting faults 120 deg – (3 x slope)	
	Limited height fracture Zwdf = 0.5 – short fracture homogeneous		U_shaped faults – L,L,L	
	Dual porosity – pseudo steady state		U_shaped faults – L,10L, L	
	Dual porosity – pseudo steady state with wellbore storage		U_shaped faults – L,L, 10L	
	Dual porosity - transient		Closed system – L,L, L, L (drawdown)	

WELL TESTING TYPICAL RESPONSES
PANSYSTEM USER GUIDELINES

RESERVOIR FLOW MODEL	NAME	BOUNDARY MODEL	NAME	BOUNDARY CONFIGURATION
	Dual porosity – transient with wellbore storage		Closed system – L,L,L, L (buildup)	
	Dual permeability		Closed system – 5L,L, 5L, 9L (drawdown)	
	Dual permeability with wellbore storage		Closed system – 5L,L, 5L, 9L (buildup)	
	Radial composite – inner mobility lower		Closed system – L,L, 9L, 9L (drawdown)	
	Radial composite with wellbore storage – inner mobility lower		Closed system – L,L, 9L, 9L (buildup)	
	Radial composite – inner mobility higher		Closed system – 2L,10L,2L, 10L (drawdown)	
	Radial composite with wellbore storage – inner mobility higher		Closed system – 2L,10L,2L, 10L (buildup)	
	Partial penetration		Closed system – 2L,19L,2L, L (drawdown)	
	Partial penetration with wellbore storage		Closed system – 2L,19L,2L,L (buildup)	
	Gas cap/aquifer support		Closed system – L,19L,3L, L (drawdown)	
	Gas cap/aquifer support with wellbore storage		Closed system – L,19L,3L, L (buildup)	
			2-cell compartmentalised – (drawdown)	
			2-cell compartmentalised – (buildup)	
			Hexagonal system - L	

WELL TESTING TYPICAL RESPONSES
PANSYSTEM USER GUIDELINES

HORIZONTAL WELLS	
RESERVOIR FLOW MODEL	**NAME**
	Horizontal well – two no-flow boundaries Zwd = 0.5 –homogeneous
	Horizontal well – two no-flow boundaries Zwd = 0.5 – homogeneous with wellbore storage
	Horizontal well – two no-flow boundaries Zwd > 0.5 – homogeneous
	Horizontal well – two no-flow boundaries Zwd > 0.5 – homogeneous with wellbore storage
	Horizontal well – two no-flow boundaries – dual porosity
	Horizontal well – two no-flow boundaries – dual porosity with storage
	Horizontal well – no-flow/constant pressure boundary – homogeneous
	Horizontal well – no-flow/constant pressure boundary – homogeneous with storage
	Horizontal well – no-flow/constant pressure boundary – dual porosity
	Horizontal well – no-flow/constant pressure boundary – dual porosity with storage