Spill Volume Calculation

Elvis Tank Battery Facility 6/3/19 Spill

Absorbed Oil Volume				
Area	Length (ft)	Width (ft)	Depth (in)	Volume (bbl)
1	50	20	0.5	0.3
2	65	20	2	1.6
3	75	20	2	1.9
			Total Volume Oil Absorbed (bbl)	**3.8**
Standing Oil Volume				
Total Fluid Recovered (bbl)	5			
			Total Volume Oil Recovered (bbl)	**1.3**
Total Spill Volume (Absorbed Oil Volume + Standing Oil Volume)				
			Total Volume (bbl)	**5.1**

Absorbed Oil Volume

Volume (bbls) = [Length x Width x Depth x Porosity x (1- water saturation)]/bbl conversion factor

Porosity = 0.17 (on pad)

Water Saturation = 0.75 (high saturation assumed due to rain event)

Bbl conversion factor = 5.61 ft^3/bbl

Example Calculation: Area 1

Volume (bbls) = [50ft x 20ft x (0.5in/12(in/ft)) x 0.17 x (1-0.75)] / (5.61ft^3/bbl) = 0.3

Standing Oil Volume

Standing fluid recovered was estimated to be 25% oil by volume.

Volume (bbl) = Total fluid recovered x 0.25 = 5 bbl x 0.25 = 1.3