DD-1112
No Date

Restricted Vertical Migration

If migration in the vertical plane were restricted, then lateral dispersal of contamination could be significant.

initial contaminant depth \ maximum dispersal angle (from horizontal)	22.5°	45°	67.5°	90°
	Horizontal dispersion distance at point of groundwater contact			
	Actual dispersion distance at point of groundwater contact			
	Aerial extent at point of groundwater contact			
0′	140′	70′	35′	0′
	157′	99′	78′	70′
	61,575 ft²	15,394 ft²	3,848 ft²	—
25′	90′	45′	27′	0′
	114′	83′	75′	45′
	25,447 ft²	6,362 ft²	2,376 ft²	—

1. Average depth from surface to groundwater ≃ 70′

Even under conditions of limited vertical migration, a contaminant source at 25′ deep would reach groundwater at 70′ before traveling horizontally 50′ if vertical migration was ≥ 42° (or horizonally 75′ if vertical migration ≥ 31°)

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limited vertical migration
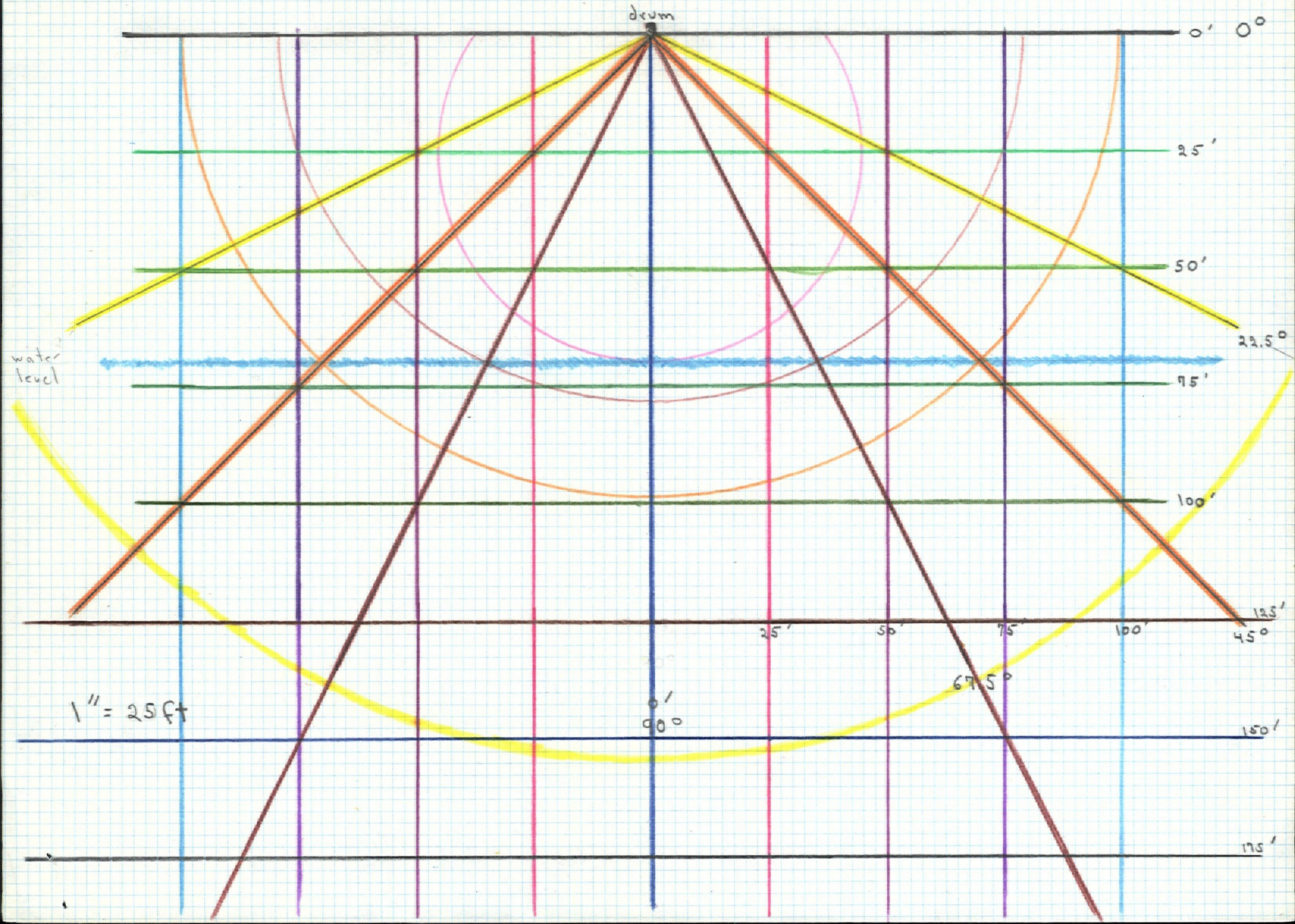
fig 11