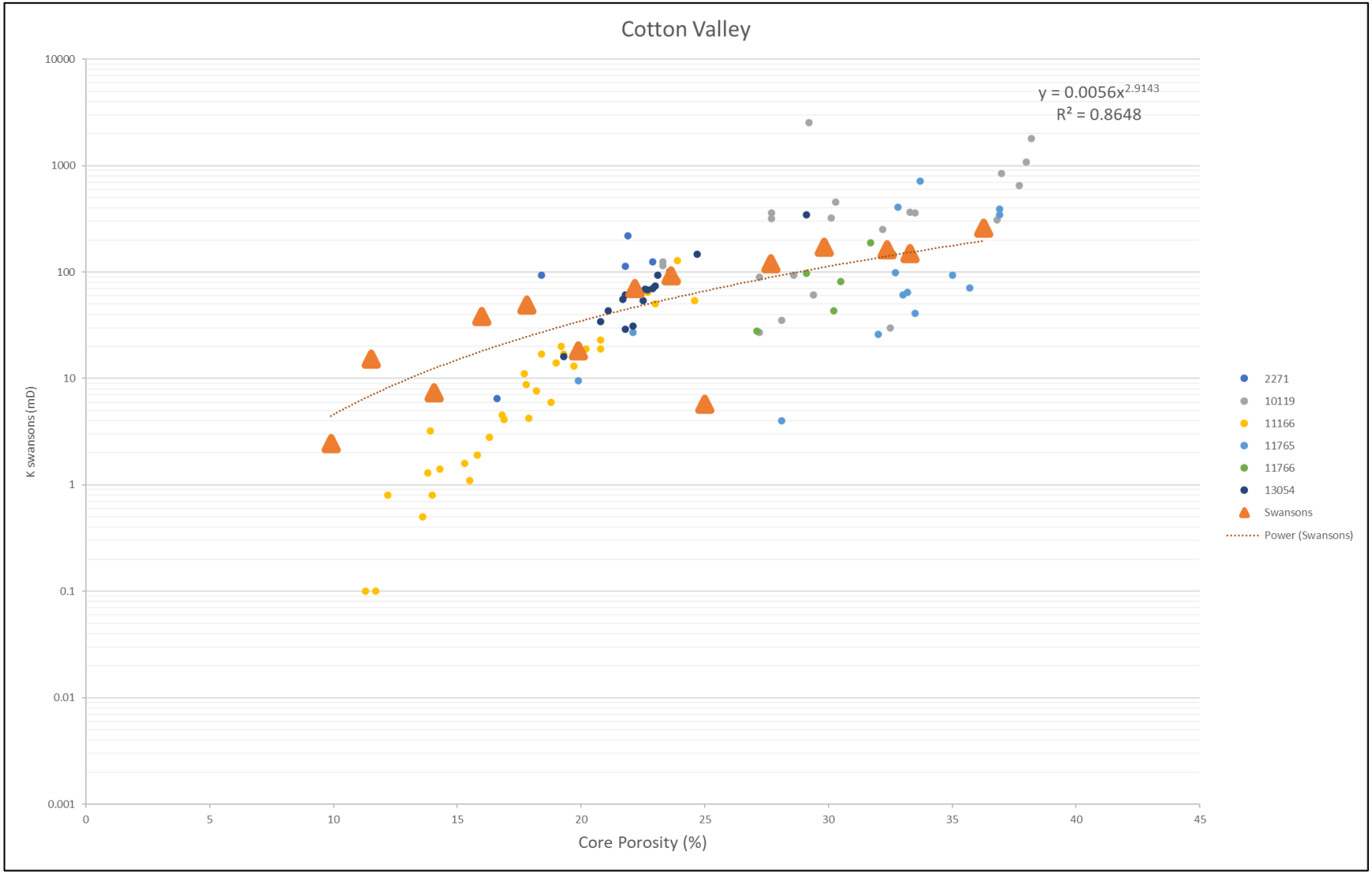

To characterize the porosity and permeability values of the Cotton Valley sands, core data was obtained from the SPDA database throughout the Lapis Energy modeling area in Union County, Arkansas. Six wells comprised of 97 data points with depths ranging from 3,537.0 to 7,602.5 feet show that porosities and permeabilities range from 11.3 % to 24.5 % and 0.1 mD to 2,520 mD. The average porosity is 24.5% and the average permeability is 162.2 mD.

- **Average porosity=24.5%**
- **Average permeability=162.2 md**
- **Max porosity= 38%**
- **Min porosity= 11.3%**
- **Max permeability= 2520 md**
- **Min permeability=0.1 md**

Lapis Energy

Figure 2-28

Cotton Valley Injection Zone
Core Porosity-Permeability Cross Plot

PROJECT INFO: Union County Arkansas		SCALE INFO: N/A	
DATE: Jan 2023	PROJECT NAME: 220080LEE	BY: GKS CHECK BY: GKS	SHEET 1 OF 1

Geostock Sandia