GAM run 03-02

by **Robert E. Mace**
>Texas Water Development Board
>Groundwater Availability Modeling Section
>(512) 463-7847
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REQUESTOR:

Mr. Fred Bartle, Kendall County Water Council

DESCRIPTION OF REQUEST:

What is the average well yield/production for Kendall County in the Hill County Trinity model?

METHOD:

Queried the database of well yields, specific capacity, and transmissivity compiled for the Hill Country Trinity GAM (Mace and others, 2001).

PARAMETERS AND ASSUMPTIONS:

None: Data request.

RESULTS:

See attached table. Includes summary for entire Hill Country. The average well yield for Kendall County is 28 gpm. Note that the average value is greater than the median value of 17 gpm on the attached table. The median value more accurately reflects the central tendency of the well yield values. In other words, someone is more likely to get a well with the median value than with the average value in this particular case.

REFERENCES:

Mace, R. E., Chowdhury, A. H., Anaya, R., and Way, S.-C., 2000, Groundwater availability of the Middle Trinity aquifer, Hill Country area, Texas- Numerical simulations through 2050: Texas Water Development Board Report 353, 117 p.

Table of measured well yields for the Hill Country Trinity aquifer area.

	Count	Min	Max	25th	50th	75th	90th
all	1,653	0.25	1,100	12	20	35	100
Bandera	254	4	732	14	19	30	90
Bexar	98	1.50	800	11	15	25	176
Blanco	109	0.25	150	10	20	30	100
Comal	322	2	800	12	15	20	69
Gillespie	108	5	350	15	22	30	87
Hays	156	1	1,100	15	25	45	150
Kendall	174	0.50	227	9	17	30	115
Kerr	467	1	300	25	40	50	100
Medina	22	4	150	10	14	30	98
Travis	147	1.50	190	10	15	22	78

Notes:
1. All units in gallons per minute (gpm)
2. Count is the number of compiled well yields.
3. Min is the minimum value
4. Max is the maximum value
5. 25th is the value at the 25th percentile (means that 25 percent of the values are less than this value and 75 percent are greater than this value)
6. 50th is the value at the 50th percentile (also called the median which means that 50 percent of the values are lower and 50 percent are higher than this value)
7. 75th is the value at the 75th percentile (means that 75 percent of the values are less than this value and 25 percent are greater than this value)
8. 90th is the value at the 90th percentile (means that 90 percent of the values are less than this value and 10 percent are greater than this value)
9. Values for Uvalde County are not reported because there was only one value.