

The background features abstract, overlapping green geometric shapes in various shades of green, creating a modern, layered effect. The shapes are primarily triangular and polygonal, with some lighter green areas and darker green borders.

# Furches Farms Partnership

## Tripp and Sharon Furches

### Farm Irrigation Project

3182 State Rt. 94W, Murray, KY 42071 - Farming since 1946



## Furches Farms - 3 miles west of Murray on Hwy. 94

Home Farm - 150 acres

Our main grain complex - 550,000 bushel capacity, three farm shops, farm offices, and two family homes.

Joins an additional grain complex purchased in 2011 + 78 rented acres.



West bin facility

Furches Home

Bell Home

Farm shop complex

Anderson Bin facility

94

783

94



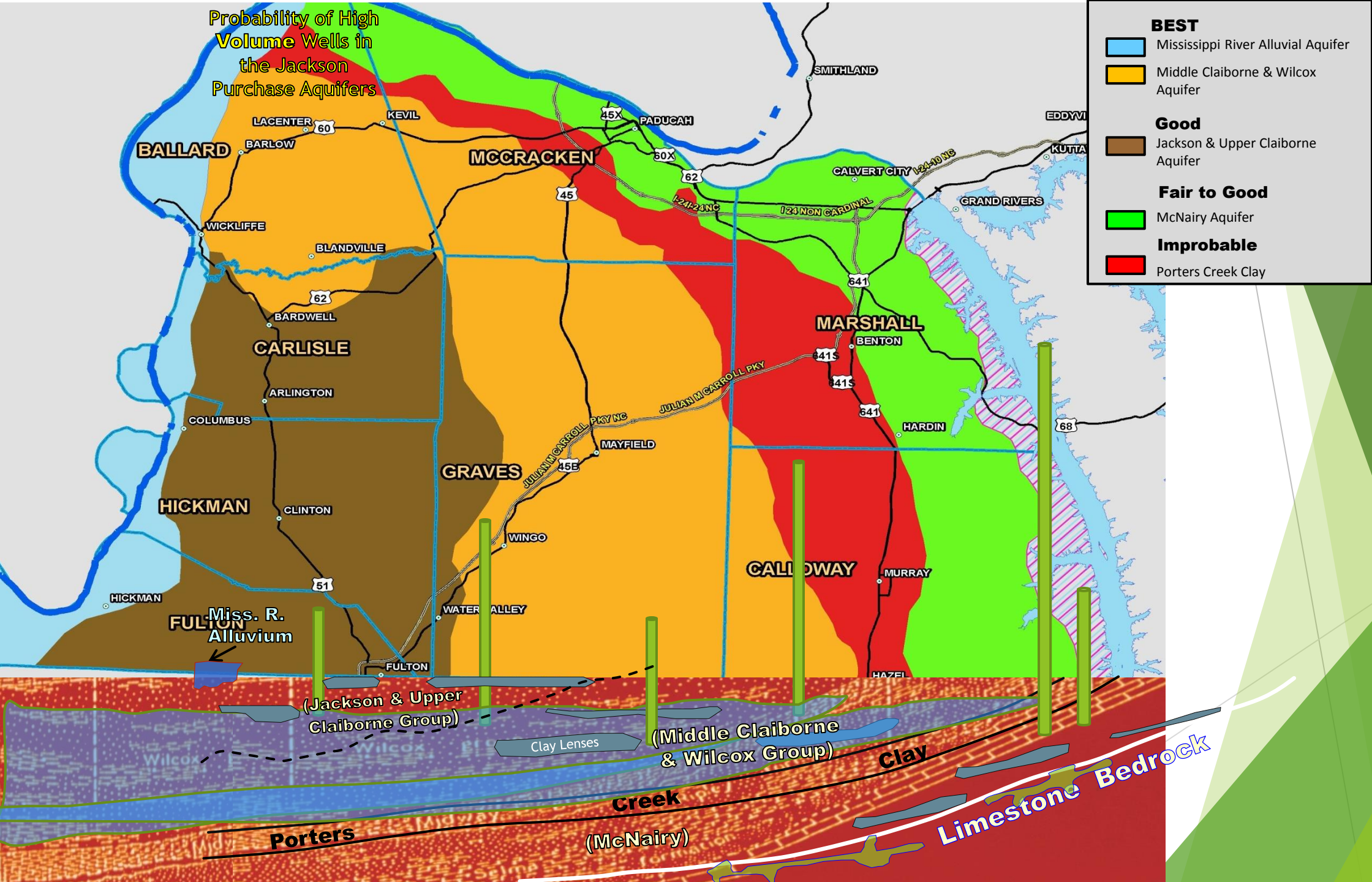


# Probability of high volume wells in the Jackson Purchase Aquifers

Porters Creek Clay

*\*Improbable\**

Probability of High  
Volume Wells in  
the Jackson  
Purchase Aquifers



**Table 5. Approximate maximum flow rate in different pipe sizes to keep velocity  $\leq 5$  feet per second.**

Pipe diameter	Flow rate (gpm)
1/2	6
3/4	10
1	15
1 1/4	25
1 1/2	35
2	50
3	110
4	200
5	310
6	440
8	780
→ 10	1225
12	1760
16	3140

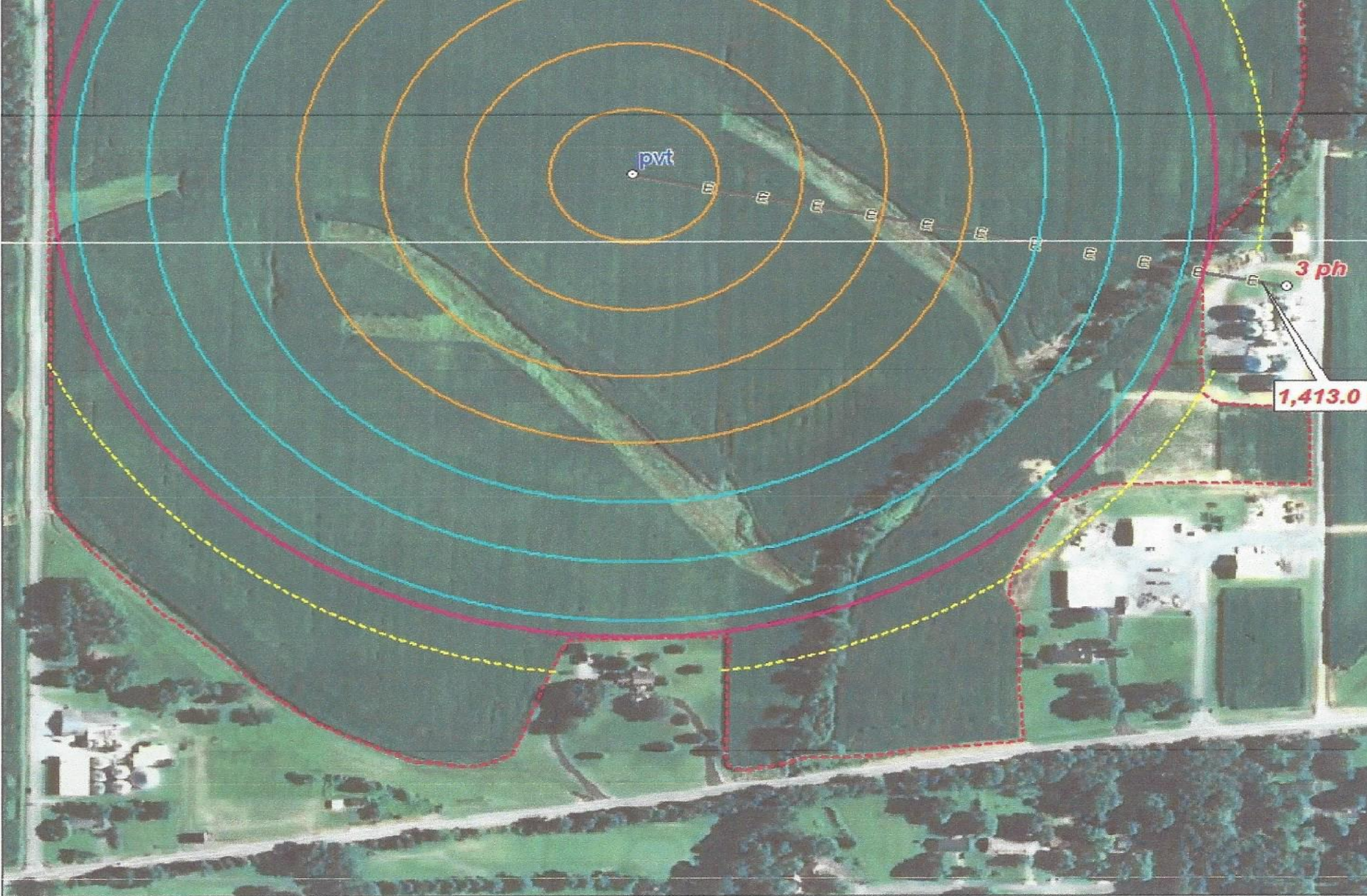
Flow rate - 750 gal/minute

27,154 gallons to put 1" on 1 acre

Can apply 1/2" on 123 acres in approx. 35 hours


Total application is approx. 1.7 million gallons





Pivot Map



- 
- Drilled 490 feet deep
  - Powered by 75 hp motor with shaft drive to bottom of 12” Well
  - Well Drilling Cost - \$49,125
  - Additional cost for test well - \$5,000



- *VALLEY* system cost - \$76,126 (6 towers & an end gun. Covers 123 acres.
- Piping to Pivot 1300 ft. - \$11,908 (\$9.16 per ft. includes trencher & labor)
- Chemigation Valve - \$600
- Concrete & Misc. fittings - \$2,034
- Control wire to Pivot - \$3,597
  - (\$2.77 per ft.)

Expected cost: \$153,515.00

Actual cost: \$163,840.00

Above ground 3-phase line extensions - \$8.00/ft.  
Convert single to 3-phase - \$3.50/ft.  
Underground trenching & pipe - \$5.75/ft.  
Wire installed into pipe - \$9.00/ft.





# Electrical panel

Located with electrical panel for grain complex.

HP	75	PHASE	3	HZ	60
FRAME	365TP WP1	VOLTS	460		
TYPE	VHS365TP-4-075S	AMPS	88		
DESIGN	B LR CODE G	INSUL	GLASS F		
RATING-CONT	S1	SF	1.15	RPM	1770
BEARING	7224 B	LOWER BEARING	6314		
OIL CAP	4.2 QTS	LOWER BEARING	GREASE LUBRICATED		
SERIAL NO	304281		460 KG		
NRR			NEMA NOM.EFF.	91.4	
ROTATION					

HIGH THRUST HOLLOW SHAFT VERTICAL MOTOR



**CAUTION**  
Do not run the motor without oil in the oil chamber for upper bearing. The upper bearing must be lubricated with mechanical oil.















VALLEY   
**TouchPro**

**⚠ DANGER ⚠**  
High Voltage!  
480 volts can kill!  
Lock Machine Power  
in the "OFF" position  
before opening cover!

**CAUTION**  
⚡ Shock Hazard ⚡



