Determining the Presence of Fecal Coliform Bacteria in Private Water Well Samples of Texas

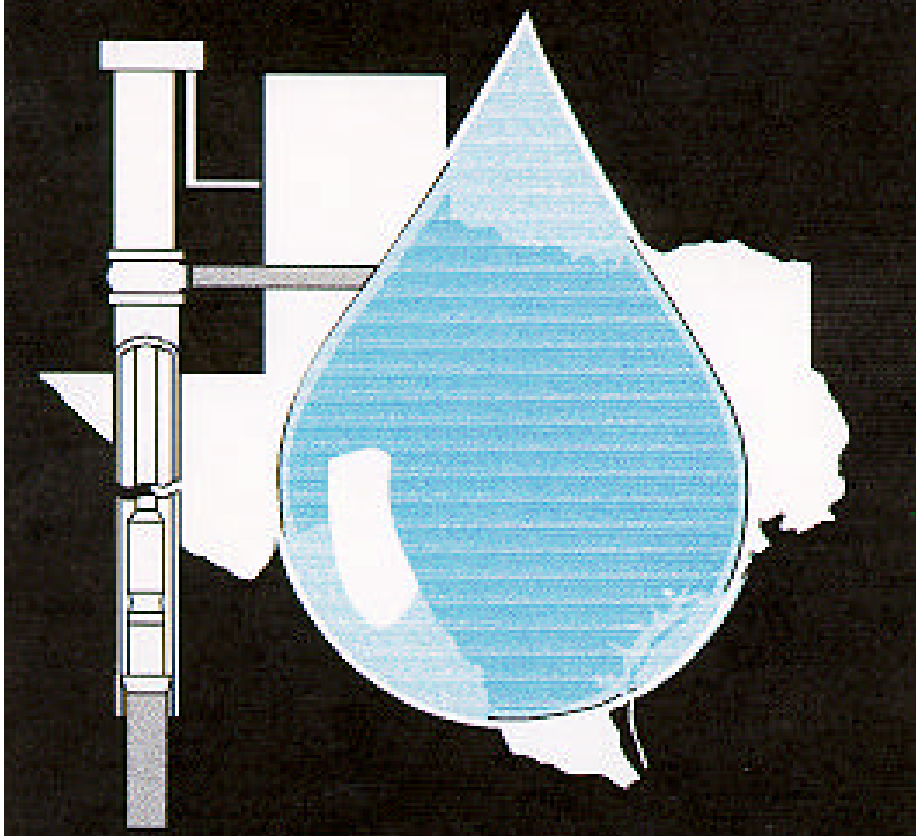
Monty C. Dozier

Ext. Specialist – Water Resources

Dennis Hoffman

Exp. Station Research Scientist

TEX★A★Syst



Rural Well Water Assessment

Target Audience

Why Check for Fecal Coliform?

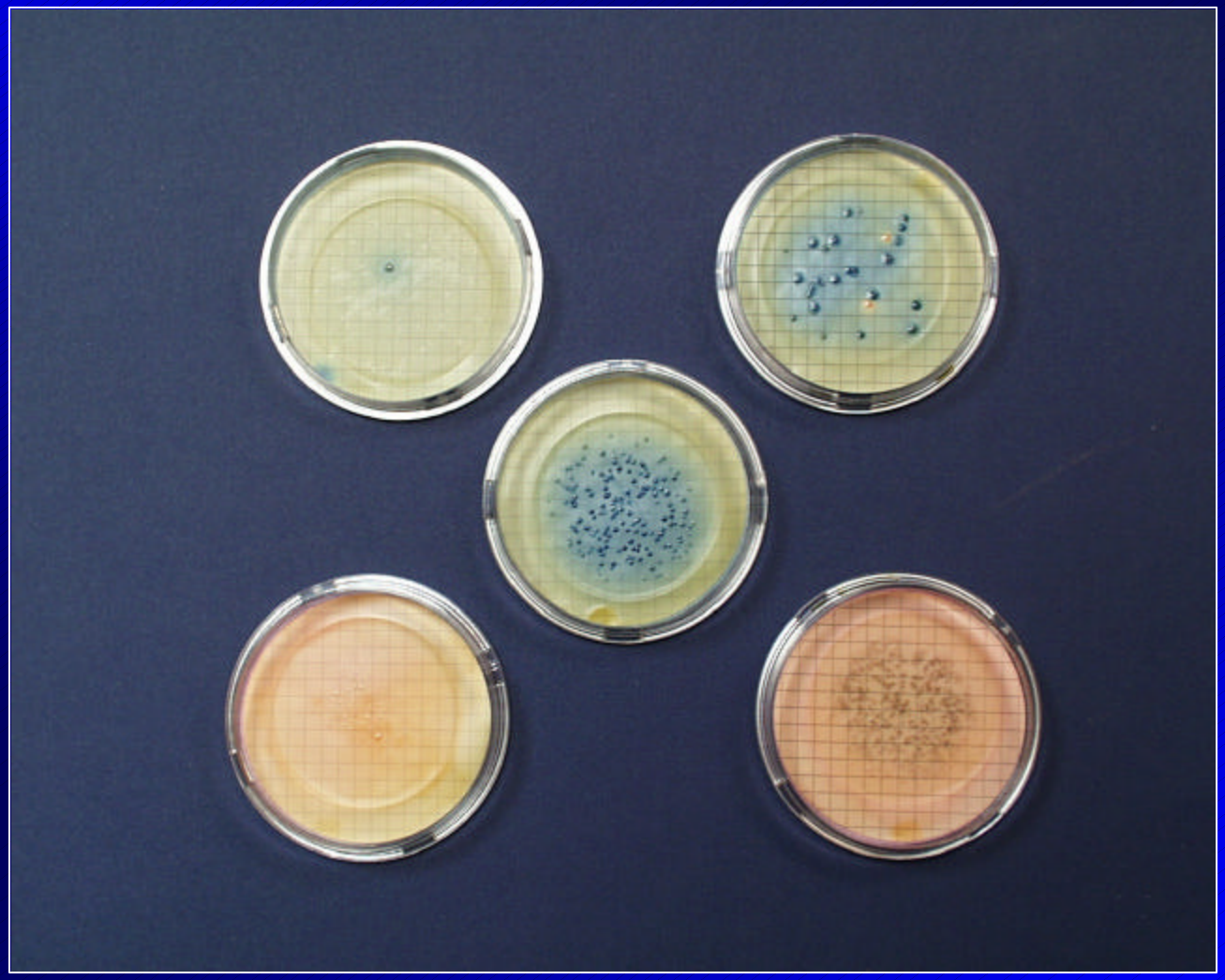
- MCL – 0 colony/100 ml
- Present in intestinal tract and fecal waste
- Indicator bacteria
- Cost Effective
- Similar response to treatment and environment
- Indicates disease risk
  - Intestinal infections, dysentery,hepatitis, typhoid fever, cholera & others

Water Well Screening Program

Samples screened on-site

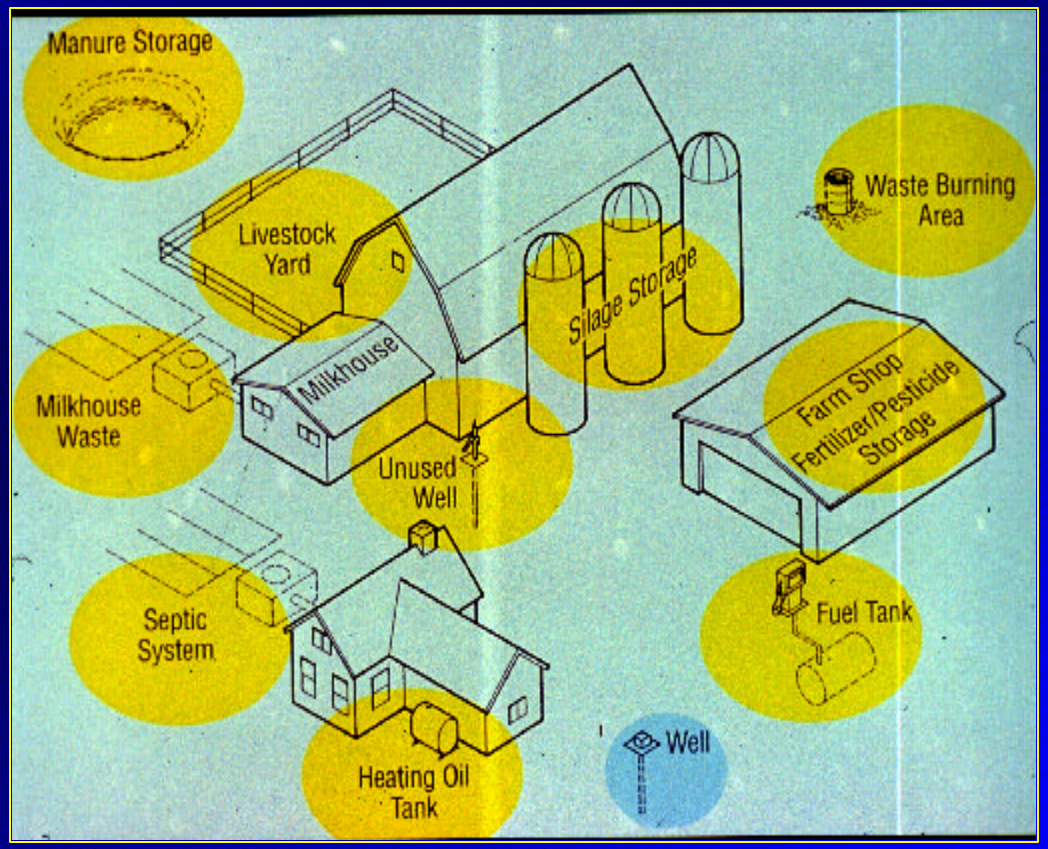
Water Screened For Fecal Coliform

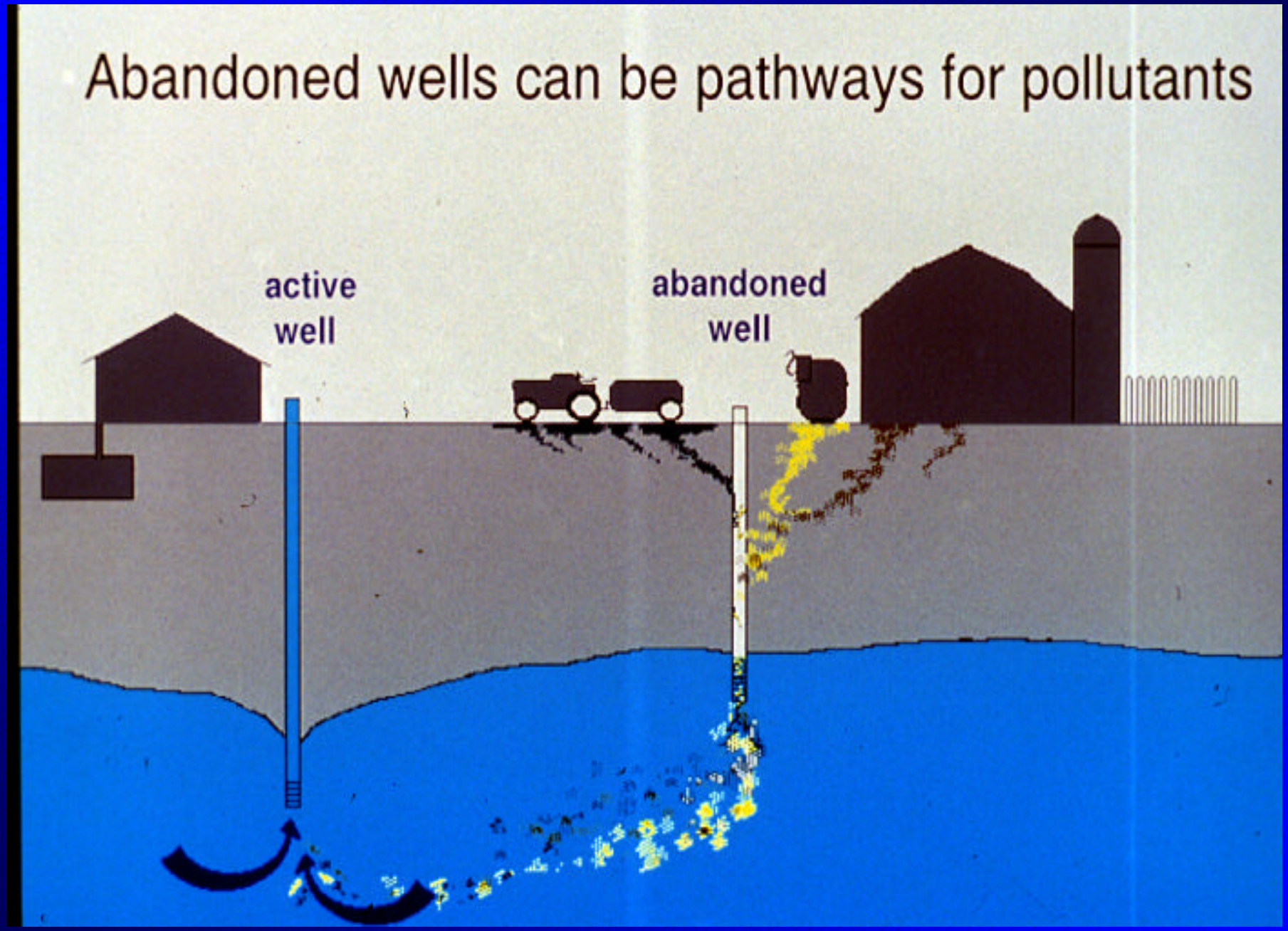
Whoop, There It Is



Sources of Bacteria Contamination

- Septic Tank
- Livestock Pens
- Dog runs
- Critters
- Sewage treatment facilities
- Flood waters

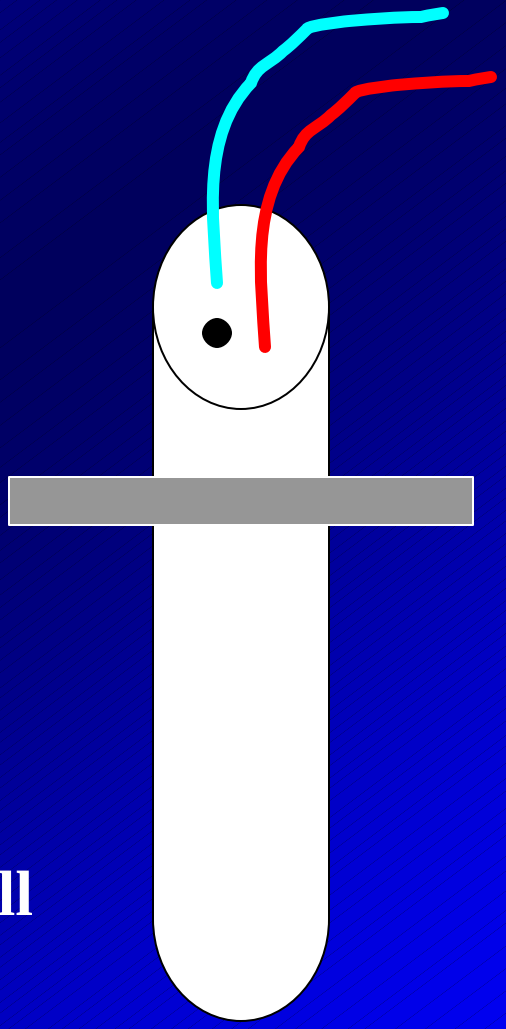



Abandoned wells can be pathways for pollutants
active well
abandoned well

Treatment For Positives

Contact Health Dept. for test

Well Depth	Gallons Bleach
< 100 ft	½ to 1 gallon
100 – 200 ft	1 to 1 ½ gallon
200 – 300 ft	2 gallons
> 300 ft	2 ½ gallons



TNRCC Publication – Private Well Disinfection and Water Sampling

State Results

- Reporting Dates – May 1999 to November 2001
- # Samples – 3,319
- # Fecal Positives – 250, 7.5%

High Plains Results

- Northern High Plains
- # Samples – 1,166
- # Fecal Positives – 105
- Percent Fecal Positives- 9.0 %

- Southern High Plains
- # Samples – 531
- # Fecal Positives – 19
- Percent Fecal Positives- 3.6 %

Program Benefits

- Teachable Moment
- Increased Awareness
- Management Education
- Protection of Public Health
- Partnership
- TCFF
- Exposure

Water Websites

- http://waterhome.tamu.edu
- http://water.tamu.edu

God Bless You and Your Family

God Bless America