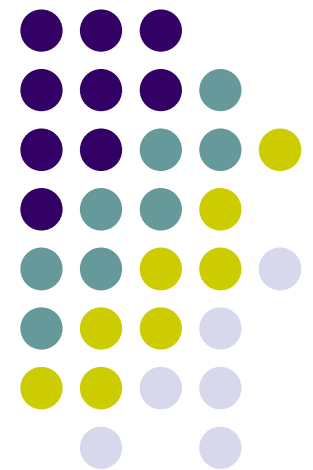


Pavillion, Wyoming EPA Sampling Results

January 2010 Sampling





EPA's Pavillion Investigation

- Heard residents' concerns in May 2008
- EPA decided additional investigation was warranted
- Conducted initial sampling in March 2009
- Follow-up sampling in January 2010
- EPA has been analyzing and reviewing data
- We requested health consultation from ATSDR on our sampling results

Purposes of Jan 2010 Sampling



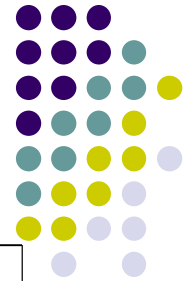
- Focus on area of concern identified in March 2009 sampling
- Verify presence and amount of compounds of concern to support evaluation of health concerns
- If possible, gather information helpful in understanding sources



Types of Samples Taken

- 23 Water Well Samples
 - 17 Domestic Drinking Water Well Samples (DW)
 - 4 Domestic Stock Well Samples (DW)
 - 2 Public Well Samples (PW)
- 3 Monitoring Well Samples (MW)
- Additional samples– surface water, production fluids

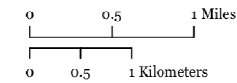
January 2010 Sample Locations



Pavillion Ground Water Investigation Phase 2 Sample Locations

Sample Locations

- Monitoring Well
- Domestic Well
- Public Well
- Surface Water
- Sediment
- Soil
- Gas/Product



Date: August 9, 2010

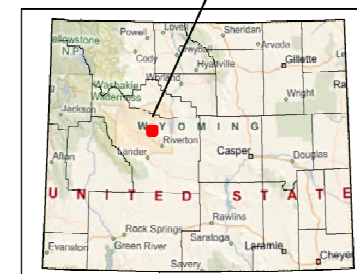
Map Projection: UTM, Meters, Zone 12N, NAD83

Data Sources: Imagery - USDA NAIP 1-meter aerial photograph (2009); Sample Locations - UOS (2009).

Disclaimer: EPA makes no claim regarding the accuracy or precision of these data. Questions concerning the data should be referred to the source agency. This map does not necessarily represent EPA's position on any Indian Country boundaries or the jurisdictional status of any specific location.

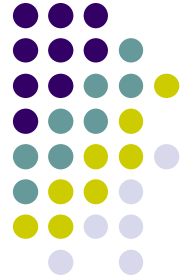


Area Enlarged



What did we find?

Overall summary of results



- Confirmation of highly contaminated shallow groundwater occurring in same aquifer as drinking water wells
- Only 2 drinking water wells have constituents above a health-based EPA drinking water standard
- Widespread incidence of low level organic detections– TPH and others

What did we find?

Overall summary of results, cont'd



- Significant levels of some inorganic constituents
- EPA has not reached any conclusions regarding the source(s) of contaminants of concern in the drinking water wells
- Town of Pavillion wells did not exceed any EPA primary drinking water standards

Shallow GW Monitoring Wells:

Key Findings



- Levels of benzene, Total Petroleum Hydrocarbons well above health-based levels of concern in soils and groundwater
- Proximity to drinking water wells- closest is 200 yards away
- Raises concern about potential future impacts on drinking water wells
- Ongoing clean-up will need to ensure no migration to drinking water wells

Drinking Water/Stock Wells:

Key Findings



- Total Petroleum Hydrocarbons detected in 17 of 19 drinking water wells- low concentrations
- Thermogenic methane detected in 7 of 8 wells
- 4 pesticides detected at very low levels consistent with previous USGS sampling

Drinking Water/Stock Wells:

Key Findings- Bacteria



- Some inorganics at high levels— consistent with historic values
- Previous TICs confirmed— adamantanes and 2 BE-P (or TBEP)
- Bacteria found are not a health concern but may contribute to taste and odor issues