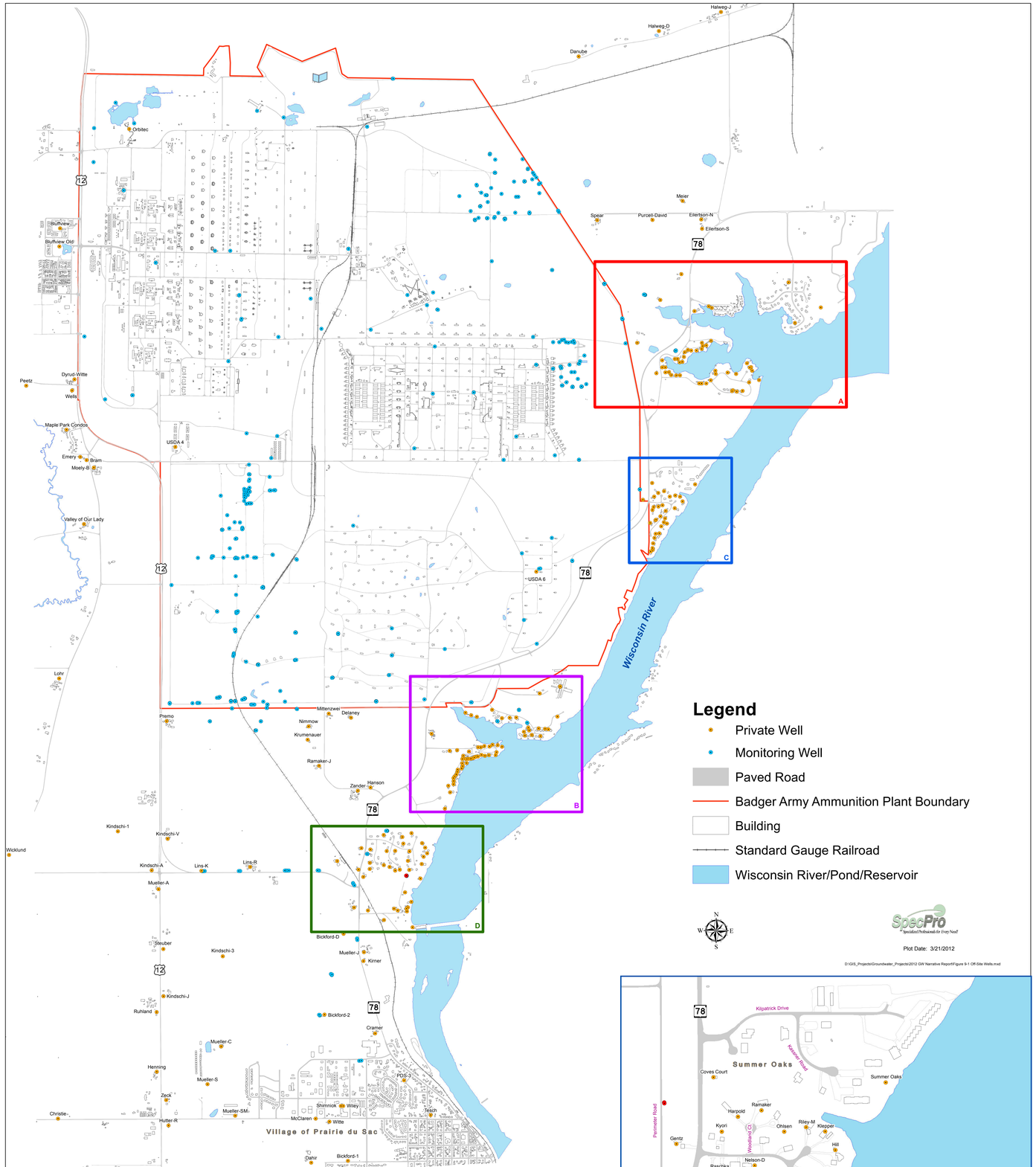

Legend

- Private Well
- Monitoring Well
- Paved Road
- Badger Army Ammunition Plant Boundary
- Building
- Standard Gauge Railroad
- Wisconsin River/Pond/Reservoir

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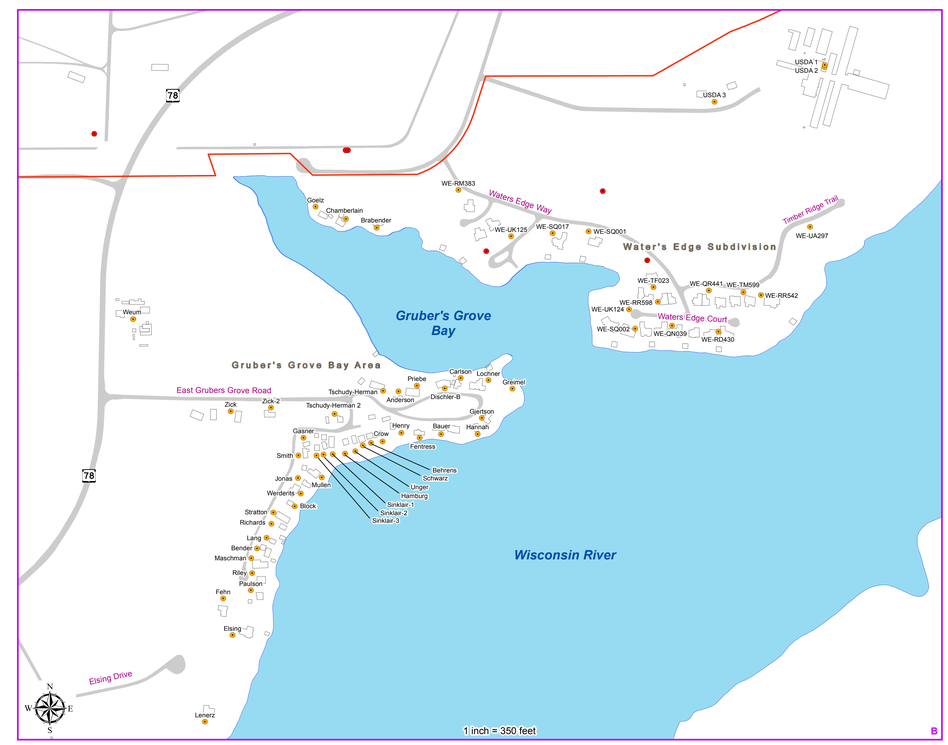
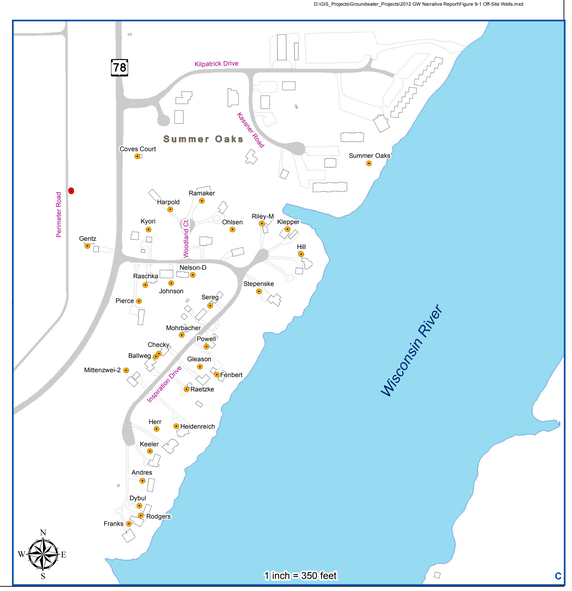
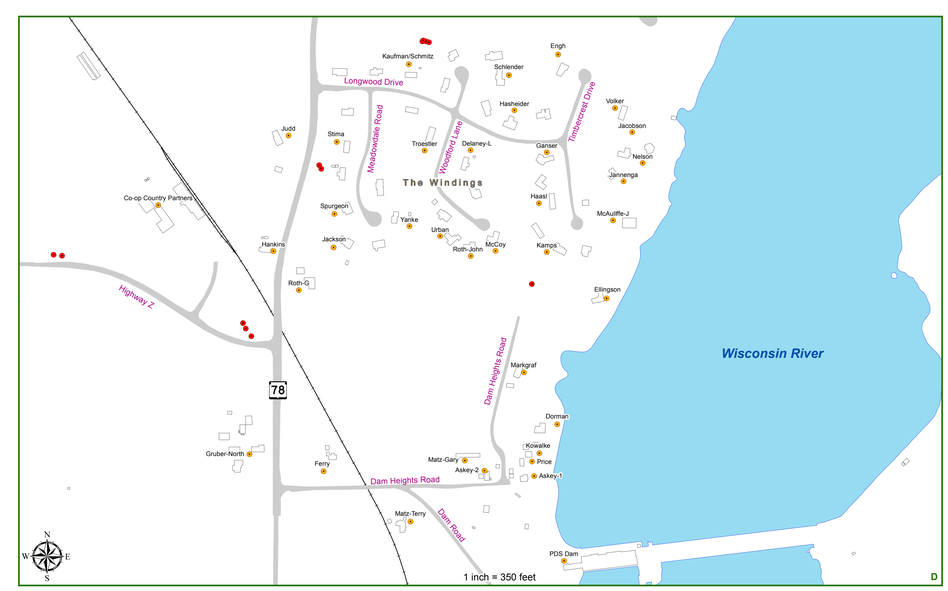
Figure 9-1
Off-Site Plume Area, Southeast Area, and Residential Well Locations
2012 Groundwater Narrative Summary Report
Badger Army Ammunition Plant

1 inch = 1,400 feet

0 1,250 2,500 5,000 7,500 10,000 Feet







PAL EXCEEDANCES

Table 9-2 lists parameters that exceeded the PAL at least once during 2011.

TABLE 9-2: Maximum PAL Exceedances, Off-Site Plume Area Wells (WDNR LICENSE AREAS #3485 and #3493)

Well	DNT, Total (µg/l)	2,4-DNT (µg/l)	2,6-DNT (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	Bromo-dichloro-methane (µg/l)	CTET (µg/l)	Chloroform (µg/l)	TCE (µg/l)
(PAL)	**0.005**	**0.005**	**0.005**	**0.6**	**0.06**	**0.5**	**0.6**	**0.5**
PBM 9001D					0.1		3.86	
PBM 9003D	0.031		0.031					
PBN 9101C		0.034	0.033		0.14			
SWN 0501C		0.019				0.61	1.72	
SWN 0502B		0.024					1.11	
SWN 0502C	0.027						0.99	
SWN 0503C	0.022						0.98	
SWN 0503D	0.027							
SWN 0503E				0.7				
SWN 9103B		0.017	0.022				1.58	1.27
SWN 9103C	0.031						3.98	0.91
SWN 9103D							0.98	
SWN 9103E						0.64		
SWN 9104C		0.015	0.016			1.98		
SWN 9104D						2.76	0.66	
SWN 9105C							2.43	
SWN 9105D							0.81	

Bromodichloromethane – Bromodichloromethane exceeded the PAL in two wells.

Carbon Tetrachloride – CTET exceeded the PAL in four wells. CTET has routinely exceeded the PAL in the same four wells.

Chloroform – Chloroform exceeded the PAL in 11 wells.

Dinitrotoluene – 2,4-DNT exceeded the PAL in five wells. 2,6-DNT exceeded the PAL in four wells. DNT, total exceeded the PAL in five wells.

Trichloroethylene – TCE exceeded the PAL in two wells.

Bis(2-ethylhexyl)phthalate is a common plasticizer. Some monitoring wells report this chemical. It is unknown if this parameter is present in the wells or due to a laboratory contaminant or due to plasticizers in the pump components.

SUMMARY AND CONCLUSIONS

Parameters of concern in the Off-Site Plume Area include CTET, chloroform, DNT, and TCE. The source of groundwater contamination in this area is the PBG.

Carbon Tetrachloride – CTET exceeded the ES in five wells and the PAL in four wells. CTET has routinely exceeded the ES and PAL in the same wells.

Chloroform – Chloroform exceeded the ES in one well and the PAL in 11 wells.

Dinitrotoluene – 2,4-DNT exceeded the PAL in five wells. 2,6-DNT exceeded the ES in one well and the PAL in four wells. DNT, total exceeded the ES in two wells and the PAL in five wells.

Trichloroethylene – TCE exceeded the ES in two wells and the PAL in two wells.