

Figure 5: Atlas Site 4 – Area B Well Locations and TCE Plume Footprint

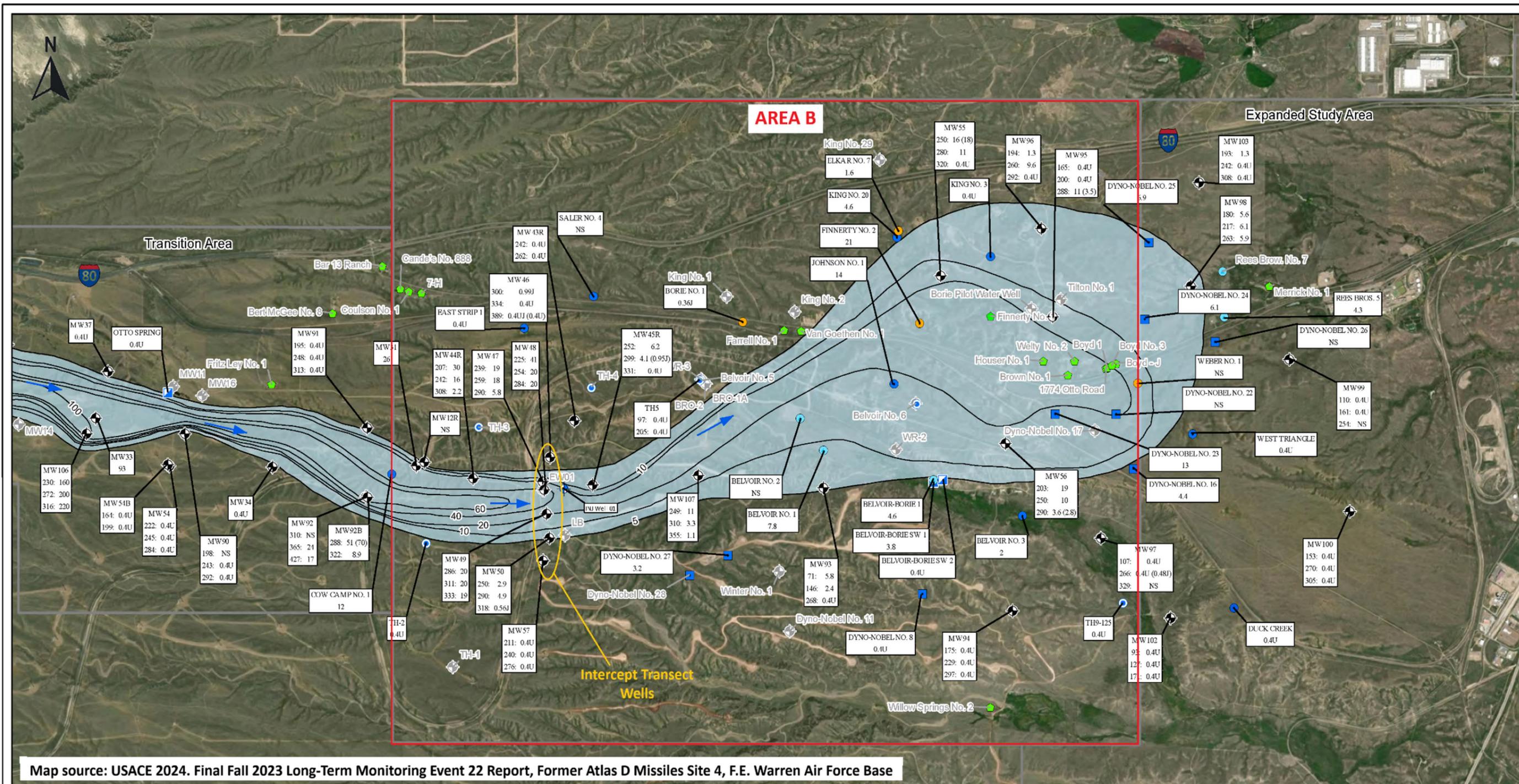
-Scroll down to view Figure

This figure presents an annotated aerial photography map showing all monitoring well locations, municipal wells, industrial wells, and several stock well locations in Area B of the Atlas D Missile Site 4 groundwater contamination project (FUDS # B08WY0467). Area B is a 30-square mile rectangle encompassing the eastern end of the groundwater TCE plume. Adjacent areas of the Transition Area and Expanded Study Area are also depicted.

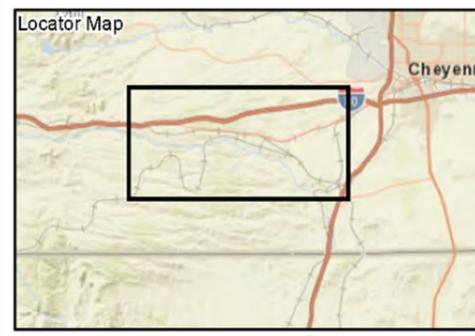
Eighteen (18) monitoring wells locations are shown; most of these are nested wells with three different depth intervals screened at the same location, allowing collection of three samples from the aquifer. Eight (8) stock/irrigation wells that have sample results are shown in Area B, and several others that had no samples collected. Six (6) industrial wells are shown in Area B, with another three (3) located just east in the Expanded Study Area. Four municipal wells are also located in Area B, with the easternmost located on the line between Area B and the Expanded Study Area. Each location has associated text boxes presenting the most recent (Fall 2023) groundwater sample results for TCE for samples collected from monitoring wells at the location.

The TCE groundwater plume (TCE concentrations greater than or equal to 5 µg/L) is shown as a light blue overlay extending eastward from the Transition Area into Area B. The plume width is the same as in the Transition Area (~1/2 mile) for the first two miles as it flows east across Area B, and then begins to widen to about 2.1 miles across in the eastern third of Area B. The leading edge of the plume is located in the Expanded Study Area 1/2 mile east of Area B.

TCE concentrations in the center of the plume at the Intercept Transect range from 5.8 to 41 ug/L (ppb). In the widened area of the plume in the east half of Area B TCE concentrations range from 7.8 to 21 ug/L (ppb).



Map source: USACE 2024. Final Fall 2023 Long-Term Monitoring Event 22 Report, Former Atlas D Missiles Site 4, F.E. Warren Air Force Base



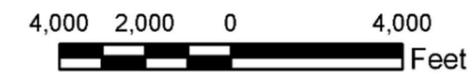
- Legend**
- ◆ Monitoring Well Included for Sampling
 - ⊕ Well not Sampled
 - Industrial Well
 - Irrigation Well
 - Municipal Well
 - Stock Well
 - Test Hole
 - Surface Water/Sediment Location
 - Domestic Well
 - Groundwater Flow
 - TCE > 5 µg/L

µg/L = micrograms per liter
 J = estimated
 LTM = Long-Term Monitoring
 NS = not sampled
 TCE = trichloroethene
 U = nondetect

- Notes:**
- 1) Results shown are TCE concentrations (µg/L) from the Fall 2023 event.
 - 2) Isoconcentrations are based on vertical and horizontal interpretations. Contours may show higher interpreted concentrations than well analytical results if higher concentrations are interpreted to pass over, nearby, or below the screen interval.
 - 3) TCE concentrations shown in parentheses are from samples taken using passive diffusion bags in comparison wells.

Horizontal Datum:
 NAD_1983_StatePlane_Wyoming_East_FIPS_4901_Feet

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri



TCE Concentrations in Groundwater within the Transition Area, Area B, and the Expanded Study Area
 Fall 2023 LTM Event 22
 Former Atlas "D" Missile Site 4
 F.E. Warren Air Force Base, WY

Drawn By:	DPG	Date:	4/22/2024
Checked By:	IBK	Revision:	0

FIGURE 5