Fort Detrick Remedial Investigation/Feasibility Study

Restoration Advisory Board Meeting

8 December 1999 7:30 PM
Fort Detrick, Frederick, Maryland

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Fort Detrick RI/FS
Area A Update

Schedule:	Completion Date
RI & FS (Revised Draft Final, completed)	Oct 99
Revised RI (Final)	Apr 00
FS (Final)	Apr 00
PP (PROPOSED PLAN)	May 00
DD (DECISION DOCUMENT)	Jul 00
RD (REMEDIAL DESIGN)	Apr 01
RA (REMEDIAL ACTION)	Jul 01
CC (CONSTRUCTION COMPLETE)	Oct 01
LTM (LONG TERM MONITORING)	Nov 21

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Fort Detrick RI/FS Area B Update

DOCUMENTS

COMPLETED	Completion Date
Technical Addendum IV (Final)	Aug 99
PENDING	**Completion Date**
RI (Draft Final)	---
RI (Final)	Apr 00
FS (Draft)	May 00
FS (Draft Final)	Jul 00
FS (Final)	Jan 01
PP (NFA Sites)	Jun 00
DD (NFA Sites)	Jun 00
PP (FTD49/Area B GW)	Feb 01
DD (FTD49/Area B GW)	Apr 01
RD (FTD49/Area B GW)	Feb 02
RA (FTD49/Area B GW)	Apr 02
FFS (Groundwater, Hotspot well 57D)	Schedule being developed
Quantitative Ecological Risk Assessment Work Plan	Schedule being developed
Suspected Burial Pit Area Characterization Work Plan	Schedule being developed
Area B-11 Pit SVE Pilot Test Work Plan	December 00 (Draft)
Dye Trace Study Work Plan	Schedule being developed

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Risk Assessment Update

Area A - Draft revisions performed and are in review.

- Eliminate cumulative exposures which are not likely or projected for current and future mission use.
- Industrial exposure scenario for lead at Water Towers using newly available model.
- Add exposure scenario for hypothetical future residential well using concentrations found in well 15A for exposure (last analysis 11 ug/L TCE, 1997).
- Future worker exposures being added.

Area B - Revisions pending decision of future development plans.

- Eliminate cumulative exposures which are not likely or projected for current and future mission use.
- Requirement to assess risk due to biological contamination should be considered if site is to be developed. (Fort Detrick is currently evaluating development plans).
- Add exposure scenario for hypothetical future residential well using concentrations found in well 31D for exposure (last analysis 500 ug/L PCE, 34 ug/L TCE, July 1999).

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Area B Update

Completed and Planned Field Activities

COMPLETED

- Quarterly Sampling - November 1999
- Surface Geophysical Survey (Areas B-6, B-8/B-11, identify/confirm waste burial locations)
- Groundwater Radiation Sampling of Six Wells (screening due to reported radiological burial areas)
- Surface Soil Sampling - Area B-3 Inactive (screen for SVOCs which have previously been reported in groundwater in the area.)

PLANNED

- Residential Well Survey and Sampling
- SVE test near B-11 pit - Work Plan in Development (Schedule being developed)
- Well 57D Rehabilitation - Schedule being developed
- Additional periodic residential and on-post well and surface water sampling - Being negotiated, same schedule as 1999
- Dye trace study - FY00
- Water Treatment System (Krantz) - Army waiting on Rights-of-Entry
- Suspected Burial Pit Area Characterization

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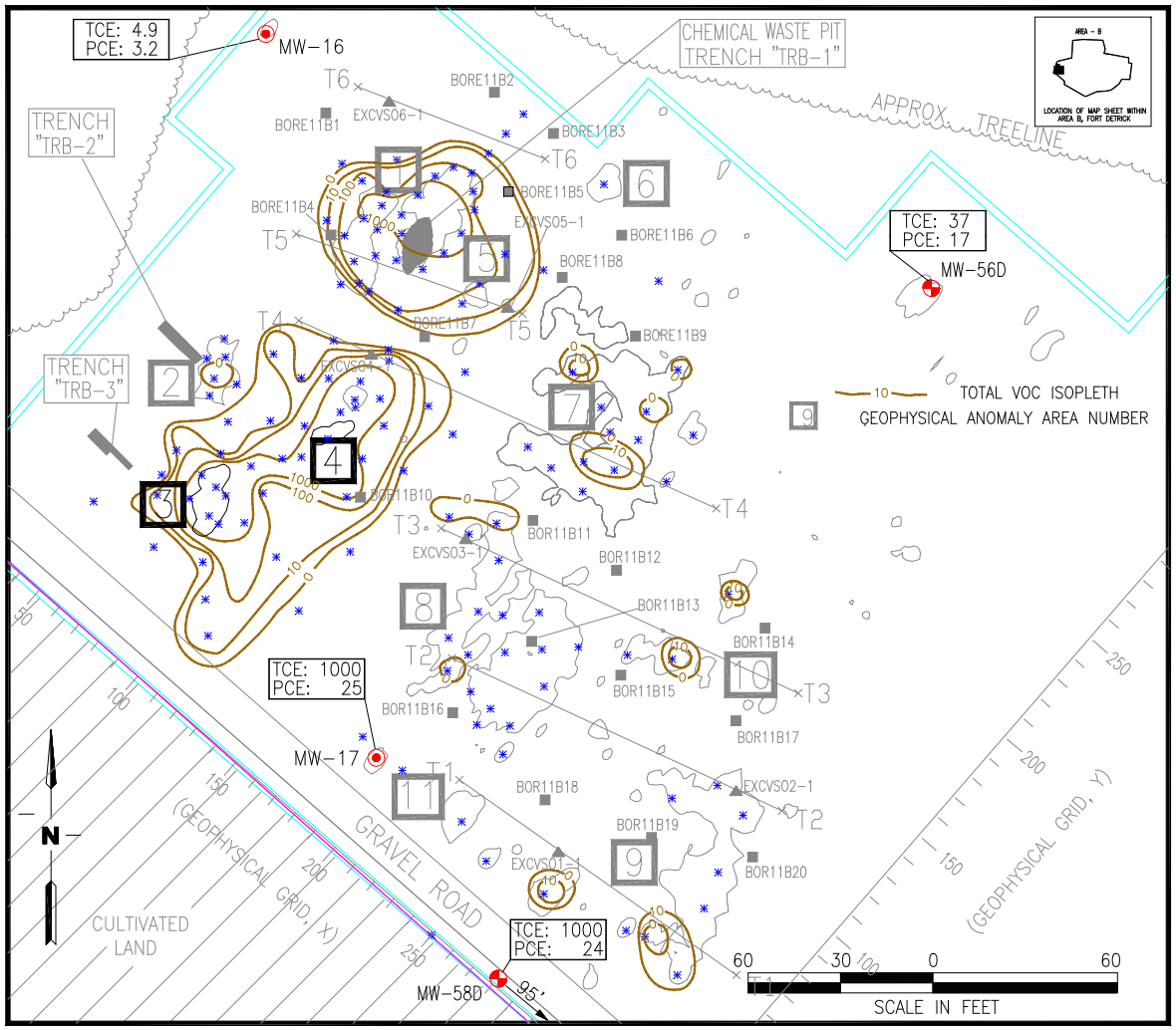
Suspected Burial Pit Areas



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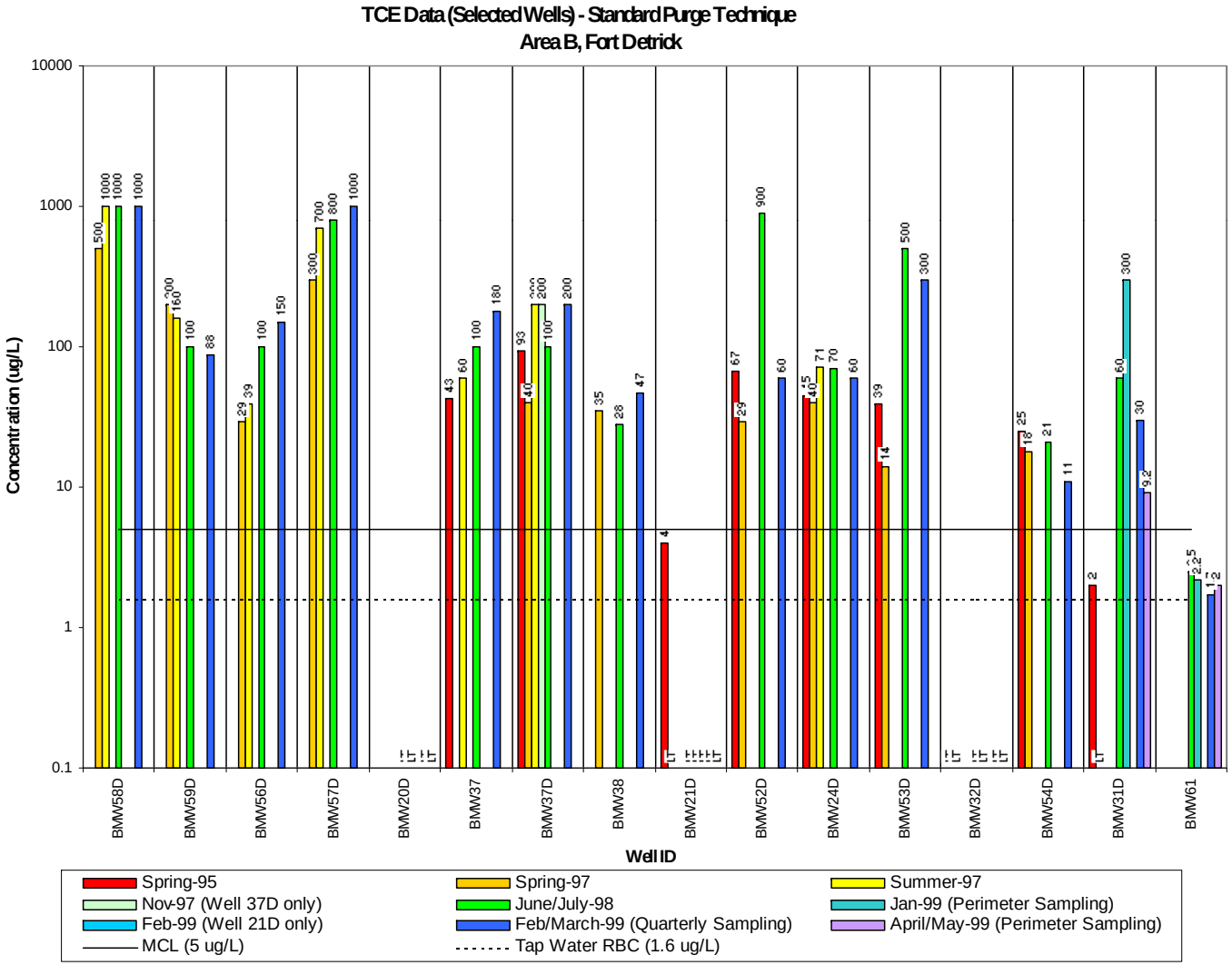
Sampling Data - Area B (Standard Purge Technique)
TCE Data



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Sampling Data - Area B (Low Flow Sampling Technique)

TCE Data

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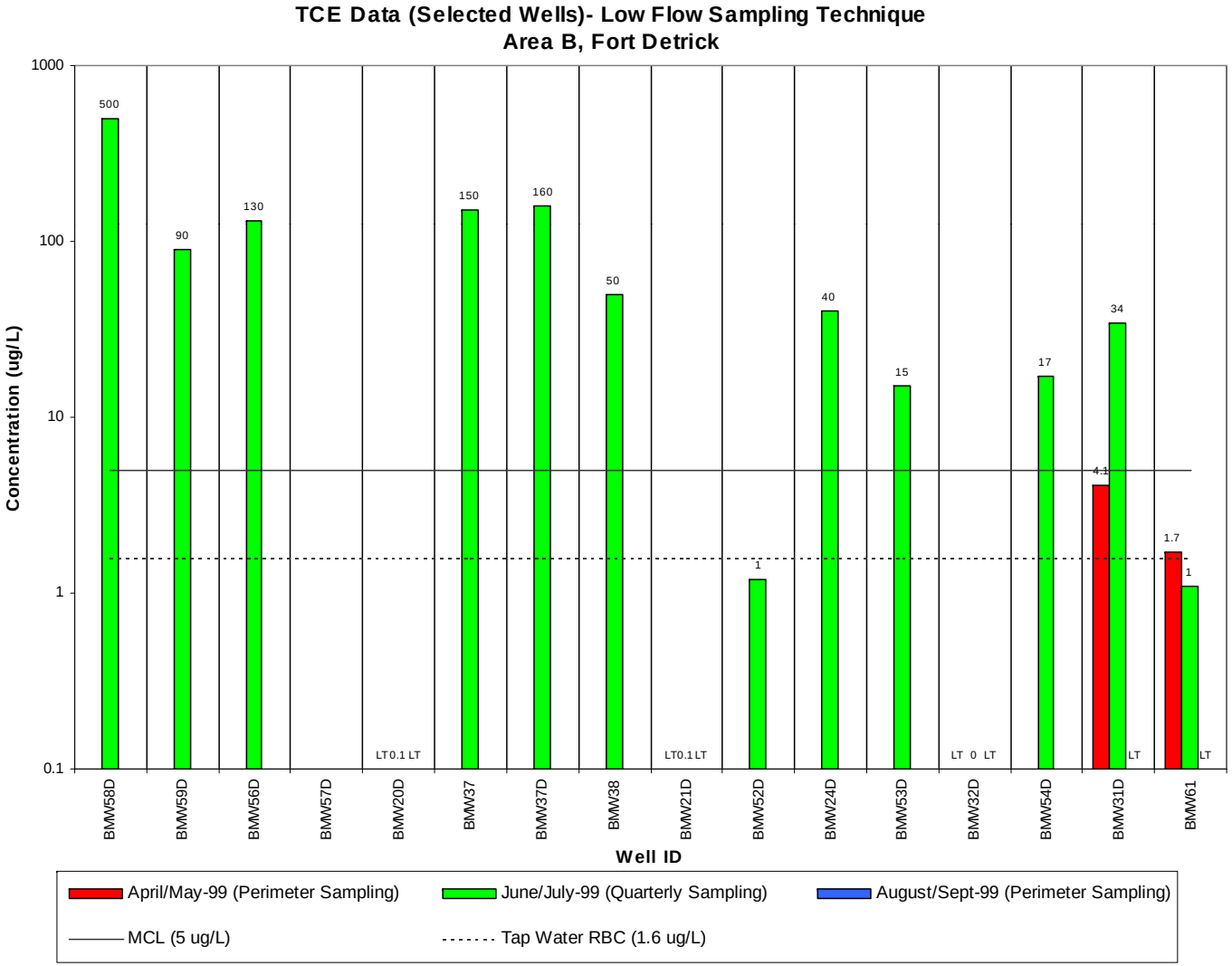

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Sampling Data - Area B
TCE Data - June/July 1999

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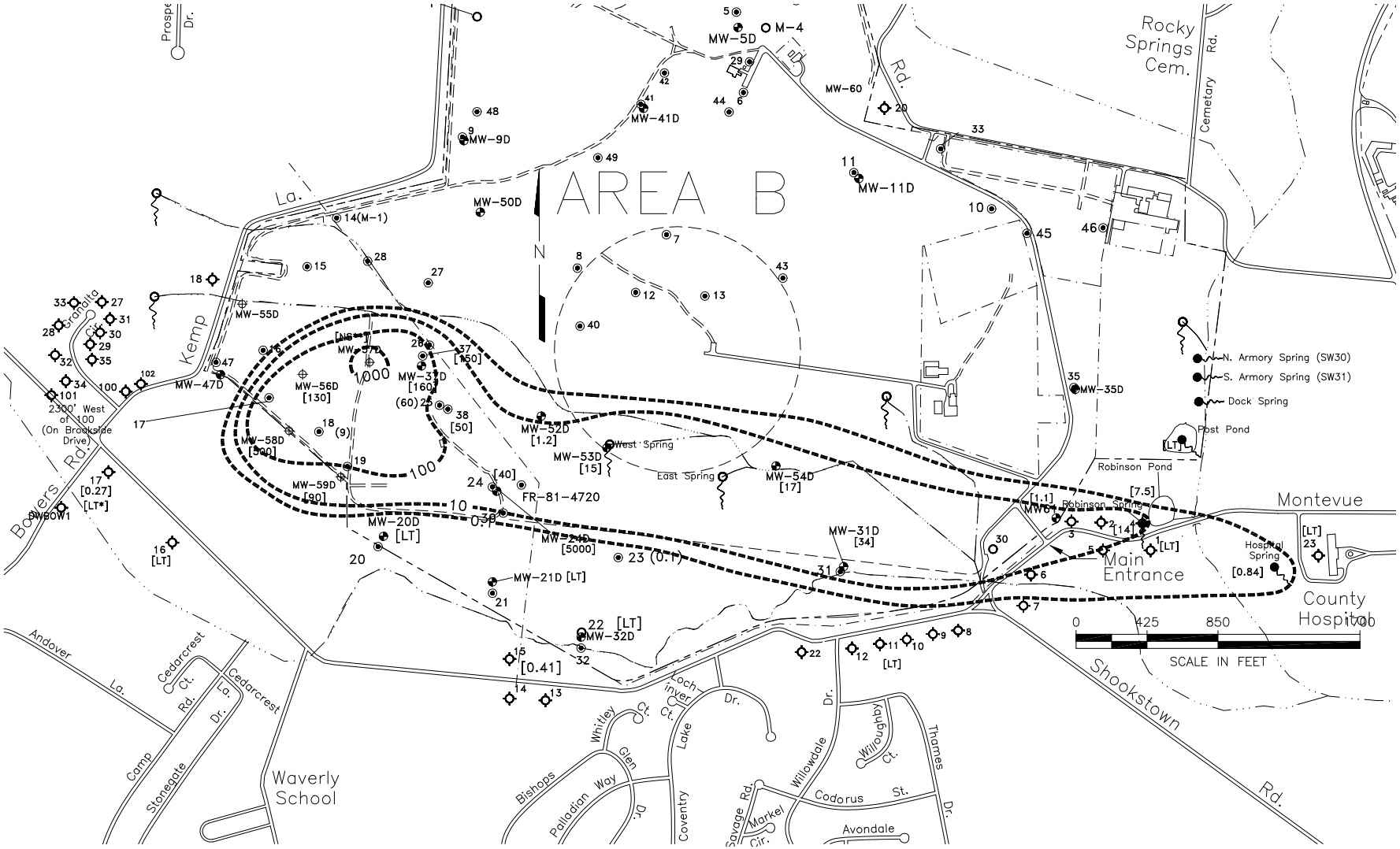

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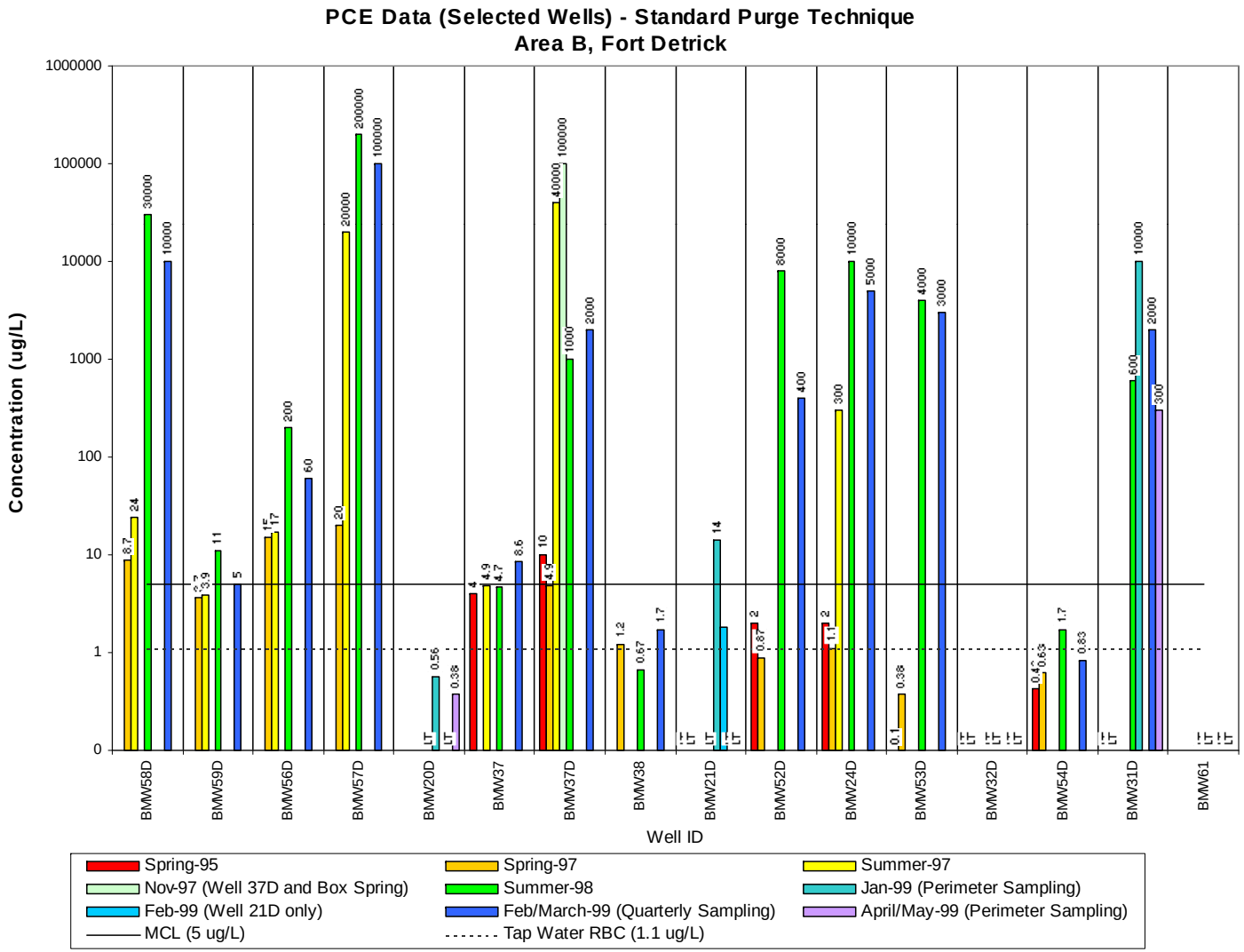
Sampling Data - Area B (Standard Purge Technique)
PCE Data



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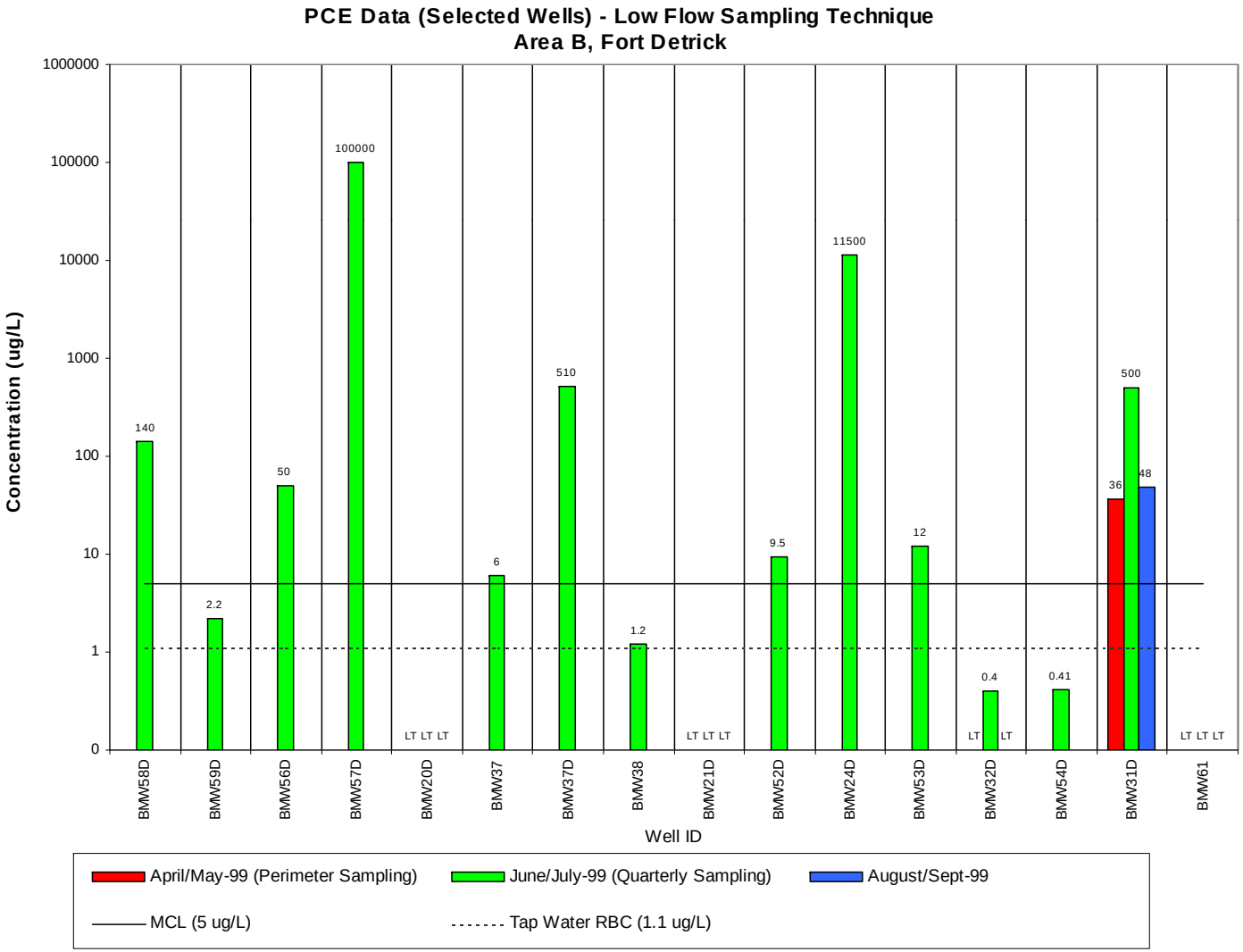

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Sampling Data - Area B
PCE Data - June/July 1999

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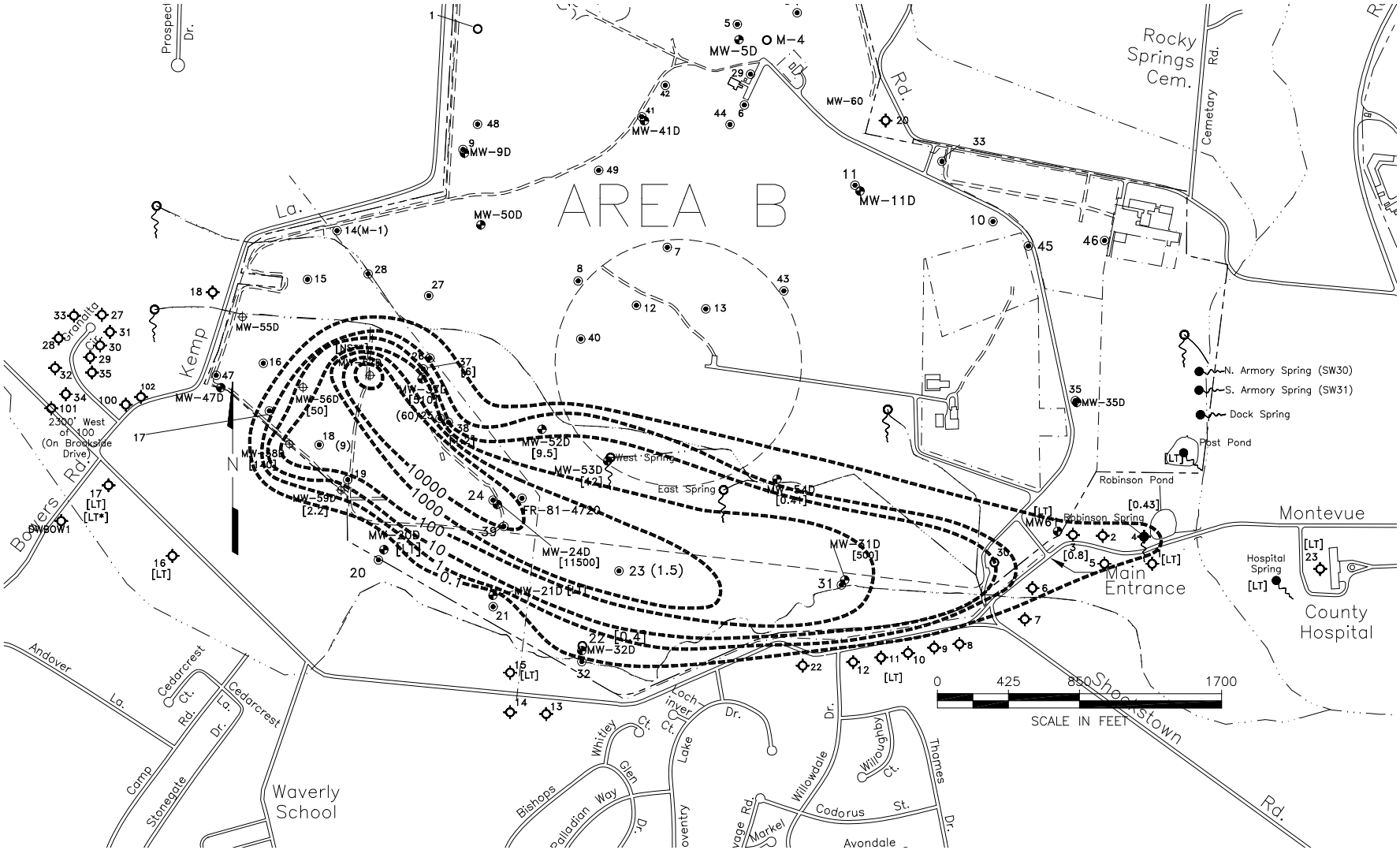

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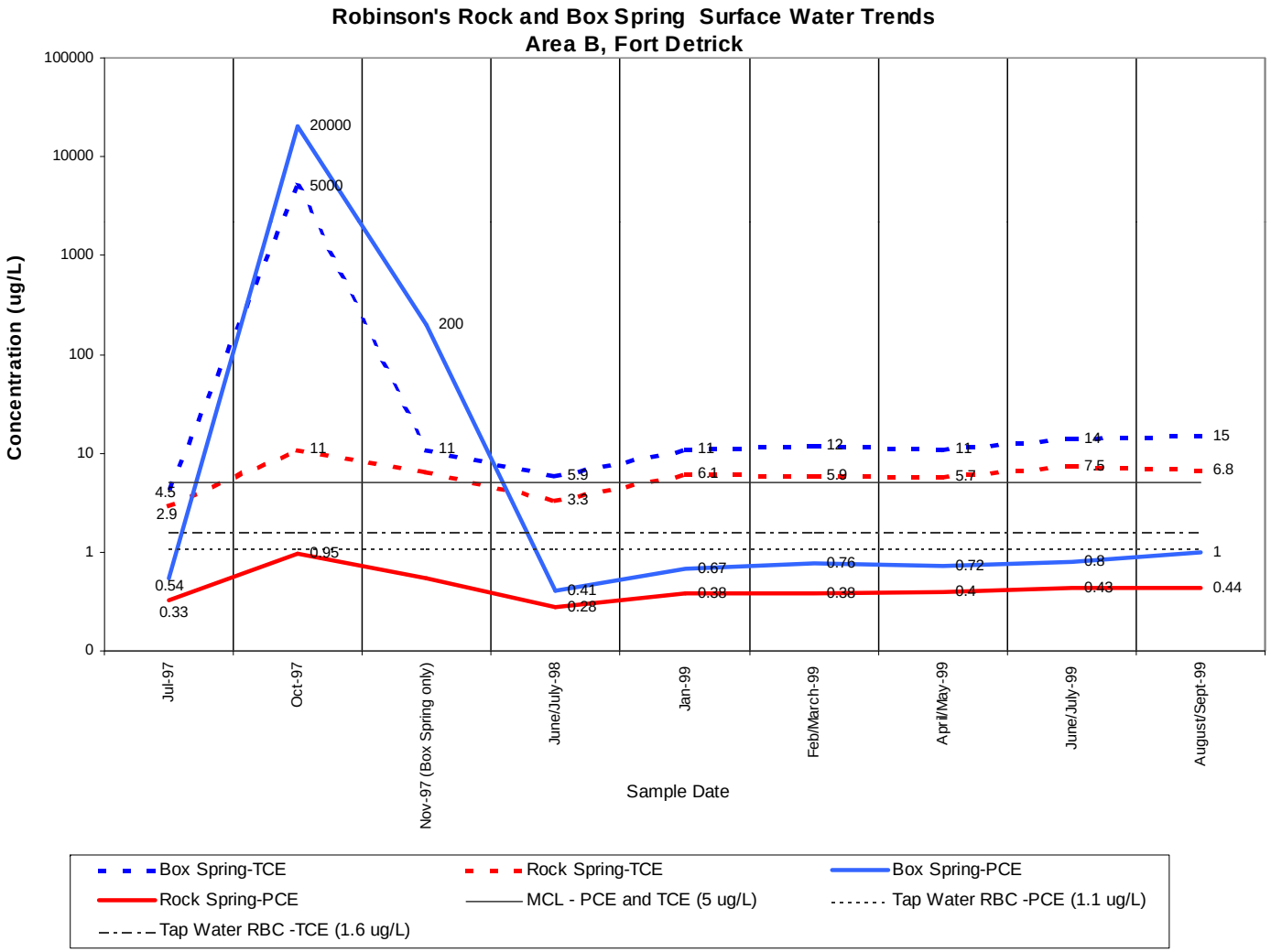
Surface Water Sampling Data - PCE and TCE
Robinson's Box and Rock Springs



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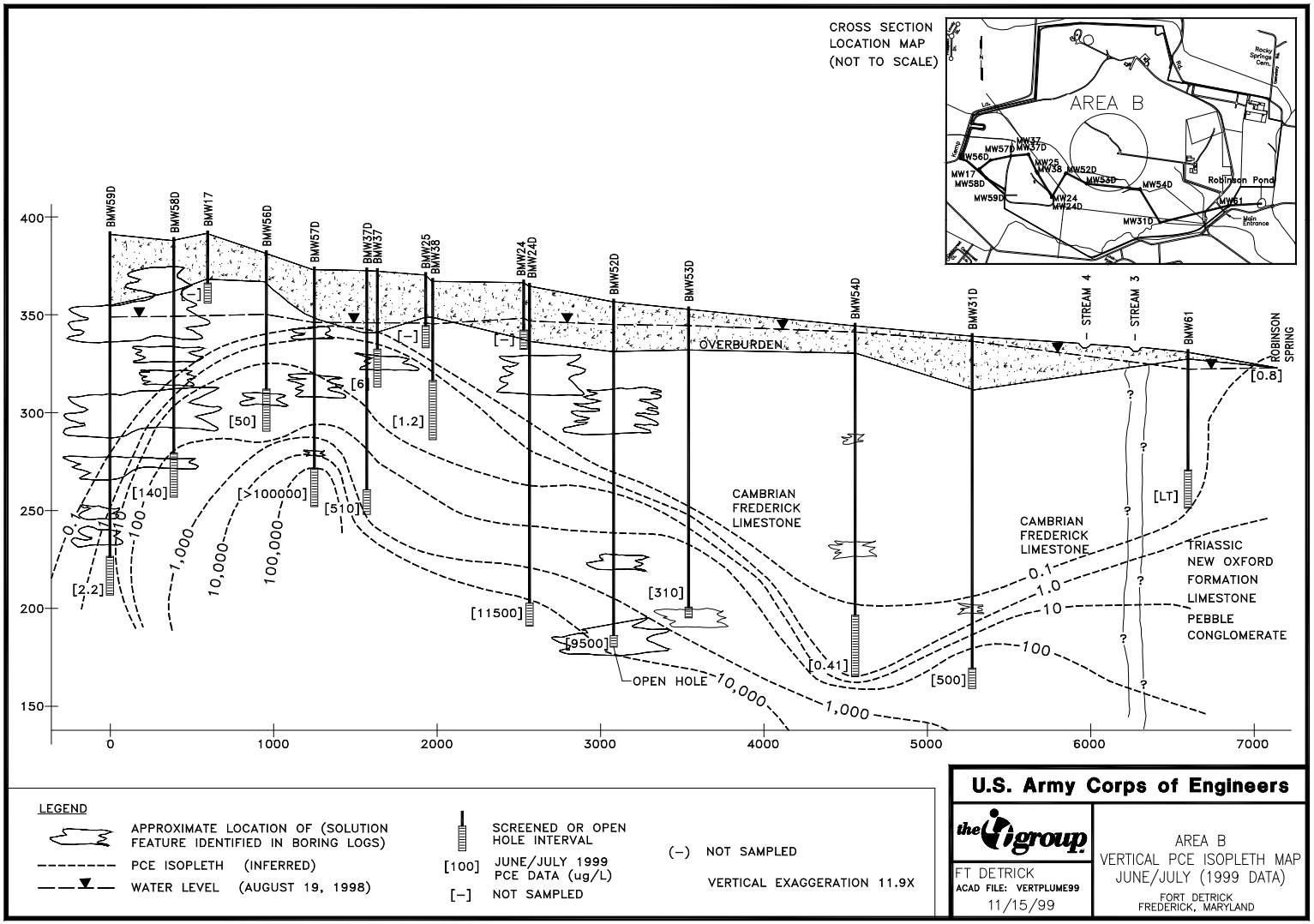
Vertical Isopleth Map - PCE
June/July 1999 Data



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RESIDENTIAL BOUNDARY WELL TCE SAMPLING DATA

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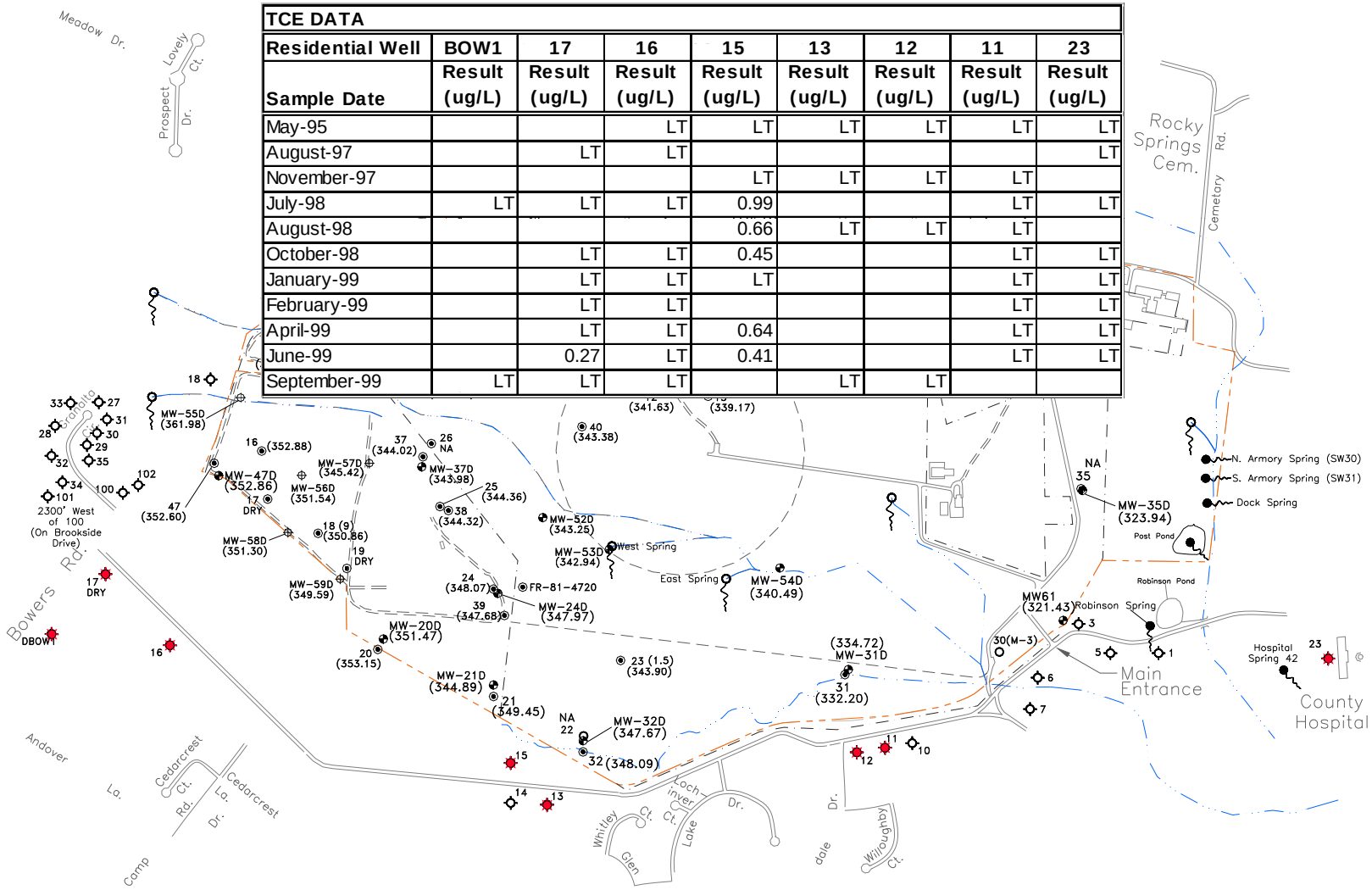
TCE DATA								
Residential Well	BOW1	17	16	15	13	12	11	23
Sample Date	Result (ug/L)	Result (ug/L)	Result (ug/L)	Result (ug/L)	Result (ug/L)	Result (ug/L)	Result (ug/L)	Result (ug/L)
May-95			LT	LT	LT	LT	LT	LT
August-97		LT	LT					LT
November-97				LT	LT	LT	LT	
July-98	LT	LT	LT	0.99			LT	LT
August-98				0.66	LT	LT	LT	
October-98		LT	LT	0.45			LT	LT
January-99		LT	LT	LT			LT	LT
February-99		LT	LT				LT	LT
April-99		LT	LT	0.64			LT	LT
June-99		0.27	LT	0.41			LT	LT
September-99	LT	LT	LT		LT	LT		



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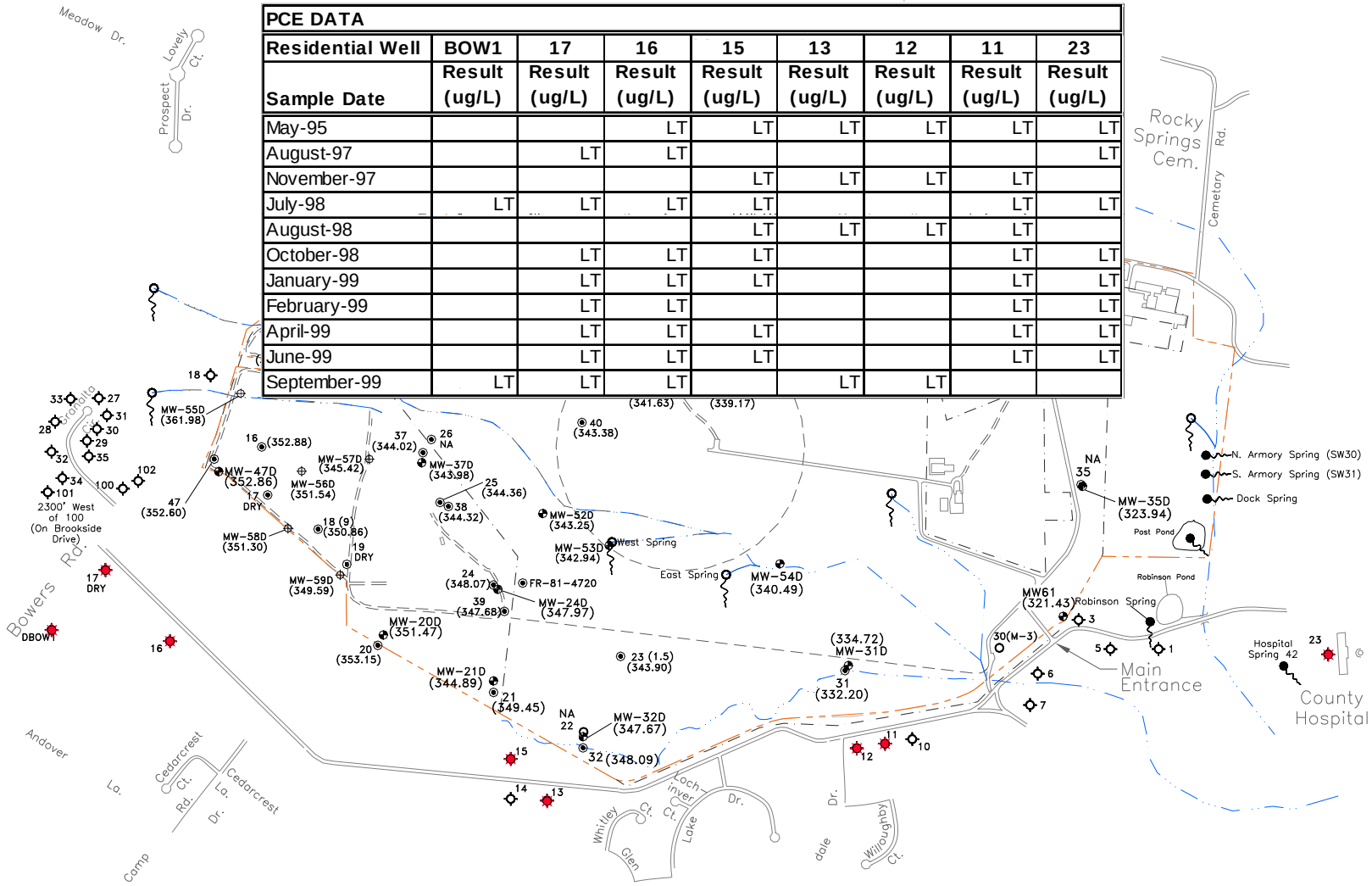
August-97		LT	LT					LT
November-97				LT	LT	LT	LT	
July-98	LT	LT	LT	LT			LT	LT
August-98				LT	LT	LT	LT	
October-98		LT	LT	LT			LT	LT
January-99		LT	LT	LT			LT	LT
February-99		LT	LT				LT	LT
April-99		LT	LT	LT			LT	LT
June-99		LT	LT	LT			LT	LT
September-99	LT	LT	LT		LT	LT		



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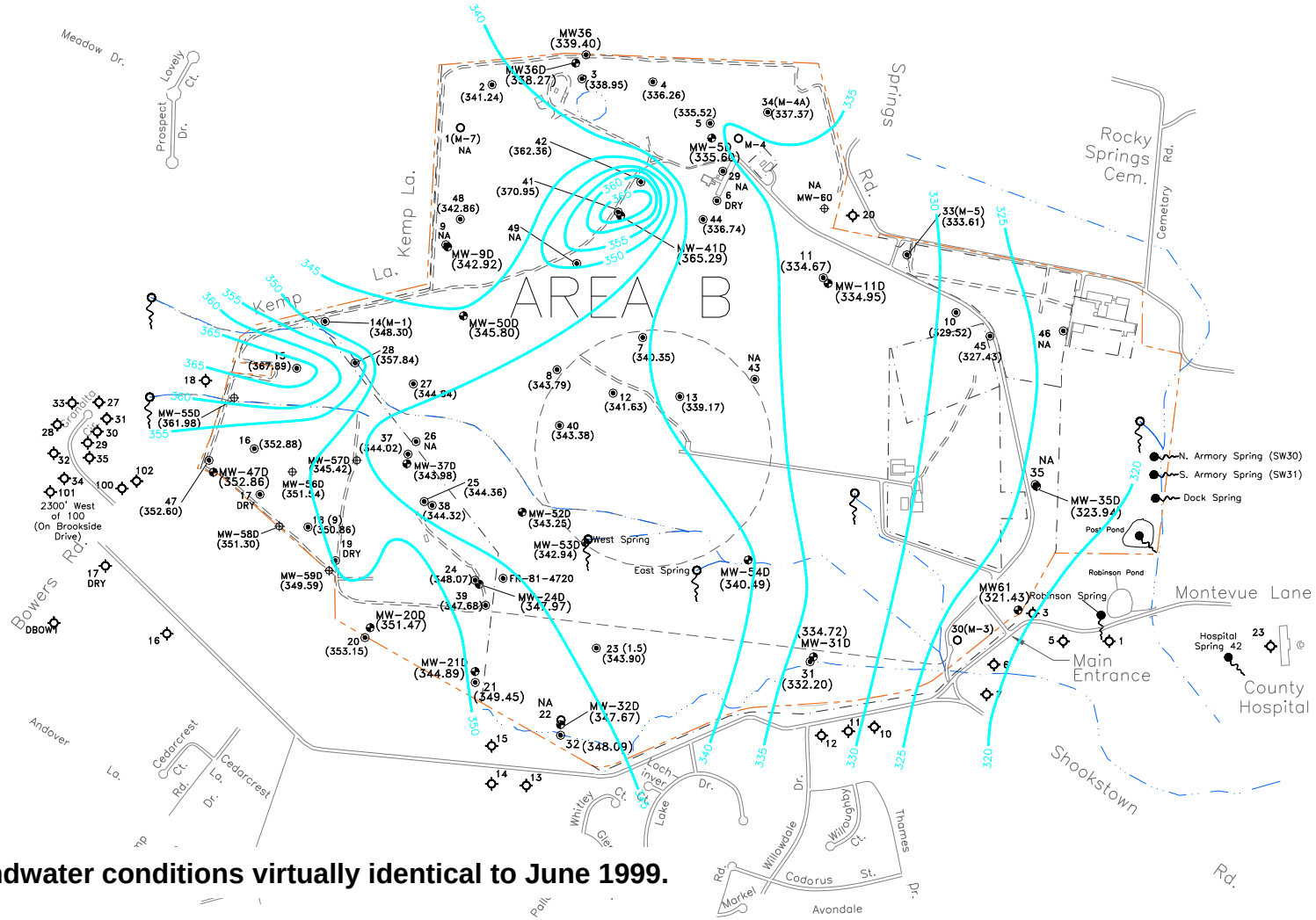
Groundwater Contour Map
(19 November 1999)



*** Groundwater conditions virtually identical to June 1999.**

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Area C WWTP RI Update

COMPLETED

- **Area C - Wastewater Treatment Plant (WWTP) Expanded Site Investigation (ESI) Final Report - October 1999.**
- **Area C - Wastewater Treatment Plant (WWTP) Remedial Investigation Work Plan (Draft) - November 1999**

FUTURE PROJECT ACTIVITIES

- **Final RI Work Plan - January 2000.**
- **RI Field Work - Winter 2000.**

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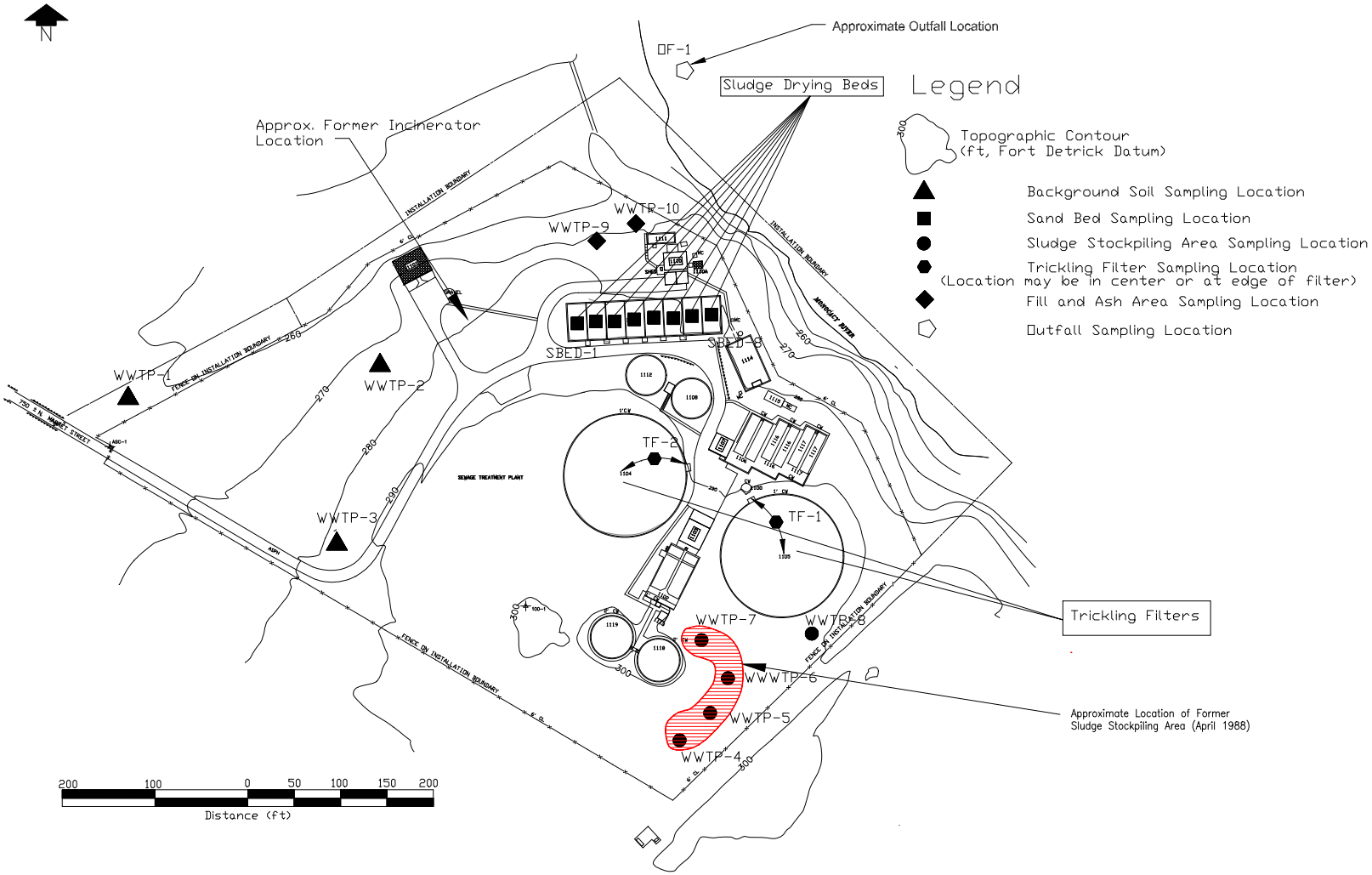
Area C WWTP ESI Sampling