



a passion for discovery

Building 96 PCE Source Area Remediation Update

*Presentation to CAC
September 9, 2010*

Managed for the U.S. Department of Energy
by Brookhaven Science Associates

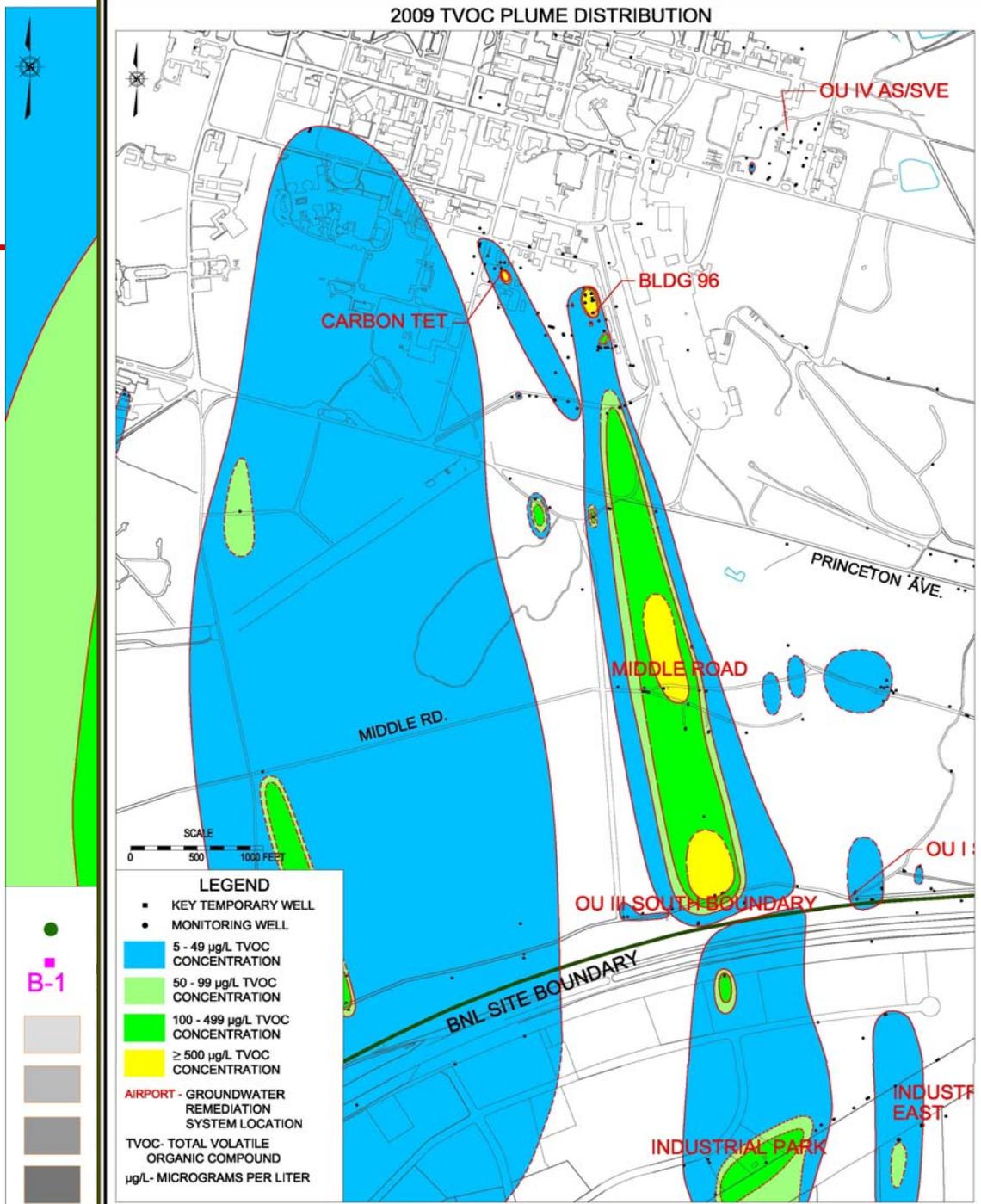
**Bill Dorsch, Manager
Groundwater Protection Group**



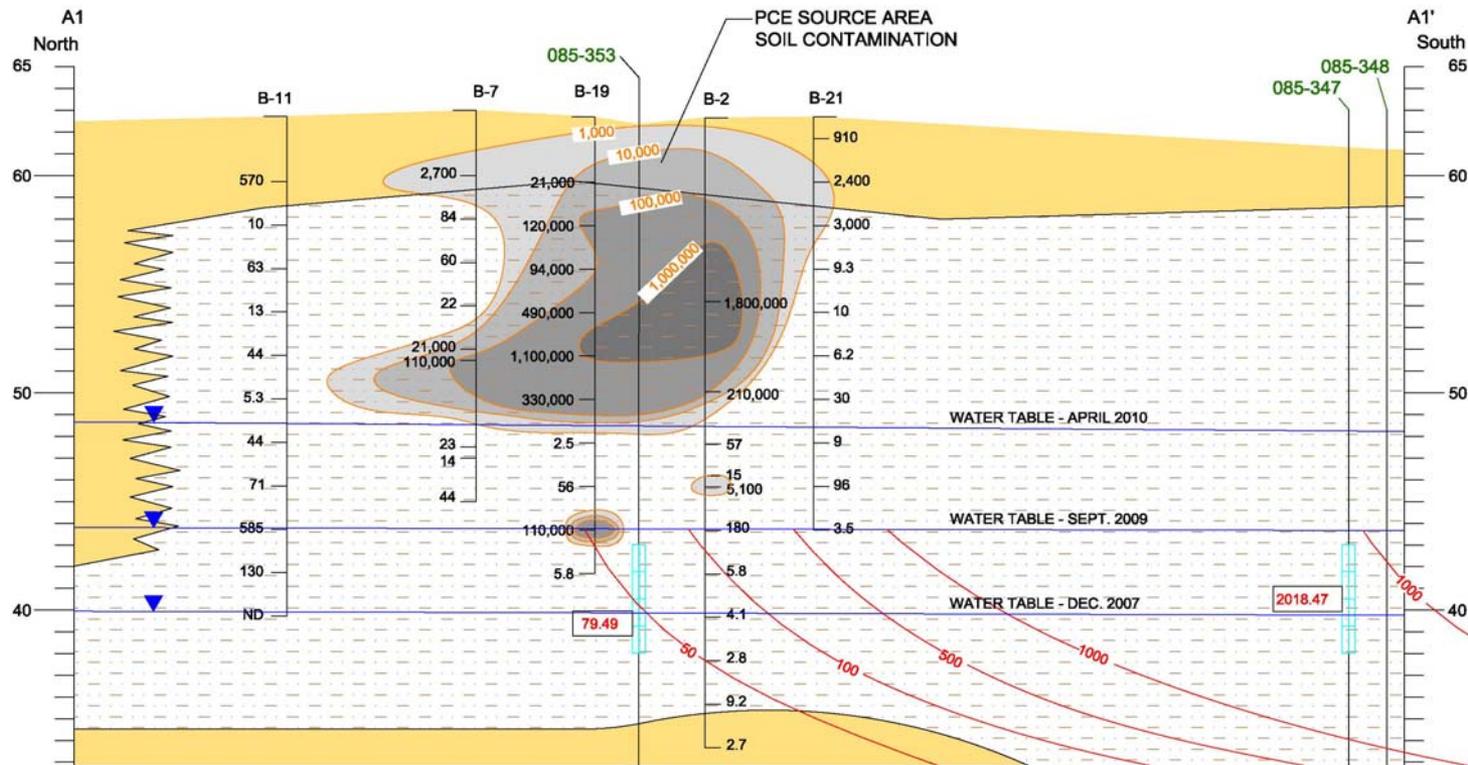
Bldg. 96 Source Area Cleanup

- Area formerly used for motor vehicle repairs/washing, drum storage
- Identified perchloroethylene (PCE) in soil up to 1,800 ppm in 2007
- Submitted excavation work plan to regulators 9/09

2009 TVOC PLUME DISTRIBUTION



North-South X-Section Bldg. 96 Source Area Cleanup



LEGEND

Upper Glacial aquifer

- Fine to coarse sand, trace to little silt and/or fine to medium gravel.
- Very fine sand and/or silt, with silt and sand lenses interbedded.
- Isoconcentration Contour representing line of equal PCE concentration in ($\mu\text{g}/\text{kg}$) in soil, based on 2008 borings.

- 095-85 BNL Monitoring Well ID
- 104.94 TVOC Concentration ($\mu\text{g}/\text{L}$) in Groundwater - 2009
- 50 - TVOC Contour ($\mu\text{g}/\text{L}$) 2009 (Dashed Where Inferred)
- B-11 Soil Borings with PCE results ($\mu\text{g}/\text{kg}$)
- Monitoring Well Screen

Water Table, date noted

- TVOC - Total Volatile Organic Compound
- $\mu\text{g}/\text{kg}$ - Micrograms Per Kilogram
- PCE - Tetrachloroethylene

HORIZONTAL SCALE



NOTES:

- 1) GEOLOGIC INFORMATION SHOWN IS BASED ON LITHOLOGIC DATA COLLECTED JUNE 2004, NOV. 2004 AND SUPPLEMENTED WITH GEOLOGIC DATA FROM 2008 SOIL BORINGS.
- 2) GROUNDWATER PLUME DISTRIBUTION BASED ON THIRD AND FOURTH QUARTER 2009 BLDG 96 SAMPLING EVENT.
- 3) CONTOUR INTERVAL IS AS SHOWN.
- 4) BNL WELL ID COLOR CORRESPONDS TO LONG-TERM MONITORING PROGRAM WELL LOCATION MAP.

I:\IDENTIFY\GOW_PROJECTS\2009_GW_REPORT\FINAL_FIGURES\FIG_3.2.2-02.DWG



BROOKHAVEN
NATIONAL LABORATORY

ENVIRONMENTAL PROTECTION DIVISION

TITLE:

OU III BUILDING 96 AREA
HYDROGEOLOGIC CROSS SECTION (A1-A1')

2009 BNL GROUNDWATER STATUS REPORT

DWN: AJZ	VT-HZ: 1.5:1	DATE: 06/14/10	PROJECT NO.:
CHKD: JEB	APPD: WRD	REV.:	NOTES:

FIGURE NO.: 3.2.2-2

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DRY

Bldg. 96 Source Area Cleanup

- Began work early August 2010
- 16 non-hazardous roll-offs to Greentree Landfill, PA, 4 hazardous roll-offs to EQ Landfill, MI
- Excavated to depth of 8-9 ft. (~ 200 cu. yds. of soil).
- Expect to complete excavation by end of September 2010.

