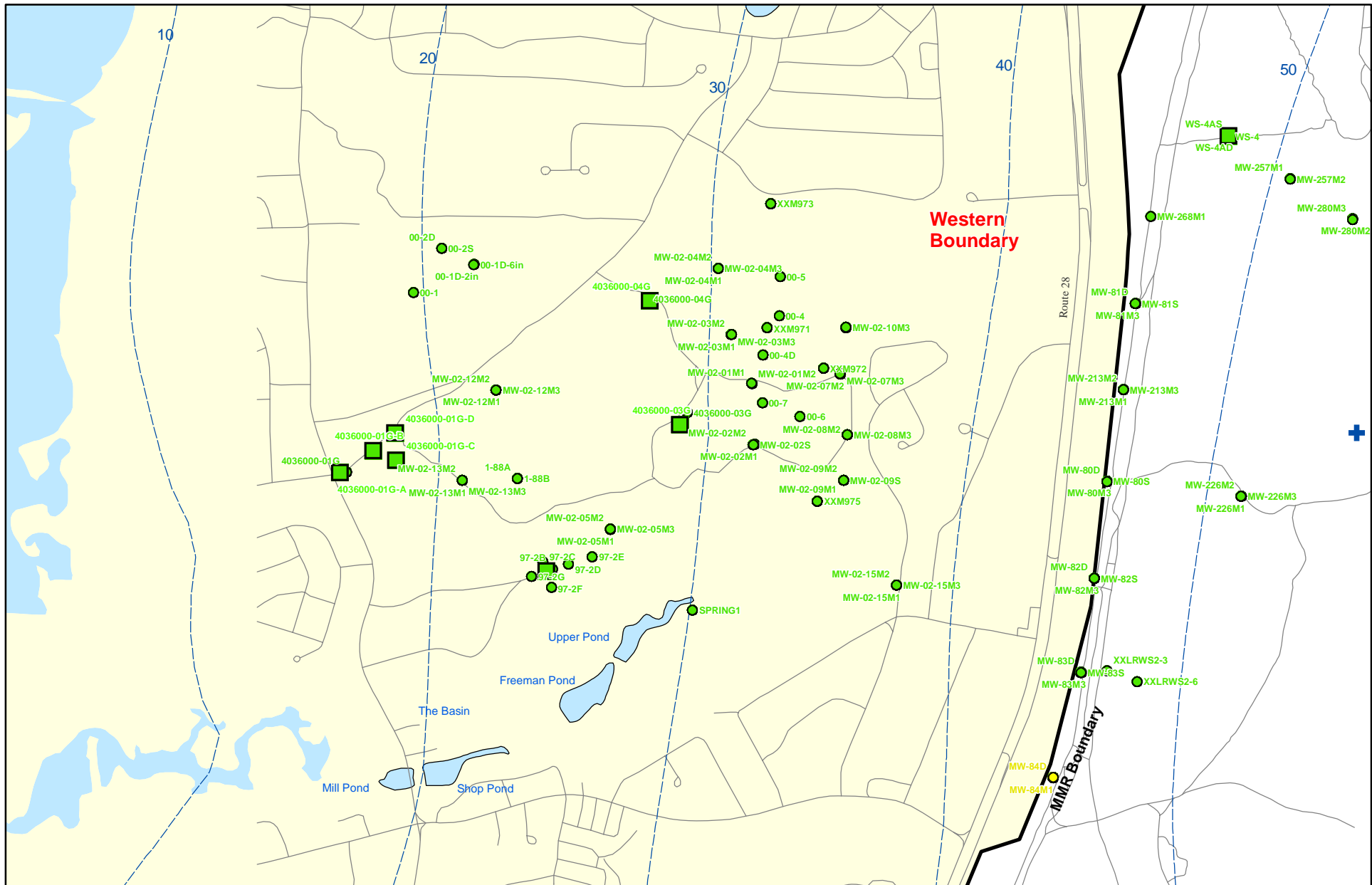


**Explosives in Groundwater Compared to Maximum Contaminant Level/Health Advisories Validated Data as of 12/31/08**



Sources & Notes:  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic maps  
 Source: Office of Geographic and  
 Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

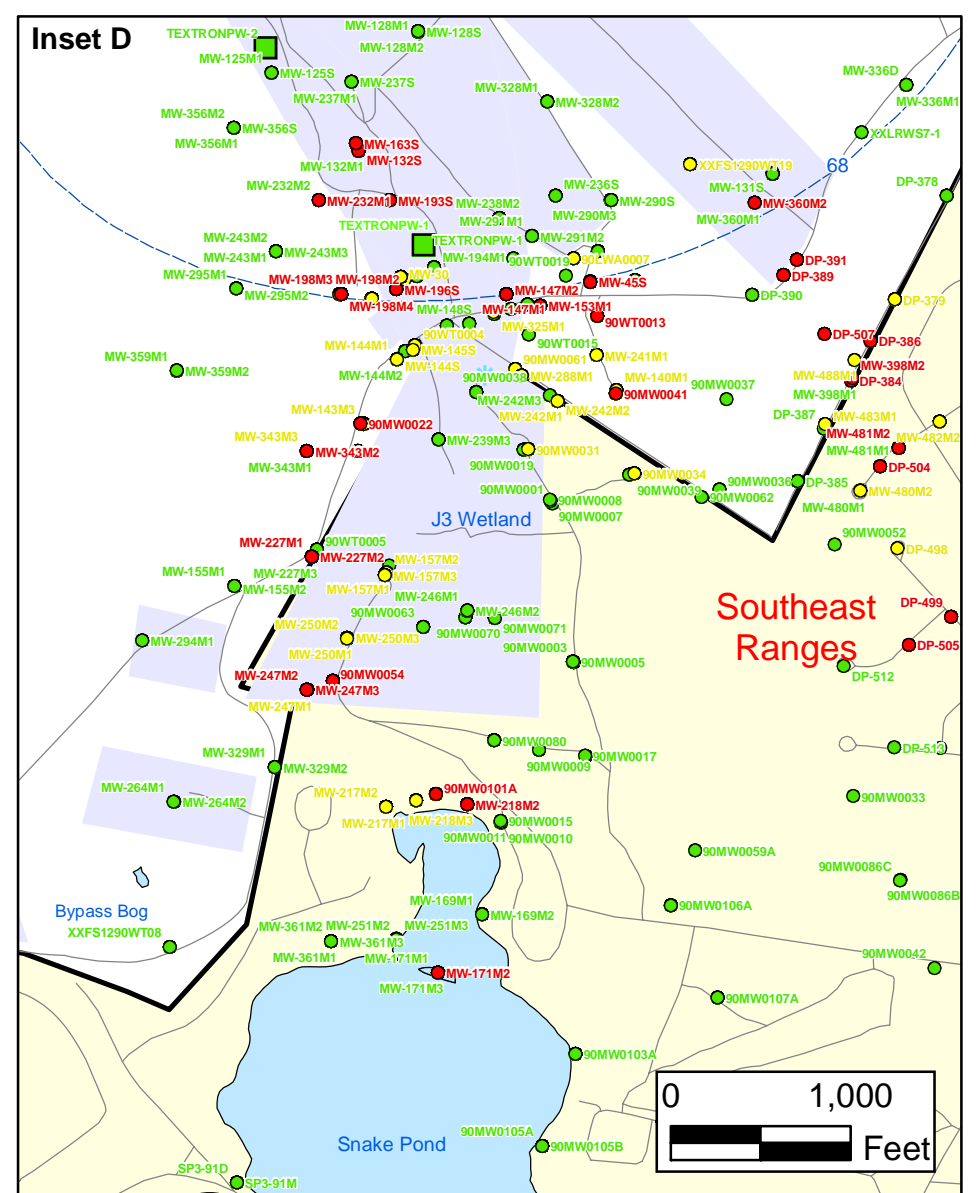
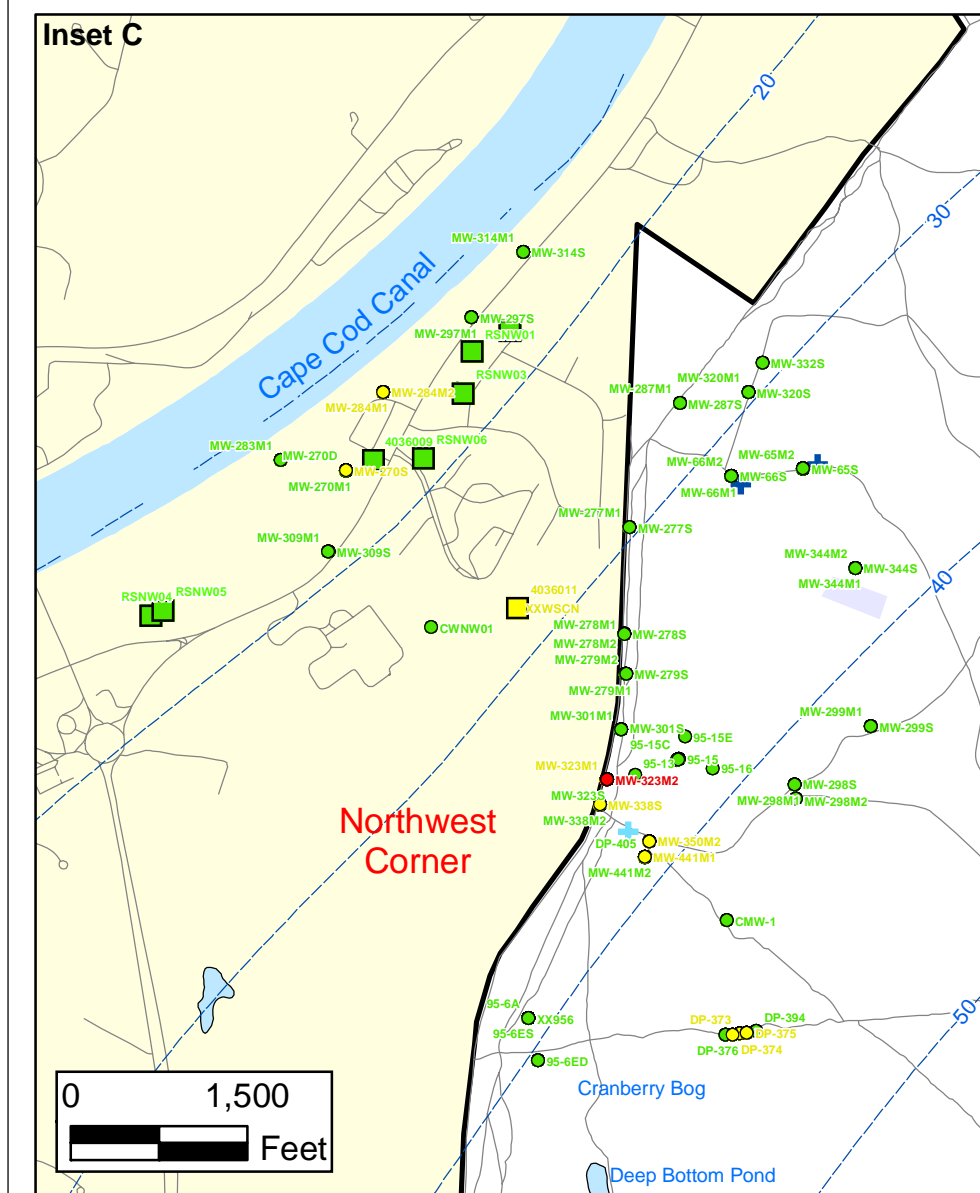
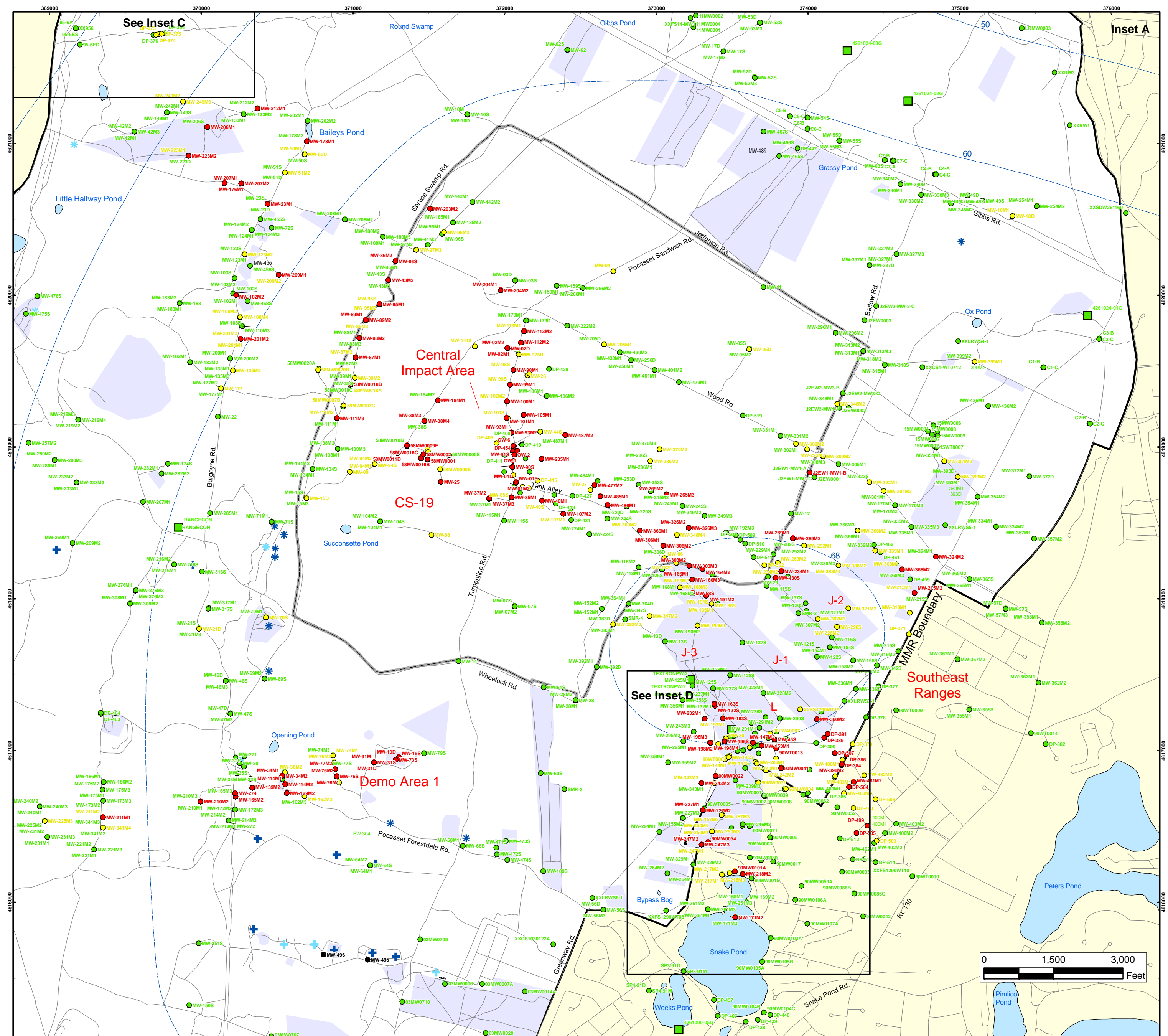
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- + Current Gun Position
- Validated Non-Detect Water Supply Well
- Proposed Water Supply Well
- Water Table Contour (Feet NGVD)  
AMEC, September 2003

**Explosives in Groundwater Compared to  
 Maximum Contaminant Level/Health Advisories  
 Validated Data as of 12/31/08**

Impact Area  
Groundwater Study Program

Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

ECC-MMR  
Cape Cod, Massachusetts



### Explosives in Groundwater Compared to Maximum Contaminant Level/Health Advisories

Validated Data as of 12/31/08

- Validated Detection Greater than or Equal to Maximum Contaminant Level/Health Advisories
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Data Pending
- Military Range Areas
- + Current Gun Position
- \* Current Mortar Position
- + Old Gun Position
- \* Old Mortar Position
- Validated Non-Detect Water Supply Well
- Validated Detection Less than Maximum Contaminant Level/Health Advisories Water Supply Well
- Water Table Contour (Feet NGVD), AMEC, September 2003

Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

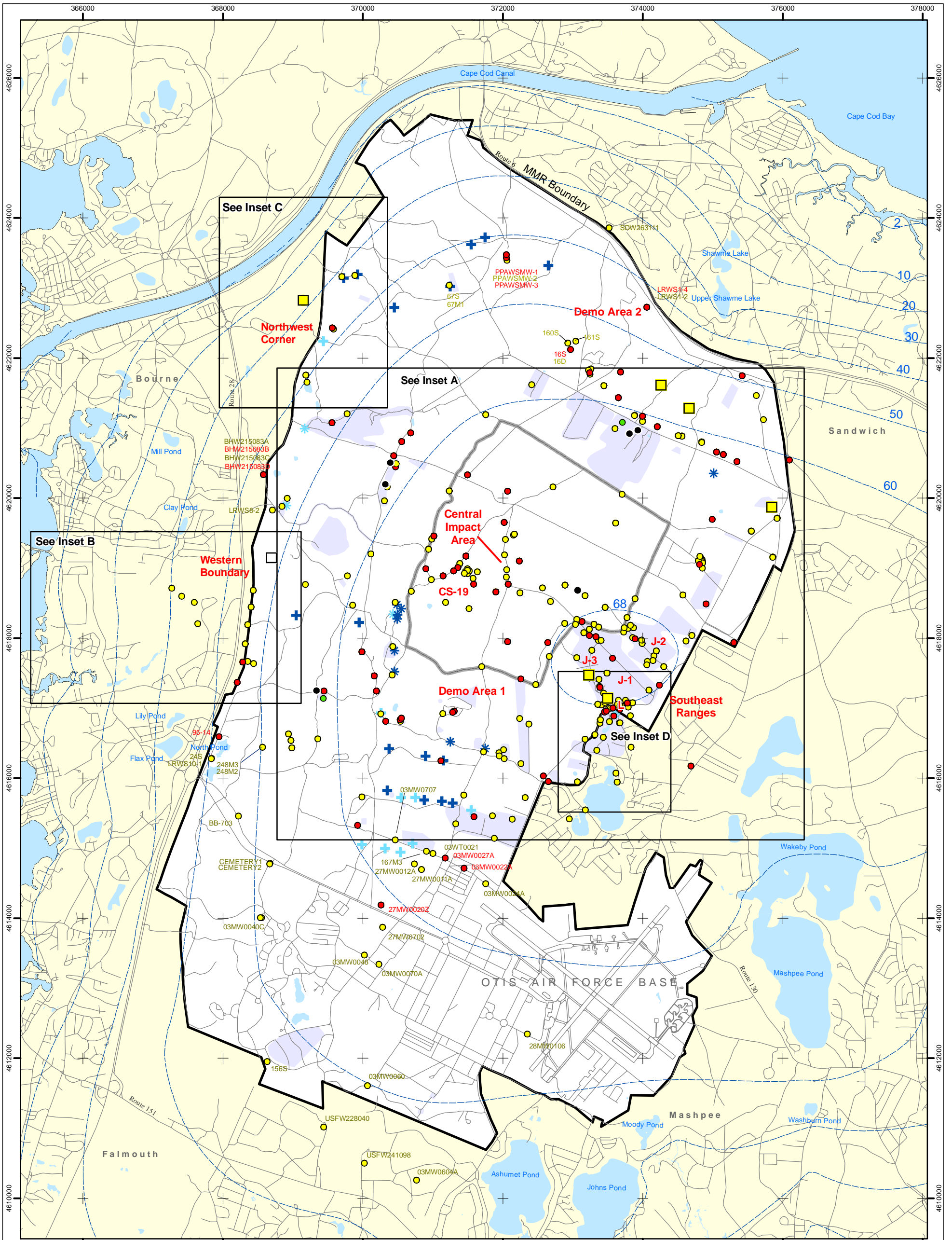
**Impact Area  
Groundwater Study Program**

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Cape Cod, Massachusetts


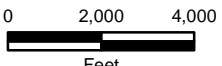
Sources & Notes  
Base map data from US Geological Survey  
7 1/2 minute Topographic Maps  
Source: Office of Geographic and  
Environmental Information (MassGIS)  
Environmental Information (MassGIS)  
Executive Office of Environmental Affairs

**FIGURE 1**

**Inset Map**



<span style="color: red;">●</span> Validated Detection Greater than or Equal to Maximum Contaminant Level/Health Advisories	<span style="color: blue;">+</span> Current Gun Position	<span style="color: black;">●</span> Data Pending
<span style="color: yellow;">●</span> Validated Detection Less than Maximum Contaminant Level/Health Advisories	<span style="color: blue;">*</span> Current Mortar Position	<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">○</span> Proposed Monitoring Well
<span style="color: green;">●</span> Validated Non-Detect	<span style="color: lightblue;">+</span> Old Gun Position	<span style="background-color: yellow; border: 1px solid black; width: 15px; height: 15px; display: inline-block;"></span> Validated Detection Less than Maximum Contaminant Level/Health Advisories Water Supply Well
	<span style="color: lightblue;">*</span> Old Mortar Position	<span style="border: 1px solid black; width: 15px; height: 15px; display: inline-block;"></span> Proposed Water Supply Well
	<span style="background-color: lightpurple; width: 15px; height: 15px; display: inline-block;"></span> Military Range Areas	<span style="color: blue;">---</span> Water Table Contour (Feet above NGVD), AMEC, September 2003

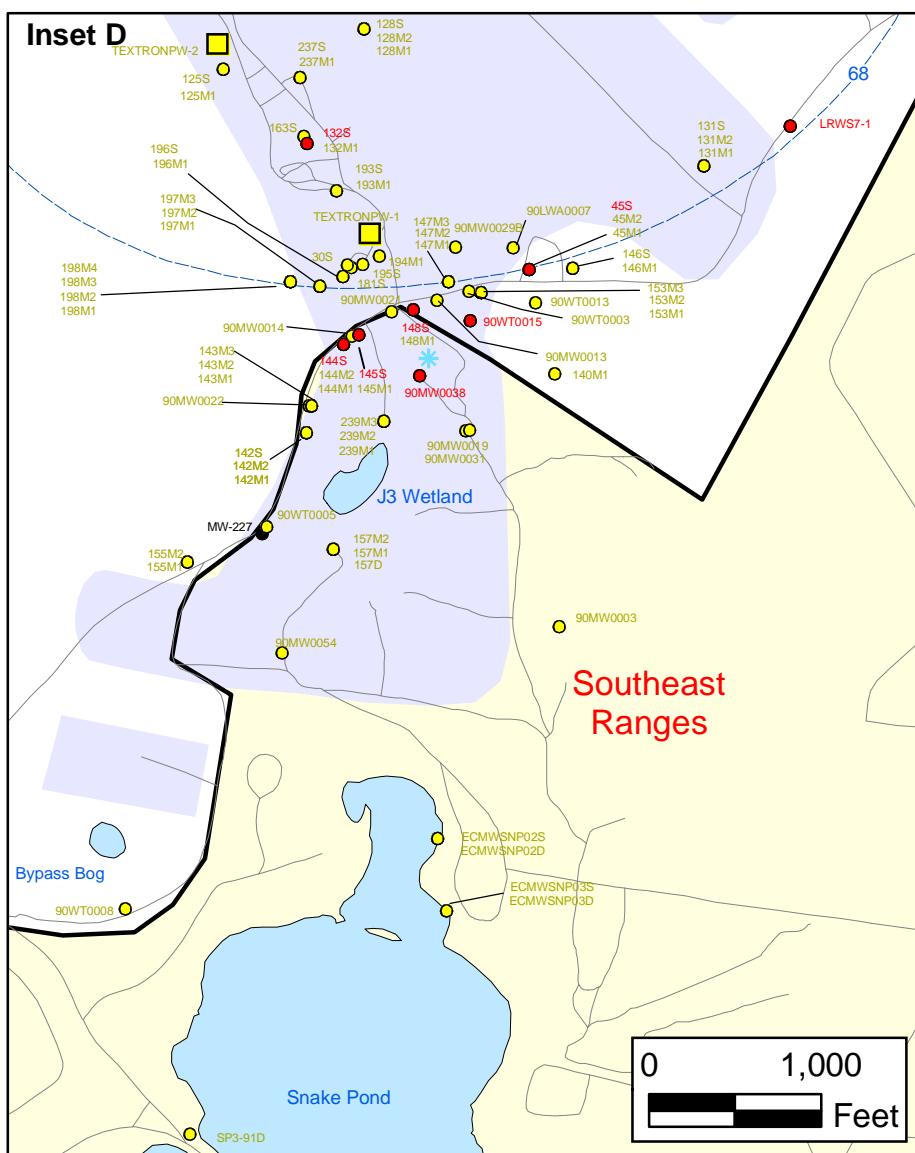
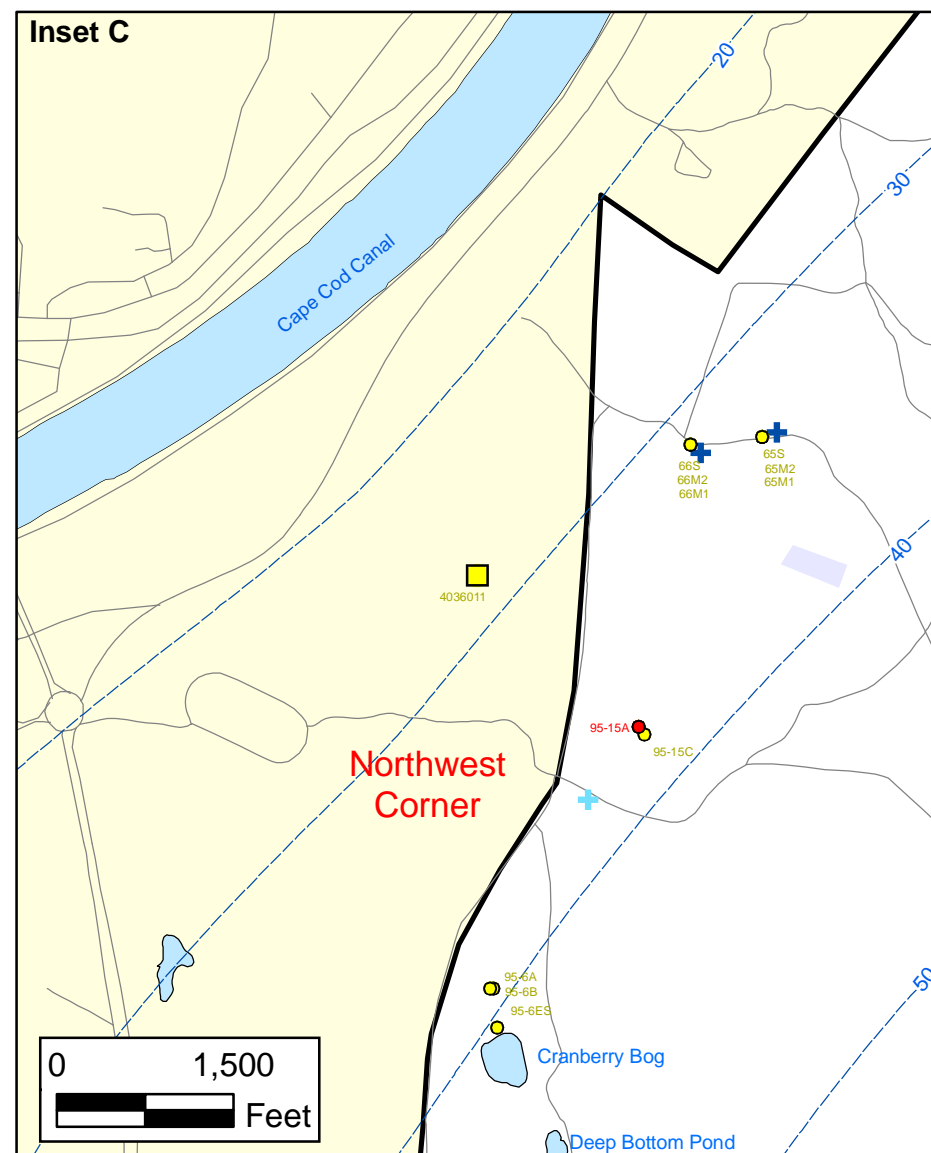
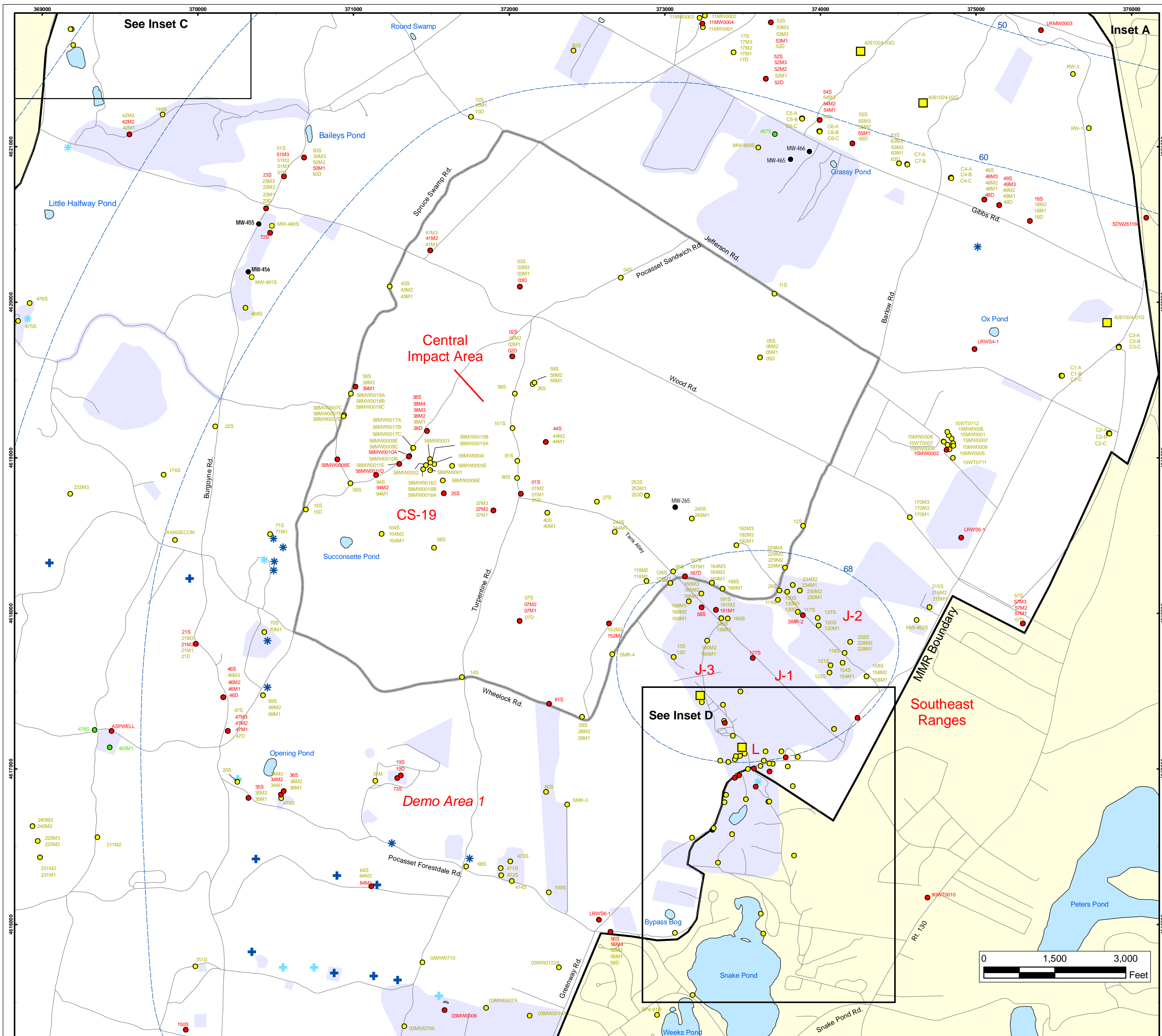

  


Sources & Notes  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic Maps  
 Source: Office of Geographic and Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

### Metals in Groundwater Compared to Maximum Contaminant Level/Health Advisories Validated Data as of 03/31/08

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 Westford, Massachusetts



### Metals in Groundwater Compared to Maximum Contaminant Level/Health Advisories

**Validated Data as of 03/31/08**

- Validated Detection Greater than or Equal to Maximum Contaminant Level/Health Advisories
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Data Pending
- Proposed Monitoring Well
- Military Range Areas
- + Current Gun Position
- \* Current Mortar Position
- + Old Gun Position
- \* Old Mortar Position
- Validated Detection Less than Maximum Contaminant Level/Health Advisories Water Supply Well
- Water Table Contour (Feet NGVD), AMEC, September 2003

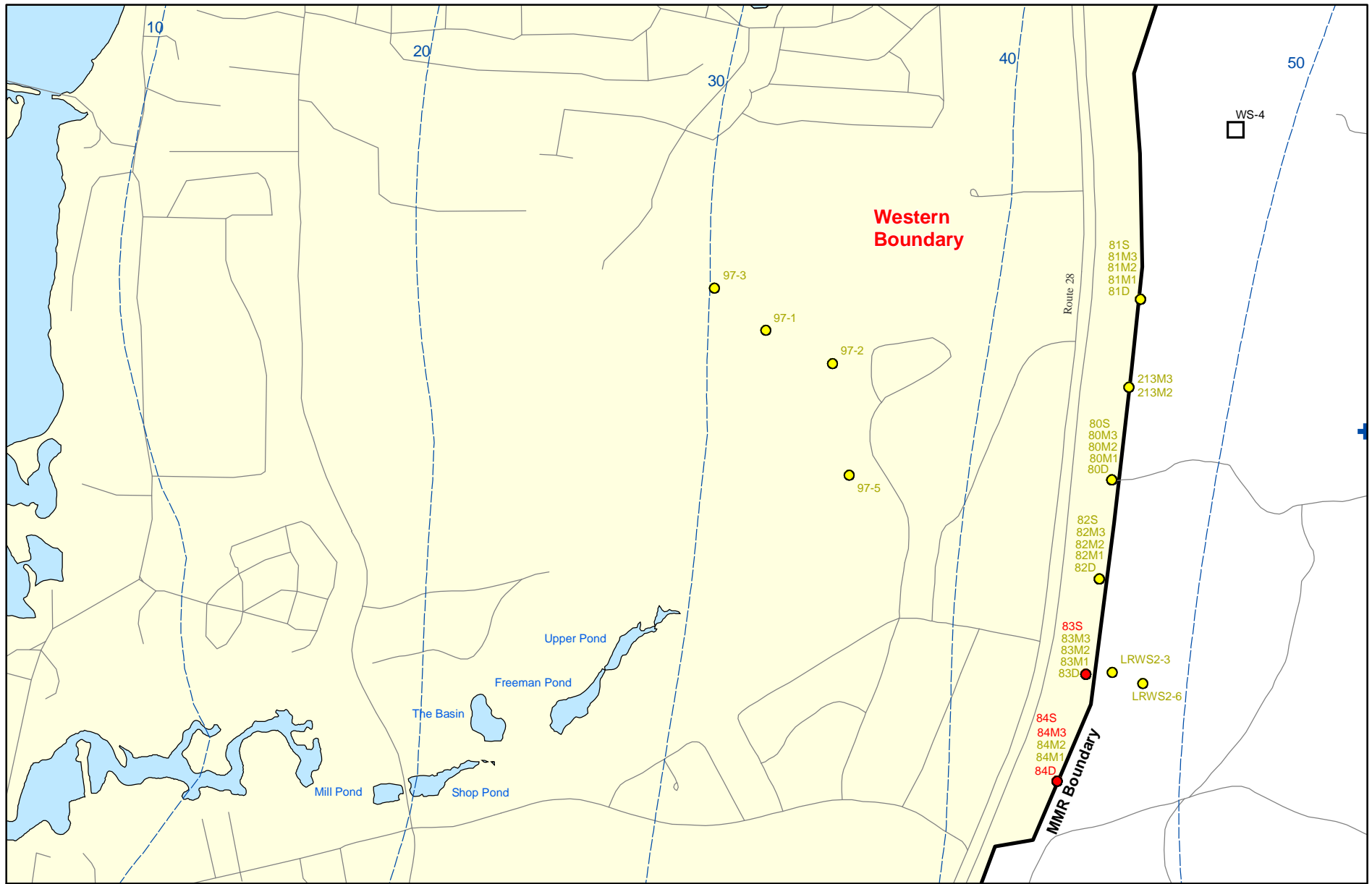
Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

**Impact Area  
Groundwater Study Program**

Sources & Notes  
Base map data from US Geological Survey  
7 1/2 minute Topographic Maps.  
Source: Office of Geographic and  
Environmental Information (MassGIS)  
Commonwealth of Massachusetts  
Executive Office of Environmental Affairs

**AMEC Earth & Environmental, Inc.**  
Westford, Massachusetts

**Inset Map**  
**FIGURE 2**



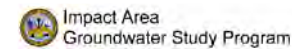
Sources & Notes:  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic maps.  
 Source: Office of Geographic and  
 Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

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- Validated Detection Greater than or Equal to Maximum Contaminant Level/Health Advisories
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Proposed Water Supply Well
- + Current Gun Position
- Water Table Contour (Feet NGVD) AMEC, September 2003

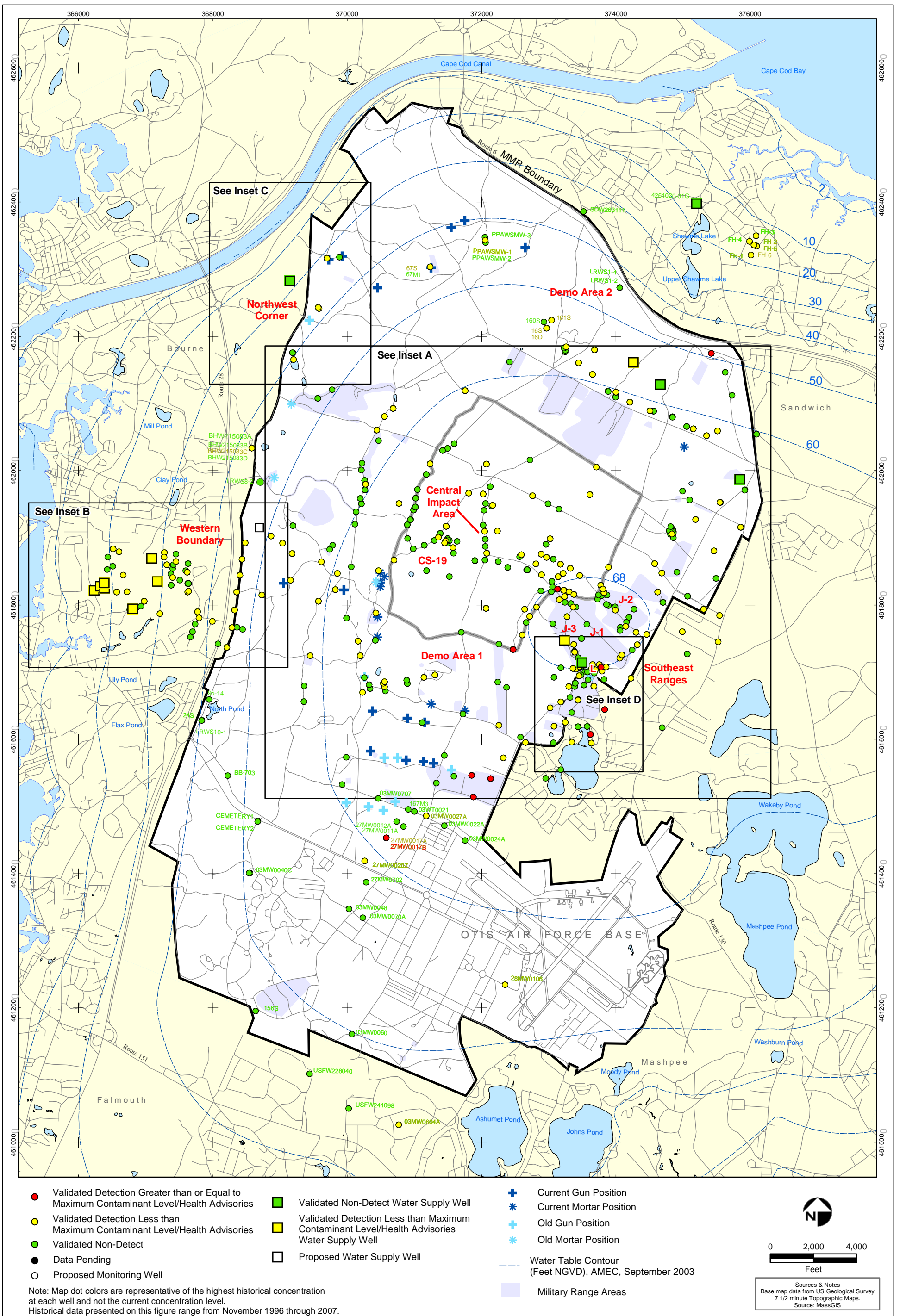
Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level.  
 Historical data presented on this figure range from November 1996 through 2007.

### Metals in Groundwater Compared to Maximum Contaminant Level/Health Advisories Validated Data as of 03/31/08



Inset Map B

FIGURE  
**2**

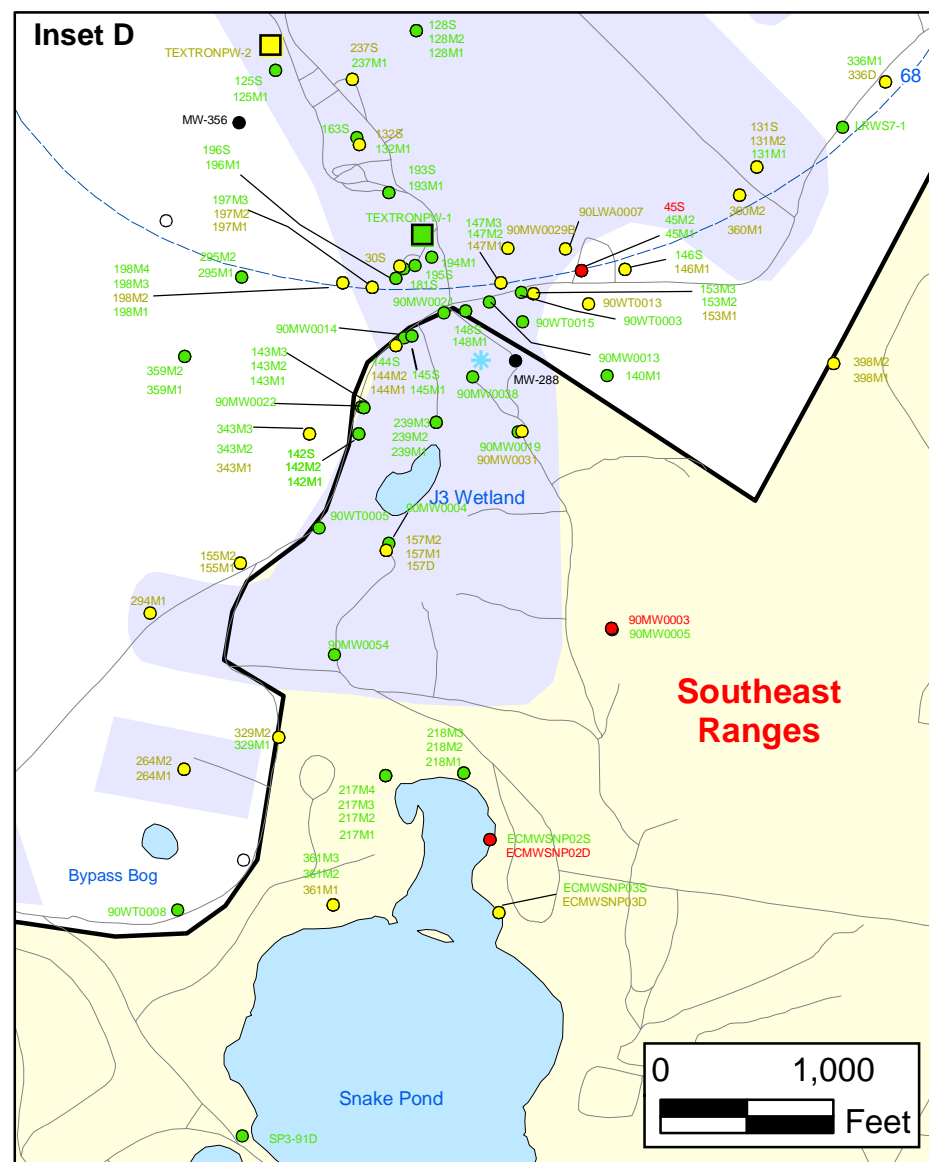
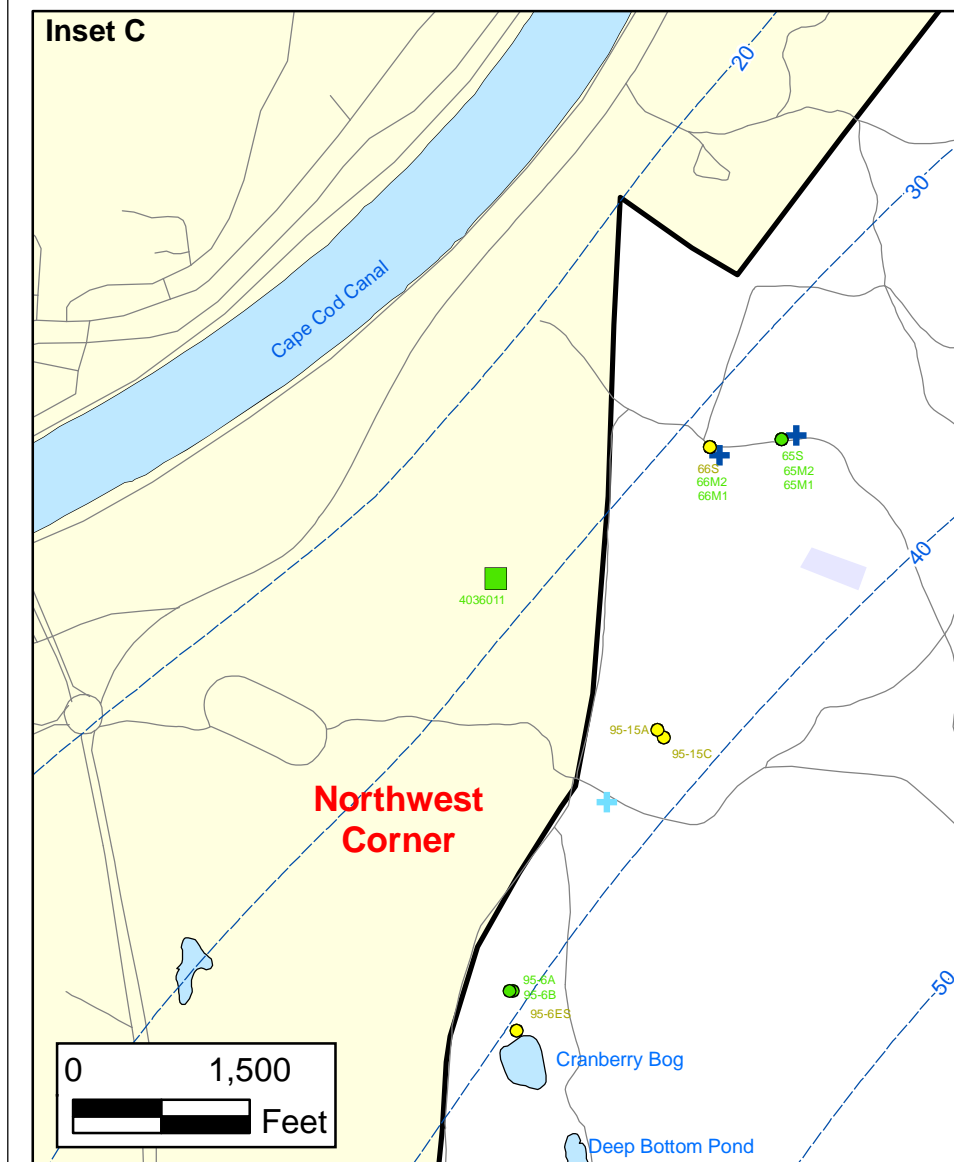
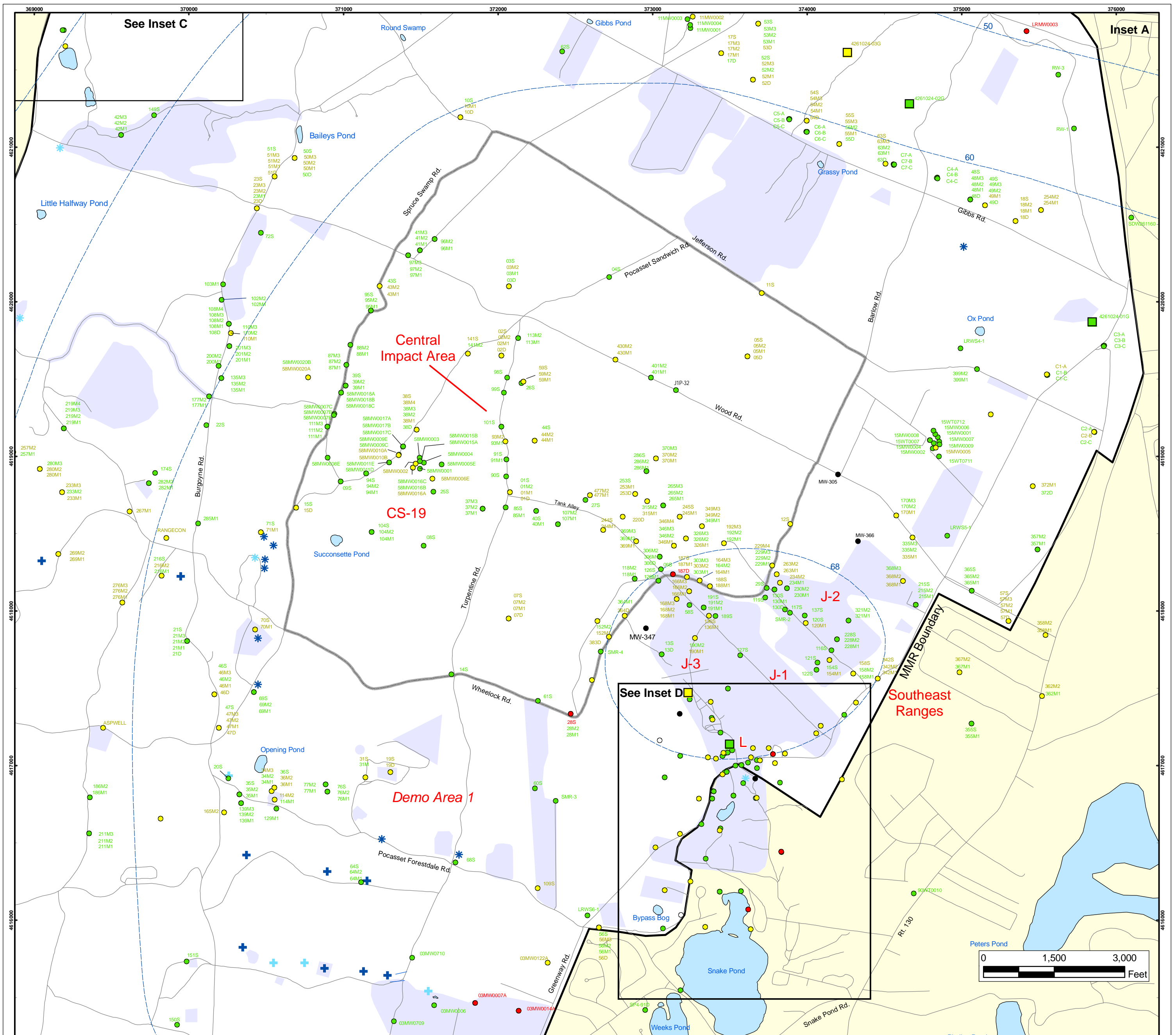


**Volatile Organic Compounds (Excluding Chloroform) in Groundwater  
Compared to Maximum Contaminant Level/Health Advisories  
Validated Data as of 03/31/08**

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Westford, Massachusetts

FIGURE  
**3**





**Volatile Organic Compounds (Excluding Chloroform) in Groundwater Compared to Maximum Contaminant Level/Health Advisories Validated Data as of 03/31/08**

- Validated Detection Greater than or Equal to Maximum Contaminant Level/Health Advisories
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Data Pending
- Proposed Monitoring Well
- Military Range Areas
- ⊕ Current Gun Position
- ⊕ Current Mortar Position
- ⊕ Old Gun Position
- ⊕ Old Mortar Position
- Validated Non-Detect Water Supply Well
- Validated Detection Less than Maximum Contaminant Level/Health Advisories Water Supply Well
- Water Table Contour (Feet NGVD), AMEC, September 2003

Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

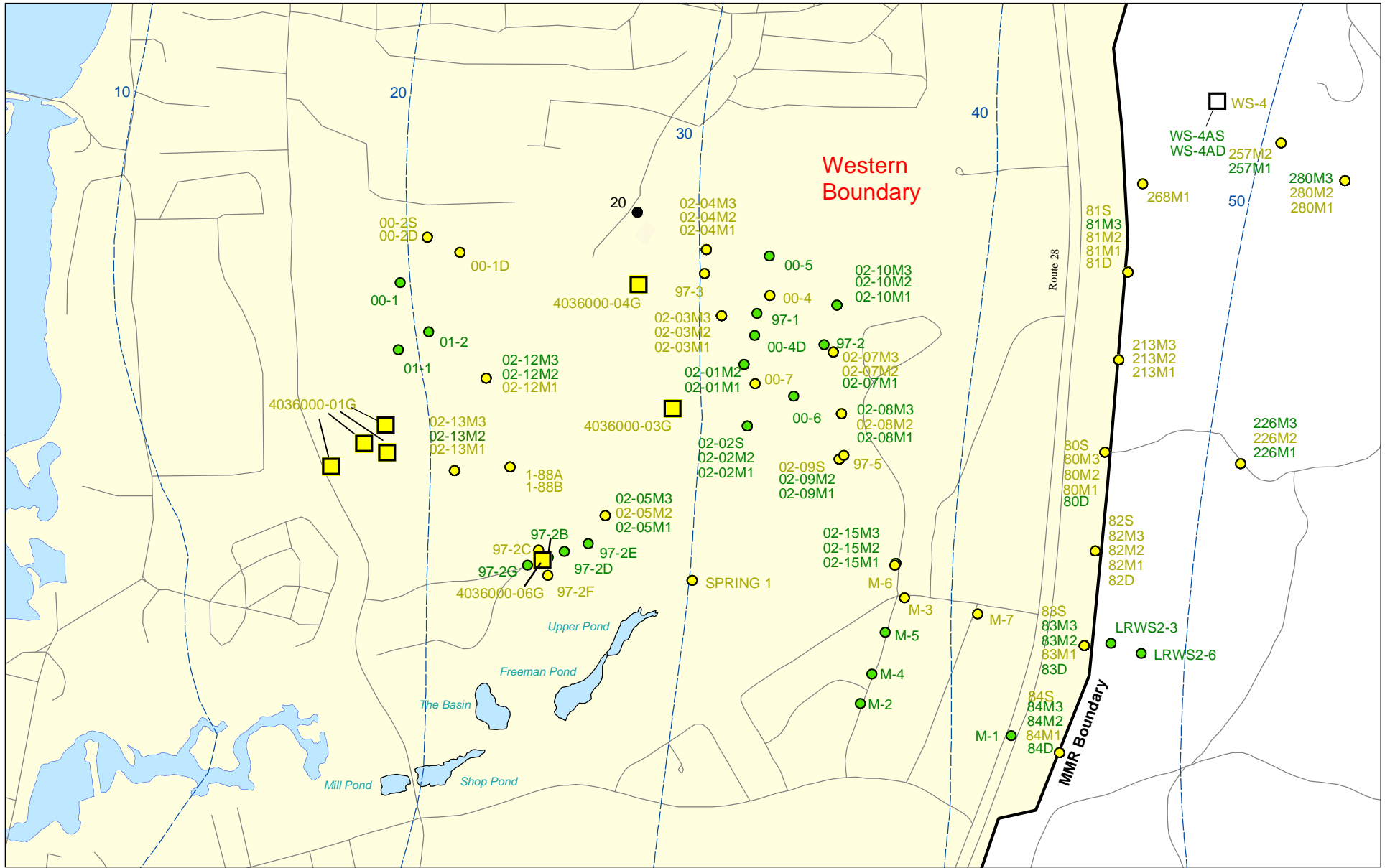
**Impact Area Groundwater Study Program**

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Sources & Notes  
Base map data from US Geological Survey  
7 1/2 minute Topographic Maps  
Source: Office of Geographic and Environmental Information (MassGIS)  
Commonwealth of Massachusetts  
Executive Office of Environmental Affairs

**FIGURE 3**  
*Inset Map*





**Sources & Notes:**  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic maps.  
 Source: Office of Geographic and  
 Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

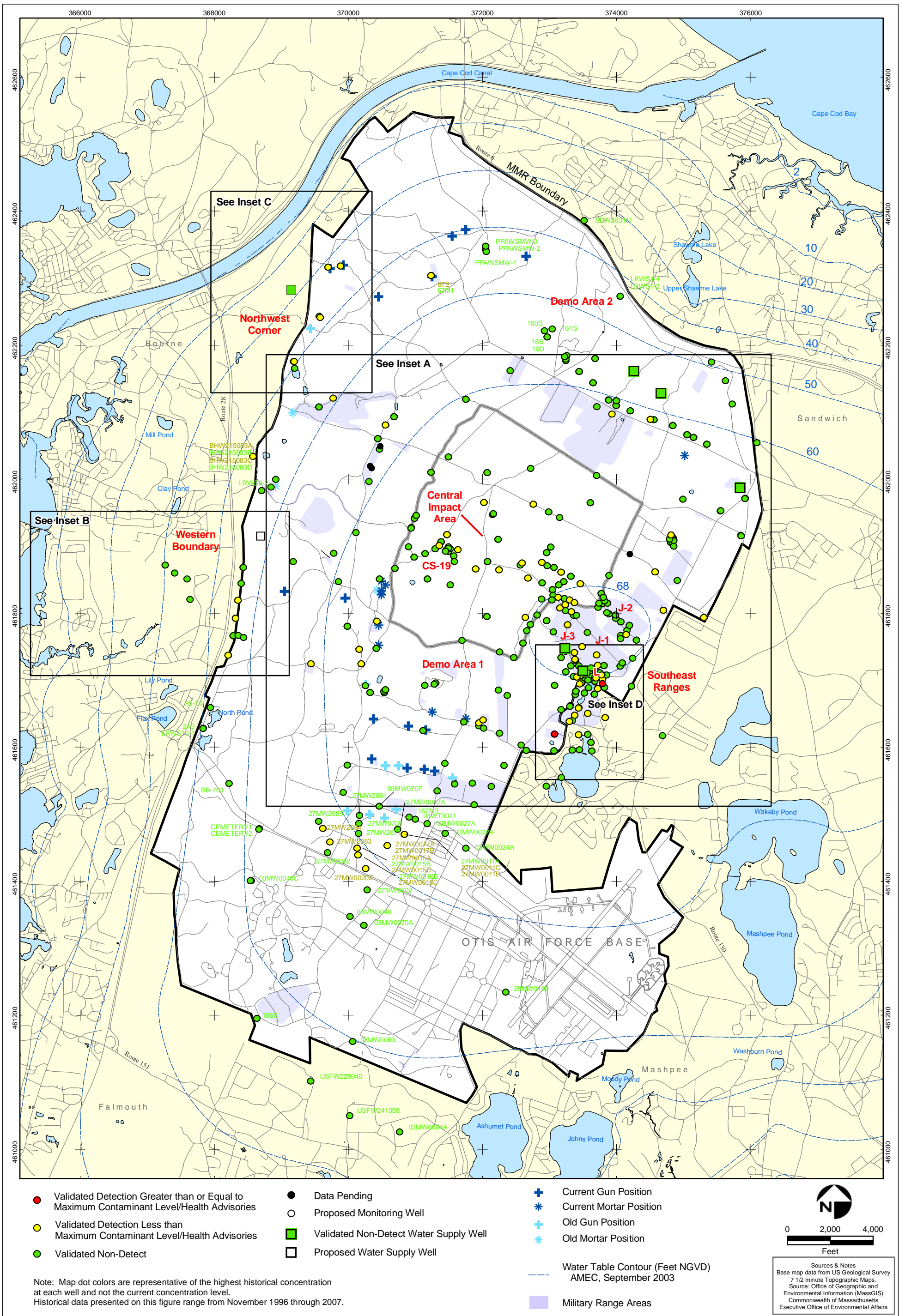
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Data Pending
- Validated Detection Less than Maximum Contaminant Level/Health Advisories Water Supply Well
- Proposed Water Supply Well
- Water Table Contour (Feet NGVD), AMEC, September 2003

**Volatile Organic Compounds (Excluding Chloroform)  
 in Groundwater Compared to Maximum  
 Contaminant Level/Health Advisories  
 Validated Data as of 03/31/08**



Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level.  
 Historical data presented on this figure range from November 1996 through 2007.

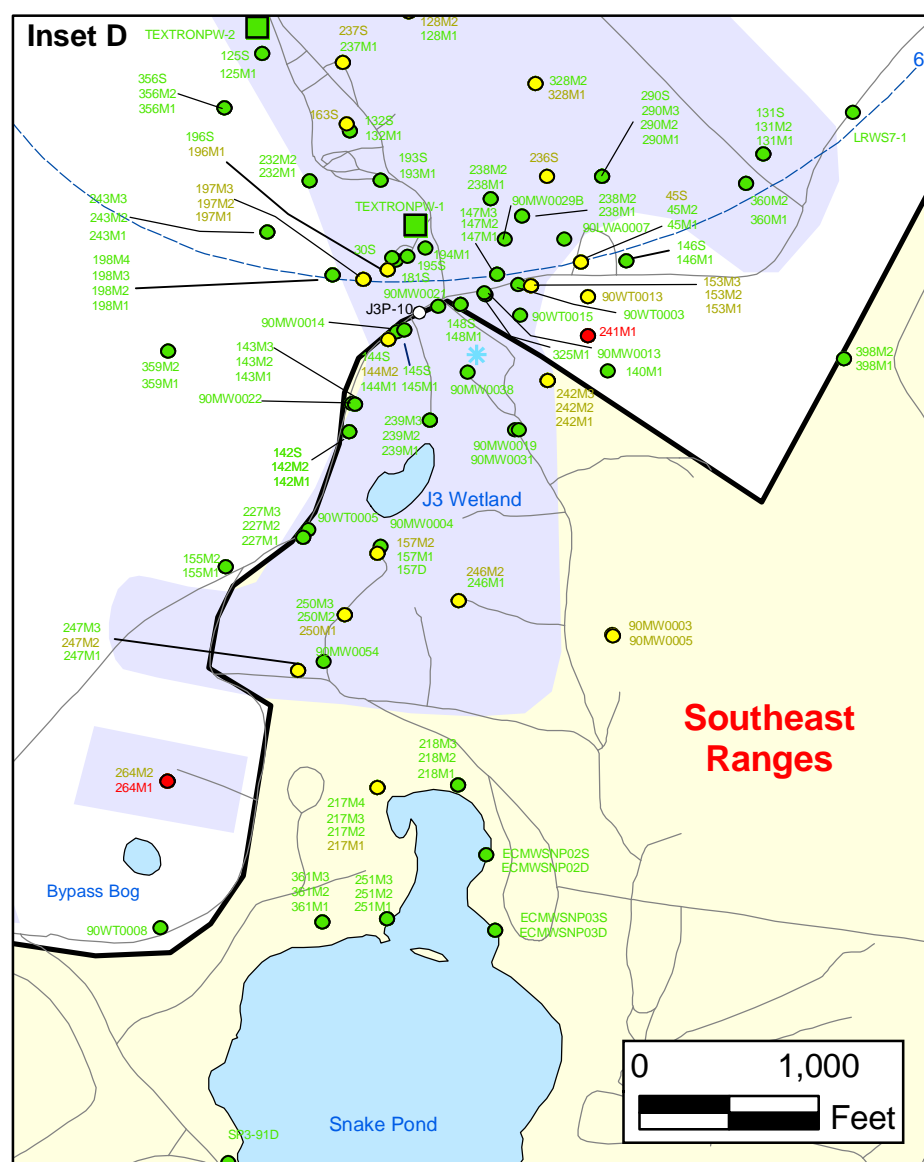
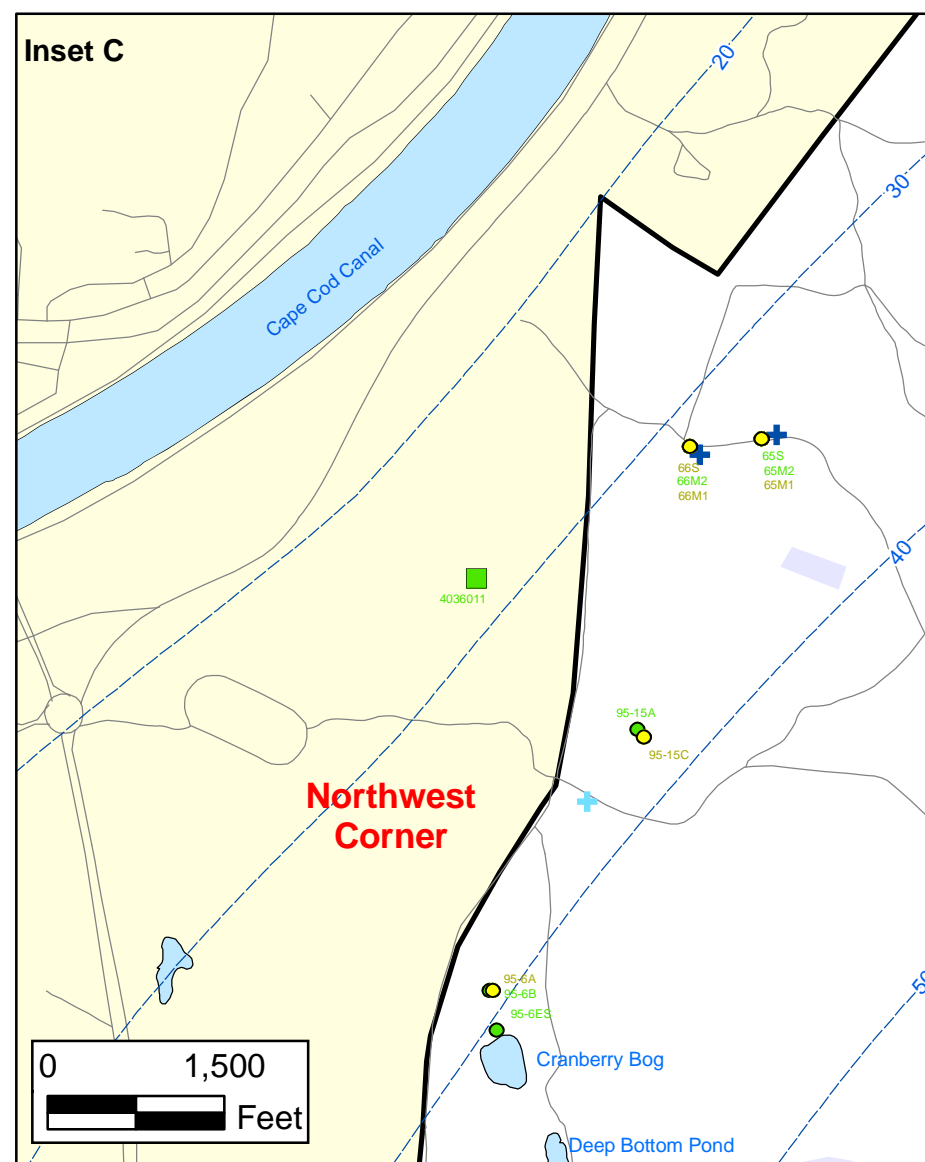
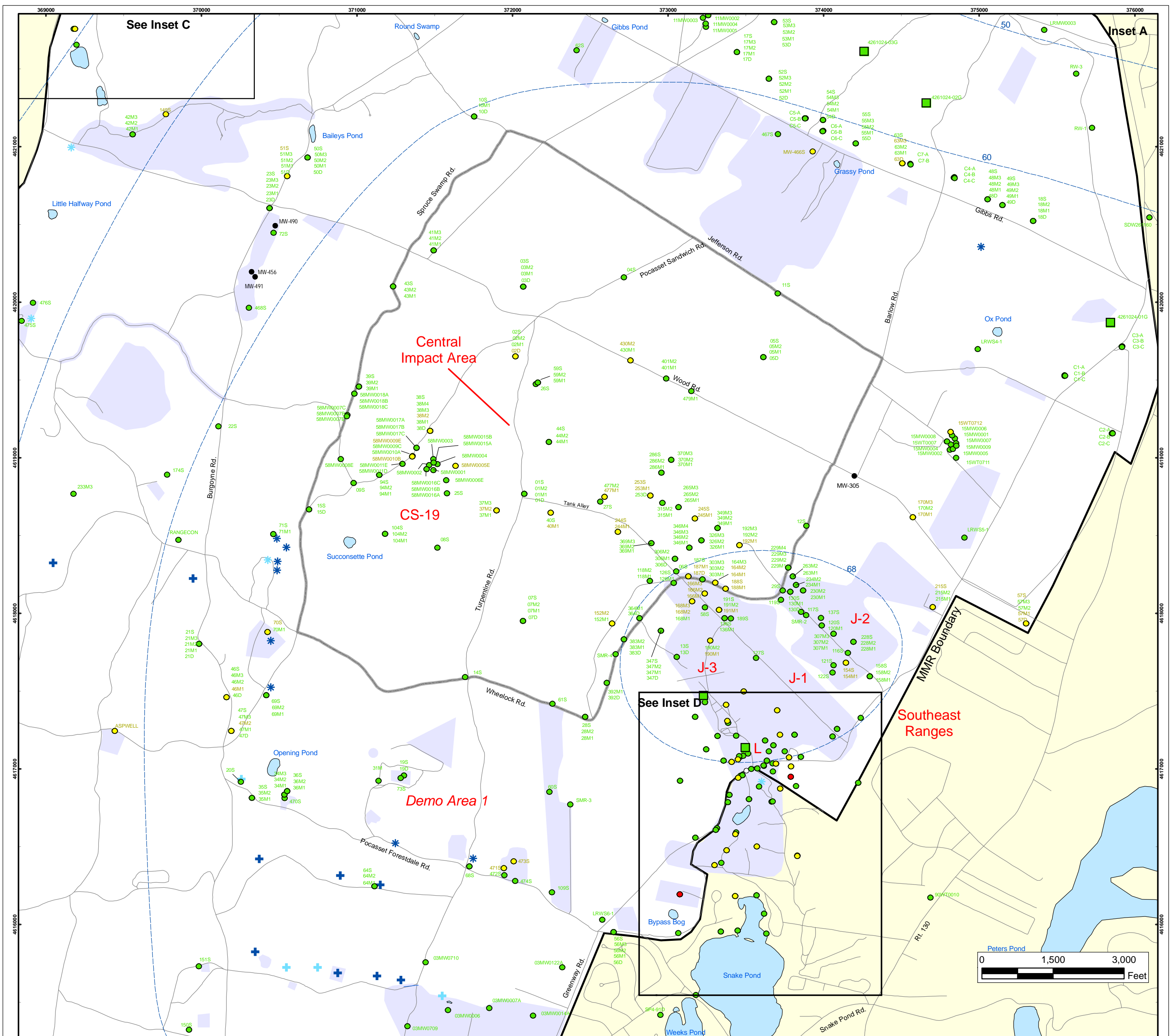
**FIGURE  
 Inset Map B 3**



**Semi-Volatile Organic Compounds (Excluding BEHP) in Groundwater  
 Compared to Maximum Contaminant Level/Health Advisories  
 Validated Data as of 03/31/08**

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FIGURE  
**5**



### Semi-Volatile Organic Compounds (Excluding BEHP) in Groundwater Compared to Maximum Contaminant Level/Health Advisories Validated Data as of 03/31/08

- Validated Detection Greater than or Equal to Maximum Contaminant Level/Health Advisories
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Data Pending
- Proposed Monitoring Well
- Military Range Areas
- ✚ Current Gun Position
- ✚ Current Mortar Position
- ✚ Old Gun Position
- ✚ Old Mortar Position
- Validated Non-Detect Water Supply Well
- Water Table Contour (Feet NGVD), AMEC, September 2003

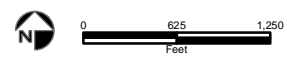
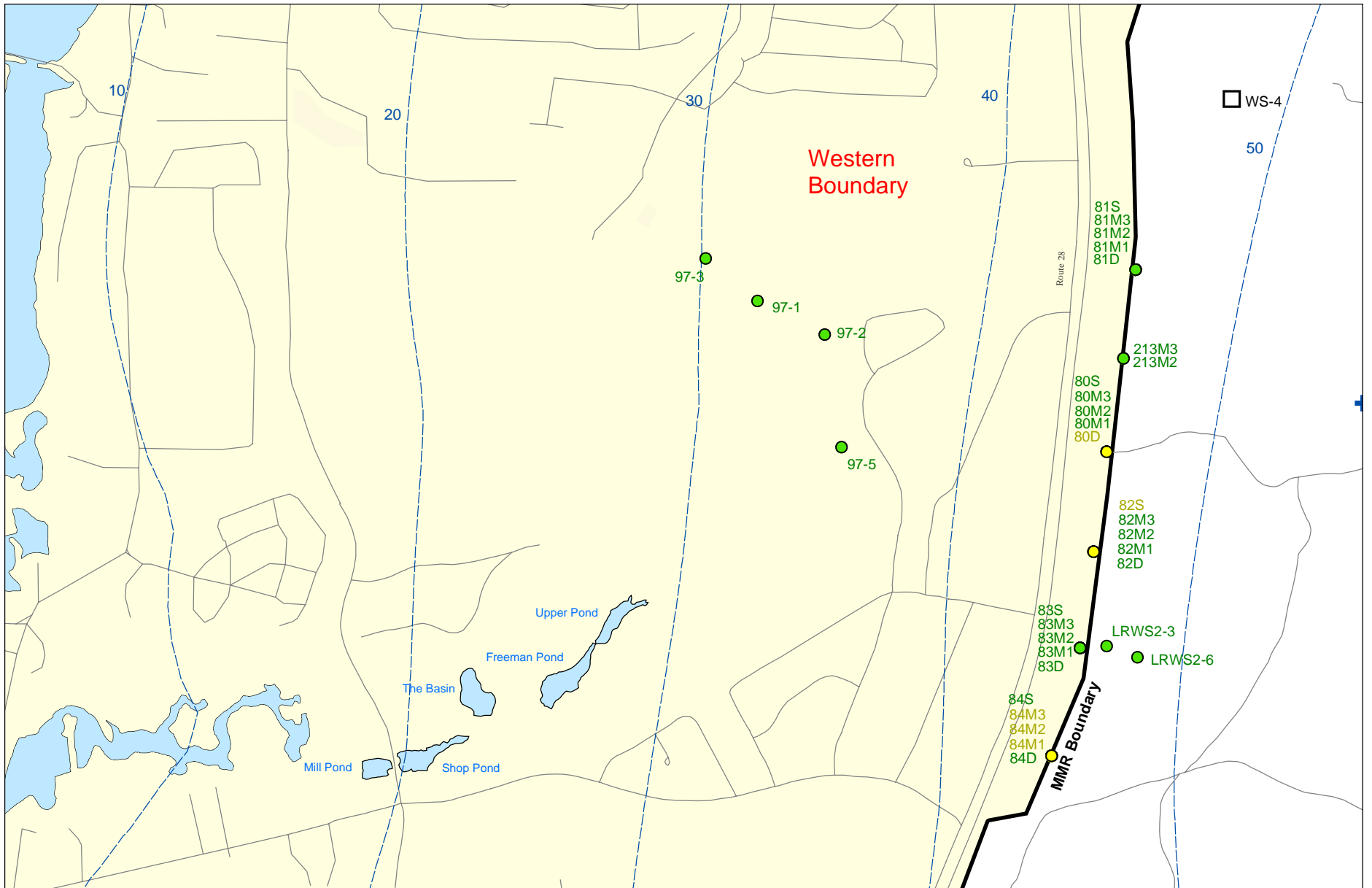
Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

**Impact Area Groundwater Study Program**

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**Inset Map**

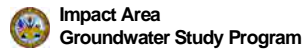
**FIGURE 5**



Sources & Notes:  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic maps.  
 Source: Office of Geographic and  
 Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

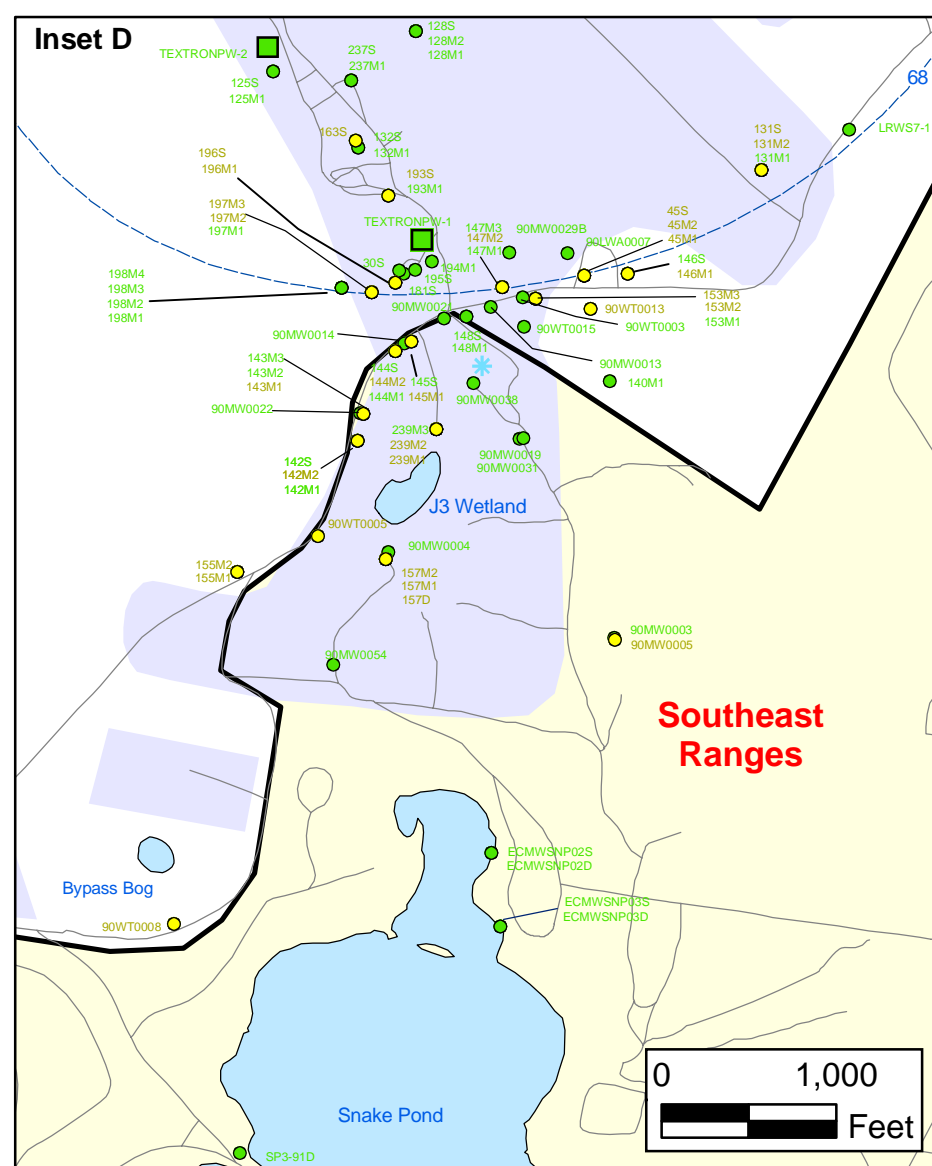
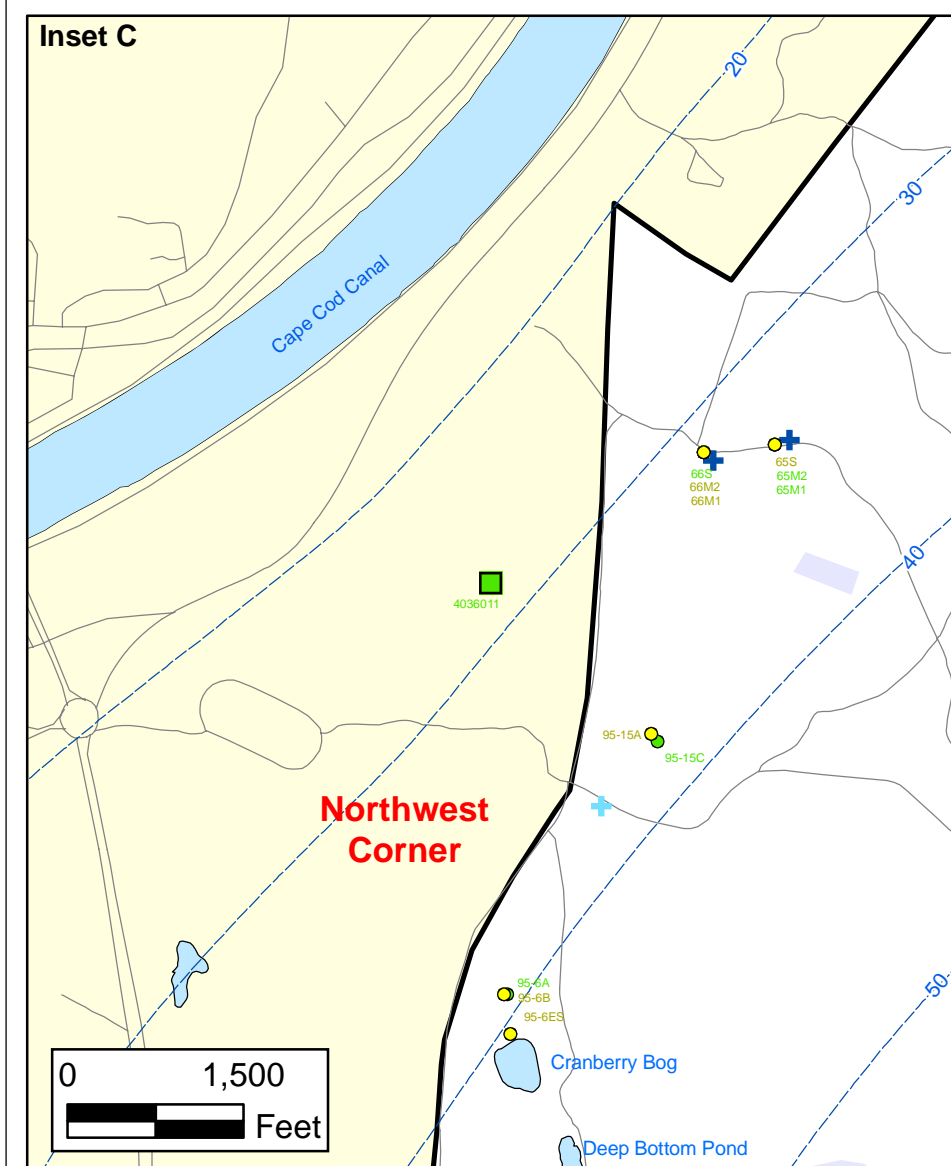
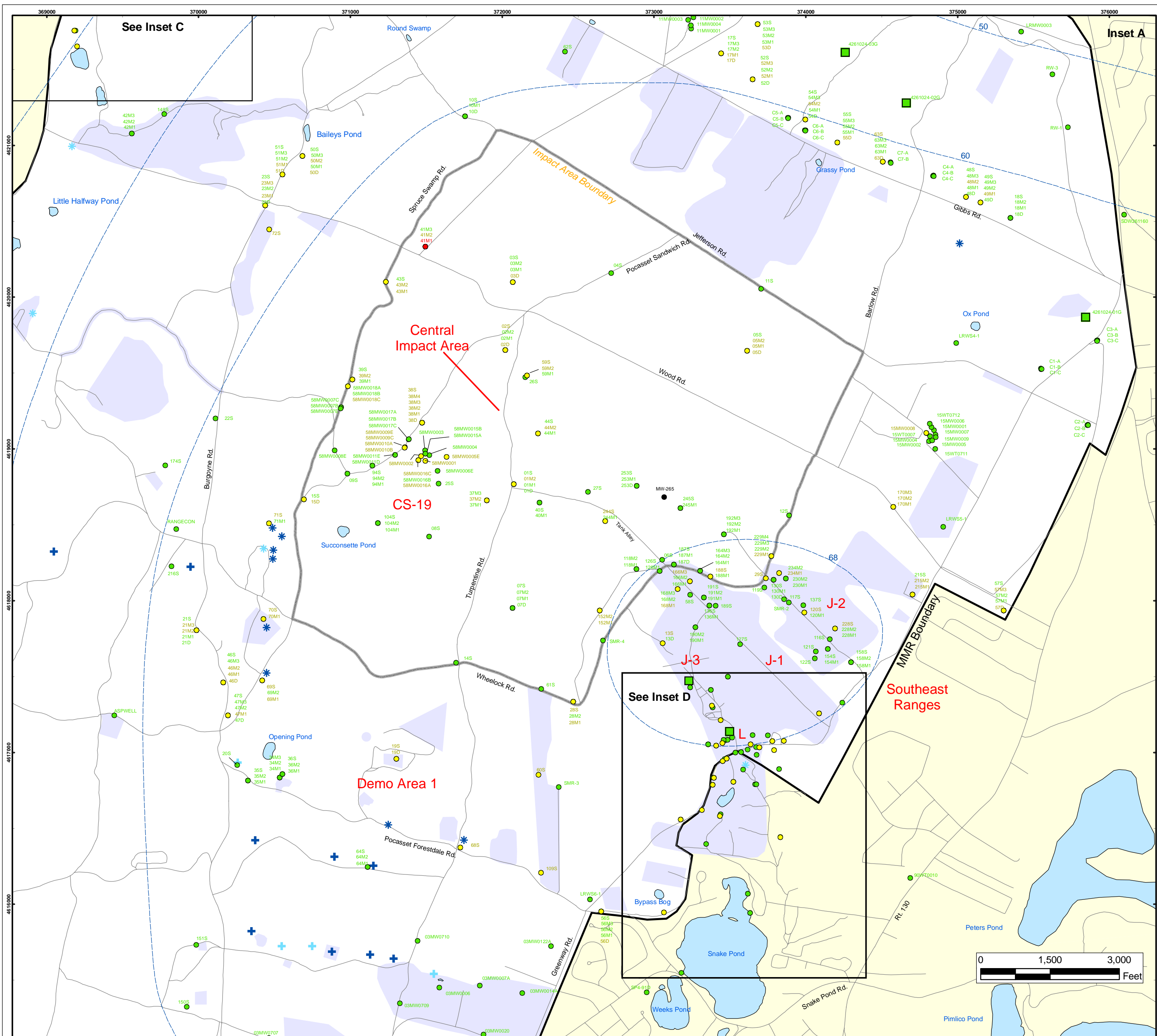
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Proposed Water Supply Well
- + Current Gun Position
- Water Table Contour (Feet NGVD), AMEC, September 2003

**Semi-Volatile Organic Compounds (Excluding BEHP) in Groundwater Compared to Maximum Contaminant Level/Health Advisories**  
 Validated Data as of 03/31/08



Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

*Inset Map B* **FIGURE 5**



### Herbicides and Pesticides in Groundwater Compared to Maximum Contaminant Level/Health Advisories Validated Data as of 03/31/08

- Validated Detection Greater than or Equal to Maximum Contaminant Level/Health Advisories
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Data Pending
- Proposed Monitoring Well
- Military Range Areas
- ⊕ Current Gun Position
- ⊛ Current Mortar Position
- ⊕ Old Gun Position
- ⊛ Old Mortar Position
- Validated Non-Detect Water Supply Well
- Water Table Contour (Feet NGVD), AMEC, September 2003

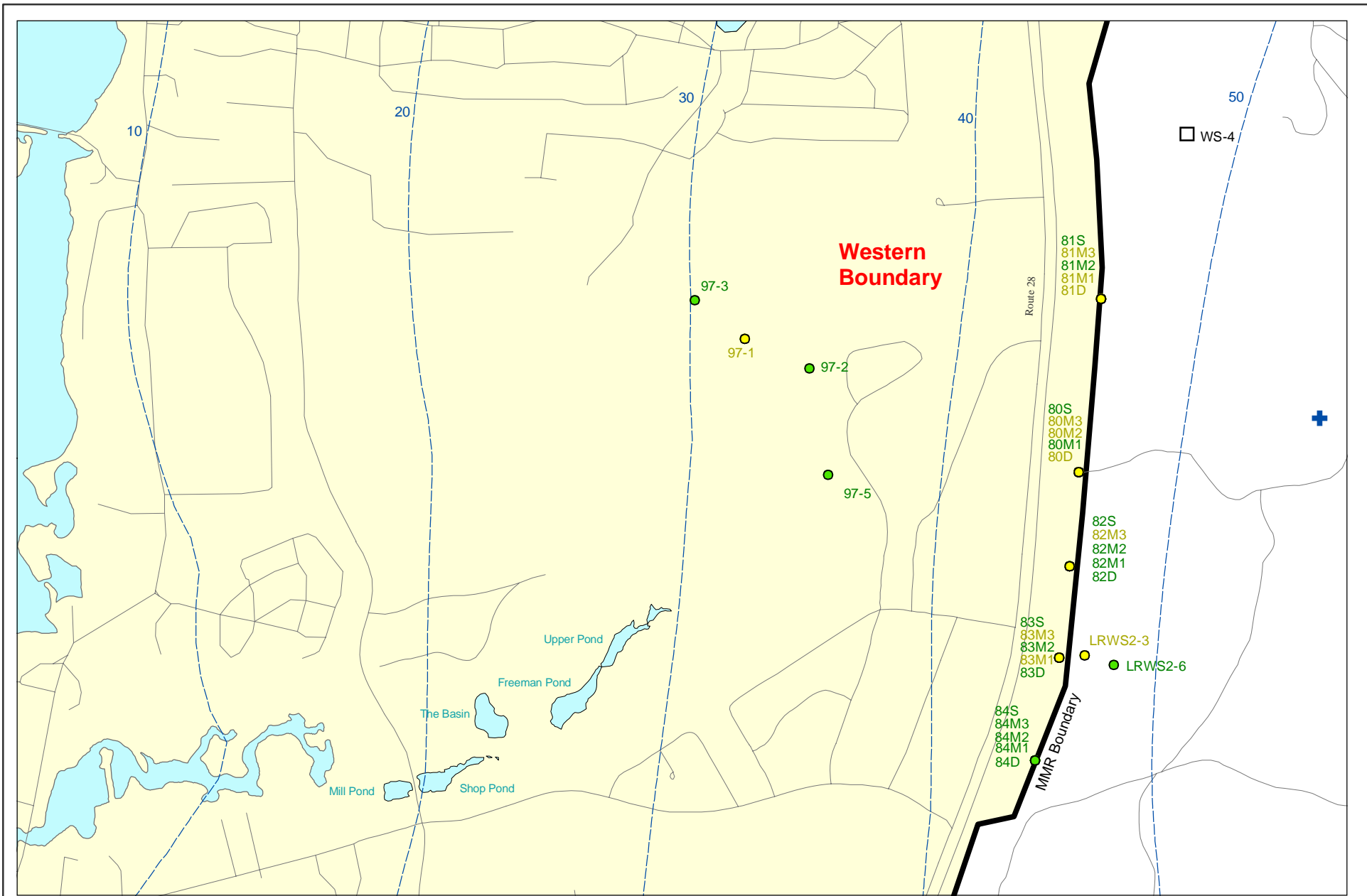
Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

**Impact Area Groundwater Study Program**

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Sources & Notes  
Base map data from US Geological Survey  
7 1/2 minute Topographic Maps  
Source: Office of Geographic and Environmental Information (MassGIS)  
Commonwealth of Massachusetts  
Executive Office of Environmental Affairs

**FIGURE 7**  
**Inset Map**

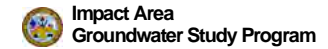


**Sources & Notes:**  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic maps.  
 Source: Office of Geographic and  
 Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

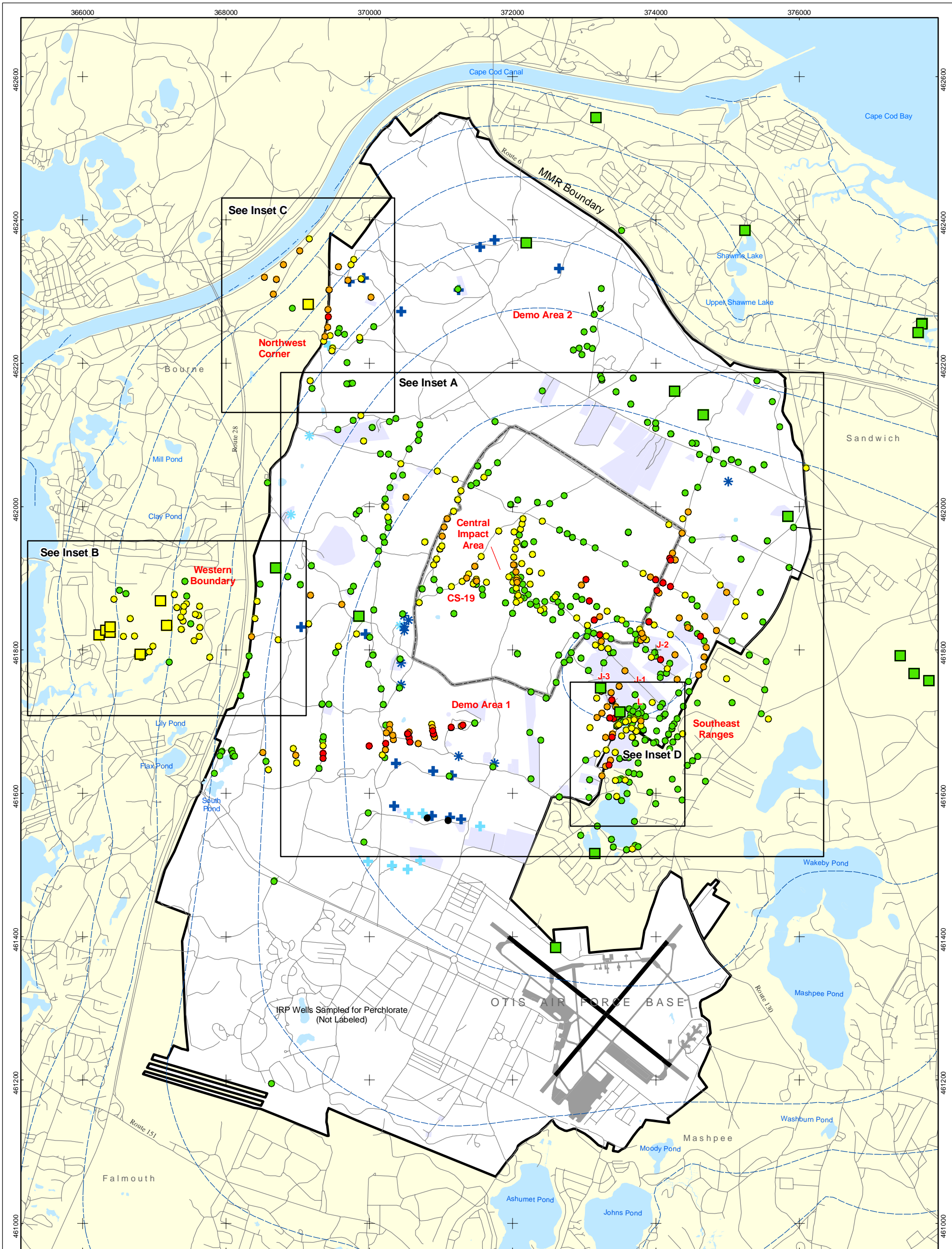
- Validated Detection Less than Maximum Contaminant Level/Health Advisories
- Validated Non-Detect
- Proposed Water Supply Well
- + Current Gun Position
- Water Table Contour (Feet NGVD), AMEC, September 2003

Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

**Herbicides & Pesticides in Groundwater Compared to Maximum Contaminant Level/Health Advisories Validated Data as of 03/31/08**



AMEC Earth & Environmental, Inc.  
 Westford, Massachusetts

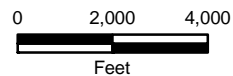


- Validated Detection Greater than or Equal to 24 ppb
- Validated Detection Greater than or Equal to 2 and Less than 24 ppb
- Validated Detection Greater than Non-Detect and Less than 2 ppb
- Validated Non-Detect

Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

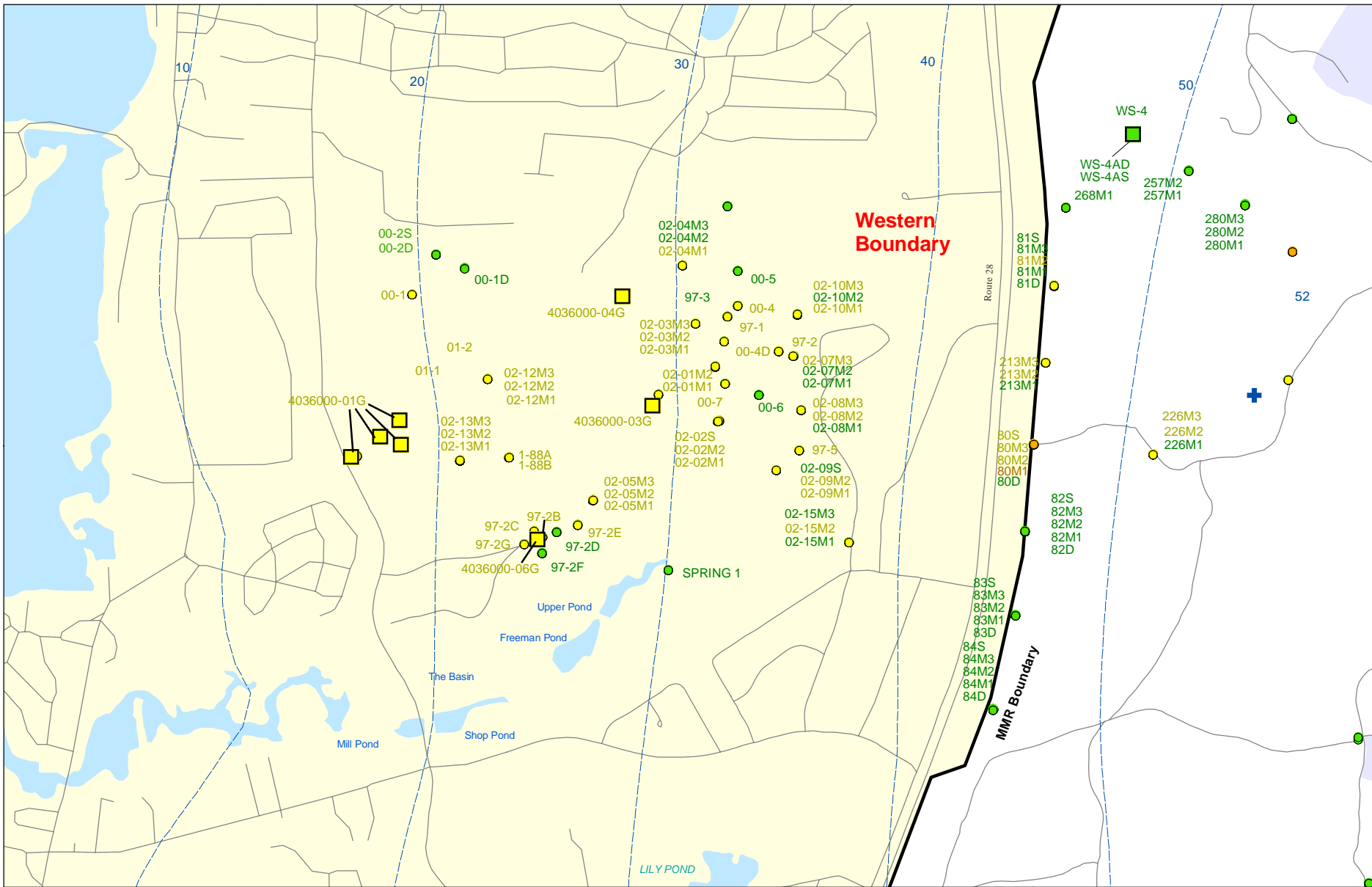
- Data Pending
- Proposed Monitoring Well
- ⊕ Current Gun Position
- ⊛ Current Mortar Position
- ⊕ Old Gun Position
- ⊛ Old Mortar Position

- Validated Non-Detect Water Supply Well
- Validated Detection Less than 2 ppb Water Supply Well
- Proposed Water Supply Well
- Water Table Contour (Feet NGVD) AMEC, September 2003
- Military Range Areas



Sources & Notes  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic Maps  
 Source: Office of Geographic and Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

**Perchlorate in Groundwater  
 Compared to a 2 ppb Concentration  
 Validated Data as of 12/31/08**



Sources & Notes:  
 Base map data from US Geological Survey  
 7 1/2 minute Topographic maps.  
 Source: Office of Geographic and  
 Environmental Information (MassGIS)  
 Commonwealth of Massachusetts  
 Executive Office of Environmental Affairs

- Validated Detection Greater than or Equal to 2 and Less than 24 ppb
- Validated Detection Greater than Non-Detect and Less than 2 ppb
- Validated Non-Detect

- Validated Detection Less than 2 ppb Water Supply Well
- Validated Non-Detect Water Supply Well
- +
- Current Gun Position
- Water Table Contour (Feet NGVD)  
 AMEC, September 2003

### Perchlorate in Groundwater Compared to a 2 ppb Concentration Validated Data as of 12/31/08

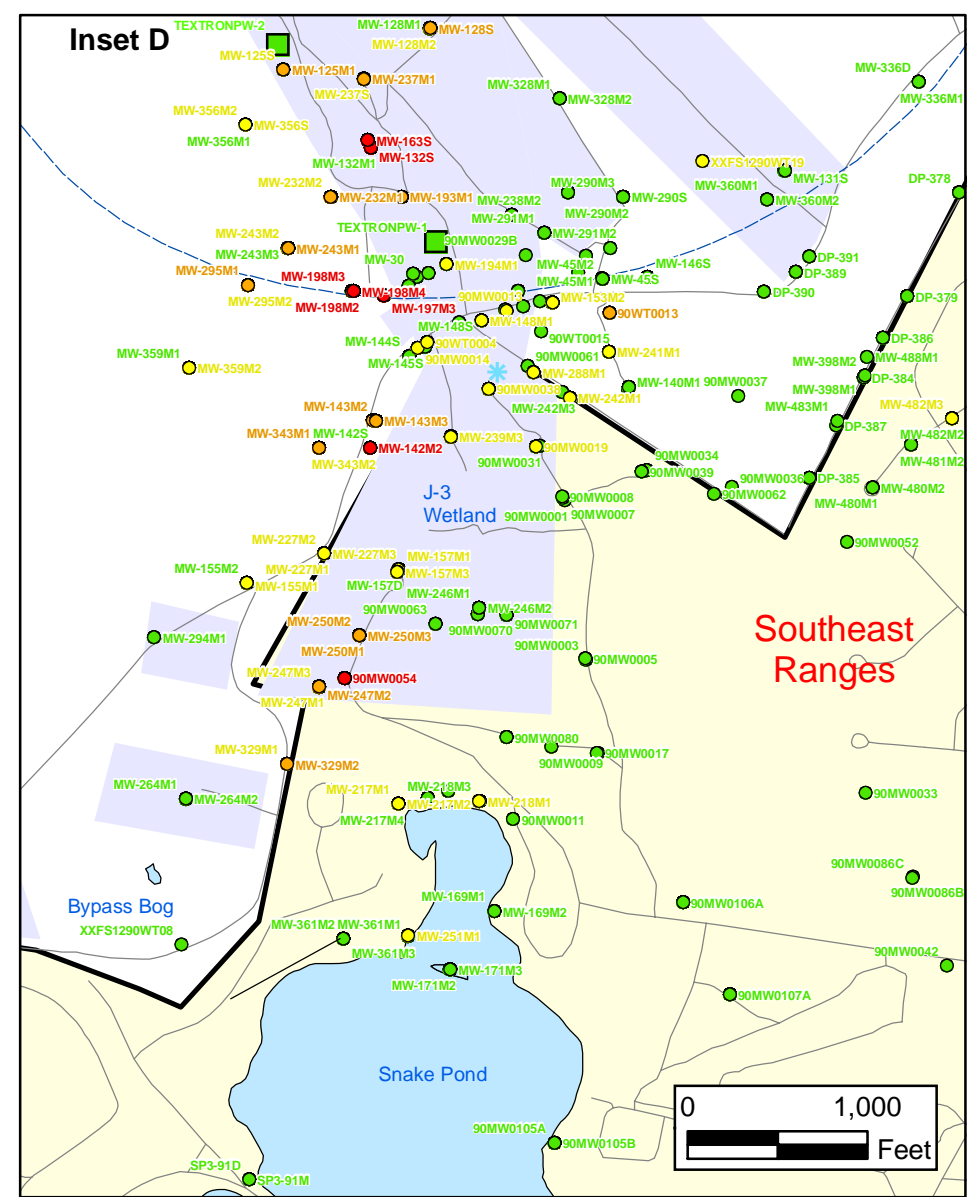
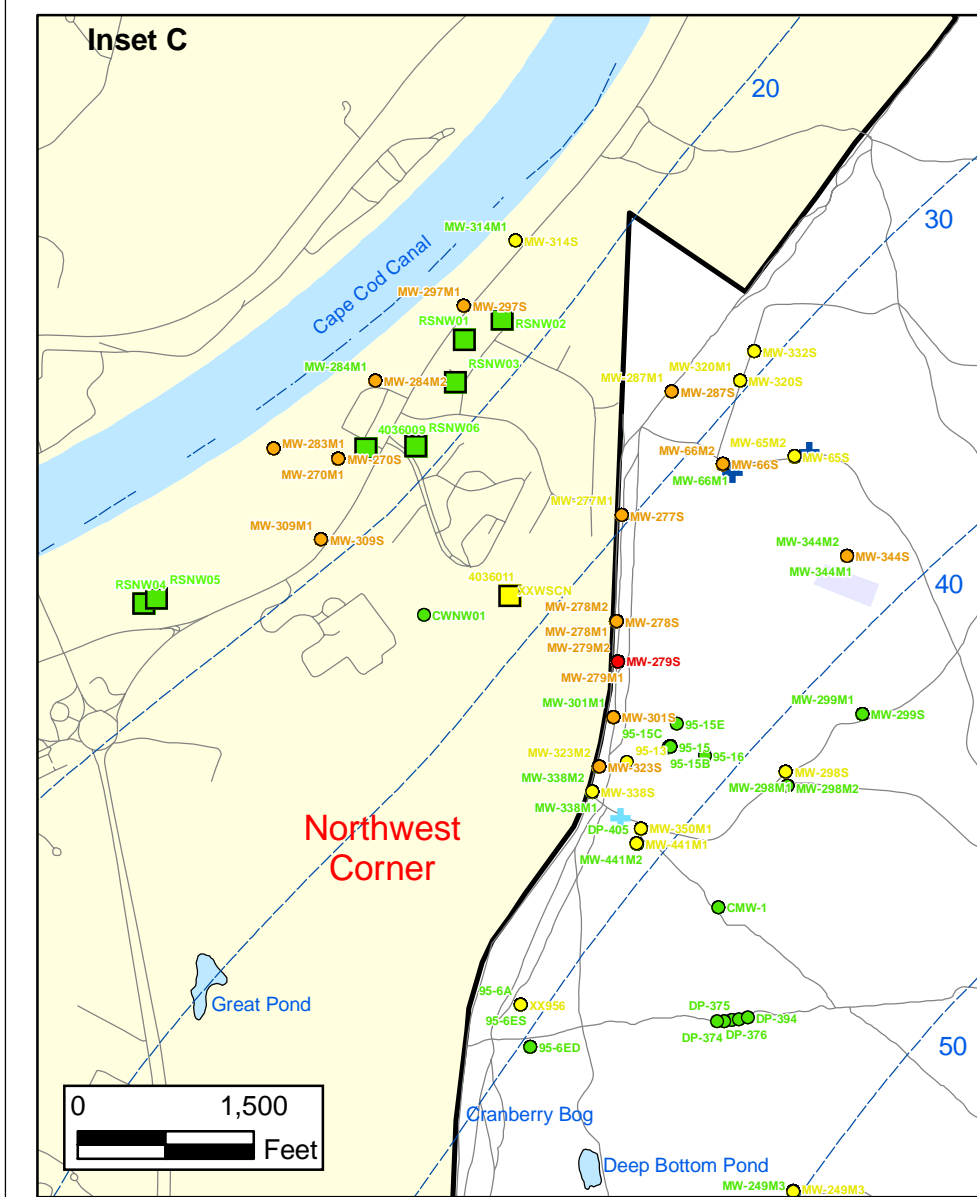
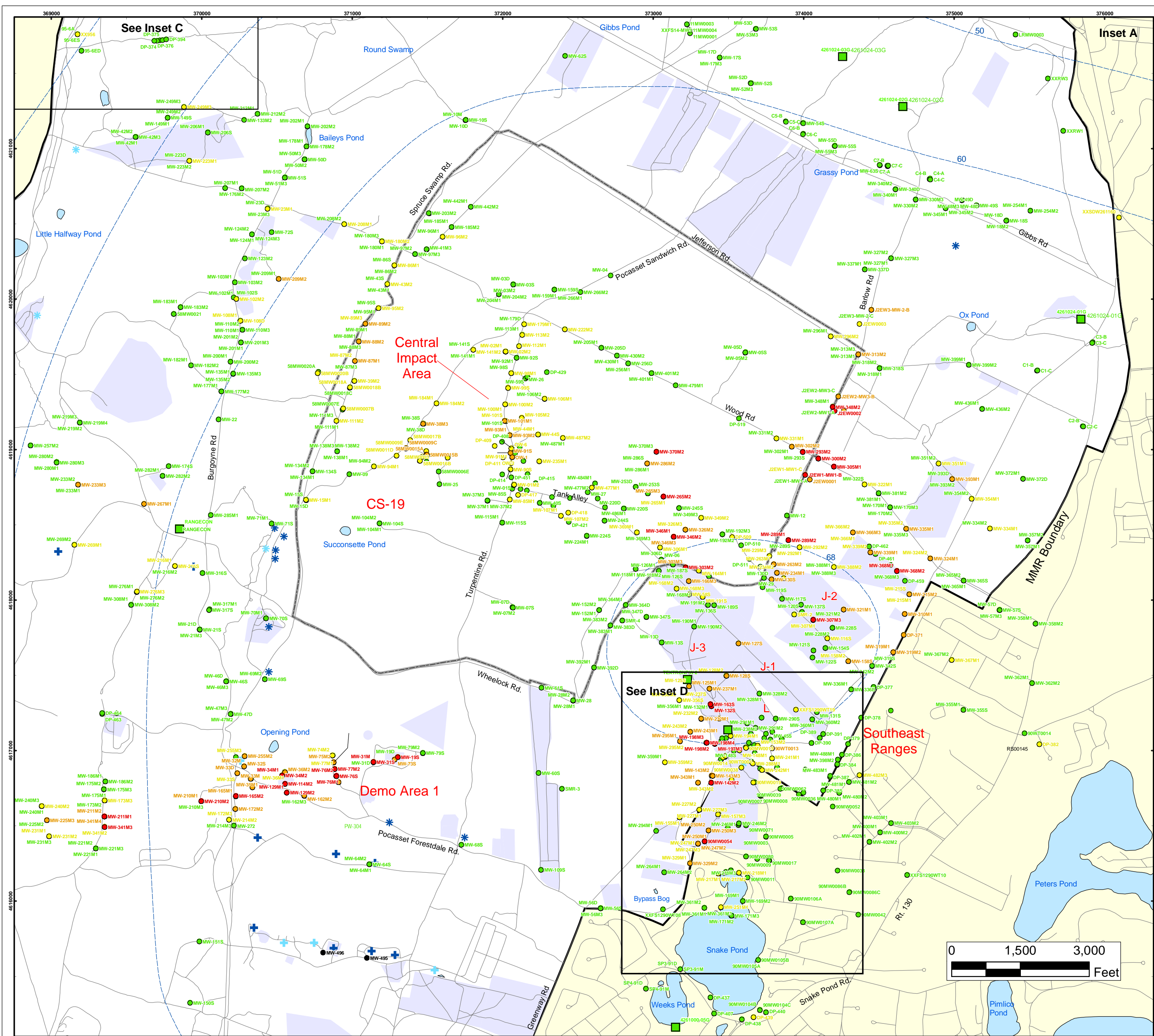


Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level.  
 Historical data presented on this figure range from November 1996 through 2007.

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Inset Map B **8**





### Perchlorate in Groundwater Compared to a 2 PPB Concentration Validated Data as of 12/31/08

- Validated Detection Greater than or Equal to 24 ppb
- Validated Detection Greater than or Equal to 2 and Less than 24 ppb
- Validated Detection Less than 2 ppb
- Validated Non-Detect
- Data Pending
- Military Range Areas
- + Current Gun Position
- \* Current Mortar Position
- + Old Gun Position
- \* Old Mortar Position
- Validated Non-Detect Water Supply Well
- Validated Detection Less Than 2 ppb Water Supply Well
- Water Table Contour (Feet NGVD), AMEC, September 2003

Note: Map dot colors are representative of the highest historical concentration at each well and not the current concentration level. Historical data presented on this figure range from November 1996 through 2007.

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Cape Cod, Massachusetts

FIGURE  
**8**