

**Environmental  
Resources  
Management**

399 Boylston Street, 6<sup>th</sup> Floor  
Boston, MA 02116  
(617) 646-7800  
(617) 267-6447 (fax)

<http://www.erm.com>

6 May 2004  
Reference: 0013606

Brian Monahan  
Conservation Administrator  
Wayland Conservation Commission  
Town Building  
Wayland, MA 01778



Re: Inspection Report #5  
23 April through 4 May 2004  
Former Raytheon Facility  
430 Boston Post Road  
DEP File No. 322-0564

Dear Mr. Monahan:

In accordance with Condition Number 48 of Order of Conditions 322-0564, dated 20 November 2003, Environmental Resources Management (ERM) is pleased to provide the Wayland Conservation Commission (Commission) with this Inspection Report regarding the vertical profiling and monitoring well installation activities for the former Raytheon facility at 430 Boston Post Road.

The following information summarizes work performed during the period from 23 April through 4 May 2004.

***Work Performed During Period***

- Vertical profiling conducted using direct push techniques at the following location (refusal depth parenthetical).
  - B-419 (168 feet)
- Daily erosion control measure inspections were performed and corrective action taken, as needed. Sufficient supplies of silt fence and straw bails are maintained on site to allow for corrective action and maintenance activities. Inspection logs are detailed on the Daily Reports (Attachment A).
- Borings were pressure grouted and previously installed steel casing was removed following refusal and removal of profiling equipment in accordance with the Notice of Intent submitted on 26 September 2003 and approved by the Commission on 20 November 2003.

- Photographs were taken in accordance with Condition Number 40 and available for the Commission's inspection.
- Equipment is being refueled in accordance with the "Equipment Refueling Plan" provided to the Commission. Sufficient spill containment supplies are maintained at each location.
- Equipment mobilization and demobilization to each location was completed with mud mats to prevent rutting the Town's fields.
- Surface water quality monitoring was conducted on 27 April and 4 May 2004 in accordance with Condition Number 35. The results are detailed in the Daily Reports (Appendix A).
- As of 30 April on-site activities related the vertical profiling component of DEP File Number 322-0564 are on hold until further notice. The Commission will be notified prior to recommencing activities per the Order of Conditions.

*Items Not in Conformance with Order of Conditions During Period*

- Intermittent ruts were created in the Commission fields and have been repaired in accordance with the Order of Conditions.

*Other Information*

- ERM submitted data packages on 17, 18, and 24 March 2004, in accordance with Conditions Number 60 and 46, of the Commission Order of Conditions and Wetlands and Water Resources Permit (Chapter 194) respectively, dated 20 November 2003 (Department of Environmental Protection File Number 322-0564).
- The Daily Reports, in accordance with Condition Number 23, for 23 April through 4 May 2004 are attached in Appendix A.
- Advancement of soil borings and installation of monitoring wells will not be conducted until fall 2004 to comply with the Natural Heritage & Endangered Species Program (NHESP) Determination (NHESP File Number 02-10733). The Commission will be notified prior to recommencing activities per the Order of Conditions.
- ERM requests a site walk with a representative of the Commission to view the work areas and verify compliance with the Order of Conditions.

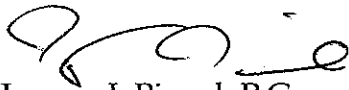
Mr. Monahan  
Conservation Administrator  
Wayland Conservation Commission  
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If there are significant changes to the work plan as presented to the Commission in the Notice of Intent, ERM will contact you as soon as practical.

If you have any questions or comments please contact the undersigned at (617) 267-8377.

Sincerely,

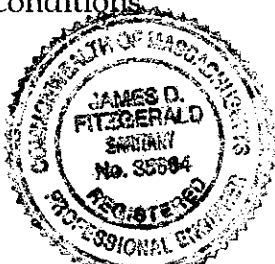


Jeremy J. Picard, P.G.  
Project Manager



James D. Fitzgerald, P.E., LSP  
Professional Engineer  
MA License 35664

As required by Condition 48, I certify based on my observations during a site visit on 30 April 2004 and conversations with ERM field representatives that, to the best of my knowledge, all work (except for any exceptions noted above) has been conducted in accordance with the Order of Conditions.



James D. Fitzgerald, P.E., LSP  
Professional Engineer  
MA License 35664

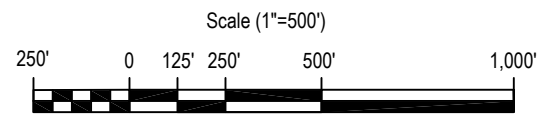
Enclosures: Figure 1 - Vertical Profiling Location Map  
Appendix A - Daily Reports for the Period Ending  
4 May 2004

cc: Edwin Madera, Raytheon  
Public Repositories  
Ben Gould, CMG Environmental



Legend

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- Waterloo Profiler Locations



**Figure 1 - Waterloo Profiler Location Map**  
Former Raytheon Facility - Wayland, MA



## *Appendix A*

**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
DEP File #: 322-0564**

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**Project Number: 0013606**

**Prepared By:** Elissa McNamara **Date:** 4/23/04  
**Signature**

**Checked By:** Jeremy Picard **Date:** 4/26/04  
**Signature:**

**Project Activity:**

Vertical Profiling

**Current Project Operation:**

Vertical Profiling activities at B-419.

**Summary of Activities ending on Friday, April 23 2004:**

**Onsite:** 0700

**Offsite:** 1740

- B-419 – Conducted vertical profiling and groundwater sampling (see next page) to refusal. Demobilized waterloo profiler from location using mud mats.

**Anticipated Operations for next 24 hours:**

No activity over weekend. Hole below casing to be grouted Monday April 26 and Geoprobe demobilized from location.

**Surface Water Quality Sampling:**

Not scheduled for today.

**Reports and Attachments (Preliminary):**

To be submitted under separate cover.

**Sediment Barrier Daily Inspections:**

Completed by E. McNamara. Barriers are in good condition (no repairs).

**Equipment Type and Quantity / Companies Represented:**

One Geoprobe, and one support truck – GeoSearch.

One vertical profiling truck – Stone Environmental

**Comments:**



**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
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**Project Number: 0013606**

**Prepared By:** Elissa McNamara  
**Signature**

**Date:** 4/26/04

**Checked By:** Jeremy Picard  
**Signature:**

**Date:** 4/27/04

**Project Activity:**

Vertical Profiling

**Current Project Operation:**

Vertical Profiling to bedrock at B-417 and B-419.

**Summary of Activities ending on Monday, 26 April 2004:**

**Onsite:** 0700

**Offsite:** 1000

- B-419 – Hole grouted below casing. Geoprobe demobilized from site using mud mats.

**Anticipated Operations for next 24 hours:**

Mobilize atv drill rig to B-417 to remove casing and grout hole.

**Surface Water Quality Sampling:**

Not scheduled today.

**Reports and Attachments (Preliminary):**

To be submitted under separate cover.

**Sediment Barrier Daily Inspections:**

Completed by E. McNamara. Barriers are in good condition (no repairs).

**Equipment Type and Quantity / Companies Represented:**

One Geoprobe and one support truck – GeoSearch.

**Comments:**



**Raytheon - Wayland**  
**Subsurface Investigation Daily Report:**  
**DEP File #: 322-0564**

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Project Number: 0013606

**Prepared By:** Elissa McNamara **Date:** 4/27/04  
**Signature:**

**Checked By:** Jeremy Picard **Date:** 4/28/04  
**Signature:**

**Project Activity:**

Vertical Profiling

**Current Project Operation:**

Removal of casing and grouting of holes to bedrock at B-417, B-419 &amp; B-422.

**Summary of Activities ending on Tuesday, 27 April 2004:****Onsite:** 0700**Offsite:** 1630

- B-417 – Mobilize atv drill rig to location using mud mats. Remove casing and grout hole. Remove all materials from B-417 and B-418 work areas. Demobilize rig from location using mud mats.

**Anticipated Operations for next 24 hours:**

Mobilize atv drill rig to B-419 to remove casing and grout hole.

**Surface Water Quality Sampling:**

Conducted today.

Location	pH	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Temp. (Celsius)	Specific Conductivity (uS/cm)	Water Depth (feet)
SW-1	6.61	7.86	0.8	250.1	12.08	347	5.4
SW-2	6.54	7.12	0.8	253	11.99	322	3.4
SW-3	6.16	4.47	0.0	248.7	10.00	41	0.5
SW-4	6.46	8.07	0.9	230.3	12.05	348	10.8
SW-5	6.37	7.65	0.6	273.6	12.14	347	6.3

**Reports and Attachments (Preliminary):**

To be submitted under separate cover.

**Sediment Barrier Daily Inspections:**

Completed by E. McNamara. Barriers are in good condition (no repairs).

**Equipment Type and Quantity / Companies Represented:**

One atv drill rig and one support truck – GeoSearch.

**Comments:**

Photographs attached.

**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
DEP File #: 322-0564**

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**B-417 & B-418 Post-work Photos**



B-417 post-work



B-418 post-work

**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
DEP File #: 322-0564**

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**Project Number: 0013606**

**Prepared By:** Elissa McNamara **Date:** 4/28/04  
**Signature**

**Checked By:** Jeremy Picard **Date:** 4/29/04  
**Signature:**

**Project Activity:**

Vertical Profiling

**Current Project Operation:**

Removal of casing and grouting of holes to bedrock at B-417, B-419 & B-422.

**Summary of Activities ending on Wednesday, 28 April 2004:**

**Onsite:** 0700

**Offsite:** 1600

- B-419 – Mobilize atv drill rig to location using mud mats. Remove casing and grout hole.

**Anticipated Operations for next 24 hours:**

Remove all materials and reinstate B-419, B-420 & B-421 work areas. Demobilize drill rig from location.

**Surface Water Quality Sampling:**

Not scheduled today.

**Reports and Attachments (Preliminary):**

To be submitted under separate cover.

**Sediment Barrier Daily Inspections:**

Completed by E. McNamara. Barriers are in good condition (no repairs).

**Equipment Type and Quantity / Companies Represented:**

One atv drill rig and one support truck – GeoSearch.

**Comments:**

**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
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**Project Number: 0013606**

**Prepared By:** Elissa McNamara **Date:** 4/29/04  
**Signature**

**Checked By:** Jeremy Picard **Date:** 4/30/04  
**Signature:**

**Project Activity:**

Vertical Profiling

**Current Project Operation:**

Removal of casing and grouting of holes to bedrock at B-417, B-419 & B-422.

**Summary of Activities ending on Thursday, 29 April 2004:**

**Onsite:** 0700

**Offsite:** 1500

- B-419 – Remove all materials and repair B-419, B-420 & B-421 work areas. Demobilize drill rig from location using mud mats.

**Anticipated Operations for next 24 hours:**

Mobilize atv drill rig to B-422, remove casing, grout hole, remove all materials and demobilize from location.

**Surface Water Quality Sampling:**

Not scheduled today.

**Reports and Attachments (Preliminary):**

To be submitted under separate cover.

**Sediment Barrier Daily Inspections:**

Completed by E. McNamara. Barriers are in good condition (no repairs).

**Equipment Type and Quantity / Companies Represented:**

One atv drill rig and one support truck – GeoSearch.

**Comments:**

Photographs attached.

**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
DEP File #: 322-0564**

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**B-419, B-420 & B-421 Post-work Photos**



B-419 post work



B-420 post work



B-421 post work

**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
DEP File #: 322-0564**

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**Project Number: 0013606**

**Prepared By:** Elissa McNamara  
**Signature**

**Date:** 4/30/04

**Checked By:** Jeremy Picard  
**Signature:**

**Date:** 5/3/04

**Project Activity:**

Vertical Profiling

**Current Project Operation:**

Removal of casing and grouting of holes to bedrock at B-417, B-419 & B-422.

**Summary of Activities ending on Friday, 30 April 2004:**

**Onsite:** 0700

**Offsite:** 1230

- B-422 – Remove casing, grout hole, remove all materials and repair B-422 work area. Demobilize drill rig from location.

**Anticipated Operations for next 24 hours:**

None.

**Surface Water Quality Sampling:**

Not scheduled today.

**Reports and Attachments (Preliminary):**

To be submitted under separate cover.

**Sediment Barrier Daily Inspections:**

Completed by E. McNamara. Barriers are in good condition (no repairs).

**Equipment Type and Quantity / Companies Represented:**

One atv drill rig and one support truck – GeoSearch.

**Comments:**

**Raytheon - Wayland  
Subsurface Investigation Daily Report:  
DEP File #: 322-0564**

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Project Number: 0013606

**Prepared By:** Elissa McNamara  
**Signature**

**Date:** 5/4/04

**Checked By:** Jeremy Picard  
**Signature:**

**Date:** 5/5/04

**Project Activity:**

Vertical Profiling

**Current Project Operation:**

Monitoring &amp; repairs.

**Summary of Activities ending on Tuesday, 4 May 2004:**

Onsite: 0800

Offsite: 1000

- Conduct surface water monitoring.

**Anticipated Operations for next 24 hours:**

None.

**Surface Water Quality Sampling:**

Conducted today.

Location	pH	Dissolved Oxygen (mg/L)	Turbidity (NTU)	ORP (mV)	Temp. (Celsius)	Specific Conductivity (uS/cm)	Water Depth (feet)
SW-1	7.60	7.77	0.8	206.2	15.97	297	5.6
SW-2	7.54	8.30	1.6	141.4	15.95	278	1.0
SW-3	DRY						
SW-4	7.37	7.31	0.7	171.3	15.70	293	10.2
SW-5	7.90	6.76	0.0	209.0	16.43	299	7.3

**Reports and Attachments (Preliminary):**

To be submitted under separate cover.

**Sediment Barrier Daily Inspections:**

None left on site.

**Equipment Type and Quantity / Companies Represented:**

None on site.

**Comments:**