

Superfund Records Center
SITE: Town Garage Radio Beacon
BREAK: 08.02
OTHER: 568730

**DES Waste Management Division
29 Hazen Drive; PO Box 95
Concord, NH 03302-0095**

**Monitoring Well Decommissioning Summary
Town Garage/Radio Beacon Superfund Site
Londonderry, New Hampshire**

**NHDES Site #: 198509001
Project Type: Superfund (CERCLA)
Project Number: 0003569**

Prepared For:
Town of Londonderry, New Hampshire
Steve R. Cotton Sr.
268B Mammoth Road
Londonderry, NH 03053

Prepared By:
Sanborn, Head & Associates, Inc.
20 Foundry Street
Concord, NH 03301
Phone Number: (603) 229-1900
Contact Name: Scott R. Nerney, P.E.
Contact Email: snorney@sanbornhead.com

Date of Report: October 22, 2014



SDMS DocID 568730

**MONITORING WELL
DECOMMISSIONING SUMMARY**
Town Garage/Radio Beacon Superfund Site
Londonderry, New Hampshire
NHDES Site No. 198509001

Prepared for the Town of Londonderry, New Hampshire
File No. 2049.05
October 2014

Steve R. Cotton Sr.
Town of Londonderry
268B Mammoth Road
Londonderry, NH 03053

October 22, 2014
File No. 2049.05

Re: Monitoring Well Decommissioning Summary
Town Garage/Radio Beacon Superfund Site
Londonderry, New Hampshire
NHDES Site No. 198509001

Dear Steve:

Sanborn, Head & Associates, Inc. (Sanborn Head) has observed and documented the decommissioning of one shallow bedrock monitoring well (MW-2R), one deep bedrock monitoring well (MW-6D), and one MicroWell® (MI-6)¹, installed previously at the Town Garage/Radio Beacon Superfund Site in Londonderry, New Hampshire. Locations of these wells are depicted on Figure 1. The work was completed by Sanborn Head in accordance with our proposal for well decommissioning services dated July 1, 2014, and our proposal for an inventory of remaining monitoring wells/piezometers dated August 4, 2014.

The three wells were decommissioned on September 9, 2014 by Geosearch, Inc. (Geosearch) of Fitchburg, Massachusetts. Decommissioning activities were observed and documented by Sanborn Head. A photolog is provided as Attachment A and logs of the three decommissioned wells are included in Attachment B.

As requested by USEPA and NHDES, Sanborn Head has included Table 1 as a summary of the wells decommissioned at the site (including those in 2002 and 2007), and the logs for wells previously decommissioned in 2002 (Attachment C) and 2007 (Attachment D).

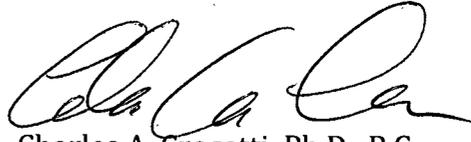
¹ Based on an August 14, 2014 site visit with the U.S. Environmental Protection Agency (USEPA), the N.H. Department of Environmental Services (NHDES), and Sanborn Head to review locations of wells proposed for decommissioning and the locations of previously decommissioned wells, Sanborn Head contacted property owners in the vicinity of 17 Saddleback Road (Lot # 6-13-13) to ask if they were aware of any piezometers located in the vicinity of their homes. The owner of 19 Saddleback Road (Lot # 6-13-14) identified a MicroWell® (MI-6), previously thought to have been destroyed during construction of the Saddleback Road residential neighborhood in 1997/1998.

If you have questions, or require further information, please contact the undersigned.

Very truly yours,
SANBORN, HEAD & ASSOCIATES, INC.



Scott R. Nerney, P.E.
Senior Project Manager



Charles A. Crocetti, Ph.D., P.G.
Sr. Vice President and Principal

SRN/CAC: srm

Encl. Table 1
Figure 1
Attachments A-D

Cc: William Lovely, USEPA
Kenneth Richards, P.E., P.G., NHDES
Sherilyn B. Young, Rath, Young and Pignatelli, P.A.

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TABLE

TABLE 1
Monitoring Well Decommissioning Summary
Town Garage/Radio Beacon Superfund Site
Londonderry, New Hampshire

| First Round Well Decommissioning | | |
|--|--|--|
| January 30, 2001 | 2000 Annual Report | Includes recommendation to decommission monitoring wells not included in the monitoring program. |
| March 1, 2001 | USEPA letter | Correspondence regarding well decommissioning and requesting a SOW Amendment. |
| March 23, 2001 | SOW Amendment #1 | Indicates wells to be decommissioned: MW-3S, MW-4S, MW-8S, MW-1S, MW-6S, MW-7S, MW-9S, MW-1D, MW-7D, PZ-1, PZ-2, PZ-3, MI-1 through MI-14, and MW-5D. |
| October 2, 2001 | USEPA letter | Provides approval of SOW Amendment #1. |
| January 29, 2003 | 2002 Annual Summary Report | Includes summary of well decommissioning for: PZ-1, PZ-3, MW-1S, MW-3S, MW-4S, MW-6S, MW-7S, MW-8S, MW-9S, MW-1D, MW-5D, MW-7D, MI-2, MI-4, MI-7, MI-9, and MI-10. Nine MicroWells® and one monitoring well listed in Amendment No. 1 and planned to be decommissioned, could not be located and are assumed to have been destroyed during construction of the Saddleback Road residential neighborhood in 1997/1998 (MI-3, MI-5, MI-6, MI-11, MI-12) or during routine operations at the Town Garage (PZ-2, MI-1, MI-8, MI 13, MI-14). |
| Second Round Well Decommissioning | | |
| June 8, 2005 | Meeting with USEPA to discuss the status of the site. | |
| November 15, 2005 | Telephone conference call with USEPA regarding amendments to the SOW. | |
| November 28, 2005 | SOW Amendment #2 | Proposes installation of new shallow bedrock monitoring well MW-2R and decommissioning of monitoring wells MW-2S, MW-2D-2, MW-3D, MW-4D-2, MW-4D-3, MW-5S, MW-6D, and MW-8D. |
| March 21, 2006 | USEPA letter | Includes comments on November 28, 2005 SOW Amendment #2; indicates monitoring well MW-6D should be retained. |
| June 2, 2006 | Revised SOW Amendment 2 | Incorporates USEPA's March 21, 2006 comments; describes installation of new shallow bedrock monitoring well MW-2R and decommissioning of monitoring wells MW-2S, MW-2D-2, MW-3D, MW-4D, MW-5S, and MW-8D. |
| June 12, 2006 | USEPA letter | Provides approval of Revised SOW Amendment #2. |
| January 31, 2007 | 2006 Annual Summary Report | Includes summary of installation of replacement monitoring well MW-2R. |
| January 23, 2008 | 2007 Annual Summary Report | Includes summary of well decommissioning for two shallow overburden monitoring wells (MW-2S and MW-5S) and four bedrock monitoring wells (MW-2D, MW-3D, MW-4D, MW-8D). |
| Third Round Well Decommissioning | | |
| July 21, 2014 | Site delisted from NPL | |
| August 14, 2014 | Site visit with USEPA and NHDES to discuss monitoring well decommissioning | |
| October 22, 2014 | Monitoring Well Decommissioning Summary | Includes summary of well decommissioning for shallow bedrock monitoring well MW-2R, deep bedrock monitoring well MW-6D, and MicroWell® MI-6. |

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FIGURE



Figure 1

Well Location Plan

Monitoring Well Decommissioning Summary
 Town Garage/Radio Beacon Superfund Site
 Londonderry, New Hampshire

Drawn By: D. Dombrowsky
 Designed By: S. Nerney
 Reviewed By: C. Crocetti
 Project No: 2049.05
 Date: October 2014

Figure Narrative

This figure depicts the approximate locations of decommissioned site monitoring wells, piezometers, and MicroWells®.

Notes

- Sanborn Head downloaded the 2011 Digital Orthophoto Quadrangles, 1 ft imagery from the New Hampshire Geographically Referenced Analysis and Information Transfer System (NH GRANIT) website. Property boundaries were digitized based on a copy of the 400 scale 2007 Town of Londonderry Tax Assessor's Map printed from the Town of Londonderry website, www.londonderrynh.org on August 8, 2007 and should be considered approximate.
- The locations of monitoring wells, piezometers and MicroWell® are based on a plan entitled "Plate 3, Location of Monitoring Wells, Residential Wells, Geophysical Survey Lines and Cross-Sections", from the Final Technical Report of Field Investigation, Holton Circle Remedial Investigation, Londonderry, New Hampshire, prepared by Metcalf & Eddy, Inc., dated March 1992. Locations are approximate.
- Monitoring well MW-2S, which was destroyed during construction of the Saddleback Road residential neighborhood in 1997/1998, was replaced by Capital Environmental Drilling Services, Inc. of Dunbarton, New Hampshire on November 18, 1999 for Stonemark Investments, Inc. (the developer of the neighborhood). The installation was observed and documented by Sanborn, Head & Associates, Inc. (Sanborn Head)
- Sanborn Head observed and documented the decommissioning on nine overburden monitoring wells (PZ-1, PZ-3, MW-1S, MW-3S, MW-4S, MW-6S, MW-7S, MW-8S, MW-9S), three bedrock monitoring wells (MW-1D, MW-5D, MW-7D), and five MicroWells® (MI-2, MI-4, MI-7, MI-9, MI-10). The wells were decommissioned between December 11 and 18, 2002 by Environmental Drilling, Inc. (EDI) of Sterling, Massachusetts. An additional nine MicroWells® and one monitoring well planned to be decommissioned, could not be located and were assumed to have been destroyed during construction of the Saddleback Road neighborhood in 1997/1998 (MI-3, MI-5, MI-6, MI-11, MI-12) or based on discussions with town employees during routine operations at the Town Garage (PZ-2, MI-1, MI-8, MI-13, MI-14).
- Monitoring well MW-2R was installed by Geosearch, Inc. (Geosearch) of Fitchburg, Massachusetts on October 30, 2006 as a replacement to MW-2D. The installation was observed and documented by Sanborn Head.
- Sanborn Head observed and documented the decommissioning of overburden monitoring wells (MW-2S Replacement and MW-5S) and four bedrock monitoring wells (MW-3D, MW-3D, MW-4D and MW-8D). The wells were decommissioned between October 9 and 12, 2007 by Geosearch.
- Sanborn Head observed and documented the decommissioning of the two bedrock monitoring wells (MW-2R and MW-6D) and MicroWell® MI-6 (location identified by property owner in August 2014), the wells were decommissioned on September 9, 2014 by Geosearch.

Legend

- Approximate Groundwater Management Zone (GMZ) boundary
- Approximate Tax Map Lot line
- 6-13** Tax Map Lot Number
- MI-7 MicroWell®
- PZ-1 Piezometer
- MW-2S Overburden monitoring well
- MW-4D Bedrock monitoring well
- MW-2S Destroyed monitoring well
- MI-7 Indicates well decommissioned December 2002
- MI-12 Indicates well that could not be located December 2002 and presumed destroyed
- MW-5S Indicates well decommissioned October 2007
- MW-6D Indicates well decommissioned September 2014



ATTACHMENT A
2014 PHOTOLOG

ATTACHMENT A 2014 PHOTOLOG



Photo 1: MW-2R location prior to decommissioning.



Photo 2: MW-2R location following decommissioning.



Photo 3: MW-6D location prior to decommissioning.



Photo 4: MW-6D location following decommissioning.



Photo 5: MI-6 location prior to decommissioning.



Photo 6: MI-6 location following decommissioning.

ATTACHMENT B
2014 WELL DECOMMISSIONING
DOCUMENTATION

Sanborn, Head & Associates, Inc.

Drilling Method: None

Sampling Method: None

Drilling Company: Geosearch, Inc.

Foreman: John Chase

Date Started: 09/09/14

Logged By: D. Porter

Date Finished: 09/09/14

Checked By: S. Nerney

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Depth of Hole | Stab. Time |
|----------|------|----------------|----------|-----------------|---------------|------------|
| 09/09/14 | — | Not Measured | | | | |

Water level probe would not fit in well.

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|--------------------|---------|-------------|-------------------------------------|--|---|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (In) | Field Testing Data | Log | Description | | | |
| 0 | | | | | | | —0' | No samples collected. |  | Topsoil and Sod (0 to 0.3') Concrete (0.3 to 1') |
| 2 | | | | | | | | |  | Granular Bentonite (1 to 15.3') |
| 4 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15.3 | | | | | | | —15.3' | Well previously installed at 15.3'. |  | 3/4" Steel Microwell Materials (1 to 15.3') |
| 16 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 24 | | | | | | | | | | |

NOTES:

1. Original MicroWell® installed on March 25, 1991 by Pine & Swallow Associates, Inc. for Metcalf & Eddy.
2. Approximately 16-18' of polyethylene tubing was removed from the 3/4" ID steel MicroWell®. Attempts to remove the MicroWell® from the ground using a Geoprobe® hand jack were unsuccessful. The well was cut off approximately 10-12" below ground surface.
3. A second similar pipe was discovered approximately 2" from well MI-6. This pipe was also cut off approximately 10-12" below ground surface.
4. Both pipes were filled with granular bentonite.
5. Approximately 6-8" of concrete were installed on top of the cut off well pipes, and approximately 3" of topsoil and grass sod were placed on top of the concrete.

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Sanborn, Head & Associates, Inc.

Drilling Method: Geoprobe® 7822 DT Drill Rig

Sampling Method: None

| Groundwater Readings | | Depth to Water | Ref. Pt. | Depth of Casing | Depth of Hole | Stab. Time |
|----------------------|-------|----------------|------------|-----------------|---------------|------------|
| Date | Time | | | | | |
| 09/09/14 | 12:45 | 5.02' | Top of PVC | | 45.5' | — |

Drilling Company: Geosearch, Inc.

Foreman: John Chase

Date Started: 09/09/14

Date Finished: 09/09/14

Logged By: D. Porter

Checked By: S. Nerney

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| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|--------------------|---------|-------------|-----------------------|--|---|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | Field Testing Data | Log | Description | | | |
| 0 | | | | | | | 0' | No samples collected. |  | Topsoil and Sod (0 to 0.3') |
| 2 | | | | | | | | |  | Concrete (0.3 to 1') |
| 4 | | | | | | | | |  | Cement/Bentonite Grout (1 to 48.5') |
| 6 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 24 | | | | | | | | | | |
| 26 | | | | | | | | | | 2" Dia. Sch. 40 PVC Well Materials (Left In-Place) (1 to 48.5') |
| 28 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 32 | | | | | | | | | | |
| 34 | | | | | | | | | | |

Sanborn, Head & Associates, Inc.

Ground Elevation: 355.99 feet
 PVC Elevation: 355.69 feet
 Datum: MSL

Drilling Method: Geoprobe® 7822 DT Drill Rig

Sampling Method: None

| Groundwater Readings | | Depth | Depth | Depth | Stab. |
|----------------------|-------|----------|------------|-----------|-------|
| Date | Time | to Water | Ref. Pt. | of Casing | Time |
| 09/09/14 | 12:45 | 5.02' | Top of PVC | 45.5' | — |

Drilling Company: Geosearch, Inc.

Foreman: John Chase

Date Started: 09/09/14

Date Finished: 09/09/14

Logged By: D. Porter

Checked By: S. Nerney

BORING LOG S:\CONDATA\2000S\2049.05\WORK\LOGS\204905 DECOM LOGS.GPJ 2010 SANBORN HEAD V1.GLB 2010 SANBORN HEAD V1.GDT 10/22/14

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|--------------------|---------|-------------|----------------------|--------------|------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | Field Testing Data | Log | Description | | | |
| 36 | | | | | | | | | | |
| 38 | | | | | | | | | | |
| 40 | | | | | | | | | | |
| 42 | | | | | | | | | | |
| 44 | | | | | | | | | | |
| 46 | | | | | | | | | | |
| 48 | | | | | | | | | | |
| 48.5' | | | | | | | | | | |
| 50 | | | | | | | | | | |
| 52 | | | | | | | | | | |
| 54 | | | | | | | | | | |
| 56 | | | | | | | | | | |
| 58 | | | | | | | | | | |
| 60 | | | | | | | | | | |
| 62 | | | | | | | | | | |
| 64 | | | | | | | | | | |
| 66 | | | | | | | | | | |
| 68 | | | | | | | | | | |
| 70 | | | | | | | | | | |

Well previously installed at 48.5'.

- NOTES:
1. The monitoring well was completed by Geosearch, Inc. of Fitchburg, Massachusetts, on October 30, 2006, and logged by Sanborn, Head & Associates, Inc.
 2. The flushmounted roadbox was removed using the drill rig winch, and the PVC riser was cut off approximately 1' below ground surface.
 3. The monitoring well was then decommissioned by backfilling the PVC well materials with cement/bentonite grout via a tremie line.
 4. Approximately 6-8" of concrete were installed on top of the grout, and approximately 3" of topsoil and grass sod were placed on top of the concrete.

Sanborn, Head & Associates, Inc.

Drilling Method: Geoprobe® 7822 DT Drill Rig

Sampling Method: None

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Depth of Hole | Stab. Time |
|----------|------|------------------|----------|-----------------|---------------|------------|
| 09/09/14 | — | No Reading Taken | | | | |

Drilling Company: Geosearch, Inc.

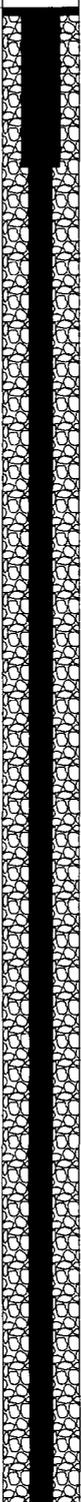
Foreman: John Chase

Date Started: 09/09/14

Date Finished: 09/09/14

Logged By: D. Porter

Checked By: S. Nerney

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|---------------|--------------------|---------|-------------|-----------------------|--|---|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/ Rec (in) | Field Testing Data | Log | Description | | | |
| 0 | | | | | | | —0— | No samples collected. |  | Concrete Pad (0 to 0.8') |
| 2 | | | | | | | | | | Formation Material (0.8 to 6') |
| 4 | | | | | | | | | | 6" Dia. Steel Casing (0.8 to 16') |
| 6 | | | | | | | | | | Cement/Bentonite Grout (0.8 to 185') |
| 8 | | | | | | | | | | 3" Dia. Sch. 80 PVC Conduit (0.8 to 185') |
| 10 | | | | | | | | | | Bedrock Borehole (6 to 185') |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 16 | | | | | | | | | | |
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| 112 | | | | | | | | | | |
| 114 | | | | | | | | | | |
| 116 | | | | | | | | | | |
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| 138 | | | | | | | | | | |
| 140 | | | | | | | | | | |
| 142 | | | | | | | | | | |
| 144 | | | | | | | | | | |
| 146 | | | | | | | | | | |
| 148 | | | | | | | | | | |

BORING LOG S:\CONDATA\2009S\2049.05\WORK\LOGS\204905.DECOM.LOGS.GPJ 2010 SANBORN HEAD V1.GLB 2010 SANBORN HEAD V1.GDT 10/22/14

Sanborn, Head & Associates, Inc.

Drilling Method: Geoprobe® 7822 DT Drill Rig

Sampling Method: None

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Depth of Hole | Stab. Time |
|----------|------|------------------|----------|-----------------|---------------|------------|
| 09/09/14 | — | No Reading Taken | | | | |

Drilling Company: Geosearch, Inc.

Foreman: John Chase

Date Started: 09/09/14

Date Finished: 09/09/14

Logged By: D. Porter

Checked By: S. Nerney

BORING LOG S:\CONDATA\2000S\2049.05\WORKLOGS\204905 DECOM LOGS.GPJ 2010 SANBORN HEAD V1.GLB 2010 SANBORN HEAD V1.GDT 10/22/14

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|--------------------|---------|-------------|---|--------------|------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | Field Testing Data | Log | Description | | | |
| 150 | | | | | | | | | | |
| 152 | | | | | | | | | | |
| 154 | | | | | | | | | | |
| 156 | | | | | | | | | | |
| 158 | | | | | | | | | | |
| 160 | | | | | | | | | | |
| 162 | | | | | | | | | | |
| 164 | | | | | | | | | | |
| 166 | | | | | | | | | | |
| 168 | | | | | | | | | | |
| 170 | | | | | | | | | | |
| 172 | | | | | | | | | | |
| 174 | | | | | | | | | | |
| 176 | | | | | | | | | | |
| 178 | | | | | | | | | | |
| 180 | | | | | | | | | | |
| 182 | | | | | | | | | | |
| 184 | | | | | | | | | | |
| 185 | | | | | | 185 | | Well previously installed at 185'. | | |
| 186 | | | | | | | | <p>NOTES:</p> <ol style="list-style-type: none"> Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy. A Solinst, Ltd. of Canada, Waterloo multilevel dedicated sampling system was installed in June 1991 by Metcalf & Eddy. The 8" ID by 4' long corrugated galvanized steel standpipe was removed using the drill rig winch. The sample tubes and cables that connect the sampling pumps and pressure transducers with the ground surface were pulled from the well using the drill rig winch. Several of the sample tubes and cables stretched and broke. Based on previous discussions with Solinst, the system was reportedly designed such that the individual sample tubes and cables will break away from the individual sampling ports if the corresponding tubes and cables were pulled. Because of the remaining cables and sampling tubes inside the central 3" PVC conduit, the bottom depth of the central conduit was plunked to a depth of about 155 feet. Since there were still cables and sampling tubes inside the central PVC conduit, the tremie line could only be inserted inside the conduit to a depth of about 155 feet. The conduit was filled, using the tremie line, with a cement/bentonite grout mixture. Grout mixture was also placed using a tremie line above the top packer. After placing the grout mixture, the top approximately 10-12" of the central PVC conduit and 6" steel casing were cut off below ground surface. Concrete was added above the cut off well casing to approximately the ground surface. | | |
| 188 | | | | | | | | | | |
| 190 | | | | | | | | | | |
| 192 | | | | | | | | | | |
| 194 | | | | | | | | | | |
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ATTACHMENT C
2002 WELL DECOMMISSIONING
DOCUMENTATION

Well Decommissioning Documentation

Pursuant to Amendment No. 1 to the Statement of Work (SOW), dated April 9, 2001 and approved by the United States Environmental Protection Agency (USEPA) on October 2, 2001, Sanborn, Head & Associates, Inc. (SHA) has observed and documented the decommissioning of nine shallow overburden monitoring wells (PZ-1, PZ-3, MW-1S, MW-3S, MW-4S, MW-6S, MW-7S, MW-8S, MW-9S), three bedrock monitoring wells (MW-1D, MW-5D, MW-7D), and five MicroWells® (MI-2, MI-4, MI-7, MI-9, MI-10) installed at the Town Garage/Radio Beacon Site (the Site) in Londonderry, New Hampshire. Locations of these wells are depicted on Figure A-1.

The seventeen monitoring wells/MicroWells® were decommissioned between December 11 and 18, 2002 by Environmental Drilling, Inc. (EDI) of Sterling, Massachusetts. Decommissioning activities were observed by SHA. Logs of the seventeen decommissioned wells are included in this Appendix.

An additional nine MicroWells® and one monitoring well listed in Amendment No. 1 and planned to be decommissioned, could not be located and are assumed to have been destroyed during construction of the Saddleback Road residential neighborhood in 1997/1998 (MI-3, MI-5, MI-6, MI-11, MI-12) or during routine operations at the Town Garage (PZ-2, MI-1, MI-8, MI-13, MI-14).

In addition to well decommissioning services, the well cap on monitoring well MW-8D was repaired by EDI on December 19, 2002 by welding a new tab to the well casing. The well cap can now be secured to the casing with a padlock.



Decommissioning Log of Well PZ-1

Notes:

1. Original well drilled and installed in October 1990 by La Framboise for Metcalf & Eddy.
2. Well depth plunked at 19.8 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 20 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

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Decommissioning Log of Well PZ-3

Notes:

1. Original well drilled and installed in October 1990 by La Framboise for Metcalf & Eddy.
2. Well depth plunked at 14.3 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 14.5 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

Decommissioning Log of Well MW-1D

Project: Town Garage/Radio Beacon Site
Location: Londonderry, New Hampshire
SHA Project No.: 2050

Ground Elevation: N/A
TOC Elevation: N/A
PVC Elevation: N/A
Datum: N/A

Drilling Method: Diedrich D-120 ATV Rig
Sampling Method: N/A
Drilling Company: Environmental Drilling, Inc.
Foreman: D. Erickson

| Groundwater Readings | | | | Depth of Casing | Stab. Time |
|----------------------|------|----------------|----------|-----------------|------------|
| Date | Time | Depth to Water | Ref. Pt. | Well Inst. | |
| 12/11/02 | 1305 | 17.60' | TOC | | -- |

Date Started: 12/12/02 Date Finished: 12/14/02
Logged By: D. Porter Checked By: S. Nerney

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|---------------|------------------|---------|-------------|----------------------|--------------|-------------------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/Rec (in.) | PID Values (ppm) | Log | Description | | | |
| 0 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 4 | | | | | | | | | | | Bentonite Chip Seal (0.5'-4') |
| 6 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 14 | | | | | | | | | | | |
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| 92 | | | | | | | | | | | |
| 94 | | | | | | | | | | | |
| 96 | | | | | | | | | | | |
| 98 | | | | | | | | | | | |
| 100 | | | | | | | | | | | |

No soil samples obtained.

Bentonite Chip Seal (0.5'-4')

Steel Casing (1'-34')

Bedrock Borehole (34'-184.5')

Cement/Bentonite Grout (4'-184.5')

Decommissioning Log of Well MW-1D

Project: Town Garage/Radio Beacon Site
Location: Londonderry, New Hampshire
SHA Project No.: 2050

Ground Elevation: N/A
TOC Elevation: N/A
PVC Elevation: N/A
Datum: N/A

Drilling Method: Diedrich D-120 ATV Rig
Sampling Method: N/A
Drilling Company: Environmental Drilling, Inc.
Foreman: D. Erickson

| Groundwater Readings | | | | Depth of Casing | Stab. Time |
|----------------------|------|----------------|----------|-----------------|------------|
| Date | Time | Depth to Water | Ref. Pt. | Well Inst. | |
| 12/11/02 | 1305 | 17.60' | TOC | | -- |

Date Started: 12/12/02 Date Finished: 12/14/02
Logged By: D. Porter Checked By: S. Nerney

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|---------------|------------------|---------|---------------------------|----------------------|--------------|------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/Rec (in.) | PID Values (ppm) | Log | Description | | | |
| 102 | | | | | | | | | | | |
| 104 | | | | | | | | | | | |
| 106 | | | | | | | | | | | |
| 108 | | | | | | | | | | | |
| 110 | | | | | | | | | | | |
| 112 | | | | | | | | | | | |
| 114 | | | | | | | | | | | |
| 116 | | | | | | | | | | | |
| 118 | | | | | | | | | | | |
| 120 | | | | | | | | | | | |
| 122 | | | | | | | | | | | |
| 124 | | | | | | | | | | | |
| 126 | | | | | | | | No soil samples obtained. | | | |
| 128 | | | | | | | | | | | |
| 130 | | | | | | | | | | | |
| 132 | | | | | | | | | | | |
| 134 | | | | | | | | | | | |
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| 196 | | | | | | | | | | | |
| 198 | | | | | | | | | | | |
| 200 | | | | | | | | | | | |

No soil samples obtained.

Bedrock Borehole (34'-184.5')

Cement/Bentonite Grout (4'-184.5')

Bottom of Boring at 184.5'

See Page 3 of 3 for notes.

Decommissioning Log of Well MW-1D

Notes:

1. Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy.
2. Well depth plunked at 184.5 feet from ground surface.
3. Well filled with a cement/bentonite grout mixture using a tremie line. The approximately 6-inch diameter steel casing was cut off approximately 1 foot below the ground surface. Bentonite chips were added from approximately 0.5 to 4 feet because of grout settlement overnight.
4. Several inches of soil were spread over the grouted borehole at the ground surface.

Decommissioning Log of Well MW-1S

Notes:

1. Original well drilled and installed in October 1990 by LaFrambois for Metcalf & Eddy.
2. Well depth plunked at 26.8 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 27 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

Decommissioning Log of Well MW-3S

Notes:

1. Original well drilled and installed in October 1990 by La Framboise for Metcalf & Eddy.
2. Well depth plunked at 10.7 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 10 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit. Roller bit was advanced ahead of the casing to a depth of approximately 10.5 feet.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.



Decommissioning Log of Well MW-4S

Notes:

1. Original well drilled and installed in October 1990 by La Framboise for Metcalf & Eddy.
2. Well depth plunked at 20.3 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 20.5 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

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Decommissioning Log of Well MW-5D

Project: Town Garage/Radio Beacon Site
 Location: Londonderry, New Hampshire
 SHA Project No.: 2050
 Drilling Method: Diedrich D-120 TruckRig w/4-1/4" Casing
 Sampling Method: N/A
 Drilling Company: Environmental Drilling, Inc.
 Foreman: D. Erickson
 Date Started: 12/18/02 Date Finished: 12/19/02
 Logged By: D. Porter Checked By: S. Nerney

Ground Elevation: N/A
 TOC Elevation: N/A
 PVC Elevation: N/A
 Datum: N/A

| Groundwater Readings | | | | Ref. Pt. | Depth of Casing | Stab. Time |
|----------------------|------|----------------|-------|----------|-----------------|------------|
| Date | Time | Depth to Water | Grade | | Well Inst. | |
| 12/18/02 | 0915 | 12.30' | | | | — |

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|----------------|------------------|---------|-------------|----------------------|--------------|-------------------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/ Rec (in.) | PID Values (ppm) | Log | Description | | | |
| 0 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 4 | | | | | | | | | | | Bentonite Chip Seal (0.5'-3') |
| 6 | | | | | | | | | | | |
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| 96 | | | | | | | | | | | |
| 98 | | | | | | | | | | | |
| 100 | | | | | | | | | | | |

No soil samples obtained.

Bentonite Chip Seal (0.5'-3')

Steel Casing (1'-38')

Bedrock Borehole (38'-150.6')

Decommissioning Log of Well MW-5D

Project: Town Garage/Radio Beacon Site
 Location: Londonderry, New Hampshire
 SHA Project No.: 2050
 Drilling Method: Diedrich D-120 TruckRig w/4-1/4" Casing
 Sampling Method: N/A
 Drilling Company: Environmental Drilling, Inc.
 Foreman: D. Erickson
 Date Started: 12/18/02 Date Finished: 12/19/02
 Logged By: D. Porter Checked By: S. Nerney

Ground Elevation: N/A
 TOC Elevation: N/A
 PVC Elevation: N/A
 Datum: N/A

| Groundwater Readings | | | | Depth of Casing | Stab. Time |
|----------------------|------|----------------|----------|-----------------|------------|
| Date | Time | Depth to Water | Ref. Pt. | Well Inst. | |
| 12/18/02 | 0915 | 12.30' | Grade | | -- |

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|----------------|------------------|---------|-------------|----------------------|-------------------------------|------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/ Rec (in.) | PID Values (ppm) | Log | Description | | | |
| 102 | | | | | | | | | | Bedrock Borehole (38'-150.6') | |
| 104 | | | | | | | | | | | |
| 106 | | | | | | | | | | | |
| 108 | | | | | | | | | | | |
| 110 | | | | | | | | | | | |
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| 200 | | | | | | | | | | | |

No soil samples obtained.

See Page 3 of 3 for notes.

Decommissioning Log of Well MW-5D

Notes:

1. Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy. The Solinst, Ltd. of Canada, Waterloo multilevel dedicated sampling system was installed in June 1991 by Metcalf & Eddy.
2. The sample tubes and cables that connect the sampling pumps and pressure transducers with the ground surface were pulled, but they did not separate from the individual sampling ports, as expected. Instead the tubes and cables stretched and broke. Based on previous discussions with Solinst, the system was reportedly designed such that the individual sample tubes and cables will break away from the individual sampling ports if the corresponding tubes and cables were pulled.
3. Well depth above the top packer plunked at 33.4 feet from ground surface. Because of the remaining tubes and cables inside the central 3-inch diameter PVC conduit, the bottom depth of the central conduit could not be plunked. Based on Solinst Construction Specifications for MW-5D the bottom depth of the central conduit was reported to be approximately 155.1 feet from the ground surface.
4. Since there were still sampling tubes and cables within the central PVC conduit a tremie line could not be inserted down inside the conduit. Therefore, the conduit was filled slowly from the top with a cement/bentonite grout mixture. Once the central conduit appeared to be full, additional grout was pressure-injected into the conduit so that the grout would pass through holes/openings in the conduit into the annular space along the outside of the conduit. Grout was also placed using a tremie line above the top packer and inside the annular space (i.e., the overburden portion of the existing well casing) to the ground surface. Presumably some of the grout did find its way into the annular space outside of the conduit because approximately 25% more grout was used than was estimated would be needed to fill the central conduit and the space above the top packer.
5. After placing the grout, the top section (approximately 15 feet long) of the central PVC conduit was removed by unthreading the section.
6. The approximately 6-inch diameter steel casing was cut off approximately 1 foot below the ground surface. Bentonite chips were added from approximately 0.5 to 3 feet because of grout settlement overnight.
7. Several inches of soil were spread over the grouted borehole at the ground surface.

Notes:

1. Original well drilled and installed in October 1990 by La Framboise for Metcalf & Eddy.
2. Well depth plunked at 9.7 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 10 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

Decommissioning Log of Well MW-7D

Project: Town Garage/Radio Beacon Site
 Location: Londonderry, New Hampshire
 SHA Project No.: 2050
 Drilling Method: Diedrich D-120 ATV Rig w/4-1/4" Casing
 Sampling Method: N/A
 Drilling Company: Environmental Drilling, Inc.
 Foreman: D. Erickson
 Date Started: 12/17/02 Date Finished: 12/18/02
 Logged By: D. Porter Checked By: S. Nerney

Ground Elevation: N/A
 TOC Elevation: N/A
 PVC Elevation: N/A
 Datum: N/A

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|------|----------------|----------|-----------------|------------|
| 12/16/02 | 1505 | 3.88' | TOC | Well Inst. | -- |

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|----------------|------------------|---------|-------------|----------------------|-------------------------------|------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/ Rec (In.) | PID Values (ppm) | Log | Description | | | |
| 0 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 4 | | | | | | | | | | Bentonite Chip Seal (0.5'-6') | |
| 6 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 14 | | | | | | | | | | | |
| 16 | | | | | | | | | | | |
| 18 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 24 | | | | | | | | | | | |
| 26 | | | | | | | | | | | |
| 28 | | | | | | | | | | | |
| 30 | | | | | | | | | | | |
| 32 | | | | | | | | | | | |
| 34 | | | | | | | | | | | |
| 36 | | | | | | | | | | | |
| 38 | | | | | | | | | | | |
| 40 | | | | | | | | | | | |
| 42 | | | | | | | | | | | |
| 44 | | | | | | | | | | | |
| 46 | | | | | | | | | | | |
| 48 | | | | | | | | | | | |
| 50 | | | | | | | | | | | |
| 52 | | | | | | | | | | | |
| 54 | | | | | | | | | | | |
| 56 | | | | | | | | | | | |
| 58 | | | | | | | | | | | |
| 60 | | | | | | | | | | | |
| 62 | | | | | | | | | | | |
| 64 | | | | | | | | | | | |
| 66 | | | | | | | | | | | |
| 68 | | | | | | | | | | | |
| 70 | | | | | | | | | | | |
| 72 | | | | | | | | | | | |
| 74 | | | | | | | | | | | |
| 76 | | | | | | | | | | | |
| 78 | | | | | | | | | | | |
| 80 | | | | | | | | | | | |
| 82 | | | | | | | | | | | |
| 84 | | | | | | | | | | | |
| 86 | | | | | | | | | | | |
| 88 | | | | | | | | | | | |
| 90 | | | | | | | | | | | |
| 92 | | | | | | | | | | | |
| 94 | | | | | | | | | | | |
| 96 | | | | | | | | | | | |
| 98 | | | | | | | | | | | |
| 100 | | | | | | | | | | | |

No soil samples obtained.

Bedrock Borehole (6'-382')

Cement/Bentonite Grout (6'-382')

Bentonite Chip Seal (0.5'-6')

Steel Casing (1'-16')

Decommissioning Log of Well MW-7D

Project: Town Garage/Radio Beacon Site
 Location: Londonderry, New Hampshire
 SHA Project No.: 2050
 Drilling Method: Diedrich D-120 ATV Rig w/4-1/4" Casing
 Sampling Method: N/A
 Drilling Company: Environmental Drilling, Inc.
 Foreman: D. Erickson
 Date Started: 12/17/02 Date Finished: 12/18/02
 Logged By: D. Porter Checked By: S. Nerney

Ground Elevation: N/A
 TOC Elevation: N/A
 PVC Elevation: N/A
 Datum: N/A

| Groundwater Readings | | | | | |
|----------------------|------|----------------|----------|-----------------|------------|
| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
| 12/16/02 | 1505 | 3.88' | TOC | | |

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|----------------|------------------|---------|---------------------------|----------------------|--------------|------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/ Rec (in.) | PID Values (ppm) | Log | Description | | | |
| 102 | | | | | | | | | | | |
| 104 | | | | | | | | | | | |
| 106 | | | | | | | | | | | |
| 108 | | | | | | | | | | | |
| 110 | | | | | | | | | | | |
| 112 | | | | | | | | | | | |
| 114 | | | | | | | | | | | |
| 116 | | | | | | | | | | | |
| 118 | | | | | | | | | | | |
| 120 | | | | | | | | | | | |
| 122 | | | | | | | | | | | |
| 124 | | | | | | | | | | | |
| 126 | | | | | | | | | | | |
| 128 | | | | | | | | | | | |
| 130 | | | | | | | | | | | |
| 132 | | | | | | | | | | | |
| 134 | | | | | | | | | | | |
| 136 | | | | | | | | | | | |
| 138 | | | | | | | | | | | |
| 140 | | | | | | | | | | | |
| 142 | | | | | | | | | | | |
| 144 | | | | | | | | No soil samples obtained. | | | |
| 146 | | | | | | | | | | | |
| 148 | | | | | | | | | | | |
| 150 | | | | | | | | | | | |
| 152 | | | | | | | | | | | |
| 154 | | | | | | | | | | | |
| 156 | | | | | | | | | | | |
| 158 | | | | | | | | | | | |
| 160 | | | | | | | | | | | |
| 162 | | | | | | | | | | | |
| 164 | | | | | | | | | | | |
| 166 | | | | | | | | | | | |
| 168 | | | | | | | | | | | |
| 170 | | | | | | | | | | | |
| 172 | | | | | | | | | | | |
| 174 | | | | | | | | | | | |
| 176 | | | | | | | | | | | |
| 178 | | | | | | | | | | | |
| 180 | | | | | | | | | | | |
| 182 | | | | | | | | | | | |
| 184 | | | | | | | | | | | |
| 186 | | | | | | | | | | | |
| 188 | | | | | | | | | | | |
| 190 | | | | | | | | | | | |
| 192 | | | | | | | | | | | |
| 194 | | | | | | | | | | | |
| 196 | | | | | | | | | | | |
| 198 | | | | | | | | | | | |
| 200 | | | | | | | | | | | |

Bedrock Borehole (6'-382')

Cement/Bentonite Grout (6'-382')

Decommissioning Log of Well MW-7D

Project: Town Garage/Radio Beacon Site
 Location: Londonderry, New Hampshire
 SHA Project No.: 2050
 Drilling Method: Diedrich D-120 ATV Rig w/4-1/4" Casing
 Sampling Method: N/A
 Drilling Company: Environmental Drilling, Inc.
 Foreman: D. Erickson
 Date Started: 12/17/02 Date Finished: 12/18/02
 Logged By: D. Porter Checked By: S. Nerney

Ground Elevation: N/A
 TOC Elevation: N/A
 PVC Elevation: N/A
 Datum: N/A

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|------|----------------|----------|-----------------|------------|
| 12/16/02 | 1505 | 3.88' | TOC | Well Inst. | -- |

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|---------------|------------------|---------|-------------|----------------------|--------------|------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/Rec (in.) | PID Values (ppm) | Log | Description | | | |
| 202 | | | | | | | | | | | |
| 204 | | | | | | | | | | | |
| 206 | | | | | | | | | | | |
| 208 | | | | | | | | | | | |
| 210 | | | | | | | | | | | |
| 212 | | | | | | | | | | | |
| 214 | | | | | | | | | | | |
| 216 | | | | | | | | | | | |
| 218 | | | | | | | | | | | |
| 220 | | | | | | | | | | | |
| 222 | | | | | | | | | | | |
| 224 | | | | | | | | | | | |
| 226 | | | | | | | | | | | |
| 228 | | | | | | | | | | | |
| 230 | | | | | | | | | | | |
| 232 | | | | | | | | | | | |
| 234 | | | | | | | | | | | |
| 236 | | | | | | | | | | | |
| 238 | | | | | | | | | | | |
| 240 | | | | | | | | | | | |
| 242 | | | | | | | | | | | |
| 244 | | | | | | | | | | | |
| 246 | | | | | | | | | | | |
| 248 | | | | | | | | | | | |
| 250 | | | | | | | | | | | |
| 252 | | | | | | | | | | | |
| 254 | | | | | | | | | | | |
| 256 | | | | | | | | | | | |
| 258 | | | | | | | | | | | |
| 260 | | | | | | | | | | | |
| 262 | | | | | | | | | | | |
| 264 | | | | | | | | | | | |
| 266 | | | | | | | | | | | |
| 268 | | | | | | | | | | | |
| 270 | | | | | | | | | | | |
| 272 | | | | | | | | | | | |
| 274 | | | | | | | | | | | |
| 276 | | | | | | | | | | | |
| 278 | | | | | | | | | | | |
| 280 | | | | | | | | | | | |
| 282 | | | | | | | | | | | |
| 284 | | | | | | | | | | | |
| 286 | | | | | | | | | | | |
| 288 | | | | | | | | | | | |
| 290 | | | | | | | | | | | |
| 292 | | | | | | | | | | | |
| 294 | | | | | | | | | | | |
| 296 | | | | | | | | | | | |
| 298 | | | | | | | | | | | |
| 300 | | | | | | | | | | | |

No soil samples obtained.

Bedrock Borehole (6'-382')

Cement/Bentonite Grout (6'-382')

Decommissioning Log of Well MW-7D

Project: Town Garage/Radio Beacon Site
 Location: Londonderry, New Hampshire
 SHA Project No.: 2050
 Drilling Method: Diedrich D-120 ATV Rig w/4-1/4" Casing
 Sampling Method: N/A
 Drilling Company: Environmental Drilling, Inc.
 Foreman: D. Erickson
 Date Started: 12/17/02 Date Finished: 12/18/02
 Logged By: D. Porter Checked By: S. Nerney

Ground Elevation: N/A
 TOC Elevation: N/A
 PVC Elevation: N/A
 Datum: N/A

| Groundwater Readings | | | | | |
|----------------------|------|----------------|----------|-----------------|------------|
| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
| 12/16/02 | 1505 | 3.88' | TOC | | -- |

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description | |
|------------|---------------------|--------------------|------------|--------------------|----------------|------------------|---------|----------------------------|----------------------------------|----------------------------|------------------|--|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/ Rec (in.) | PID Values (ppm) | Log | Description | | | | |
| 302 | | | | | | | | | No soil samples obtained. | Bedrock Borehole (6'-382') | | |
| 304 | | | | | | | | | | | | |
| 306 | | | | | | | | | | | | |
| 308 | | | | | | | | | | | | |
| 310 | | | | | | | | | | | | |
| 312 | | | | | | | | | | | | |
| 314 | | | | | | | | | | | | |
| 316 | | | | | | | | | | | | |
| 318 | | | | | | | | | | | | |
| 320 | | | | | | | | | | | | |
| 322 | | | | | | | | | | | | |
| 324 | | | | | | | | | | | | |
| 326 | | | | | | | | | | | | |
| 328 | | | | | | | | | | | | |
| 330 | | | | | | | | | | | | |
| 332 | | | | | | | | | | | | |
| 334 | | | | | | | | | | | | |
| 336 | | | | | | | | | | | | |
| 338 | | | | | | | | | | | | |
| 340 | | | | | | | | | | | | |
| 342 | | | | | | | | | | | | |
| 344 | | | | | | | | | | | | |
| 346 | | | | | | | | | | | | |
| 348 | | | | | | | | | | | | |
| 350 | | | | | | | | | | | | |
| 352 | | | | | | | | | | | | |
| 354 | | | | | | | | | | | | |
| 356 | | | | | | | | | | | | |
| 358 | | | | | | | | | | | | |
| 360 | | | | | | | | | | | | |
| 362 | | | | | | | | | | | | |
| 364 | | | | | | | | | | | | |
| 366 | | | | | | | | | | | | |
| 368 | | | | | | | | | | | | |
| 370 | | | | | | | | | | | | |
| 372 | | | | | | | | | | | | |
| 374 | | | | | | | | | | | | |
| 376 | | | | | | | | | | | | |
| 378 | | | | | | | | | | | | |
| 380 | | | | | | | | | | | | |
| 382 | | | | | | | | | | | | |
| 384 | | | | | | | | Bottom of Boring at 382' | Cement/Bentonite Grout (6'-382') | | | |
| 386 | | | | | | | | | | | | |
| 388 | | | | | | | | | | | | |
| 390 | | | | | | | | | | | | |
| 392 | | | | | | | | | | | | |
| 394 | | | | | | | | | | | | |
| 396 | | | | | | | | | | | | |
| 398 | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | |
| | | | | | | | | See Page 5 of 5 for notes. | | | | |

Decommissioning Log of Well MW-7D

Notes:

1. Original well drilled and installed in October 1990 by LaFrambois for Metcalf & Eddy.
2. Well depth plunked at 382 feet from ground surface.
3. Well filled with a cement/bentonite grout mixture using a tremie line. The approximately 6-inch diameter steel casing was cut off approximately 1 foot below the ground surface. Bentonite chips were added from approximately 0.5 to 6 feet because of grout settlement overnight.
4. Several inches of soil were spread over the grouted borehole at the ground surface.

Notes:

1. Original well drilled and installed in October by LaFrambois for Metcalf & Eddy.
2. Well depth plunked at 6.6 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 7 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

Decommissioning Log of Well MW-8S

Project: Town Garage/Radio Beacon Site
 Location: Londonderry, New Hampshire
 SHA Project No.: 2050

Ground Elevation: N/A
 TOC Elevation: N/A
 PVC Elevation: N/A
 Datum: N/A

Drilling Method: Diedrich D-120 TruckRig w/4-1/4" Casing
 Sampling Method: N/A
 Drilling Company: Environmental Drilling, Inc.
 Foreman: D. Erickson

| Groundwater Readings | | | | Ref. Pt. | Depth of Casing | Stab. Time |
|----------------------|------|----------------|--|----------|-----------------|------------|
| Date | Time | Depth to Water | | PVC | Well Inst. | |
| 12/18/02 | 1240 | 10.80' | | | | -- |

Date Started: 12/18/02 Date Finished: 12/18/02
 Logged By: D. Porter Checked By: S. Nerney

| Depth (ft) | Casing Blows per ft | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|---------------------|--------------------|------------|--------------------|----------------|------------------|---------|-------------|----------------------|--------------|------------------|
| | | Sample No. | Depth (ft) | Spoon Blows per 6" | Pen/ Rec (in.) | PID Values (ppm) | Log | Description | | | |
| 0 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 14 | | | | | | | | | | | |
| 16 | | | | | | | | | | | |
| 17 | | | | | | | | | | | |
| 18 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 24 | | | | | | | | | | | |
| 26 | | | | | | | | | | | |
| 28 | | | | | | | | | | | |
| 30 | | | | | | | | | | | |
| 32 | | | | | | | | | | | |
| 34 | | | | | | | | | | | |
| 36 | | | | | | | | | | | |
| 38 | | | | | | | | | | | |
| 40 | | | | | | | | | | | |

No soil samples obtained.

Bottom of Boring at 17'

See Page 2 of 2 for notes.

Cement/Bentonite Grout (0'-17')

Decommissioning Log of Well MW-8S

Notes:

1. Original well drilled and installed in October by LaFramboise for Metcalf & Eddy.
2. Well depth plunked at 16.3 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 15 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit. Roller bit was advanced ahead of the casing to a depth of approximately 17 feet.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

Decommissioning Log of Well MW-9S

Notes:

1. Original well drilled and installed in October by LaFramboise for Metcalf & Eddy.
2. Well depth plunked at 9.4 feet from ground surface.
3. 4 ½ inch O.D. HW size casing driven to a depth of approximately 9.5 feet. Inside of the casing was then drilled out with 3 -inch O.D. roller bit.
4. As the casing was removed the boring was filled with a cement/bentonite grout mixture using a tremie line.
5. Several inches of soil were spread over the grouted borehole at the ground surface.

Notes:

1. Original well drilled and installed on March 25, 1991 by Pine & Swallow Associates, Inc. for Metcalf & Eddy.
2. An attempt to pull MicroWell® from ground surface was unsuccessful.
3. MicroWell® was filled with granular bentonite to bottom of well and then the steel casing was cut off approximately 1 foot below the ground surface. Additional granular bentonite was place above the cut off section of casing.
4. Several inches of soil were spread over the grouted borehole at the ground surface.

Notes:

1. Original well drilled and installed on March 25, 1991 by Pine & Swallow Associates, Inc. for Metcalf & Eddy.
2. An attempt to pull MicroWell® from ground surface was unsuccessful.
3. MicroWell® was filled with granular bentonite to bottom of well and then the steel casing was cut off approximately 1 foot below the ground surface. Additional granular bentonite was placed above the cut off section of casing.
4. Several inches of soil were spread over the grouted borehole at the ground surface.

Notes:

1. Original well drilled and installed on March 25, 1991 by Pine & Swallow Associates, Inc. for Metcalf & Eddy.
2. An attempt to pull MicroWell® from ground surface was unsuccessful.
3. MicroWell® was filled with granular bentonite to bottom of well and then the steel casing was cut off approximately 1 foot below the ground surface. Additional granular bentonite was placed above the cut off section of casing.
4. Several inches of soil were spread over the grouted borehole at the ground surface.

Notes:

1. Original well drilled and installed on March 25, 1991 by Pine & Swallow Associates, Inc. for Metcalf & Eddy.
2. An attempt to pull MicroWell® from ground surface was unsuccessful.
3. MicroWell® was filled with granular bentonite to bottom of well and then the steel casing was cut off approximately 1 foot below the ground surface. Additional granular bentonite was placed above the cut off section of casing.
4. Several inches of soil were spread over the grouted borehole at the ground surface.

Notes:

1. Original well drilled and installed on March 25, 1991 by Pine & Swallow Associates, Inc. for Metcalf & Eddy.
2. An attempt to pull MicroWell® from ground surface was unsuccessful.
3. MicroWell® was filled with granular bentonite to bottom of well and then the steel casing was cut off approximately 1 foot below the ground surface. Additional granular bentonite was placed above the cut off section of casing.
4. Several inches of soil were spread over the grouted borehole at the ground surface.

ATTACHMENT D
2007 WELL DECOMMISSIONING
DOCUMENTATION

Well Decommissioning Documentation

Pursuant to Revised Amendment No. 2 to the Statement of Work (SOW), dated June 2, 2006 and approved by the United States Environmental Protection Agency (USEPA) on June 12, 2006 Sanborn, Head & Associates, Inc. (SHA) has observed and documented the decommissioning of two shallow overburden monitoring wells (MW-2S and MW-5S) and four bedrock monitoring wells (MW-2D, MW-3D, MW-4D, MW-8D), installed at the Town Garage/Radio Beacon Site (the Site) in Londonderry, New Hampshire. Locations of these wells are depicted on Figure 1.

The monitoring wells were decommissioned between October 9 and 12, 2007 by Geosearch, Inc. (Geosearch) of Fitchburg, Massachusetts. Decommissioning activities were observed by SHA. Logs of the six decommissioned wells are included in this Appendix.



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-2D

Ground Elevation: N/A

Drilling Method: CME 75 Truck Rig

Datum: N/A

Sampling Method: N/A

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|-------|----------------|---------------------------------------|-----------------|------------|
| 10/11/07 | 09:30 | 20.1' | Top of PVC(after packing tube pulled) | | |

Drilling Company: Geosearch, Inc.

Foreman: J. Keenan

Date Started: 10/11/07

Date Finished: 10/11/07

Logged By: D. Porter

Checked By: S. Nerney

DECOM OF MON WELL 2049.01 FORMER LONDONDERRY TOWN GARAGE OCT07 LOGS.GPJ S:\CONDATAGINTOLD GINT LIBRARIES\040706 SHA - NEW LOGO.GLB 12/28/07

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|---------------|-----------------------|---------|-------------|---------------------------|-------------------------------|------------------------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/ Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 0 | | | | | | | | No soil samples obtained. | | Topsoil (0 to 1.2') |
| 2 | | | | | | | | | | Concrete Cap (1.2 to 2') |
| 4 | | | | | | | | | 6" Steel Casing (1.5 to 29') | |
| 6 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 24 | | | | | | | | | | |
| 26 | | | | | | | | | | |
| 28 | | | | | | | | | Bedrock Borehole (29 to 185') | |
| 30 | | | | | | | | | | |
| 32 | | | | | | | | | | |
| 34 | | | | | | | | | | |
| 36 | | | | | | | | | | |
| 38 | | | | | | | | | | |
| 40 | | | | | | | | | | |
| 42 | | | | | | | | | | |
| 44 | | | | | | | | | | |
| 46 | | | | | | | | | | |
| 48 | | | | | | | | | | |
| 50 | | | | | | | | | | |
| 52 | | | | | | | | | | |
| 54 | | | | | | | | | | |
| 56 | | | | | | | | | | |
| 58 | | | | | | | | | | |
| 60 | | | | | | | | | | |
| 62 | | | | | | | | | | |
| 64 | | | | | | | | | | |
| 66 | | | | | | | | | | |
| 68 | | | | | | | | | | |
| 70 | | | | | | | | | | |
| 72 | | | | | | | | | | |
| 74 | | | | | | | | | | |
| 76 | | | | | | | | | | |
| 78 | | | | | | | | | | |
| 80 | | | | | | | | | | |
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| 84 | | | | | | | | | | |
| 86 | | | | | | | | | | |
| 88 | | | | | | | | | | |
| 90 | | | | | | | | | | |
| 92 | | | | | | | | | | |
| 94 | | | | | | | | | | |
| 96 | | | | | | | | | | |
| 98 | | | | | | | | | | |
| 100 | | | | | | | | | | Cement/Bentonite Grout (2 to 185') |



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-2D
 Ground Elevation: N/A

Drilling Method: CME 75 Truck Rig

Datum: N/A

Sampling Method: N/A

Groundwater Readings

Drilling Company: Geosearch, Inc.

Date: 10/11/07 Time: 09:30 Depth to Water: 20.1' Ref. Pt.: Top of PVC(after packing tube pulled) Depth of Casing: Stab. Time

Foreman: J. Keenan

Date Started: 10/11/07

Date Finished: 10/11/07

Logged By: D. Porter

Checked By: S. Nemey

DECOM OF MON WELL_2049.01_FORMER LONDONDERRY TOWN GARAGE_OCT07_LOGS.GPJ_S:\CONDATA\GINTOLD GINT LIBRARIES\040706 SHA - NEW LOGO.GLB 12/28/07

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|----------------------|--------------|------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 100 | | | | | | | | | | |
| 102 | | | | | | | | | | |
| 104 | | | | | | | | | | |
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Decommissioning Log of Monitoring Well MW-2D

NOTES:

1. Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy. A Solinst, Ltd. of Canada, Waterloo multilevel dedicated sampling system was installed in June 1991 by Metcalf & Eddy.
2. The sample tubes and cables that connect the sampling pumps and pressure transducers with the ground surface were pulled. The sample tubes and 4 of the 6 electrical cables were pulled from the well. The cables stretched and broke. Based on previous discussions with Solinst, the system was reportedly designed such that the individual sample tubes and cables will break away from the individual sampling ports if the corresponding tubes and cables were pulled.
3. Because of the remaining cables inside the central 3-inch diameter PVC conduit, the bottom depth of the central conduit was plunked to a depth of about 175 feet.
4. Since there were still cables within the central PVC conduit the tremie line could only be inserted down inside the conduit to a depth of about 175 feet. The conduit was filled, using the tremie line, with a cement/bentonite grout mixture. Grout was also placed using a tremie line above the top packer.
5. The approximately 6-inch diameter steel casing was cut approximately 1.5 feet below the ground surface. Concrete was added from approximately 1.2 to 2 feet below the ground surface.
6. Several inches of topsoil were spread over the grouted borehole flush with the ground surface.



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-2S

Ground Elevation: N/A

Drilling Method: CME 75 Truck Rig

Datum: N/A

Sampling Method: N/A

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|-------|----------------|------------|-----------------|------------|
| 10/11/07 | 14:00 | 6.2' | Top of PVC | Well installed | |

Drilling Company: Geosearch, Inc.

Foreman: J. Keenan

Date Started: 10/11/07

Date Finished: 10/11/07

Logged By: D. Porter

Checked By: S. Nerney

DECOM OF MON WELL_2049.01_FORMER LONDONDERRY TOWN GARAGE_OCT07_LOGS.GPJ_S:\CONDATA\GINTOLD_GINT_LIBRARIES\040706_SHA - NEW LOGO.GLB_12/28/07

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|---|--------------|-------------------------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 0 | | | | | | | | No soil samples obtained. | | Topsoil (0 to 0.3') |
| 2 | | | | | | | | | | Cement/Bentonite Grout (0.3 to 10') |
| 4 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | NOTES: | | |
| 12 | | | | | | | | 1. Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy. | | |
| 14 | | | | | | | | 2. Well depth plunked at 10 feet from ground surface. | | |
| 16 | | | | | | | | 3. Using a tremie line, a cement/bentonite grout mixture was pumped into the well. The bottom of the 2-inch PVC well pipe was then punctured and the pipe was removed. Grout was placed to about 3 inches below the ground surface and several inches of topsoil were spread over the grouted borehole. | | |
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Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-3D
 Ground Elevation: N/A

Drilling Method: CME 850 Tracked ATV

Datum: N/A

Sampling Method: N/A

Groundwater Readings

Drilling Company: Geosearch, Inc.

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|------|----------------|---------------|-----------------|------------|
| 10/10/07 | | 8.25' | Top of Casing | Well Installed | |

Foreman: J. Keenan

Date Started: 10/10/07

Date Finished: 10/11/07

Logged By: M. Thomas

Checked By: S. Nerney

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|---------------------------|--------------|--------------------------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 0 | | | | | | | | No soil samples obtained. | | Topsoil (0 to 0.5') |
| 2 | | | | | | | | | | Concrete Cap (0.5 to 1.5') |
| 4 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | | | 6" Steel Casing (1 to 16') |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 18 | | | | | | | | | | Bedrock Borehole (16 to 184') |
| 20 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 24 | | | | | | | | | | |
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| 90 | | | | | | | | | | |
| 92 | | | | | | | | | | |
| 94 | | | | | | | | | | Cement/Bentonite Grout (1.5 to 184') |
| 96 | | | | | | | | | | |
| 98 | | | | | | | | | | |
| 100 | | | | | | | | | | |

DECOM OF MON WELL_2049.01_FORMER LONDONDERRY TOWN GARAGE_OCT07_LOGS.GPJ_S:\CONDATA\GINT\TOLD GINT LIBRARIES\040706 SHA - NEW LOGO.GLB_12/28/07



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-3D

Ground Elevation: N/A

Drilling Method: CME 850 Tracked ATV

Datum: N/A

Sampling Method: N/A

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|------|----------------|---------------|-----------------|------------|
| 10/10/07 | | 8.25' | Top of Casing | Well Installed | |

Drilling Company: Geosearch, Inc.

Foreman: J. Keenan

Date Started: 10/10/07

Date Finished: 10/11/07

Logged By: M. Thomas

Checked By: S. Nerney

DECOM OF MON WELL 2049.01 FORMER LONDONDERRY TOWN GARAGE, OCT07_LOGS.GPJ S:\CONDATA\GINT\OLD GINT LIBRARIES\040706 SHA - NEW LOGO.GLB 12/28/07

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|----------------------|--------------|------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 100 | | | | | | | | | | |
| 102 | | | | | | | | | | |
| 104 | | | | | | | | | | |
| 106 | | | | | | | | | | |
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Decommissioning Log of Monitoring Well MW-3D

NOTES:

1. Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy.
2. Well depth plunked at 184 feet from ground surface.
3. Well filled with a cement/bentonite grout mixture using a tremie line. The approximately 6-inch diameter steel casing was cut off approximately 1 foot below the ground surface. Concrete was added from approximately 0.5 to 1.5 feet.
4. Several inches of topsoil were spread over the grouted borehole at the ground surface.



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-4D
 Ground Elevation: N/A

Drilling Method: CME 850 Tracked ATV

Datum: N/A

Sampling Method: N/A

Groundwater Readings

Drilling Company: Geosearch, Inc.

Date 10/10/07 Time Not Measured Depth to Water Not Measured Ref. Pt. Not Measured Depth of Casing Not Measured Stab. Time Not Measured

Foreman: J. Keenan

Date Started: 10/09/07

Date Finished: 10/10/07

Logged By: M. Thomas

Checked By: S. Nerney

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|---------------------------|--------------|------------------------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 0 | | | | | | | | | | Topsoil (0 to 0.5') |
| 2 | | | | | | | | No soil samples obtained. | | Formation Material (0.5 to 1.5') |
| 4 | | | | | | | | | | Concrete Cap (1.5 to 3') |
| 6 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 16 | | | | | | | | | | 6" Steel casing (2 to 28') |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 24 | | | | | | | | | | |
| 26 | | | | | | | | | | |
| 28 | | | | | | | | | | Bedrock Borehole (28 to 185') |
| 30 | | | | | | | | | | |
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| 92 | | | | | | | | | | |
| 94 | | | | | | | | | | |
| 96 | | | | | | | | | | Cement/Bentonite Grout (3 to 185') |
| 98 | | | | | | | | | | |
| 100 | | | | | | | | | | |

DECOM OF MON WELL_2049.01_FORMER LONDONDERRY TOWN GARAGE_OCT07_LOGS.GPJ S:\CONDATA\GINT\OLD_GINT_LIBRARIES\040706_SHA_NEW.LOGO.GLB 12/28/07



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-4D
 Ground Elevation: N/A

Drilling Method: CME 850 Tracked ATV

Datum: N/A

Sampling Method: N/A

Groundwater Readings

Drilling Company: Geosearch, Inc.

Date 10/10/07 Time Not Measured Depth to Water Not Measured Ref. Pt. Not Measured Depth of Casing Not Measured Stab. Time Not Measured

Foreman: J. Keenan

Date Started: 10/09/07

Date Finished: 10/10/07

Logged By: M. Thomas

Checked By: S. Nerney

DECOM OF MON WELL 2049.01 FORMER LONDONDERRY TOWN GARAGE OCT07 LOGS.GPJ S:\CONDATA\GINT\OLD GINT LIBRARIES\040706 SHA - NEW LOGO.GLB 12/28/07

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|----------------------|--------------|------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 100 | | | | | | | | | | |
| 102 | | | | | | | | | | |
| 104 | | | | | | | | | | |
| 106 | | | | | | | | | | |
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| 198 | | | | | | | | | | |
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Decommissioning Log of Monitoring Well MW-4D

NOTES:

1. Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy. A Solinst, Ltd. of Canada, Waterloo multilevel dedicated sampling system was installed in June 1991 by Metcalf & Eddy.
2. The sample tubes and cables that connect the sampling pumps and pressure transducers with the ground surface were pulled. Three sample tubes and one of three electric cables were pulled from the well. Two cables stretched and broke. Based on previous discussions with Solinst, the system was reportedly designed such that the individual sample tubes and cables will break away from the individual sampling ports if the corresponding tubes and cables were pulled.
3. Well depth above the top packer plunked at about 7 feet from ground surface. Because of the remaining cables inside the central 3-inch diameter PVC conduit, the bottom depth of the central conduit was plunked to a depth of about 157 feet.
4. Since there were still cables within the central PVC conduit the tremie line could only be inserted inside the conduit to a depth of about 165 feet. The conduit was filled, using the tremie line, with a cement/bentonite grout mixture. Grout was also placed using a tremie line above the top packer.
5. After placing the grout, the top section (approximately 7 feet long) of the central PVC conduit was removed by unthreading the section.
6. The approximate 6-inch diameter steel casing was cut approximately 2 feet below the ground surface. Concrete was added from approximately 1.5 to 3 feet below the ground surface because of the grout settlement overnight.
7. Approximately 1.5 feet of topsoil were spread over the grouted borehole at the ground surface.



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-5S

Ground Elevation: N/A

Drilling Method: CME 850 Tracked ATV

Datum: N/A

Sampling Method: N/A

Groundwater Readings

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|------|----------------|---------------|-----------------|------------|
| 10/09/07 | | 15.05' | Top of Casing | Well Installed | |

Drilling Company: Geosearch, Inc.

Foreman: J. Keenan

Date Started: 10/09/07

Date Finished: 10/10/07

Logged By: M. Thomas

Checked By: S. Nerney

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|---|--------------|---------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 0 | | | | | | | 0' | No soil samples obtained. | | Topsoil (0 to 0.5') |
| 2 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 16 | | | | | | | | | | |
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| 20 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 24 | | | | | | | | | | |
| 26 | | | | | | | | | | |
| 28 | | | | | | | | | | |
| 30 | | | | | | | 30.3' | | | |
| 32 | | | | | | | | NOTES: 1. Original well drilled and installed in October 1990 by LaFramboise for Metcalf & Eddy. | | |
| 34 | | | | | | | | 2. Well depth plunked at 30.3 feet from ground surface. | | |
| 36 | | | | | | | | 3. Using a tremie line, a cement/bentonite grout mixture was pumped into the well. The bottom of the 2-inch PVC well pipe was then punctured and the well pipe was removed. Grout was placed to about 6-inches below the ground surface and several inches of topsoil were spread over the ground borehole. | | |
| 38 | | | | | | | | | | |
| 40 | | | | | | | | | | |
| 42 | | | | | | | | | | |
| 44 | | | | | | | | | | |
| 46 | | | | | | | | | | |
| 48 | | | | | | | | | | |
| 50 | | | | | | | | | | |

DECOM OF MON WELL_2049.01_FORMER LONDONDERRY TOWN GARAGE_OCT07_LOGS.GPJ_S:\CONDAT\GINT\OLD GINT LIBRARIES\040706 SHA - NEW LOGO.GLB_12/28/07



Project: Londonderry Town Garage
 Location: Londonderry, New Hampshire
 SHA Project No.: 2049.01

Decommissioning Log of Monitoring Well MW-8D
 Ground Elevation: N/A

Drilling Method: CME 75 Truck Rig

Datum: N/A

Sampling Method: N/A

Groundwater Readings

Drilling Company: Geosearch, Inc.

| Date | Time | Depth to Water | Ref. Pt. | Depth of Casing | Stab. Time |
|----------|------|----------------|---------------|-----------------|------------|
| 10/12/07 | - | 21.2' | Top of Casing | 63' | NA |

Foreman: J. Keenan

Date Started: 10/12/07

Date Finished: 10/12/07

Logged By: M. Thomas

Checked By: S. Nerney

DECOM OF MON WELL 2049 01 FORMER LONDONDERRY TOWN GARAGE OCT07 LOGS GPJ S:\CONDATA\GINT\TOLD GINT LIBRARIES\040706 SHA - NEW LOGO GLB 12/28/07

| Depth (ft) | Sample Information | | | | | Stratum | | Geologic Description | Well Diagram | Well Description |
|------------|--------------------|------------|----------------------|--------------|-----------------------|---------|-------------|---------------------------|--------------|--------------------------------------|
| | Sample No. | Depth (ft) | Spoon Blows per 6 in | Pen/Rec (in) | PID/FID Values (ppmv) | Log | Description | | | |
| 0 | | | | | | | | | | |
| 2 | | | | | | | | No soil samples obtained. | | Rubber Landscaping Chips (0 to 0.3') |
| 4 | | | | | | | | | | Formation Material (0.3 to 1') |
| 6 | | | | | | | | | | Concrete Cap (1 to 3') |
| 8 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 12 | | | | | | | | | | 6" Steel Casing (1.5 to 22.5') |
| 14 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| 22 | | | | | | | | | | |
| 24 | | | | | | | | | | Bedrock Borehole (22.5 to 65.5') |
| 26 | | | | | | | | | | |
| 28 | | | | | | | | | | |
| 30 | | | | | | | | | | |
| 32 | | | | | | | | | | |
| 34 | | | | | | | | | | |
| 36 | | | | | | | | | | |
| 38 | | | | | | | | | | |
| 40 | | | | | | | | | | |
| 42 | | | | | | | | | | |
| 44 | | | | | | | | | | |
| 46 | | | | | | | | | | |
| 48 | | | | | | | | | | |
| 50 | | | | | | | | | | |
| 52 | | | | | | | | | | |
| 54 | | | | | | | | | | |
| 56 | | | | | | | | | | |
| 58 | | | | | | | | | | |
| 60 | | | | | | | | | | |
| 62 | | | | | | | | | | |
| 64 | | | | | | | | | | |
| 66 | | | | | | | | | | |
| 68 | | | | | | | | | | |
| 70 | | | | | | | | | | |
| 72 | | | | | | | | | | |
| 74 | | | | | | | | | | |
| 76 | | | | | | | | | | |
| 78 | | | | | | | | | | |
| 80 | | | | | | | | | | |
| 82 | | | | | | | | | | |
| 84 | | | | | | | | | | |
| 86 | | | | | | | | | | |
| 88 | | | | | | | | | | |
| 90 | | | | | | | | | | |
| 92 | | | | | | | | | | |
| 94 | | | | | | | | | | |
| 96 | | | | | | | | | | |
| 98 | | | | | | | | | | |
| 100 | | | | | | | | | | |

NOTES

- No original log of MW-8D was available, however, it is believed the well was installed at a similar time period (October 1990) and by LaFramboise for Metcalf & Eddy as the other site wells
- Well depth plunked at 65.5 feet from ground surface
- Well filled with a cement/bentonite grout mixture using a tremie line. The approximately 6-inch diameter steel casing was cut off approximately 1.5 feet below the ground surface. Concrete was added from approximately 1 to 3 feet because of grout settlement.
- Soil was placed from about 0.3 to 1 foot below the ground surface. Rubber landscape chips were placed from the ground surface to 0.3 feet below the ground surface.