Environment

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Addendum to the November 1, 2013 Supplemental Phase II Scope of Work

Former General Electric Facility

50 Fordham Road

Wilmington, MA

RTN 3-0518

AECOM Project No: 60312865

Revision 1

Addendum to the November 1, 2013 Supplemental Phase II Scope of Work

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			Section	Narrative of Items Affected
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1 (Addendum)	Scott Olson/Lori Herberich Daniel Folan/Art Taddeo	8/26/2015	Addendum for 2015-2017 work	Text, Tables, Figures, Appendices

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ISRM	International Society for Rock Mechanics
IWPA	Interim Wellhead Protection Area
kg/month	Kilograms per month
LCS	Laboratory Control Sample
LNAPL	Light non-aqueous phase liquid
Lockheed Martin	Lockheed Martin Corporation
LSP	Licensed Site Professional
MassDEP	Massachusetts Department of Environmental Protection
MCP	Massachusetts Contingency Plan

RSSB	Regulated Substances Storage Building
RTN	Release Tracking Number
SAP	Sampling and Analysis Plan
SIM	Selected Ion Monitoring
SOPs	Standard Operating Procedures
SOW	Scope of Work
SVOC	Semi-volatile organic compounds
T&FR	Technical and Functional Requirements
TCE	Trichloroethylene
TCLP	Toxicity Characteristic Leaching Program
TPH	Total Petroleum Hydrocarbons
TRC	TRC Environmental Corporation
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
USTs	Underground Storage Tanks
VOA	Volatile organic analysis
VOCs	Volatile organic compounds
VPHs	Volatile Petroleum Hydrocarbons
WMP	Waste Management Plan
WRT	Wilmington Realty Trust

1.0 INTRODUCTION

This Addendum has been prepared as a companion document to the November 1, 2013 Supplemen Phase II Scope of Work (SWO). This document only details the additional scope, objectives, and

1.2

- Appendix E – Example Field Records
- Appendix F – Waste Management Procedure and Forms

66-8, Well #13, and Well #15). The Town of Reading has discontinued use of the Town Forest Wells

House. Tanks G and H were drained of their contents in 1979 and were reportedly never used aga
Tanks D, G, H, and I were reportedly removed in June 1987.

Liquid acid and caustic wastes from a former metal finishing room within Building 1 drained via floor drains into Tank F, a 3,500-gallon UST, located outside the southwestern corner of Building 1. Tank F replaced an older butyl rubber-lined open top steel tank, which was taken out of service in 1981 and removed from the property in June 1987. No identification number of this open top steel tank is provided, and it appears to have been destroyed during removal.

2.4.3.1 Overburden Aquifer

Shallow overburden groundwater flows to the east. As the shallow groundwater flows into the wetlands,

2.5 UTILITIES

Underground utility services including gas, electric, and water are present on-site. Based on the Existing Conditions Plan EX-2 prepared by RJ O'Connell & Associates (October 2008) for WRT, these services are mainly present under the grassy area between Fordham Road and Buildings 1, 1A, and 2, with feeds coming from Fordham Road. These utilities also run between Buildings 1A and 2 and along the south and east sides of Building 1. Underground electrical service to the Tent Shed and the EPL lights is from the east side of Building 1.

On-site storm water and sanitary sewage are treated at the Sewage Treatment Plant and Wastewater Treatment Plant located in the northern portion of the property. The associated outfalls

On October 10, 2014, Lockheed Martin submitted a Tier Classification Extension that was approved b MassDEP on November 11, 2014. On November 20, 2014 the MassDEP notified Lockheed Martin that the Tier Classification was extended to May 3, 2017.

2.7 PUBLIC INVOLVEMENT P LAN

The site is one of four MCP Tier 1A sites in the Fordham Road and Concord Street portion of the towns of Wilmington and North Reading, Massachusetts. These four sites are part of a single PIP, prepared MassDEP on November 17, 2000. The three other sites include Roadway Express, MSM Industries, a Sterling Supply. On February 22, 2011, TRC (the previous environmental consultant/LSP) notified th Public Involvement mailing list participants that the PIP was no longer considered active. However, n formal modification or termination notice was submitted to MassDEP regarding the PIP. Lockheed Martin and its contractors have continued public communications as site activities continue and implement public involvement activities in accordance with the 2000 PIP (see Section 3.3).

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2.8 SUPPLEMENTAL INVESTIGATIOTw 5.208 0 Td w 5.202(e)4(0 Td ( )Tj -0.02-3(G) on)-1d (1)T

- On May 31, 2012, AECOM gauged four monitoring wells (CW-1, CW-2, PZ-2S, and TRC-101) in the EPL for the presence of LNAPL. Sheen with no detectable LNAPL thickness was present in well CW-2; no other evidence of LNAPL was noted.
- On August 23, 2012, AECOM collected one round of indoor air samples within Building 1 (IA-2, IA-3, IA-4, IA-7, and IA-8 on the first floor, and IA-9 and IA- plAoTd [(9 a-0.s)-(t)-2(2(n)- 0 3(d [

- In August 2012, AECOM advanced two

- On May 21, AECOM gauged seven monitoring wells (AE-3, AE-4, CW-1, CW-2, GZA-102S, PZ-2S, and TRC-101) in the EPL for the presence of LNAPL. The only evidence of LNAPL was 0.01 ft measured in wells CW-1 and CW-2.
- On May 22, 2013, AECOM collected groundwater samples at five wells (AE-3, AE-4, GZA-102S, PZ-2S, and TRC-101) in the EPL for analyses of VOCs via Method 8260 and EPH/VPH via MassDEP Method.
- In May and June 2013, AECOM advanced three soil borings and installed and developed two shallow overburden wells AE-23S and AE-24, and one bedrock well AE-23R, beneath the southwestern corner of Building 1. These wells were installed in the vicinity of the highest detected sub-slab vapor and indoor air concentrations. Soil samples were collected for analysis of metals (arsenic, beryllium, chromium, copper, lead, nickel, silver, zinc) via Method 6010C, VOCs via Method 8260, and cyanide via Method 9012.
- On July 3, 2013, AECOM collected groundwater samples from wells AE-23S, AE-23R, and AE-24 for analysis of metals (arsenic, beryllium, chromium, copper, lead, nickel, silver, zinc) via Method 6010, VOCs via Method 8260, cyanide via Method 9012, and 1,4-dioxane via Method 8270SIM.
- In May 2013, AECOM performed a site-wide inventory of all groundwater monitoring wells and piezometers, performed trail maintenance, and generated a detailed well inventory and summary of proposed future well rehabilitation and maintenance activities.
- On January 11, April 1, June 28, August 28, and December 27, 2013 AECOM checked and maintained the packer pressure in monitoring well TRC-102R. The pressure was maintained between 190 and 200 psi.
- In August and September 2013, AECOM performed an evaluation of a condition of Substantial Release Migration (SRM). This included: communications with the N. Reading Board of Health; review of nearby residential private well construction details and proximity to the site chlorinated solvent plume; water level measurements to confirm groundwater flow directions; and collection of groundwater samples at four wells (MW-5, PS-8S, PS-8D, and PS-3) in the wooded/wetland area down-gradient of the site for VOC (8260) analyses. The results indicated a lack of impacts in monitoring wells located between the private wells and the CVOC plume. In addition, the private wells are clearly located up-gradient of the CVOC plume. Therefore, it was concluded that a Condition of SRM has never existed and does not currently exist.

AECOM's Project Manager (PM) and the subcontracted driller's field supervisor will complete Lockheed Martin's Risk Handling Checklist and the Dig Permit and submit it to the Lockheed Martin

Monitoring well AE-27R was intended to be drilled at an angle to investigate soil and groundwater quality beneath the portion of southwest corner room of Building 1 east-of-AE-24 where drill rig access is not possible.

AE-110R would be advanced to approximately 250 ft bgs following the same procedures for drilling, casing, coring, development, and completion as for AE-109R. The exact location will be determined based on the surficial geophysical results and the results from AE-109R.

Refer to Table 3-5 for more details pertaining to the Mobilization 3 activities.

3.1.11 Mobilization 4 –

1. FLUTe will dismantle the 5-ft extension and temporary scaffolding then remove the blank liner from the first borehole using a linear capstan to help develop the well
2. Hager-Richter will start borehole geophysics on the first hole the following morning. It is assumed that borehole geophysics will take the entire day to complete, and in some cases into the following day.
3. While borehole geophysics is being completed, FLUTe will mobilize to the next borehole and pull the blank liner so borehole geophysics can be conducted the following day
4. Once borehole geophysics is completed on the first hole, FLUTe will then conduct a transmissivity profile on the well
5. Once completed with the transmissivity profile, FLUTe will re-install the blank liner with the 5-ft extension, scaffolding, and recycled heavy mud.
6. Both FLUTe and Hager-Richter will continue this process for all six to seven bedrock borehole locations until the borehole geophysics and transmissivity profiling is completed in all boreholes.

Refer to Table 3-6 for more details pertaining to the Mobilization 4 activities.

3.1.15 Groundwater and Surface Water Sampling in EPL, Wetlands, and Concord Street

Comprehensive rounds ofroundwater sampling ar planned for June 2016 and September 2017.

A number of monitoring wells in the EPL wells (P-2S, CW-1, CW-2, TRC-101, AE-3, and AE-4) have been monitored for the presence of LNAPL over the years dating as far back as 1994. Between December 2012 and May 2015, and dating to or before 2010 in select wells, there has been no evidence of micro-scale NAPL capable of accumulating in this area beneath the EPL. Based on this absence of NAPL, routine LNAPL monitoring will be discontinued following the September 2015 monitoring event. The absence of LNAPL beneath the EPL will still be monitored as all wells on-site will be measured during multiple site-wide water level rounds to be conducted in 2016 and 2017. During these future water level measurement rounds, water levels, and product levels if1ci(a)4(r)(e)4(s)--1(e)4(Td [ns)-s

4.0 SAMPLING AND ANALYSIS PLAN

This section details the methods and procedures to be used during the performance of the supplemental investigation activities outlined in Section 3. Field work and sampling will be conducted in multiple phases as described in Section 3 to further characterize indoor air, bedrock, and groundwater quality at the site.

4.1 PROJECT OPERATION PROCEDURES

All investigation activities will be conducted in accordance with detailed Project Operation Procedures (POPs). Table 4-1 provides a summary of the POPs and clarification of site-specific procedures and methods to be followed during the execution of this SOW. Copies of the following POPs are provided in Appendix B of the November 1, 2013 Supplemental Phase II

November 1, 2013 SOW. It is anticipated that only FLUTe liner installation, transmissivity profiling, and sampling procedures and the Hager Richter borehole geophysical procedures will be used during the additional 2015-2017 investigation activities. The SOPs from FLUTe and Hager-Richter are included in Appendices C and D of this SOW Addendum.

Subcontractor	SOP
Stone Environmental	VOCs in Rock Core Samples
FLUTe	Liner Installation Procedure
FLUTe	Groundwater Sampling Procedures
Hager-Richter	Borehole Geophysical Procedures
Waterloo	Active Line Source (ALS) Temperature Profiling
Golder	Rock Core Diffusion Testing Procedure

Copies of example field records to be used to document field activities and data collection are provided in Appendix E.

4.3 ANALYTES OF CONCERN

Samples will be analyzed for the constituents listed in Tables 4-2 through 4-4 for soil, groundwater, surface water (if sampled), air, and IDW. Analyses specific to each sample are presented in the Section 3 Tables, where applicable.

4.4 ANALYTICAL PROCEDURES

Soil, groundwater, and surface water samples, where performed, will be analyzed for typical analytes by either of these laboratories:

Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001-3831
(413) 789-9018

OR

ESS Laboratory - Division of Thielsch Engineering
185 Frances Avenue, Cranston, RI 02910
(401) 461-7181

Spectrum Analytical, Inc. (Spectrum) or ESS Laboratory will also perform fractional organic carbon analyses on soil samples. The Spectrum facility located at 175 Metro Center Boulevard, Warwick, RI will perform a separate analysis for 1,4-dioxane in order meet sensitivity requirements. ESS Laboratory can perform the more sensitive analysis for 1,4-dioxane at their Cranston, RI Lab.

Analysis of magnetic susceptibility for rock samples, if performed, and groundwater samples for microbial populations and functional genes, if performed, will be performed by:

Microbial Insights, Inc.

2340 Stock Creek Boulevard

Rockford, TN 37853

(865) 573-8188

Natural isotopic analysis of surface waters and groundwater for oxygen, hydrogen/deuterium, and sulfu if performed, will be performed by:

Isotech Laboratories, Inc.

1308 Parkland Court

Champaign, IL 61821

(217) 398-3490

Air samples will be analyzed by:

Alpha Analytical

320 Forbes Boulevard

Mansfield, MA 02048

(508) 844-4156

Compound Specific Isotope Analyses (CSIA) and dissolved gases analyses in groundwater, if performed, will be performed by

Microseeps, Inc.

220 William Pitt Way

Pittsburgh, PA

(412) 826-5245

VOC analyses of crushed bedrock, if performed, will be performed by:

Stone Environmental

535 Stone Cutters Way

Montpelier, VT 05602

(802) 229-4541

Rock core diffusion and physical parameter analyses, if performed, will be performed by:

Golder Associates Ltd.

6925 Century Ave. Suite 3100

Mississauga, Ontario Canada L5N 7K2

(905) 567-4444

Samples will be analyzed for the constituents listed in Tables 4-2 through 4-4. The laboratory analytical

A summary of sample container, preservation, and holding time requirements is presented in Table 4-6.

4.6 FIELD QUALITY CONTROL

QC samples for laboratory analyses will include field duplicates, MS/MSDs, equipment blanks, trip blanks, and temperature blanks. These samples will be collected as described below:

Field Duplicates

Field duplicates will be collected at a frequency of one field duplicate per 20 field samples, per matrix per sampling technique, with certain exceptions. Field duplicates for solid samples will be collected by alternately filling two sets of identical sample containers from the interim container used to homogeniz

The MassDEP's WSC #13220: Compendium of Quality Control Requirements and Performance Standards for Selected Analytical Protocols, "Compendium of Analytical Methods" (CAM) for each analysis defines the type, frequency, and corrective action for the applicable QC checks. The contr limits for precision and accuracy will be the control limits published in the CAM laboratory protocols. For non-CAM analyses, the control limits for precision and accuracy will be the laboratory limits current at the time of analyses.

4.8 REPORTING

Data management and reporting operations include data recording, validation, transformation transmittal, reduction, analysis, tracking, storage and retrieval. Once the field and laboratory information

5.0 QUALITY ASSURANCE PROJECT PLAN

The USEPA QAPP policy as presented in USEPA

bl

locations, either within field vehicles or the treatment building on site. Samples may also be temporarily secured at the AECOM office in Chelmsford, MA while awaiting pickup by a laboratory courier.

All sample containers will be identified by the use of sample labels with sample numbers, samplin locations, date/time of collection, and type of analysis. Sample labels will be completed for each samp using waterproof ink unless prohibited by weather conditions. For example, a logbook notation woul

Guidance/Procedures" (April 2013), modified for non-Contract Laboratory Program (CLP) methods. Upon completion of the validation, a Validation Summary Report will be prepared. This report will summarize the samples reviewed, elements reviewed, any nonconformances with the established criteria, and validation actions (including application of data qualifiers). Data qualifiers will be consistent with the USEPA guidelines. In addition, a Data Usability Report will be prepared in conformance with the Data Usability Guidelines of MassDEP Policy BWSC-07-350 "MCP Data Usability Assessment".

performed by the AECOM Field Team Leader and field team. Corrective action will be documented in QA reports to the project management team (see Section 5.7.3 below).

Corrective actions will be implemented and documented in the field notebook. Documentation will include:

- A description of the circumstances that initiated the corrective action
- The action taken in response
- The final resolution
- Any necessary approvals

No staff member will initiate corrective action without prior communication of findings through the proper channels.

5.7.2 Laboratory

Corrective action in the laboratory may occur prior to, during, and after initial analyses. A number of conditions such as broken sample containers, multiple phases, low/high pH readings, and potential high concentration samples may be identified during sample login or analysis. Following consultation with laboratory analysts and supervisory personnel, it may be necessary for the Laboratory QA Coordinator to approve the implementation of corrective action. The AECOM PM and LSP-of-Record will be notified if the non-conforming condition causes the project objectives to be missed.

These corrective actions are performed prior to release of the data from the laboratory. The corrective action will be documented in both the laboratory's corrective action files, and in the narrative data report sent from the laboratory to the AECOM PM. If the corrective action does not rectify the situation, the laboratory will contact the AECOM PM, who after consultation with the LSP-of-Record, will determine the action to be taken and inform the appropriate personnel.

5.7.3 Implementation and Reporting

QA reports will be submitted to the AECOM PM and LSP-of-Record to ensure that any problems identified during the SAP programs are investigated and the proper corrective measures taken in response. The QA reports will include (where applicable):

- All results of field and laboratory audits
- A summary of revisions to the QAPP
- Results of any performance evaluation (PE) or split samples
- Problems noted during data validation and assessment
- Significant QA/QC problems, recommended corrective actions, and the outcome of corrective actions

QA reports will be prepared by the AECOM Laboratory Task Manager and submitted on an as needed basis.

5.8 DOCUMENTATION

Documentation for this project will include a variety o Td [(R)-7(es)-5(u)-4(l)-679Q16.17 -21(0.01

characterization. For drilling and testing/sampling of off-site monitoring wells, IDW will either be consolidated in the on-site IDW storage containers, or temporary secured IDW storage areas may need to be constructed on the off-site properties along Concord Street. Each container will be labeled with the following information:

- Container contents (type of IDW)
- Location(s) from which the IDW was generated (SB, MW identification) including approximate depths
- Date(s) of generation
- AECOM contact information:

  Scott Olson
  250 Apollo Drive Chelmsford, MA 01824
  978.905.2100

All containers and associated information will be tracked on an IDW log (excel spreadsheet - example included in Appendix E) t(b)]TJ[(A)6(a-14(r8(nilit0 Tdd/TT2)-112 -1.72 Td [(f)5(o)2(s)-1(oc)49.2D.024

The following are typical waste characterization analyses, some or all of which may be conducted a required, either based on the materials encountered on site (grossly impacted materials, material generated from a new investigation area, discovery of a new condition, etc.) or based on requirements of the disposal facility:

- total (RCRA 8) metals by USEPA Method 6010B
- total VOCs by USEPA Method 8260B
- total semi

Element C of the

6.7 SUBMITTALS

AECOM will submit the Waste Listing Assessment Form (Appendix F) to the Lockheed Martin Project Lead for approval prior to disposal of wastes generated as a result of AECOM's work performed on site. This form will be updated upon receipt of the analytical results and resubmitted for approval by Lockheed Martin Project Lead

Waste characterization analytical results, the generator copy of the waste manifest, transportation, and destruction records (including certificates of destruction) shall be scanned and electronically submitted to Lockheed Martin for records retention within 30 days of record finalization for any wastes transported and disposed of as a result of AECOM performed work.

7.0 REFERENCES

AECOM. 2013. Remedy Optimization Status, ROS Termination, and Tier IA Permit Extension. March 27, 2013.

AECOM, 2013. Supplemental Phase II Scope of Work. November 1, 2013.

GZA (Goldberg Zoino & Associates, Inc.). 1990. Phase II Site Assessment Report, Former GE Facility, RTN#3-0518, Wilmington, Massachusetts. April 1990.

Kick, John F. 1990. Gravity 820 and Hallberg Circle, Reading, Massachusetts. Report prepared for the Town of Reading, Department of Public Works.

MassDEP. 2000. Public Involvement Plan, MSM Industries, Former Sterling Supply Corporation Disposal Site, Roadway Express Disposal Site, Former General Electric Disposal Site, Wilmington an North Reading, Massachusetts. November 17, 2000.

MassDEP 2007.EN[6(nE)3(l)-1AsAgtthas- 0.33 0 Td [(Z)Site-6( )-10(I)13, M,(nvol)oP.S4(t)-C-4a(t)-16(d)

310 0.01 13(e)4 Tw 1 4( )T00-13(e)4(a)4.1(di)-12(t)-2(o)4(m)-12(u11(a)4(s)-1(s)-1(a)-6(c(i)-2()-1nt Td [(0)-10(518,

Tables

7DEOH
6LWH &KDUDFWHUL]DWLRQ +LVWRU\ DQG 5HJXODWRU\ 7L
)RUPHU *( )DFLOLW\ )RUGKDP 5RDG :LOPLQJWRQ 0$

	'HYHORSPHQW RI)RUGKDP 5RDG SURSHUW\
	*(V $HURVSDFH ,QVWUXPHQWV &RQWURO 6\VWHPV HQWHUV IDFLOLW\
'HF	7RZQ RI 1RUWK 5HDGLQJ WHVWV WKH 6WLFNQH\ :HOO :HOO LV VKXW (
	7DQN . UHPRYHG
-XQ	

Table 2-2
Operable Unit Summary
Former GE Facility, 50 Fordham Rd, Wilmington, MA

2SHUDEOH 8QLWHVFULSWLRQ	$IIHFWHG 0HGLD&RPSRXQGV RI &RQFHUQ	5HJXODWRU\ 6\
28)RUPHU 7DQN) DUHD DQG DGM	9DGRVH]RQH V VKDOORZ JURX	6WRGGDUG VRL LQ JURXQGZDW H[WUDFWDEOH K\GURFDUERQV YRODWLOH SHW K\GURFDUERQV ERWK VRLOV D DVVRFLDWHG D	2SHQ
28)RUPHU 7DQN) DUHD DQG GRZ SOXPH RQ DQG	*URXQGZDWHU &92&V DQG	2SHQ DQH
28 6WRUPZDWHU : 2XWIDOOV D	6HGLPHQW	0HWDOV DQG S K\GURFDUERQV	&ORVHG 3DUW 5HVSRQVH $FW 5$2 6XEPLWW 'HFHPEHU
28)RUPHU 7DQN . DQG LPPHGLDW JUDGLHQW SOX	9DGRVH]RQH V VKDOORZ JURX	*DVROLQH UHO K\GURFDUERQV 2UJDQLF &RPSR 92&V	&ORVHG 3DUW 5$2 6XEPLWWH

7DEOH
5DWLRQDOH RI 3URSRVHG 6XSSOHPHQWDO ,QYHVWLJDWLRQ $FWLYLWLHV
)RUPHU *( )DFLOLW\ )RUGKDP 5G :LOPLQJWRQ 0$

/RFDWLRQ ,'	$FWLYLWLHV	2EMHFWLYH 5DWLRQDOH
*HQHUDO 0RELOL]DWLRQ	6LWH $FFHVV $JUHHPHQWV 3HUPLVVLRQV DQG 3UHSDUDWLRQV ‡ 2EWDLQ 9HULI\ SHUPLVVLRQ ZLWK SURSHUW\ RZQHUV WR GULOO VDPSOH DQG ‡ 6HWXS RI IDFLOLWLHV LQFOXGLQJ GHFRQWDPLQDWLRQ DUHD SRUWDEOH UHVW	

7DEOH
%XLOGLQJ ,QYHVWLJDWLRQ 6XPPDU\
6XSSOHPHQWDO ,QYHVWLJDWLRQ $FWLYLWLHV
)RUPHU *( )DFLOLW\ )RUGKDP 5G :LOPLQJWRQ 0$

/RFDWLRQ ,'&RPSOHWLRQ 'HSWKHOD

*HQHUDO 3UH
:RUN

&XUUHQWO
ERUHKROH W
FDVLQJ WR
(VWLPDWHG \
IHHW
$(5
0: %HGURF OHDYH DV %HGURFN
%XLOGLQJ ERUHKROH V
)/87H OLQH
WR EH ODWHU
DV)/87H OLQ
VDPSOLQJ

1R R
6DPSC 6RLO $QDO\VHV 3URFHGXUHV

‡ 6RIW GLJ WR IHHW EHORZ JUDGH
‡ &DVFDGH WR 34 FRUH LQFK ,'
‡ &DVHG WR GHYHORS 5 @ 5HQ ERUHI
‡ &DVFDGH RO

1 $

7DEOH

7DEOH

7DEOH
0RELOL]DWLRQ %RUHKROH *HRSK\VLFV)/87H 7UDQVPLVVLYLW\ 3URILOLQJ 6OXJ 7HVWLQJ DQG 'DWD ,
6XSSOHPHQWDO ,QYHVWLJDWLRQ $FWLYLWLHV
)RUPHU *( )DFLOLW\ )RUGKDP 5G :LOPLQJWRQ 0$

$FWLYLW\ /RFDWLRQ ,'

*HQHUDO 3UH
:RUN

0RELOL]DWLRQ

$(5 $(5
%RUHKROH 5 $(5
*HRSK\VLFV 5 LI GULOO
5 DQG
$(5

$(5 $(5
)/87H 5 $(5 ‡)/87H ZLOO SHUIRUP)/87H WUDQVPLVVLYLW\ SURILOLQJ RQ HDFK RI WKH VL[RU VHYHQ QHZO\
7UDQVPLVVLY 5 LI GULOO
3URILOLQJ 5 DQG
$(5

$/6 'DWD 6HOHFW %HGl
,QWHUSUHWD %RUHKROHV

2YHUEXUGHQ
6OXJ 7HVWLQJ $(0 $(6
LI GULOOHG
$(

1RWHV
,' LGHQWLILFDWLRQ

HV °°°° O RVPp HV ™@pÀ™rVPLOVP#þ03•

POP # or Reference	Title, Revision, Date	Originating Organization	POP option or Equipment Type (if POP provides different options)	Comments
POP-001				

7DEOH
3URMHFW 2SHUDWLRQ 3ODQ 323 6XPPDU\
)RUPHU *( )DFLOLW\ )RUGKDP 5G :LOPLQJWRQ 0$

POP # or Reference	Title,

7DEOH
3URMHFW 2SHUDWLRQ 3ODQ 323 6XPPDU\
)RUPHU *( )DFLOLW\ )RUGKDP 5G :LOPLQJWRQ 0$

POP # or Reference	Title, Revision, Date	Originating Organization	POP option or Equipment Type (if POP provides different options)	Comments
POP-014	Low Stress Groundwater Purging and Sampling Procedure; Revision 0, September 2013	AECOM		

Table 4-2
Analytes and Reporting Limits for Groundwater and Soil
Former GE Facility, 50 Fordham Rd, Wilmington, MA

Table 4-2
Analytes and Reporting Limits for Groundwater and Soil
Former GE Facility, 50 Fordham Rd, Wilmington, MA

	Groundwater (ug/L)	Soil (mg/kg)	Groundwater (ug/L)	Soil (mg/kg)
VOCs by SW-846 8260B				
Acetone	6300	6	10	0.01
Amyl Methyl Ether (TAME), tert-	NE	NE	1	0.005
Benzene	5	2	1	0.005
Bromobenzene	1000*	100*	2	0.005
Bromochloromethane	832	162	1	0.005
Bromodichloromethane	3	0.1	0.6	0.005
Bromoform	4	0.1	1	0.005
Bromomethane	10	0.5	2	0.01
Butylbenzene, sec-	NE	NE	1	0.005
Butylbenzene, n-	7802	39002	1	0.005
Butylbenzene, tert-	1000*	100*	1	0.005
Carbon Disulfide	7202	100*	1	0.005
Carbon Tetrachloride	5	10	1	0.005
Chlorobenzene	100	1	1	0.005
Chlorodibromomethane	2	0.005	1	0.002
Chloroethane	1000*	100*	2	0.01
Chloroform	70	0.4	1	0.005
Chloromethane	1902	100*	2	0.01
Chlorotoluene, 2-	1902	100*	1	0.005
Chlorotoluene, 4-	1902	16002	1	0.005
1,2-Dibromo-3-chloropropane	100*	10*	5	0.005
Dibromoethane, 1,2-	1002	0.02	1	0.005

f30(1)-20(,)-30(2)-20(-)-2(o)-13(rEMC /P <</MCID 4>>BDC q 0.00 0.00 612.00 792.00 re W n /Cs1 cs 0.000 0.000 0.000 sc 0.000 0.000 0.000 SC /GS1 gs BT 1.00 0 0 1 72.00 720.00 Tm /F1 16(ne)-16.1(,)-30(1)-20(,)-30(u)2 Td (5)Tj EMC /P,

Table 4-2
Analytes and Reporting Limits for Groundwater and Soil
Former GE Facility, 50 Fordham Rd, Wilmington, MA

Parameter	Project Action Limit [1]		ESS Labs Reporting Limit[2]	
	Groundwater (ug/L)	Soil (mg/kg)	Groundwater (ug/L)	Soil (mg/kg)
SVOC by SW-846 8270C with SIM				
1,4-Dioxane	0.3**	0.2	0.25	see above
VPH by MADEP –VPH-04-1.1				
C_5-C_8 Aliphatic Hydrocarbons	300	100	150	10
C_9-C_{12} Aliphatic Hydrocarbons	700	1000	150	10
C_9-C_{10} Aromatic Hydrocarbons	200	1000	100	10
Benzene	5	2	1.5	0.2
Ethylbenzene	700	40	5	0.2
Methyl-tert-butyl ether	70	0.1	1.5	0.05
Naphthalene	140	4	5	0.2
Toluene	1000	30	5	0.2
o-Xylene	10000	400	5	0.2
m & p -Xylene	10000	400	10	0.4
C_9-C_{18} Aliphatic Hydrocarbons	700	1000	100	15
C_{19}-C_{36} Aliphatic Hydrocarbons	14000	3000	100	15
C_{11}-C_{22} Aromatic Hydrocarbons	200	1000	100	15
Naphthalene	140	4	0.5	0.4
2-Methylnaphthalene	10	0.74.2 564.14		

Table 4-3
Analytes and Reporting Limits for Investigation Derived Waste
Former GE Facility, 50 Fordham Rd, Wilmington, MA

Analyte	Spectrum Laboratory Reporting Limit Aqueous (ug/L)	Soil (mg/kg)
VOCs		
73+	PJ O	
&RUURVLYLW\	1$	1$
,JQLWDELOLW\	1$	1$
5HDFWLYH &\DQLGH	PJ O	
5HDFWLYH 6XOILGH	PJ O	
TCLP VOCs	6HH 7DEOH	ZDWHU UHSRU\
TCLP Metals		
$UVHQLF	PJ O	
%DULXP	PJ O	
&DGPLXP	PJ O	
&KURPLXP	PJ O	
/HDG	PJ O	
6HOHQLXP	PJ O	
6LOYHU	PJ O	
0HUFXU\	PJ O	
PCBs		
$URFORU		
$URFORU		
$URFORU		
$URFORU		
$URFORU		
$URFORU		
$URFORU		
$URFORU		
$URFORU		
SVOCs		
$FHQDSKWKHQH		
$FHQDSKWK\OHQH		
$FHWRSKHQRQH	6HH EHORZ	6HH EHOR
$QLOLQH		
$QWKUDFHQH		
$]REHQ]HQH		
%HQ]R D DQWKUDFHQH		
%HQ]R D S\UHQH		
%HQ]R E IOXRUDQWKHQH		
%HQ]R N IOXRUDQWKHQH		
%HQ]R J K L SHU\OHQH		
%URPRSKHQ\O SKHQ\O HWKHU		
%XW\O EHQ]\O SKWKDODWH		
%XW\O SKWKDODWH 'L Q		
&KORURDQLOLQH		
ELV &KORURHWKR[\ PHWKDQH		
ELV &KORURHWK\O HWKHU		
ELV &KORURLVRSURS\O HWKHU		
&KORURQDSKWKDOHQH		
&KORURSKHQRO		
&KU\VHQH		
'LEHQ] D K DQWKUDFHQH		

Table 4-3
Analytes and Reporting Limits for Investigation Derived Waste
Former GE Facility, 50 Fordham Rd, Wilmington, MA

Analyte	Spectrum Laboratory Reporting Limit Aqueous (ug/L)	Soil (mg/kg)
'LEHQ]RIXUDQ		
'LFKORUREHQ]HQH		
'LFKORUREHQ]HQH		
'LFKORUREHQ]HQH		
'LFKORUREHQ]LGLQH µ		
'LFKORURSKHQRO		
'LHWK\O SKWKDODWH		
'LPHWK\O SKWKDODWH		
'LPHWK\OSKHQRO		
'LQLWURSKHQRO		
'LQLWURWROXHQH		
'LQLWURWROXHQH		
'LR[DQH 1$		1$
ELV (WK\OKH[\O SKWKDODWH		
)OXRUDQWKHQH		
)OXRUHQH		
+H[DFKORUREHQ]HQH		
+H[DFKORUEXWDGLHQH		
+H[DFKORURHWKDQH		
,QGHQR FG S\UHQH		
,VRSKRURQH		
0HWK\OQDSKWKDOHQH		
0HWK\OSKHQRO		
0HWK\OSKHQRO	5HSRUWHG	5HSRUWHG
	0HWK\OSKHC	0HWK\OSKHQ
0HWK\OSKHQRO	5HSRUWHG	5HSRUWHG
	0HWK\OSKHC	0HWK\OSKHQ
1DSKWKDOHQH		
1LWUREHQ]HQH		
1LWURSKHQRO		
1LWURSKHQRO		
2FW\O SKWKDODWH GL Q		
3HQWDFKORURSKHQRO		
3KHQDQWKUHQH		
3KHQRO		
3\UHQH		
7ULFKORUREHQ]HQH		
7ULFKORURSKHQRO		
7ULFKORURSKHQRO	¦$ Ã	

Table 4-3
Analytes and Reporting Limits for Investigation Derived Waste
Former GE Facility, 50 Fordham Rd, Wilmington, MA

	Aqueous (ug/L)	Soil (mg/kg)
VOCs		
7 3 +		
& R U U R V L Y L W \	1 $	1 $
, J Q L W D E L O L W \	1 $	1 $
5 H D F W L Y H & \ D Q L G H		
5 H D F W L Y H 6 X O I L G H		
TCLP VOCs		
TCLP Metals	P J O	P J O
$ U V H Q L F		
% D U L X P		
& D G P L X P		
& K U R P L X P		
/ H D G		
6 H O H Q L X P		
6 L O Y H U		
0 H U F X U \		
PCBs		
$ U R F O R U		
$ U R F O R U		
$ U R F O R U		
$ U R F O R U		
$ U R F O R U		
$ U R F O R U		
$ U R F O R U		
$ U R F O R U		
$ U R F O R U		

$ F H Q D S K W K H Q H

Table 4-3
Analytes and Reporting Limits for Investigation Derived Waste
Former GE Facility, 50 Fordham Rd, Wilmington, MA

	ESS Laboratories Reporting Limit	
Analytug/L)	Aqueous (ug/L)	Soil (mg/kg)

Table 4-4
Analytes and Reporting Limits for Indoor and Ambient Air
Former GE Facility, 50 Fordham Road, Wilmington, MA

	(ug/m3)	(ppbv)	(ug/m3)	(ppbv)
VOCs by MassDEP TO-15 SIM 2010				
$FHWRQH				
%HQ]HQH		1(		
%URPRGLFKORURPHWKDQH		1(		
%URPRIRUP		1(		
%URPRPHWKDQH		1(		
&KORUREHQ]HQH		1(		
&KORURIRUP		1(		
&DUERQ WHWUDFKORULGH		1(		
'LFKORURHWKDQH		1(		
'LFKORURHWK\OHQH		1(		
'LEURPRHWKDQH		1(	0.154	
'LFKORURHWKDQH		1(		
'LFKORURSURSDQH		1(		
'LEURPRFKORURPHWKDQH		1(	0.17	
WUDQV 'LFKORURHWK\OHQH		1(		
FLV 'LFKORURHWK\OHQH		1(		
FLV 'LFKORURSURSHQH		1(		
P 'LFKORUREHQ]HQH		1(		
R 'LFKORUREHQ]HQH		1(		
S 'LFKORUREHQ]HQH		1(		
WUDQV 'LFKORURSURSHQH		1(		
'LR[DQH		1(		
(WK\OEHQ]HQH		1(		
+H[DFKORUREXWDGLHQH		1(		
0HWK\OHQH FKORULGH		1(		
0HWK\O HWK\O NHWRQH		1(		
0HWK\O ,VREXW\O .HWRQH		1(		

Table 4-5
Analytical Methods

Table 4-5
Analytical Methods Performed
Former GE Facility, 50 Fordham Rd, Wilmington, MA

Parameter	Methodology (ESS Laboratories)
9 2 & V H [F O X G L Q J G L R [D Q H	6 : % & $ 0
' L R [D Q H	6 : ' 6 , 0 & $ 0 $ T X H R X V R (

Table 4-6
Sample Containers, Preservations, and Holding Times
Spectrum Laboratories
Former GE Facility, 50 Fordham Rd, Wilmington, MA

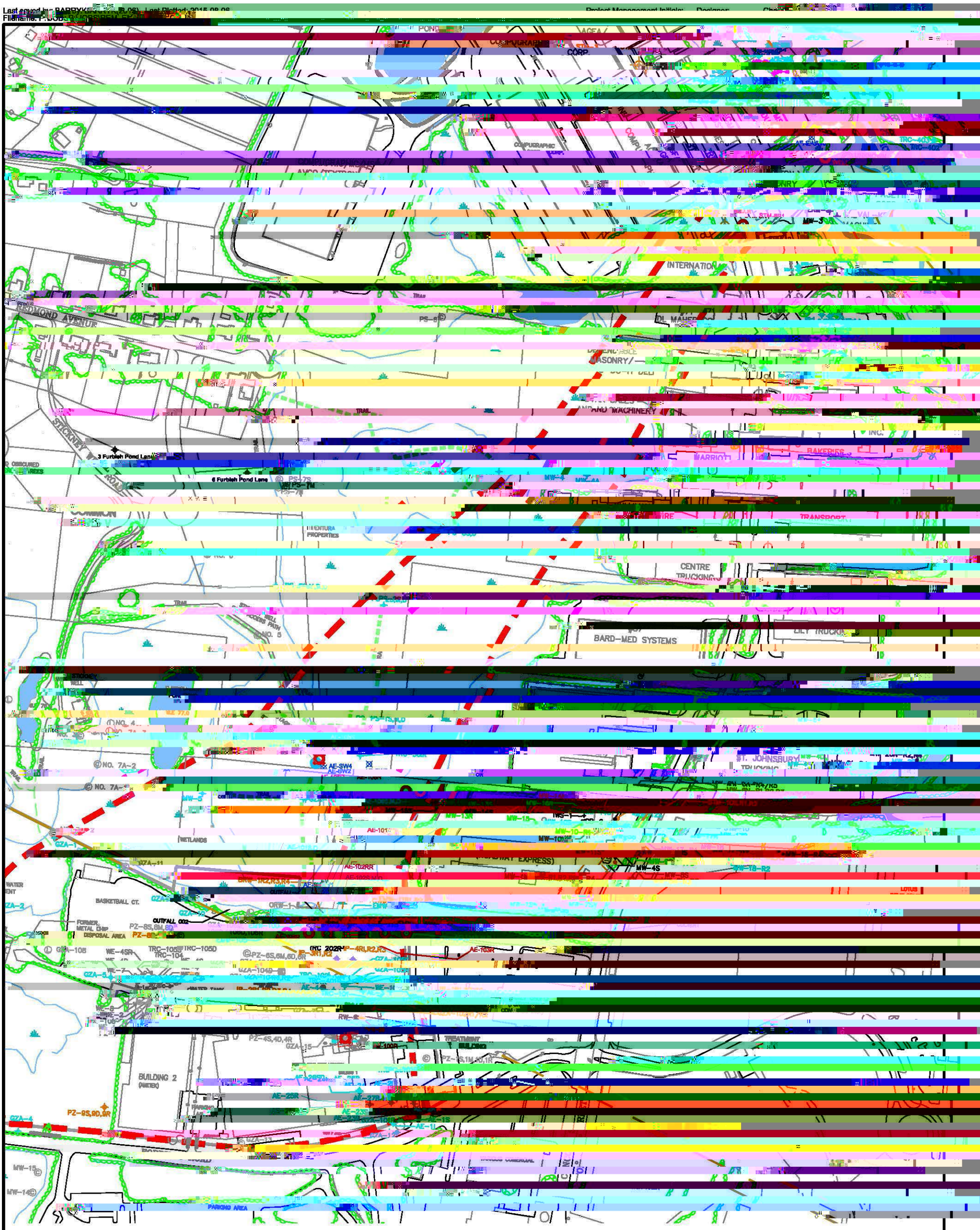
3DUDPHWHU	&RQWDLQHU	3UHVHUYDWLRQ	+ROGLQJ 7LPH
7&/3 PHWDOV	R] DPEHU JODVV ,FH OLQHG FDS	f&	GD\V WR OHDFK PHUFXU\ GD\V \ IRU RWKHU PHWDO IURP OHDFKLQJ WH PHUFXU\ GD\V I OHDFKLQJ WR DQDO PHWDOV
7&/3 92&V	R] JODVV MDU Z &RROqX KHDGVSDFH	&WR.HHS IURP OLJKW	7&/3 H[WUDFWLRQ GD\V RI FROOHF ZLWKLQ GD\V IU H[WUDFWLRQ
,JQLWDELOLW\	R] DPEHU JODVV ,FH OLQHG FDS	f&	$6$3
5HDFWLYLW\	R] DPEHU JODVV ,FH OLQHG FDS	f&	GD\V
&RUURVLYLW\ S+	R] DPEHU JODVV ,FH OLQHG FDS	f&	$6$3
)UDFWLRQDO RUJ			

Table 4-6
Sample Containers, Preservations, and Holding Times
ESS Laboratories
Former GE Facility, 50 Fordham Rd, Wilmington, MA

3DUDPHWHU	&RQWDLQHU	3UHVHUYDWLRQ	+ROGLQJ 7LPH
S+	R] MDU ZLWK 7H DQG QR KHDG\	,FH f&	KRXUV
2[LGDWLRQ 5HGXFWLRQ 3RWHQWLDO 25	R] MDU ZLWK 7H DQG QR KHDG\	,FH f&	KRXUV
+H[DYDOHQW &KURPLXP	R] MDU ZLWK 7H DQG QR KHDG\	,FH f&	

Figures

Site Location
Pumping Sta
West Village
Wildwood St
Pumping
Gravel Pits
Golf Course



WORKPLAN
#50 FORDHAM ROAD, WILMINGTON, MA
Lockheed Martin
60312865 2015-08-06

AECOM

Figure 2-2

Last saved by: BRRYK(2015-08-10) Last Plotted: 2015-08-10
Filename: P:\0013REM_ENV\PROJECT FILES\LOCATIONS\WILMINGTON, MA 2015\INDOOR AIR SAMPLE LOCATIONS.DWG
Project Management: Designer: Checked: Approved:
Building 1 - PROPOSED EXPLORATION LOCATIONS
PLOTTED: 11" x 17"

TREATMENT BUILDING

FORMER

BUILDING

BUILDING 1A

AREA

PROPOSED

AE-26R

AE-26S/D

HIGH BAY AREA

AE-25R

AE-25S/D

AE-24

AE-23S

AE-2R

FORMER

AREA

AE-29R

LEGEND

MONITORING WELL LOCATION

GRAPHIC SCALE IN FEET

25 0 50

NOTE

1. PROPOSED AE
ARE APPROXIMATE
BASED ON UTILITY SURVEY RESU

2. EXISTING WELL AE-26R T
DEEPER (APPROX. 15

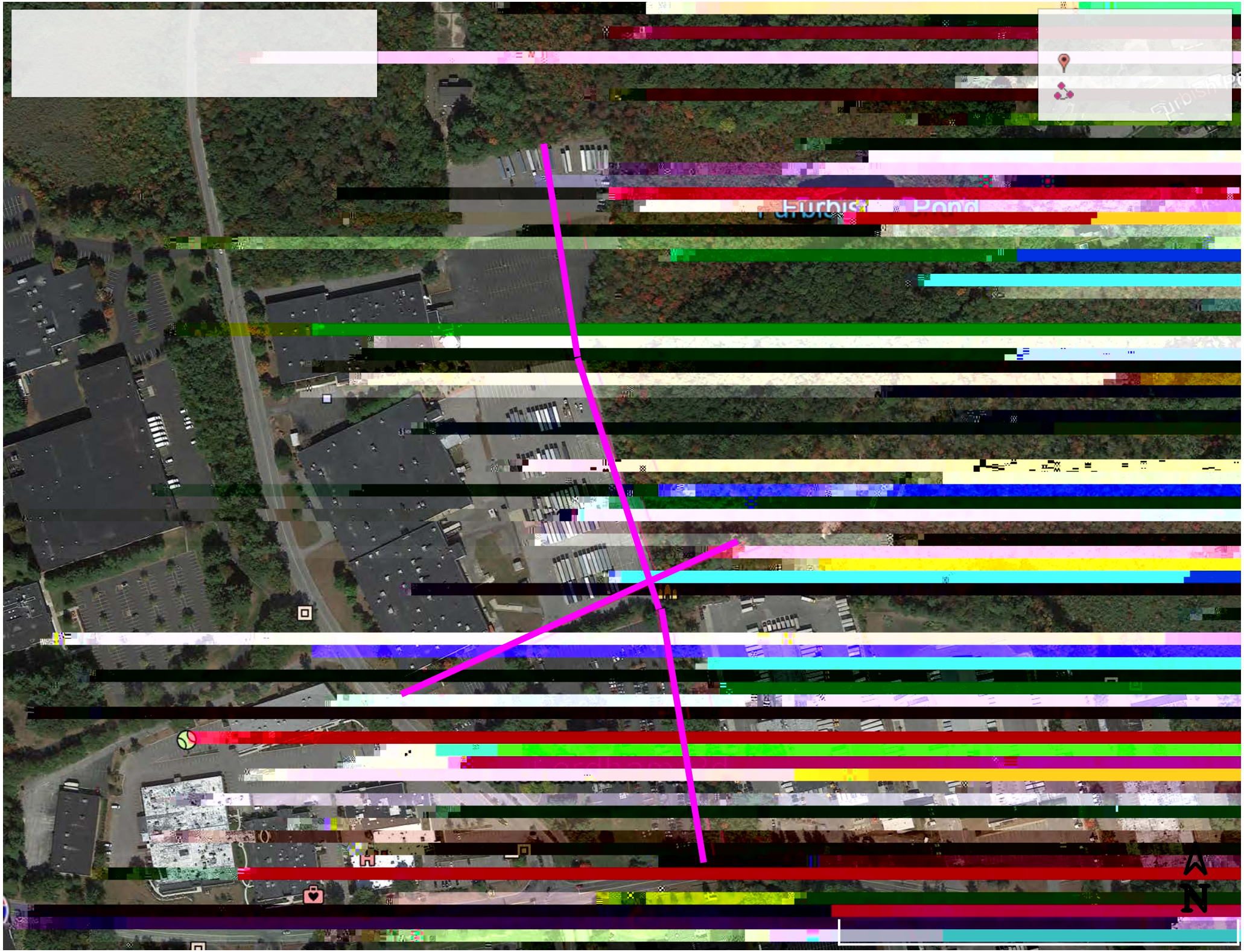
DRILLED APPR
COMPLETED AS A PRE-PACKED

4. BEDROCK
AND AE

PR

FORMER TANK F
LOCATION

For
Loc
60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Lockheed Martin Minimum Requirements for Intrusive Fieldwork Work Plans

PURPOSE

7KH SXUSRVH RI WKLV UHTXLUHPHQWV GRFXPHQW LV WR VXEVXUIDFH VWUXFWXUHV DQG XWLOLWLHV [SHFWHG FKHPLFDO UHOHDVHV GXULQJ JURXQG GLUHFW SXVK WHFKQRORJLHV H[FDYDWLRQ WUHQFKLQJ FKHP

SCOPE

7KLV GRFXPHQW LV LQWHQGHG WR SURYLGH PLQLPXP UHTXLUHPHQWV IRU VXEVXUIDFH FRQ SULRU WR DQG GXULQJ JURXQG GLVWXUEDQFH DFWLYLWLHV DW FRPSOHWLQJ WKH VXEVXUIDFH FOHDUDQFH DFWLYLWLHV LGHQW SURFHHG ZLWK FDXWLRQ

7KLV GRFXPHQW SURYLGHV PLQLPXP UHTXLUHPHQWV LQ VLWX FKHPLFDO L VLJQLILFDQW ILHOG FKDQJHV LQ ILHOG ZRUN SODQV DQG ZRUN

7KH /RFNKHHG 0DUWLQ 3URMHFW /HDG 3/ WKH PDQDJLQJ FRQ UHVSRQVLEOH IRU IXOILOOLQJ WKH REOLJDWLRQV RXWOLQHG LQ WKH SHUPLW FRQWUDFWRU V DSSOLFDEOH UHJXODWRU\ UHTXLUHPHQWV RXWOLQHG EHORZ VKDOO

WORK REQUIREMENTS

General

7KH SHUIRUPLQJ FRQWUDFWRU¶V SURMHFW PDQDJHU DQG WKH UHVSRQVLEOH IRU IXOILOOLQJ DOO UHTXLUHPHQWV RXWOLQHG LQ WKH 3URFHGXUH (QJLQHHULQJ 3URFHGXUHV DQG TXHVWLRQV ZLWKLQ WKH LGHQWLILFDWLRQ RI SRWHQWLDO IDLOXUH PRGHV DQG KD]DUGV DGGUHVVHG LQ WKH ZRUN SODQ ,Q DGGLWLRQ WR WKH SURYLV PXVW EH LGHQWLILHG LQ WKH ZRUN SODQ &6 DQG 5KLQH DFFHOHUDWRU &RQWUDFWRU 3HUPLW DUH LQFOXGHG LQ $SSHQGL[$ RI WKLV GRFXPH

7KH SHUPLWWHH DQG WKH VXEFRQWUDFWRU SHUIRUPLQJ WKH (QYLU GLVWXUEDQFH 3DFNDJH LV UHVSRQVLEOH IRU SURYLGLQJ WKHVH LWHPV WR WKH (QYLU SURIHVVLRQDO WKH UHVSRQVLEOH IRU WKH (QYLU

%HFDXVH XQGRFXPHQWHG RU LQDFWLYH XWLOLWLHV FDQ UHVX
XWLOLWLHV XWLOLW\ ORFDWLRQ GNSHQWUDFWRU GUDUDW
REMHFWV WKDW PD\ QRW EH LGHQWLILHG FRUUHFWO\ DQG RWKHU UH

7KH XWLOLW\ ORFDWLRQ SURYLGHV \RX ILUP

5 H Y L V L

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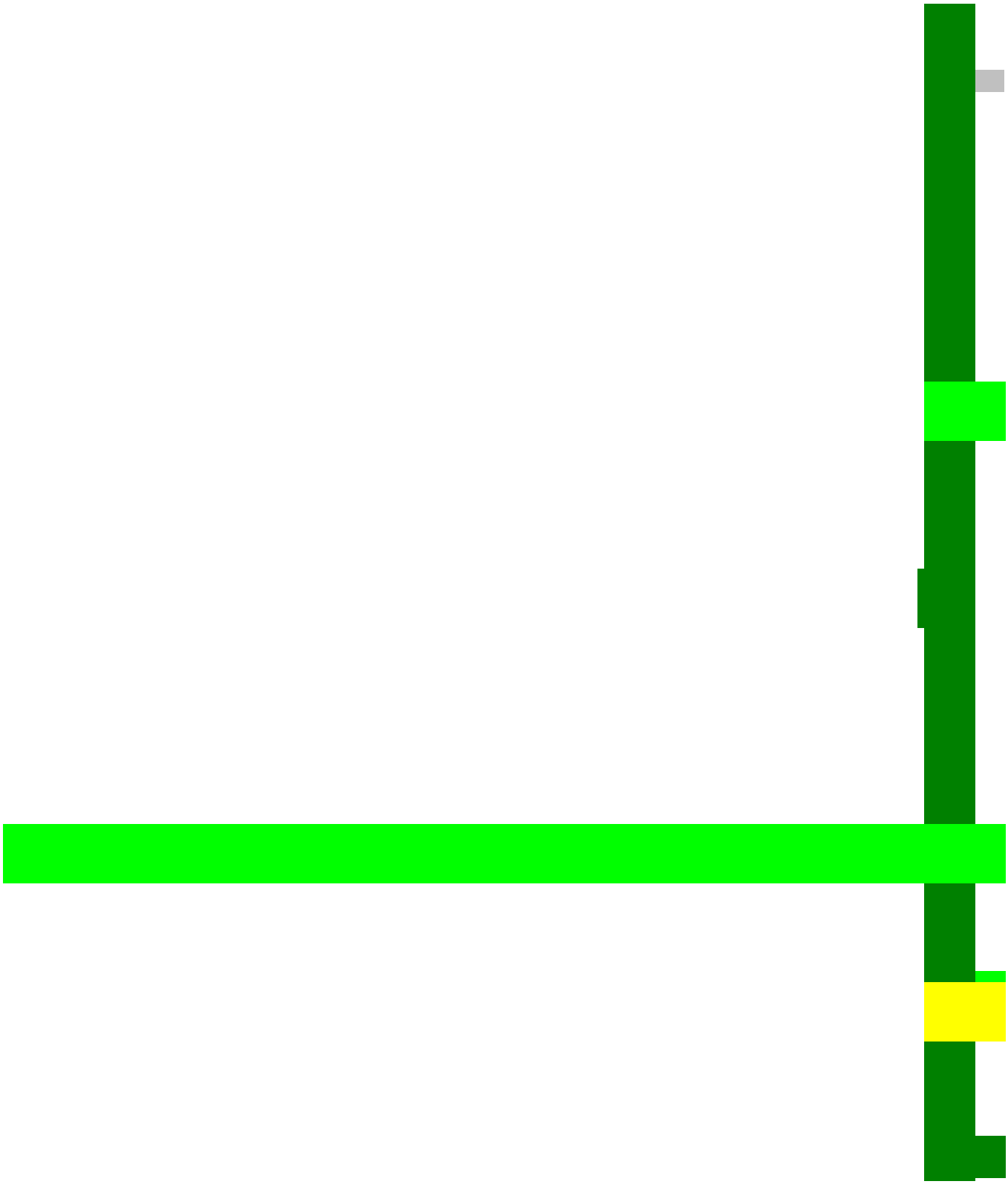


/RFNKHHG 0DUWLQ ,QYDVLYH)LHOG

3URMHFW BBBBBBBBBBBBBBBBBBBBBBBBB
)LHOGZRUN 'HVFULSWLRQ
BBBBBBBBBBBBBBBBBBBB

Appendix B

Project Operation Plans (POPs)

- POP 017 Straddle Packer Groundwater Sampling

  (all pre-existing POPs 001 through 016 are presented in Appendix B of the November 1, 2013 Supplemental Phase II SOW)

/RFNKHHG 0DUWLQ :LOPLQJWRQ 3URMHFW 2SHUDWLQJ 3URFHGXUH 323

6WDQGDUG 323 6WDQGDUG*UDSKLFDO 6WDWHPHQW 6DPSOH

1.0 3URMHFW 6FRSH DQG $SSOLFDELOLW\

3323 GHVFULEHV WKH SURFHGXUHV DQG UHTXLUHPHQWV IRU 3URMHFW 2SHUDWLQJ 3URFHGXUH 323 GHVFULEHV WKH SURFY”

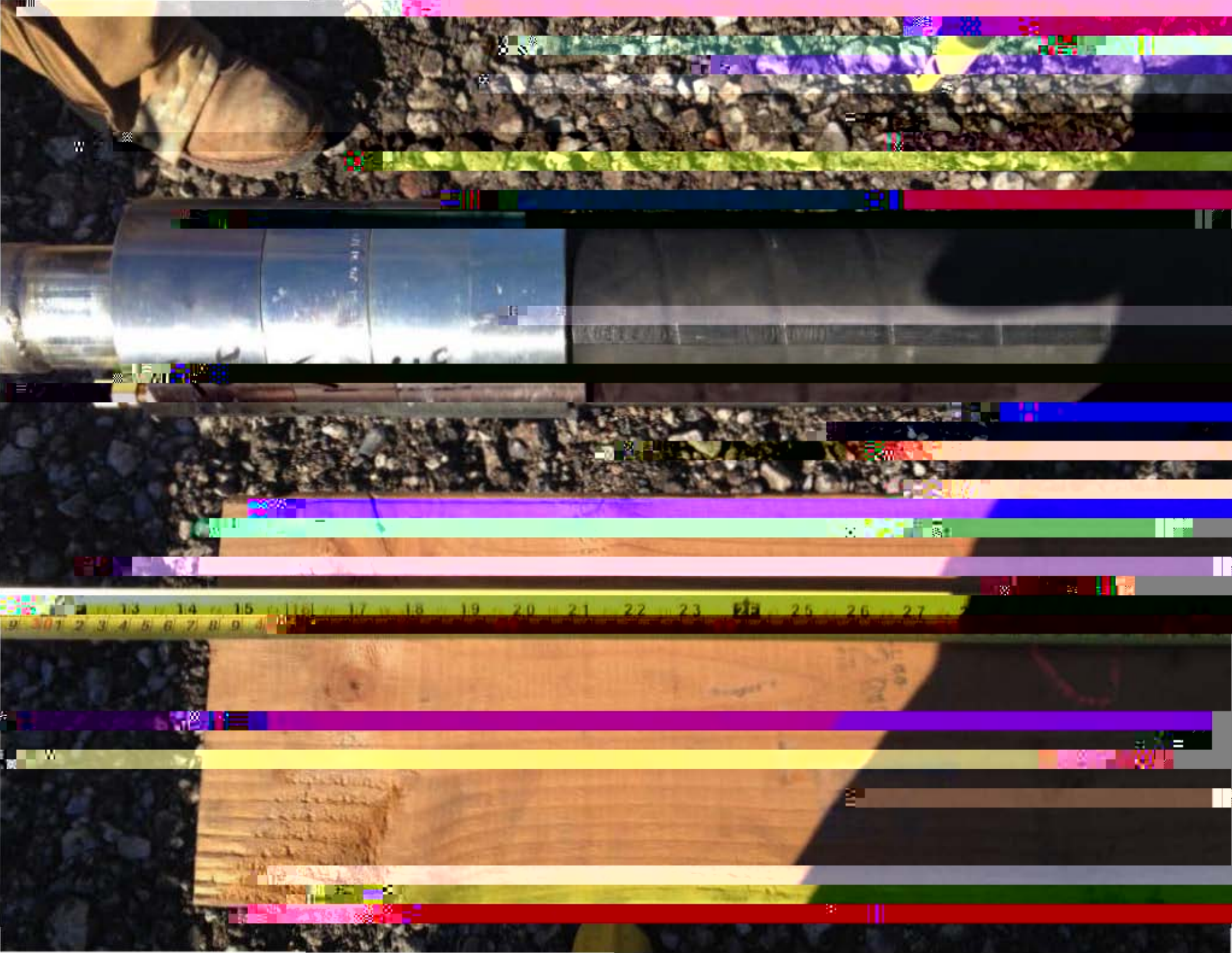
5.3 (TXLSPHQW 'HFRQWDPLQDWLRQ

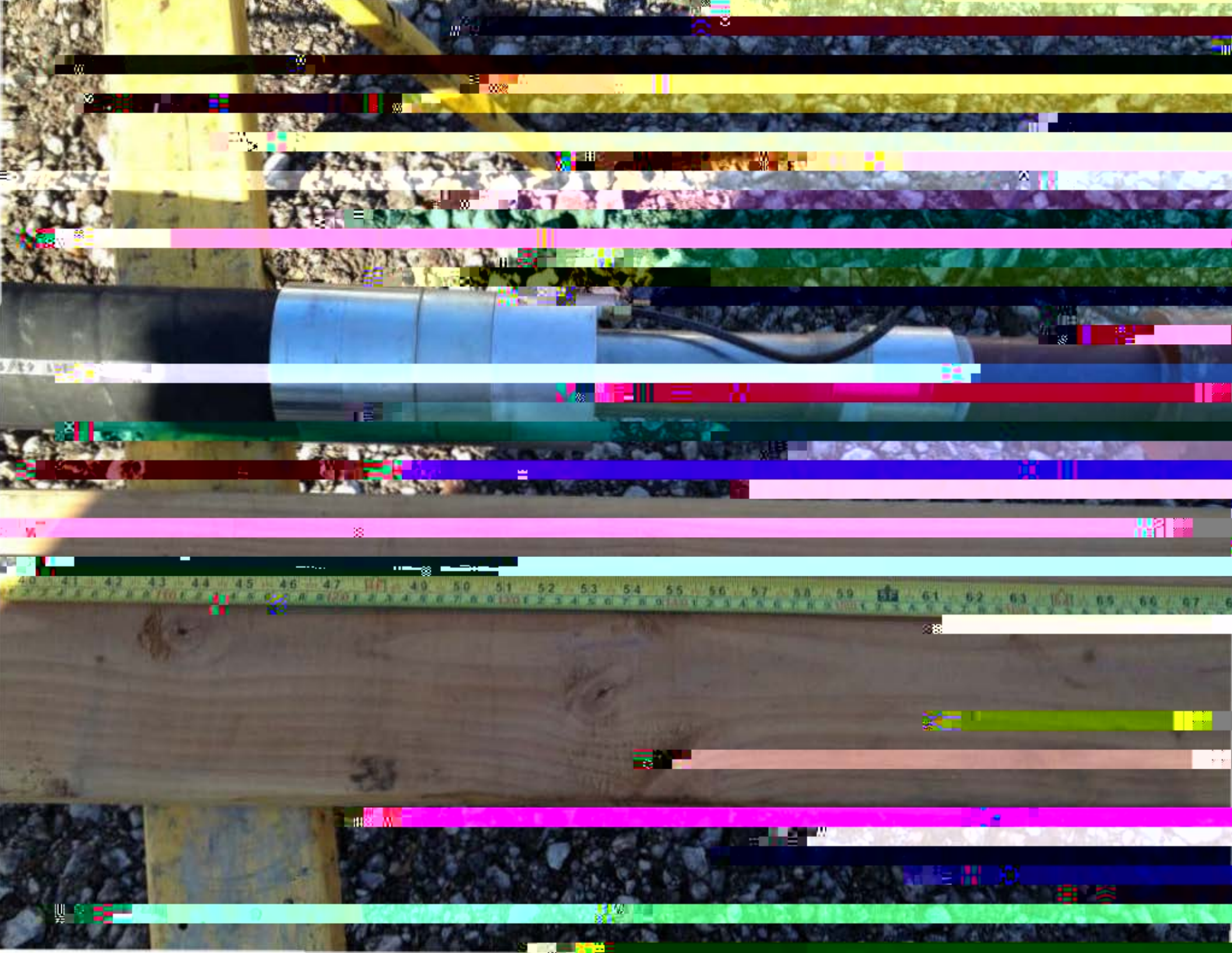
$OO HTXLSPHQW WKDW FRPHV LQWR FRQWDFW ZLWK JURXQGZDWHU H
SXPS URGV HWF ZLOO EH GHFRQWDPLQDWHG LQ DFFRUGDQFH ZLWK
(TXLSPHQW IROORZLQJ} HH EH@ ™` RI) WLH uOO @‰ìÍ06.0 P ð 9@ ó@ ô P G

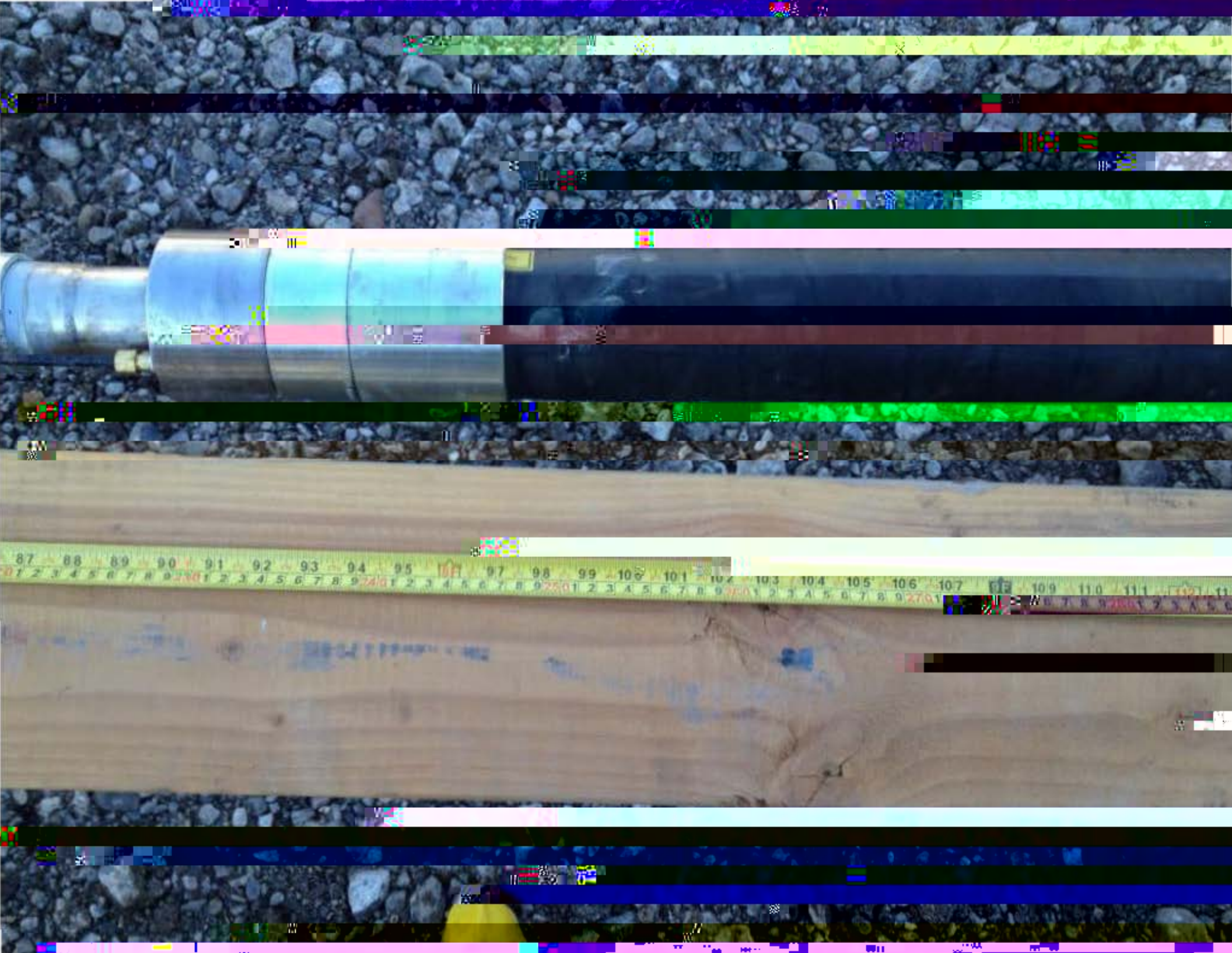
([DPSOH)LJXUH DQG 6WUDGGOH 3DFNHU 6DPSOLQJ)RUP

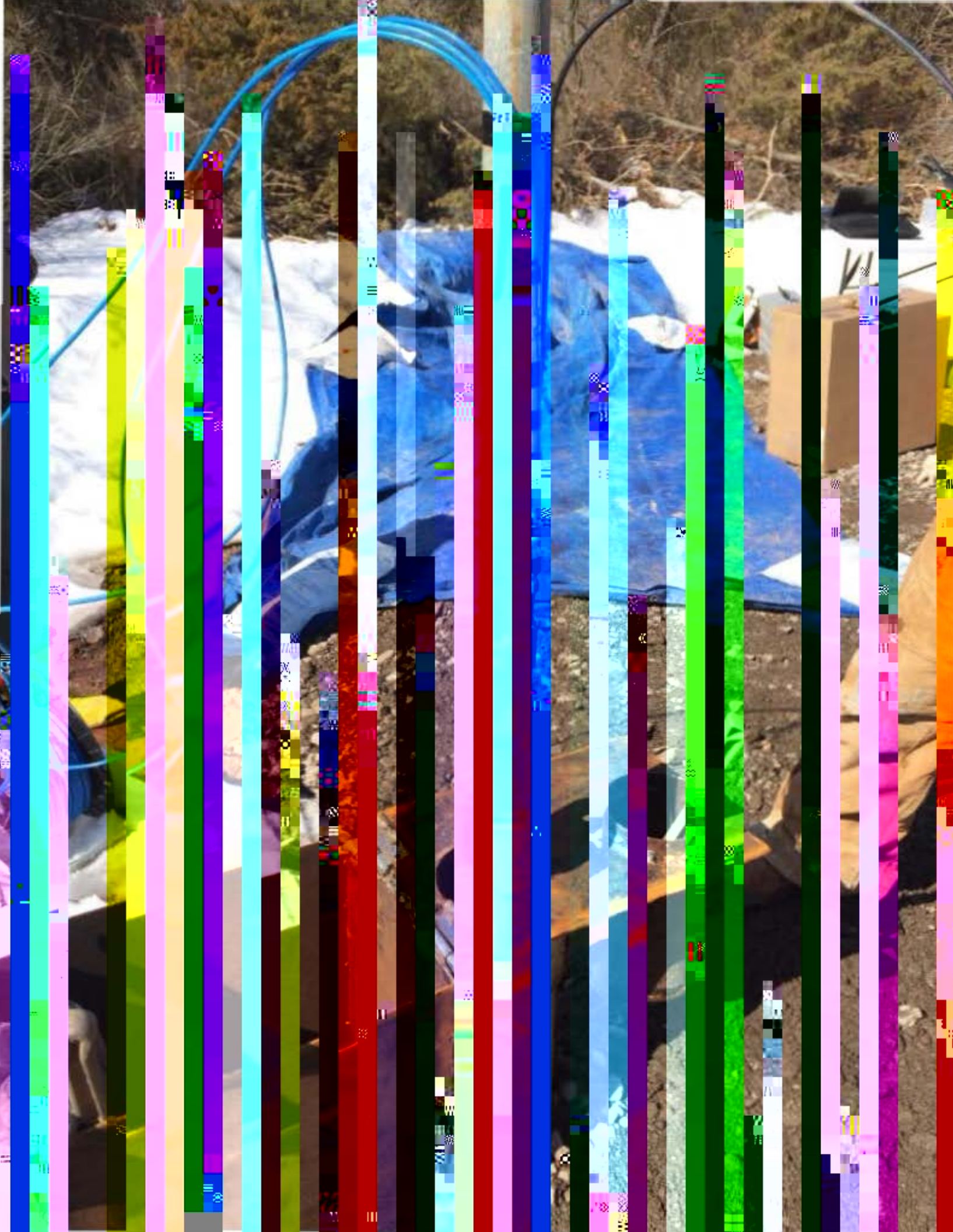
PACKER TESTING
ADMINISTRATIVE DATA
FOR EACH WELL

3KRWRJUDSKV RI ([DPSOH 3DFNHU $VVHPEOLHV









Appendix C

FLUTe Liner Installation and Groundwater Sampling SOPs

Flexible Liner Underground Tec

Blank liner installation and removal procedure
(note the starred items may not apply to the simple installation)

The blank liner installation is quite simple when performed in the following sequence:
1. Form the split hose over the top of the casing to protect the liner. Trim the hose to the proper length to cover the entire top edge of the casing. Tape the lower edge of the hose to the casing to hold it in place.
2. Set up the shipping reel on the reel stands with the large axle flange on the side marked “vent” inside the edge of the reel flange*. Make sure the arrow on the protective liner cover points over the top of the reel toward the wellhead. The reel should be about 10 ft from the wellhead.
4. Remove the protective wrapper on the liner. Don’t use a sharp knife. Unwrap it.
5. Tag the water level.
6. Assure that the depth of the hole is known and that the hole has not caved, bridged, or otherwise become blocked.

2. Set up the winch plate about 50 ft away from the wellhead. Lay out a protective sheet of heavy plastic film between the wellhead and the winch to prevent abrasion or thorn/stubble damage to the liner as it is pulled out of the hole.
3. Anchor the winch plate using the cable and the aluminum plate provided. A vehicle can be parked with a tire on the aluminum plate to serve as a good anchor. Make sure that the tire will not be rotated with a 1000 lb force on the cable. A side pull on the tire is more secure for a front wheel.
4. Route the tether as shown and wrap the tether about 4 wraps, clockwise on the capstan of the winch. Then insert the handle and apply tension to the tether. The tail of the tether, where it comes off the winch, must have some tension on it to prevent slipping on the capstan of the winch. It is usually easier if someone pulls "T" the tether while someone else cranks the winch. The winch has two directions of travel. The easier direction to turn is geared about 1.6 above the direct gearing of the harder direction. Don't crank too hard on the winch (i.e., the limit of your ability). Just develop a good tension in the tether, which stretches the liner. Then wait as the liner contracts and pulls itself out of the hole. Retighten the tether as needed to remove the liner. As the liner rises in the hole, it will proceed more rapidly as more flow paths are uncovered.
5. In order to pull a blank liner from a hol

Fle

Installation procedure for Water FLUTes

Purpose
This is intended as a brief general descripti

An air vent tube is first located in the borehole to allow the air above the water table to escape as the liner is installed. A second tube called a pump tube is lowered to the bottom of the hole to allow the water to escape beneath the liner as the liner is everted into the hole (eversion is the opposite procedure to inversion). The top end of the liner is fastened to the surface casing with a large hose clamp. Then the liner is pushed into the casing by hand for a depth of ~3 ft to form an annular pocket. Water is added to the annular pocket which pressurizes the liner and drives it down the hole, pulling itself off the shipping reel. The liner passes through itself and is said to be everting down the borehole. The water level inside the liner is well above the water level in the formation so that the liner interior pressure is higher than the formation pressure, causing a seal of the borehole. As the liner descends, it pushes the borehole water into the formation. If the formation is of low transmissivity, the water must be pumped from beneath the liner via the pump tube. When the liner reaches the bottom of the hole, the tether supporting the pump tubing is tied to a strong bar at the wellhead to prevent any further descent of the tubing bundle.

Figure 1 shows the liner fully everted and sealing the borehole. The individual pumping systems are tested to assure that they are functional before the pump tube is removed. In order to remove the pump tube, a pump is lowered inside the liner and the water is removed from the liner until the liner begins to collapse. (Sometimes a large tube built into the tubing bundle, called a tag tube, is used as an air lift pump to remove the water from the interior of the liner.) The pump tube is then pulled out of the hole and the liner is refilled to a level about 10 ft above the water table in the formation so as to pressurize the liner and seal the borehole. The sealing liner isolates each sampling interval in the hole to allow a discrete water sample to be drawn from that interval defined by the length of the annular spacer on the exterior of the liner.

The quick connect fittings are added to the top of the pump tubing for connection of the gas source. A nitrogen bottle is used to expel the water from the pumping system as shown in Figure 3.

Special circumstances

If the water table is very near the surface, a temporary extension of the casing is added to develop a higher driving pressure for the installation of the liner. When the liner is fully

Microseeps, Inc.

220 William Pitt Way

Pittsburgh, PA

(412) 826-5245

VOC analyses of crushed bedrock, if performed, will be performed by:

Stone Environmental

535 Stone Cutters Way

Montpelier, VT 05602

(802) 229-4541

Rock core diffusion and physical parameter analyses, if performed, will be performed by:

Golder Associates Ltd.

6925 Century Ave. Suite 3100

Mississauga, Ontario Canada L5N 7K2

(905) 567-4444

Samples will be analyzed for the constituents listed in Tables 4-2 through 4-4. The laboratory analytical

A summary of sample container, preservation, and holding time requirements is presented in Table 4-6.

4.6 FIELD QUALITY CONTROL

QC samples for laboratory analyses will include field duplicates, MS/MSDs, equipment blanks, trip blanks, and temperature blanks. These samples will be collected as described below:

Field Duplicates

Field duplicates will be collected at a frequency of one field duplicate per 20 field samples, per matrix per sampling technique, with certain exceptions. Field duplicates for solid samples will be collected by alternately filling two sets of identical sample containers from the interim container used to homogeniz

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Table 4-5
Analytical Methods Performed
Former GE Facility, 50 Fordham Rd, Wilmington, MA

Parameter	Methodology (ESS Laboratories)
9 2 & V H [F O X G L Q J G L R [D Q H	6 : % & $ 0
' L R [D Q H	6 : ' 6 , 0 & $ 0 $ T X H R X V R (

/RFNKHHG 0DUWLQ ,QYDVLYH)LHOG

3URMHFW BBBBBBBBBBBBBBBBBBBBBBBBB
)LHOGZRUN 'HVFULSWLRQ
BBBBBBBBBBBBBBBBBBBB