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Solvents Recovery Service of New England, Inc. Superfund Site

Southington, CT

Annual State of Compliance Report #5

October 31, 2012 through October 30, 2013

December 2013

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Acronyms and abbreviations used in this Annual Report and associated attachments:

1,1-DCE	1,1-dichloroethene
1,1,1-TCA	1,1,1-trichloroethane
1,2-DCA	1,2-dichloroethane
2,3,7,8-TCDD	2,3,7,8-tetrachlorodibenzo-p-dioxin
ALEP	Action Level Exceedance Plan
AOC	Administrative Order on Consent
AQC	Air Quality Control System
ARARs	Applicable or Relevant and Appropriate Requirements
ATSDR	Agency for Toxic Substance and Disease Registry
B&M	Boston & Maine
BACT	Best Available Control Technology
BBL	Blasland, Bouck & Lee, Inc.
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes
BTU	British Thermal Unit
°C	degrees Celsius
CA	chloroethane
CBYD	Call Before You Dig
cc	cubic centimeter
cDCE	cis-1,2-dichloroethene
CD	Consent Decree
CEMS	Continuous Emissions Monitoring System
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CH_4	methane
CL&P	Connecticut Light & Power
CO_2	carbon dioxide
COCs	Constituents of Concern
CT	carbon tetrachloride
CTDEP	Connecticut Department of Environmental Protection
CTDPH	Connecticut Department of Public Health
CVOCs	Chlorinated Volatile Organic Compounds
CWA	Clean Water Act
DCE	dichloroethene
DCM	dichloromethane
DCP	Demonstration of Compliance Plan
ddms	*de maximis* Data Management Solutions
DHC	Dehalococcoides
DNAPL	dense non-aqueous phase liquid
DO	dissolved oxygen

DQA	Data Quality Assessment
DQOs	Data Quality Objectives
DRE	Destruction/Removal Efficiency
DRO	Diesel Range Organics
EISB	Enhanced In-Situ Bioremediation
ELUR	Environmental Land Use Restriction
°F	degrees Fahrenheit
$Fe(OH)_3$	ferrous hydroxide
f_{oc}	fraction of solid organic carbon in soil
FS	Feasibility Study
FSP	Field Sampling Plan
PMC	Pollutant Mobility Criteria applicable to designated Class “GA” groundwater areas
GAC	granular activated carbon
GCTEOS	Groundwater Containment and Treatment Evaluation and Optimization Study
gpm	gallons per minute
GRO	Gasoline Range Organics
GWPC	Groundwater Protection Criteria
GWTF	Groundwater Treatment Facility
H	Henry’s Law Constant
H_2	hydrogen
H_2O	water
H_2S	hydrogen sulfide
HAP	hazardous air pollutant
HCl	hydrochloric acid
HCTS	Hydraulic Containment and Treatment System
HDPE	High-Density Polyethylene
HLVs	Hazard Limiting Values
HZ	Heated Zone
ID	inner diameter
IFT	interfacial tension
IMS	Interim Monitoring and Sampling
IQAT	Independent Quality Assurance Team
IRIS	Integrated Risk Information System
ISTD	In-Situ Thermal Desorption
ISTR	In-Situ Thermal Remediation
J&E	Johnson & Ettinger
K_d	soil-water partition coefficient
kg	kilogram
K_{oc}	chemical-specific organic carbon partition coefficient
LAER	Lowest Achievable Emission Rate
lbs	pounds
LNAPL	light non-aqueous phase liquid

MAROS	Monitoring and Remediation Optimization System
MASC	Maximum Allowable Stack Concentration
MCLs	Maximum Contaminant Levels
MCLG	Maximum Contaminant Level Goal
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MIBK	4-methyl-2-pentanone (methyl isobutyl ketone)
mL	milliliter
MNA	Monitored Natural Attenuation
MOA	Memorandum of Agreement
N_2	nitrogen
NA	Natural Attenuation
NAPL	non-aqueous phase liquid
ng/L	nanograms per liter
NH_4^+	ammonia
NOAA	National Oceanic and Atmospheric Administration
NO_2^-	nitrite
NO_3^-	nitrate
NSR	New Source Review
NTCRA	Non-Time-Critical Removal Action
O_2	oxygen
O&M	Operations and Maintenance
OD	outer diameter
OH^-	hydroxyl radical
OIS	On-Site Interceptor System
OMM	Operation, Maintenance and Monitoring
ONOGU	Observed NAPL in the Overburden Groundwater Unit
ORP	oxidation-reduction potential
OSHA	Occupational Safety and Health Administration
OSWER	Office of Solid Waste and Emergency Response
PAHs	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
PCDDs	polychlorinated dibenzo-p-dioxins
PCDFs	polychlorinated dibenzofurans
PCE	tetrachloroethylene
PCR	Polymerase Chain Reaction
PEL	Permissible Exposure Limit
PFD	process flow diagram
PID	photoionization detector
PIPP	Pre-ISTR Preparation Plan
PLC	Programmable Logic Controller
POP	Project Operations Plan
ppb	parts per billion
PPE	personal protective equipment

ppm	parts per million
PSD	Prevention of Significant Deterioration
psig	pounds per square inch, gauge
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
R^2	correlation coefficient
RAOs	Response Action Objectives
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RDWP	Remedial Design Work Plan
RD/RA	Remedial Design/Remedial Action
Redox	Reduction-Oxidation
RDEC	Residential Direct Exposure Criteria
RH	Relative Humidity
RI	Remedial Investigation
ROD	Record of Decision
RSRs	Remediation Standard Regulations
SAP	Sampling and Analysis Plan
SCAP	Supplemental Containment Action Plan
SCM	Site Conceptual Model
SO_4^{2-}	sulfate
SOP	Standard Operating Procedure
SOW	Statement of Work
SPLP	Synthetic Precipitation Leaching Procedure
SRSNE	Solvents Recovery Service of New England, Inc.
SSO	Site Safety Officer
SVOCs	semi-volatile organic compounds
SWD	Southington Water Department
SWPC	Surface Water Protection Criteria
TAL	Target Analyte List
TCE	trichloroethylene
TCH	thermal conduction heating
TCLP	Toxicity Characteristic Leaching Procedure
TEFs	Toxic Equivalency Factors
TEQ	Toxic Equivalence Quotient
TEX	Toluene, Ethylbenzene and Xylenes
TSCA	Toxic Substances Control Act
TTZ	thermal treatment zone
ug/L	micrograms per liter
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UV	ultraviolet
VC	vinyl chloride

VI	Vapor Intrusion
VOC	volatile organic compound
WHO	World Health Organization

A. Introduction

On October 30, 2008, the United States Environmental Protection Agency (USEPA) lodged a Consent Decree (CD) with the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE). The CD was entered by the Court on March 26, 2009. The CD addresses Remedial Design/Remedial Action (RD/RA) activities for the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site in Southington, Connecticut (Site). Appendix B to the CD is a Statement of Work (SOW) that defines the required RD/RA activities and deliverables.

Section VIII.B of the SOW requires the Settling Defendants to submit an Annual State of Compliance Report one year after lodging of the CD and annually thereafter, to USEPA for approval or modification, after reasonable opportunity for review and comment by Connecticut Department of Energy and Environmental Protection (CTDEEP). Section 62.e of the CD requires a demonstration of the amounts of the Rolling Oversight Cost Cap and the Available Balance. This ***Annual State of Compliance Report #5*** (report) has been prepared on behalf of the SRSNE Site Group, an unincorporated association of Settling Defendants to the CD, to address these CD and SOW requirements. This report documents Site activities during the period of October 31, 2012 through October 30, 2013 (the "reporting period").

As specified in SOW Section VIII.B, this report includes a comprehensive evaluation of all monitoring required by this SOW, including, but not limited to:

- compliance with the Performance Standards of the Hydraulic Containment and Treatment System and Severed Plume;
- Institutional Controls;
- construction, operation and maintenance;
- habitat restoration;
- hydraulic containment;
- the Memorandum of Agreement with Southington Water Department / Town of Southington; and
- groundwater monitoring program, including monitored natural attenuation.

Also required in the report is an assessment of the progress being made towards achieving the Performance Standards, as well as recommendations for changes to any

monitoring program to address deficiencies identified during the evaluation. Proposals for reductions in monitoring, along with justifications, are provided as appropriate.

B. Background

The SRSNE Site is located on approximately 14 acres of land along Lazy Lane in Southington, Hartford County, Connecticut, approximately 15 miles southwest of the city of Hartford (Figure 1). The physical setting of the Site – including the regional geology, overburden geology, bedrock geology, hydrogeology, groundwater use and classification, drainage, and surface water use and classification – is summarized below. This information is also described in detail in prior report submittals, including the *Remedial Investigation Report* (Blasland, Bouck & Lee, Inc. [BBL] 1998) and the *Feasibility Study Report* (BBL and USEPA 2005), and the draft Remedial Design Work Plan (RDWP) (ARCADIS, April 2009).

The SRSNE Site includes portions of several properties/areas that are referred to within the RDWP consistent with terminology established in prior Site-related documents. These properties/areas include the former SRSNE Operations Area, the former Boston & Maine railroad right-of-way, the former Cianci Property, and the Town of Southington Well Field Property (Town Well Field Property). These areas are shown on Figure 2, and further described below:

- **Former SRSNE Operations Area:** The former SRSNE Operations Area comprises approximately 2.5 paved acres on a 3.7-acre lot South of Lazy Lane in the Quinnipiac River basin approximately 600 feet west of the Quinnipiac River channel. This is the area where SRSNE historically performed solvent recovery and related operations. The Operations Area is bordered on the east (downhill) by an abandoned railroad right-of-way and the former Cianci Property; to the north by commercial businesses; to the west (uphill) by private property; and to the south by private property, the Connecticut Light & Power (CL&P) electrical transmission line easement, and the Town Well Field Property.

- **Railroad Right-of-Way:** The railroad right-of-way is an approximately 50-foot wide corridor running north-south that separates the former Operations Area (to the west) from the former Cianci Property (to the east). The railroad was historically owned and operated by Boston & Maine, but is presently abandoned and the rails have been removed. CT DEP purchased the right-of-way in this area in support of extending the Farmington Canal Heritage Trail, a rails-to-trails greenway, from New Haven to the Massachusetts border (draft *Preliminary Reuse Assessment* [USEPA 2003]).

- **Former Cianci Property:** The former Cianci Property is a 10-acre parcel located immediately east of the Operations Area and railroad right-of-way. The Quinnipiac

River borders the eastern edge of the former Cianci Property. Lazy Lane is to the north, and the Town Well Field Property borders the property to the south.

- **Town Well Field Property:** The Town Well Field Property consists of approximately 28 acres of undeveloped land south of the former Cianci Property and southeast of the Operations Area. The well field is bounded to the east by the Quinnipiac River and to the south by the Quinnipiac River and Curtiss Street. The railroad right-of-way and the Delahunty Property border the western perimeter of the well field. The CL&P easement runs northwest-southeast through the northern portion of the Town Well Field Property.

  Town Production Wells No. 4 and 6 are approximately 2,000 and 1,400 feet south of the SRSNE Property, respectively. The Quinnipiac River divides the area between Wells No. 4 and 6. Production Well No. 6 is accessible using dirt roads originating from Lazy Lane or Curtiss Street, while Well No. 4 is only accessible from Curtiss Street. Production Well No. 4 was installed in August 1965 and provided drinking water to the Town of Southington from July 1966 to December 1977. Production Well No. 6 was installed in April 1976 and was pumped from May through October 1978, May through July 1979, and March 1980. Both wells have been inactive since that time.

  Within these areas, “the Site” includes areas where Site-related constituents have come to be present in soil (including wetland soil) and groundwater at concentrations exceeding SOW-specified cleanup levels. This includes observed and interpreted non-aqueous phase liquid- (NAPL-) containing areas, impacted soils in the Operations Area, railroad right-of-way, and Cianci Property, and areas of impacted groundwater in both the overburden and bedrock zones. These areas, shown on Figures 3A (overburden) and 3B (bedrock), are generally described as follows:

- **Overburden NAPL Area:** This is the area where NAPL has been observed or inferred to exist in overburden soils based on the findings of prior investigations. The estimated extent of the Overburden NAPL Area includes portions of the Operations Area, the railroad right-of-way, and a portion of the Cianci Property, as shown on Figure 3A. This area has been further delineated in the northwest corner of the former Operations Area as component of the pre-design investigations referenced in the RDWP.

- **Overburden Groundwater Area:** The Overburden Groundwater Area is the portion of the Site where dissolved volatile organic compounds (VOC) concentrations in the overburden aquifer exceed cleanup goals. While the overburden groundwater is typically considered in three zones (each approximately one-third of the saturated thickness), the composite extent of this area (based on *Feasibility Study Report* [BBL and USEPA 2005] data) is depicted on Figure 3A. The overburden groundwater VOC plume extends south to the Town Well Field Property. The extent

of the overburden groundwater area, particularly to the east of the Quinnipiac River, is subject to further assessment and delineation as part of the investigations referenced in the RDWP.

- **Bedrock NAPL Area:** The Bedrock NAPL Area is the area where NAPL has been observed or is inferred to exist based on prior site investigations. This includes a majority of the former SRSNE Operations Area and Cianci Property, as shown on Figure 3B.

- **Bedrock Groundwater Area:** This includes the portion of the Site where dissolved VOC concentrations in the bedrock aquifer exceed groundwater cleanup goals (based on *Feasibility Study Report* [BBL and USEPA 2005] data). The bedrock groundwater VOC plume extends south into the central portion of the Town Well Field Property, represented in figures 10 and 11 in the Draft 2012 MNA report (ARCADIS, November 2012)

- **Severed Plume:** The portion of the affected groundwater zone that is outside the groundwater capture zone of the Non-Time-Critical Removal Action 1 (NTCRA 1) and NTCRA 2 extraction systems (described below), which contains Site-related constituents (primarily VOCs) above detectable levels is referred to as the severed plume. The approximate location and extent of the severed plume is shown on Figure 3A.

Other key Site features referenced include the Hydraulic Containment and Treatment System (HCTS). The HCTS consists of the on-site groundwater treatment system and the two groundwater extraction systems described as follows:

- **NTCRA 1 Groundwater Extraction System:** The NTCRA 1 groundwater extraction system ("NTCRA 1 system") is located within the NTCRA containment area on the Cianci Property east of the Operations Area (Figure 4). It consists of a steel sheet pile wall through the overburden to the top of bedrock, and 12 overburden groundwater extraction wells (RW-1 through RW-12) west (formerly upgradient) of the sheet pile wall. Groundwater is extracted from the wells to maintain hydraulic gradient reversal across the sheet pile wall. This system was installed in 1995 pursuant to Administrative Order on Consent (AOC) I-94-1045, effective October 4, 1994. Pumping from the NTCRA 1 system was initiated in July 1995.

  In December of 2009, de maximis submitted a letter to the Agencies summarizing changes to the NTCRA-1 Demonstration of Compliance Plan (DCP) as a result of the abandonment of monitoring well CPZ-9 (one of the ten NTCRA I compliance monitoring points) and decommission of recovery wells RW-5 and RW-6. Monitoring well abandonment activities at the site have been undertaken in accordance with Attachment N of the RDWP.

- **NTCRA 2 Groundwater Extraction System:** The NTCRA 2 groundwater extraction system (“NTCRA 2 system”) consists of two overburden extraction wells (RW-13 and RW-14) and one bedrock extraction well (RW-1R) just north of the CL&P easement (Figure 4). These wells were installed pursuant to AOC 1-97-1000, effective February 18, 1997, and began operating in 1999, 2007, and 2001, respectively. The NTCRA 2 system includes a groundwater extraction well in the bedrock (RW-1R) and two overburden groundwater extraction wells (RW-13 and RW-14). This extraction well cluster is located in the Town Well Field Property north of the CL&P easement.

In 2013, the average combined NTCRA 1 and NTCRA 2 groundwater extraction systems pumping rate was 36.1 gallons per minute. The capture zones created by the NTCRA 1 and 2 groundwater extraction systems are shown on Figure 3A (overburden) and Figure 3B (bedrock). The operation of the combined NTCRA 1 and NTCRA 2 systems has successfully contained the overburden and bedrock VOC plumes, creating the severed plume within the Town Well Field Property. Approximately 18,978,000 gallons of groundwater were extracted, treated and discharged during this monitoring period.

On-site Groundwater Treatment System: The combined operations of the extraction systems and the treatment facility were previously referred to as the "NTCRA 1 and NTCRA 2 Groundwater Extraction and Treatment System" or "NTCRA 1/2 Groundwater System." Following entry of the CD, continued operation of the NTCRA 1/2 Groundwater System became part of the ROD-specified remedial approach for groundwater, and the system is now referred to as the HCTS (SOW Section V.A).

Groundwater extracted from the NTCRA 1 and 2 systems is treated on site with a process that was originally constructed as part of the NTCRA 1 system (Figure 4). The groundwater extracted by the NTCRA-1 and 2 containment systems is pumped directly to the groundwater treatment facility. The treatment system consists of the following unit processes: metals pretreatment, filtration, ultraviolet oxidation (UV), and granular activated carbon adsorption. Vapor phase carbon adsorption is also used to capture contaminants that volatize during treatment. The system precipitates and extracts metals, reduces suspended solids, and destroys and captures volatile organic contaminants. Treated water is discharged to the Quinnipiac River in accordance with the Revised Connecticut Department of Environmental Protection (CTDEP) Substantive Requirements for Discharge of Pre-Treated Groundwater issued 6 November 1995. Approximately 17,340 pounds of VOCs have been removed from the groundwater since system startup.

C. Site Operational History

The SRSNE facility began operations in Southington in 1955 (ATSDR 1992). From approximately 1955 until the facility's closure in 1991, spent solvents were received from customers and distilled to remove impurities, and the recovered solvents were returned to the customer or sold to others for reuse. Based on a partial record of materials processed at the SRSNE facility (excluding pre-1967 operations files, which were destroyed in a fire), SRSNE handled in excess of 41 million gallons of waste solvents, fuels, paints, etc. Additional details regarding the operational history are provided in the *Remedial Investigation Report* (BBL 1998).

D. Regulatory Status

The SRSNE Site was added to the National Priorities List (NPL) on September 8, 1983. Since that time USEPA and the State of Connecticut have implemented a variety of enforcement, regulatory and response actions, culminating with the issuance of the Proposed Plan and Record of Decision (ROD) in September 2005. After issuing the ROD, the USEPA and SRSNE Site Group negotiated the terms of the CD.

Key regulatory milestones in the recent history of the Site, based on lists included on USEPA's project website (USEPA 2009) and in the fact sheet USEPA developed in support of the 2005 Proposed Plan (USEPA 2005b), are as follows:

Regulatory Milestone	Year
USEPA adds the Site to the NPL; SRSNE signs a consent decree with USEPA to install a groundwater recovery system and store/manage hazardous waste on site.	1983
USEPA and the State of Connecticut take enforcement action to require cleanup of the facility operations and the property.	1983-1988
USEPA initiates the Remedial Investigation for the Site, conducting three phases of investigation that are presented in a four-volume report (HNUS 1994).	1990
SRSNE operations cease.	1991
USEPA conducts a Time-Critical Removal Action to remove contaminated soils from the railroad grade drainage ditch and to remove some chemicals stored at the property to an off-site location.	1992
USEPA and the SRSNE Group enter into an Administrative Order on Consent (AOC) for Removal Action to construct and operate a pump and treat system to contain the principally contaminated overburden groundwater (the NTCRA 1 work). Other work conducted under this AOC included the construction of a mitigation wetland in the northeast corner of the Cianci Property, implementation of a full-scale phytoremediation study within the NTCRA 1	1994

sheet pile wall, and extension of public water to three buildings adjacent to the Site.	
USEPA issues an Action Memorandum for a second NTCRA (NTCRA 2) to hydraulically contain VOC-impacted bedrock groundwater down gradient of the NTCRA 1 system.	1995
USEPA and the SRSNE Site Group enter into a second AOC for Removal Action and Remedial Investigation/Feasibility Study (RI/FS) to expand the groundwater containment system and complete site investigations. Work under this AOC resulted in the completion of the Site RI/FS, implementation of NTCRA 2, and the decontamination, demolition and removal of the remaining buildings and tanks from the Operations Area.	1996
SRSNE Site Group operates groundwater controls in the overburden and bedrock aquifers, completes remedial investigations, and conducts feasibility studies.	1996 - 2004
USEPA issues the Proposed Plan in June and holds two public meetings; the public comment period runs from June through August.	2005
USEPA issues the ROD for the Site, which describes the final remedy.	2005
SRSNE Site Group continues operation of the NTCRA 1 and 2 hydraulic containment and treatment systems	2005-2008
USEPA and SRSNE Site Group sign CD to implement the RD/RA activities.	2008
SRSNE Site Group continues operation of HCTS	2008 - present
Court enters CD; Remedial Design work initiated.	2009
Annual Report #1	2009
1st Five Year Review Report	2010
USEPA issues Remedial Design Work Plan Approval	2010
USEPA issues approval of PIPP 100% Design and RAWP	2010
Initiated Pre-ISTR Preparation Plan Construction Activities	2010
EPA, CTDEEP and SRSNE Site Group hold open house for public at Site	2010
Annual Report #2	2010
ISTR Conceptual Design Approval	2011
Approval of ISTR 100% Wellfield Design	2011
Annual Report #3	2011
Institutional Control Plan revisions based on March 2012 comments and May 2012 meeting	2012
Approval of the use of Hydrosleeve for interim sampling	2012
Approval for low flow screen length	2012
Completed delineation of extent of groundwater contamination	2012
Completed Pre-ISTR Preparation Plan Construction Activities	2012
Annual Report #4	2012
Initiated ISTR construction	2013
EPA, CTDEEP and SRSNE Site Group hold open house for public at Site	2013
Annual Report #5	2013

E. Selected Remedy

The overall purpose of RD/RA activities is to design and implement the selected remedial approach for the Site. The selected remedy, developed by combining components of different alternatives for source control and management of migration to obtain a comprehensive approach for Site remediation, was described in the ROD. Key elements are summarized as follows:

- Treat waste oil and solvents – where present as NAPL in the subsurface in the overburden aquifer (i.e., the Overburden NAPL Area) – using in-situ thermal treatment.

Following in-situ thermal treatment, cap the former SRSNE Operations Area. The cap will be low-permeability and multi-layered and is to be designed, constructed, and maintained to meet the requirements of Resource Conservation and Recovery Act (RCRA) Subtitle C. As described in the "Re-use of Excavated Material from Railroad Right of Way for ISTR Area Fill" memorandum (de maximis, inc., April 29, 2010), soils excavated from the Rail Road Right of Way will be incorporated as fill material in the Thermal Treatment Zone (TTZ). Excavation of soil in a specific portion of the former railroad right-of-way to a depth of 4 feet – followed by backfill to match surrounding grade –will meet the direct exposure criteria (DEC) and pollutant mobility criteria (PMC) requirements of the Connecticut Remediation Standard Regulations with the understanding that an Activity and Use Limitation (ELUR) would subsequently be established for this area.

- Excavate soils exceeding cleanup levels from certain discrete portions of the former Cianci Property. The estimated limits of soil removal on the former Cianci Property (five discrete excavation areas) are shown on Figure G-1 of the *Post-Excavation Confirmatory Sampling Plan* (Attachment G to the RDWP); these limits are subject to modification based on additional sampling proposed as part of remedial design. Provided that concentrations of polychlorinated biphenyls (PCBs) do not warrant off-site disposal, soils excavated from the former Cianci Property (and from other areas excavated outside the cap limits as part of other RD/RA activities) may be relocated to the former SRSNE Operations Area for placement beneath the cap.

- Capture and treat (on site) groundwater in both the overburden and bedrock aquifers that exceeds applicable federal drinking water standards and risk-based levels. This will be achieved through continued operation, maintenance, and modification (as needed) of the HCTS.

- Monitored natural attenuation of the groundwater plume outside the capture zones (i.e., the severed plume, shown on Figure 3A of the RDWP) that exceeds cleanup levels.

- Monitor natural degradation of constituents in the groundwater plume inside the capture zones and within the Bedrock NAPL Area (shown on Figure 3B of the RDWP).

- Implement institutional controls (i.e., Environmental Land Use Restrictions) to minimize the potential for human exposure to Site-related constituents in the subsurface soils and to prohibit activities that might affect the performance or integrity of the cap.

- Monitor groundwater and maintain the cap over the long term.

F. Performance Standards

Section IV of the SOW establishes Performance Standards for the various affected media at the SRSNE Site. It also establishes Performance Standards for other aspects of the RD/RA, including subsurface NAPL in the overburden and bedrock aquifers, performance of the multi-layer cap, hydraulic containment and treatment, the severed plume, habitat restoration, environmental monitoring, and institutional controls. These non-media-specific Performance Standards are summarized and addressed (to the extent applicable at this point in the RD/RA process) in the various task-specific work plans summarized in the RDWP.

Performance Standards for soil, wetland soil, and groundwater have been reviewed and compared to the current applicable USEPA and CTDEP standards and guidance. Based on this review, it was concluded that none of the USEPA or CTDEP criteria for Site-related constituent have been revised since the ROD was issued. However, the CTDEP has published a lower detection limit for 1,2,4-trichlorobenzene in water (0.5 micrograms per liter [ug/L] rather than the prior value of 2 ug/L). Because the detection limit is the cleanup level for groundwater (discussed below), this modification is noted on the copy of Table L-1 from the ROD that is provided as Appendix 1 to the RDWP. No other modifications were warranted to Tables L-1 or L-2 of the ROD to reflect current published guidance and standards.

G. Summary of Activities Completed This Reporting Period

A summary of activities completed during this reporting period is provided within the attached Table 1.

H. Updated Schedule

An updated project schedule is included as Attachment 1 to this report.

I. Hydraulic Containment & Treatment System Operations and Maintenance

The HCTS achieved compliance during this reporting period with the Demonstration of Compliance Requirements (see Attachment B to the SOW). Details of the operation are provided as Attachment 2 to this report.

In addition to the parameters required by the Demonstration of Compliance Requirements, groundwater temperature data have been collected within the sheetpile wall to provide a baseline dataset of temperature variation over time. These data are being collected pursuant to Section 5.3.3 of Appendix N of the RDWP (Monitoring Well Network Evaluation and Groundwater Monitoring Program).

Map views and cross-sections to demonstrate hydraulic containment in accordance with EPA guidance from January 2008 entitled *A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems* (EPA/600/R-08/003) are provided in Figures 5 through 9. These figures depict groundwater elevation contours measured on May 10-12, 2010 (i.e., the most current comprehensive groundwater gauging event), and generalized overburden and bedrock capture zone boundaries for the NTCRA 2 extraction wells, which are now part of the HCTS. The estimated capture zone boundaries are based on a combination of measured water level data, historical and recent groundwater modeling results and stagnation point calculations presented in the FS Report (BBL and USEPA, May 2005; Appendix A), and updated VOC concentration data at select monitoring wells (collected in June 2013). Although the extraction rates at the NTCRA 2 wells vary as a function of seasonal and long-term precipitation rates and well redevelopment events, the typical long-term average pumping rate has been approximately 20 to 30 gpm.

To maintain recovery rate and hydraulic control for NTCRA 2, overburden extraction wells RW-13 and RW-14 were redeveloped in April 2013. The combined NTCRA 2 extraction rate during the reporting period averaged 30.4 gpm.

Figures 5 through 9 also show the locations of former Interim Monitoring and Sampling (IMS) wells that were used to monitor the VOC plume between the completion of the RI and the issuance of the ROD. These wells have the most complete data sets and concentration trends at these wells are presented in figures 7 through 11 of the Draft 2013 MNA Report). Middle overburden well MW-03 (Figure 8-Draft 2013 MNA Report) and shallow bedrock well MW-127C (Figure 10-Draft 2013 MNA Report) are the only monitoring wells south of the Connecticut Light & Power (CL&P) easement that contained VOC concentrations above the Interim Cleanup Levels (ICLs) before the start-up of the NTCRA 2 system, but they declined to below the ICLs following NTCRA 2 system start up. As shown on Figures 7 through 11of the Draft 2013 MNA Report, the VOC concentration trends at the former IMS wells are generally declining or have too many samples with no detected VOCs to support trend analysis.

VOCs above Action Levels (the more stringent of the USEPA Maximum Contaminant Levels [MCLs] or Connecticut Class GA Groundwater Protection Criteria [GWPC]) are generally contained within the previously estimated containment boundary of the hydraulic containment and treatment system (HCTS). The exception is PZO-2M and MW-1003DR. Samples collected from these wells in June 2013 contained benzene, tetrachloroethene (PCE) and/or trichloroethene (TCE) at concentrations above their respective action levels with concentrations up to three orders of magnitude higher than prior results. Each well was resampled later in June 2013, with results similar to those in the initial June sample. To further assess concentration trends in these and other nearby wells, two additional rounds of groundwater sampling were performed: one in July 2013 and the second in September 2013. Sampling results from both events yielded concentrations above action levels. Additional details regarding these results can be found in section N of this report. Additional sampling is scheduled for November 2013 and additional evaluation of the NCTRA 2 system is being performed to assess the possibility of additional yield of the system.

J. Institutional Controls / Access Agreements

Institutional controls in the form of deed restrictions are already in place on the Operations Area and Cianci Properties that prohibit all uses except for those associated with environmental response actions, as further described in CD paragraph 26. No additional institution controls were implemented during this reporting period. In 2010, the SRSNE Site Group took control of the Voting Trusts that control the Operations Area Property and the Cianci Property, respectively, which allows the implementation of additional institutional controls on those properties when appropriate. Additional institutional controls will be implemented pursuant to the Institutional Control Plan that has been developed as required by SOW Section V.B.7. The Institutional Control Plan was revised and resubmitted in May 2013 to address comments received in December 2011 and May 2012 meeting. The revised plan includes the use of groundwater modeling to evaluate properties where future pumping may cause migration of the plume. The properties included in this “buffer zone” will be controlled with an ordinance through the local Health Department, a process that has been used by the Town of Southington in recent years. A conference call between representatives of EPA, CTDEEP, CT AG and the SRSNE Site Group on July 18, 2013 was held to discuss the IC Plan.

Access agreements were needed to conduct RD activities obtained from four (4) property owners during this reporting period. Access was granted to six properties in 2009; negotiations for access to the remaining four properties were obtained during 2010.

K. Construction, Operation and Maintenance Activities

Installation of the thermal well field commenced on April 23, 2013 and drilling program consisted of utilizing two mini rotasonic rigs. As a result of sheen, staining, and NAPL observed in wells outside the thermal treatment zone (TTZ) additional investigation was done to delineate the extent of the NAPL. This investigation resulted in eight additional heater wells added southwest of the TTZ and six heater wells were added to the east.

The draft 100% ISTR Design and Remedial Action Work Plan (RAWP) was submitted on July 9, 2013. EPA and CTDEEP provided comments on September 20 and October 1, 2013, respectively. A response to comments was provided on October 25, 2013, and a meeting with EPA and CTDEEP was held on October 30, 2013 to review the responses to comments.

The installation of the thermal wellfield was completed on September 24, 2013, below is a summary of work completed during the installation of the thermal well field:

Subsurface Item	Number Planned	Number Installed	% Complete
Heater Wells	593	602	102%
Vapor Extraction Wells (Vertical)	534	556	101%
Temperature Monitoring Points	97	99	102%
Vacuum Monitoring Points	64	65	102%
Groundwater Monitoring Wells	7	7	100%

All cuttings generated during the installation of the well field were placed in a designated area that has been constructed within the TTZ, so that they will also be thermally treated.

During the course of the well field installation, it was noted that the depth to bedrock was averaging approximately 3 feet deeper than predicted (and used in TerraTherm's bid, design, and cost estimates). The depth to rock was based on, historical knowledge, which included the prior NAPL delineation study, and a limited number of wells installed in the Operations Area. The method of determining "top of rock" was also different, during the NAPL delineation study geoprobes were utilized, which are stopped in the weathered zone of the rock. The ISTR heaters were installed with

rotasonic drilling, which does not easily differentiate weathered rock from the overlying till, so the drilling proceeds into the “competent rock”.

There are now more depth intervals for heaters, the original design planned to use three different lengths of heaters for the wellfield (15’, 18’ and 24’), with the shortest on the western side, and the longest on the eastern side of the TTZ. Based on the variability of depth to rock, and the need to heat the entire overburden thickness, there are now 7 different heater lengths (15’, 17.5’, 20’, 22.5’, 25’, 27.5’ and 30’).

On September 30, 2013 Elastizell, Inc. mobilized to the site and commenced installation of the thermal cap. The thermal cap consists of an 11-inch layer of 30psi strength concrete and a 3-inch layer of 45psi strength over the top, resulting in a 14-inch layer of concrete. This thickness was required to insure the concrete could achieve the proper R factor. Steps were constructed on the terraces to insure proper thickness overall. Installation of the cap was completed on October 30, 2013.

L. Habitat Restoration

No habitat restoration activities were conducted during this reporting period. A pre-remediation assessment of the types, extent and condition of existing habitats on site was conducted in June 2009 pursuant to RDWP Attachment H (Habitat Restoration Work Plan).

M. Memorandum of Agreement (MOA) with Southington Water Department / Town of Southington

A draft MOA was prepared during the Annual Report #1 reporting period as required by SOW Section V.B.3. This draft MOA was submitted for EPA review on September 16, 2009 and resubmitted based upon EPA comments on June 23, 2010. EPA provided further comments on the MOA on October 28, 2011. The revised MOA was provided for further EPA review on November 15, 2011. Once final issues with are negotiated. EPA will issue the final MOA for signature by all parties. Execution of the MOA will trigger finalization and submittal of the Supplementary Containment Action Plan (SCAP). The SCAP sets forth the process the Group would undertake to enhance containment of groundwater in the event SWD re-starts pumping from the Town Well Field Property. A draft SCAP in 2009 was completed in 2009 and it is anticipated that only minor changes will be required to reflect the final MOA.

N. Groundwater Monitoring Program

A comprehensive groundwater monitoring program was scoped in *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Work Plan; Attachment N to the Remedial Design Work Plan [RDWP]; ARCADIS 2010). A summary of the planned sampling frequency is provided in the attached Table N-1 from the RDWP. The first comprehensive groundwater sampling event occurred during May/June 2010 which supported the first Five-Year Review, submitted in 2010. This sampling event provided

data for the draft 1st Monitored Natural Attenuation Report which was submitted in September 2010.

In accordance with *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Work Plan; Attachment N to the Remedial Design Work Plan [RDWP]; ARCADIS 2010), the 2013 annual groundwater sampling event was performed in June 2013 and included sampling of groundwater at 44 monitoring wells. The 2013 Groundwater Sampling and Monitored Natural Attenuation Report (Attachment 3) and Supplemental HydraSleeve™ Groundwater Sampling Results Memo (Attachment 4) summarizes the 2013 groundwater sampling events performed in accordance with the and presents the results and interpretation of data collected in support of MNA as a remedy for groundwater that contains Site related constituents of concern (COCs) at concentrations exceeding acceptable risk levels or regulatory limits. Sampling results are discussed below:

Benzene was detected (1.3 µg/L) above Action Levels(1.0 µg/L) in monitoring well MW-707DR, a deep bedrock monitoring well located just beyond the southern extent of the estimated capture zone boundary, in the June 2013. This is consistent with the benzene concentration detected (1.1 µg/L) at well MW-707DR in June 2012, which were also above action levels.

Tetrachloroethene (PCE) and trichloroethene (TCE) were detected at middle overburden monitoring well PZO-2M at concentrations of 79 µg/L and 250 µg/L, respectively, in the June 2013 sample. These concentrations are above the Action Level of 5.0 µg/L for both compounds. This was the first detection of PCE above the Action Level at this well. TCE was detected above the Action Level at this well in June 2012 (9.9 µg/L).

PZO-2M was re-sampled for confirmation purposes later in June 2013; PCE and TCE were again detected at concentrations similar to those in the initial June 2013 sample. Additional groundwater sampling was performed in July 2013 to further assess concentration trends in the vicinity of this well.

Benzene, PCE and TCE were also detected at deep bedrock monitoring well MW-1003DR at concentrations above the respective Action Levels. This well was also re-sampled later in June 2013 and the results confirmed. Additional groundwater sampling was performed in July 2013 to further assess concentration trends in the vicinity of this well. No metals (either total or dissolved) exceeded their respective MCLs or GWPC, with the exception of total manganese measured at well MW-126B in 2013 (680 µg/L total manganese, compared to the GWPC of 500 µg/L). MW-126B is an upgradient, background well located north of the former Operations Area of the SRSNE Site.

Based on the results from the July sampling event, another round of sampling was performed in September 2013. Ten monitoring wells were sampled during this event,

including nine of the wells sampled in July 2013 and MW-903M. Consistent with the July 2013 event, samples were collected using HydraSleeveTM and submitted for analysis of VOCs.

The July 2013 sampling indicated PCE and TCE concentrations in PZO-2M and MW-1003DR remained above Action Levels at concentrations generally consistent with the June 2013 data; concentrations were slightly higher at PZO-2M and slightly lower at MW-1003DR. In September, PCE and TCE concentrations remained above Action Levels at monitoring wells PZO-2M and MW-1003DR, although concentrations were lower than during the June and July events.

MW-707DR, which is located outside of the inferred hydraulic capture zone, has contained benzene at a concentration at, near or slightly above the Action Level of 1 microgram per liter (ug/L). The September 2013 sample indicated no VOCs above Action Levels. MW-1002DR is a deep bedrock well upgradient of MW-1003 and has also contained PCE and TCE at concentrations above the Action Levels. With the exception of the wells and specific VOCs discussed above, the supplemental sampling of 41 wells in July 2013 and 10 wells in September 2013 did not indicate any additional noteworthy results. In general, other data were consistent with prior results, and indicate hydraulic containment of wells with concentrations exceeding Action Levels.

O. Recommendations of Changes to any Monitoring Program

Based on the results of the July and September 2013 groundwater sampling events and the recent declining concentrations at wells MW-1003DR and PZO-2M, interim HydraSleeve^{TM} sampling events will continue on a focused basis. Additional HydraSleeve^{TM} sampling at the four wells (PZO-2M, MW-707DR,MW-1002DR and MW-1003DR) in November 2013.

P. Groundwater Containment and Treatment Optimization Studies

No optimization studies were conducted during this reporting period.

Q. Costs Incurred this Reporting Period

Paragraph 62 of the CD sets forth “Additional Provisions Regarding Settling Defendants’ Payments of U.S. Oversight Costs and State Oversight Costs.” Pursuant to this paragraph, an interest bearing “Oversight Costs Payment Subaccount” of the Remedial Trust Account was established on April 27, 2009, in the amount of $5,700,000. The balance in this subaccount at the end of October 2013 was $ 5,781,576.37
. Other defined terms in this paragraph include:

- "Rolling Oversight Cap" – defined as 15% of the total costs incurred by the Settling Defendants in performing the Work through the end of the Oversight Billing Period.
- "Available Balance" equals the Rolling Oversight Cap less the sum of all Settling Defendants prior payments for U.S Oversight Cost and State Oversight Costs.

Paragraph 62.e states that the Settling Defendants shall have the burden of calculating annually the Rolling Oversight Cap and Available Balance. The following table summarizes annually the Rolling Oversight Cap and Available Balance:

Reporting Period	Total Project Costs	Rolling Oversight Cap Amount	Oversight Costs	Available Rolling Oversight Cap Amount
Annual Report #1	$1,880,301	$282,045	None billed.	
Annual Report #2	$3,446,824	$517,024	$84,290	
Annual Report #3	$4,037,109	$605,566	$30,887	
Annual Report #4	$1,421,795	$213,269	$39,939	
Annual Report #5	$3,726,911	$559,037	$18,963	
Totals*:	**$14,512,940**	**$2,176,941**	**$174,080**	**$2,002,891**

* Cost Revised based on Trustee expenditure updates

The total Rolling Oversight Cap amount available is: **$2,002,891**

R. References

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Tables

TABLE 1.0
Summary of Activities Completed
October 31, 2012 through October 30, 2013

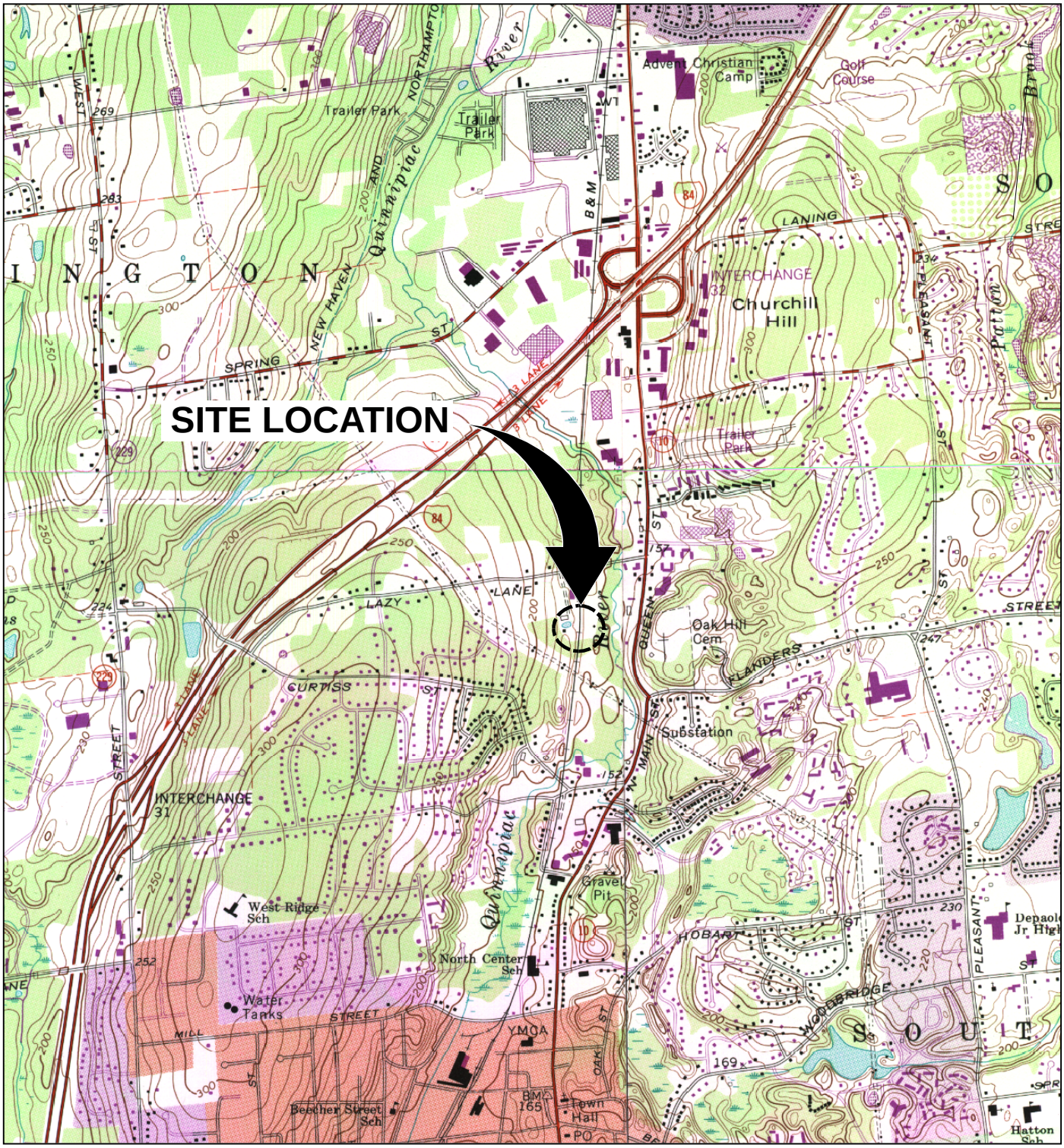
Document Name / Activity	Author(s)	Date Submitted	Date Approved	Type
Final RDWP and POP	ARCADIS	11/19/2010	pending	Deliverable under SOW
Response to Comments on ISTR Conceptual Design	TerraTherm	12/3/2010	7/7/2011	Deliverable under SOW
Annual State of Compliance Report #2	de maximis	12/20/2010	pending	Deliverable under SOW
PIPP Winter Stabilization Plan	de maximis	12/30/2010	pending	Deliverable under SOW
Vapor Intrusion Technical Memorandum	EPA	10/27/2010	1/19/2011	Conditional Approval
Data Comparison - Groundwater Sampling Techniques	ARCADIS	1/4/2011	N/A	Technical Memorandum
Updates to Existing MODFLOW Groundwater Flow Model	ARCADIS	1/5/2011	N/A	Technical Memorandum
Data Comparison - Groundwater Sampling Techniques	ARCADIS	2/10/2011	N/A	Technical Memorandum
Draft Institutional Controls Plan	de maximis/ARCADIS	2/18/2011	pending	Deliverable under SOW
Comments on Response to Comments on ISTR Conceptual Design	EPA	3/2/2011	7/7/2011	EPA comments
PIPP Sheetpile Wall Extension Design	ARCADIS	3/21/2011	4/22/2011	Deliverable under SOW
Data Comparison - HydraSleeve vs. Low-Flow Groundwater Sampling Techniques	ARCADIS	3/22/2011	N/A	Technical Memorandum
Response to Comments on Response to Comments on ISTR Conceptual Design	TerraTherm	4/6/2011	7/7/2011	Deliverable under SOW
Bedrock Outcrop Study	ARCADIS	4/20/2011	N/A	Technical Memorandum
Supplementary Vapor Intrusion Technical Memorandum	ARCADIS	6/6/2011	pending	Deliverable under SOW
Bedrock Modeling Memorandum	ARCADIS	6/6/2011	N/A	Technical Memorandum
Comments on Vapor Intrusion Technical Memorandum	EPA	6/15/2011	pending	EPA comments
ISTR Conceptual Design Approval	EPA	7/7/2011	7/7/2011	Approval
Technical Memorandum - Proposed Use of Hydrasleeve Sampling	ARCADIS	7/8/2011	7/8/2011	Technical Memorandum
Approval of ISTR 100% Wellfield Design	EPA	9/23/2011	9/23/2011	EPA Approval
Comments on Draft Memorandum of Agreement with Town and Southington Water Department	EPA	10/28/2011	pending	EPA comments
Annual State of Compliance Report #3	de maximis	1/12/2012	pending	Deliverable under SOW
Screen Volume Purge vs lowflow groundwater metholds	de maximis	5/11/2011	5/21/2012	Approval
Submittal for the use of hydrosleeve during interim sampling events	de maximis	1/4/2011	6/12/2012	Approval
Annual State of Compliance Report #4	de maximis	1/3/2013	pending	Deliverable under SOW
PIPP Completion Report	ARCADIS	4/3/2013	N/A	Technical Repot
Revised Institutional Controls Plan	de maximis / ARCADIS	5/21/2013	pending	Deliverable under SOW
Revised Draft ISTR work plan and POP	TerraTherm	7/8/2013	pending	Deliverable under SOW
Comments on revised Draft ISTR Work Plan and POP	EPA/CTDEEP	9/30/2013	N/A	EPA /CTDEEP comments
Response to EPA and CTDEEP comments on revised DRAFT ISTR Work Plan and POP	de maximis	10/26/2013	pending	Deliverable under SOW

Table N-1.
Groundwater Monitoring Network and Sampling Events
SRSNE Superfund Site, Southington, CT

Well Group	# Wells	Sampling Period	Sampling Frequency	Analytical Parameters
"C" wells	81	first comprehensive event *	1 event	VOCs, alcohols, 1,4-dioxane, TAL metals, PAHs, PCBs
"R" wells	26			VOCs, alcohols, 1,4-dioxane, TAL metals, PAHs, PCBs, MNA parameters
"N" wells	10			VOCs, alcohols, 1,4-dioxane, TAL metals, PAHs, PCBs, MNA parameters
"M" wells	5			TAL metals, MNA parameters (background)
"B" wells	3			TAL metals (background)
"C" wells	81	subsequent comprehensive events	every 5 years	VOCs, 1,4-dioxane, TAL metals
"R" wells	26			VOCs, 1,4-dioxane, TAL metals, MNA parameters
"N" wells	10			VOCs, 1,4-dioxane, TAL metals, MNA parameters
"M" wells	5			TAL metals, MNA parameters
"B" wells	3			TAL metals
"R" wells	26	after first comprehensive event	annual	VOCs
			biennial	MNA parameters
"M" wells	5	after first comprehensive event	biennial	TAL metals (background)
			biennial	MNA parameters (background)
"N" wells - overburden	8	before thermal treatment	biennial	VOCs, MNA parameters
		during thermal treatment	annual	VOCs, MNA parameters
		after thermal, before equilibrium	3x / year	VOCs, MNA parameters
		after equilibrium	annual	VOCs
			biennial	MNA parameters
"N" wells - bedrock	2	before thermal treatment	annual	VOCs, MNA parameters
		during thermal treatment	annual	VOCs, MNA parameters
		after thermal, before equilibrium	3x / year	VOCs, MNA parameters
		after equilibrium	annual	VOCs
			biennial	MNA parameters
"W" wells	36	all comprehensive events	every 5 years	Water levels only - during all comprehensive events

Notes: 1) biennial = once every two years.
* - Shallow overburden wells MW-501C, MW-903S, and MW-904S will be re-sampled approximately 6 months after the first comprehensive sampling event.

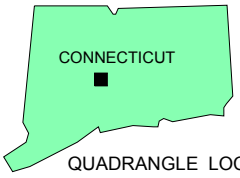
Figures



REFERENCE: SOUTHINGTON, CONN. USGS QUAD. 1968 PR 1992, MERIDEN, CONN. USGS QUAD. 1966 PR 1984, NEW BRITAIN, CONN. USGS QUAD. 1966 PR 1984, & BRISTOL, CONN. USGS QUAD 1967 PR 1984

2000' 0 2000'

APPROX. SCALE: 1" = 2000'



QUADRANGLE LOCATION

DRAFT

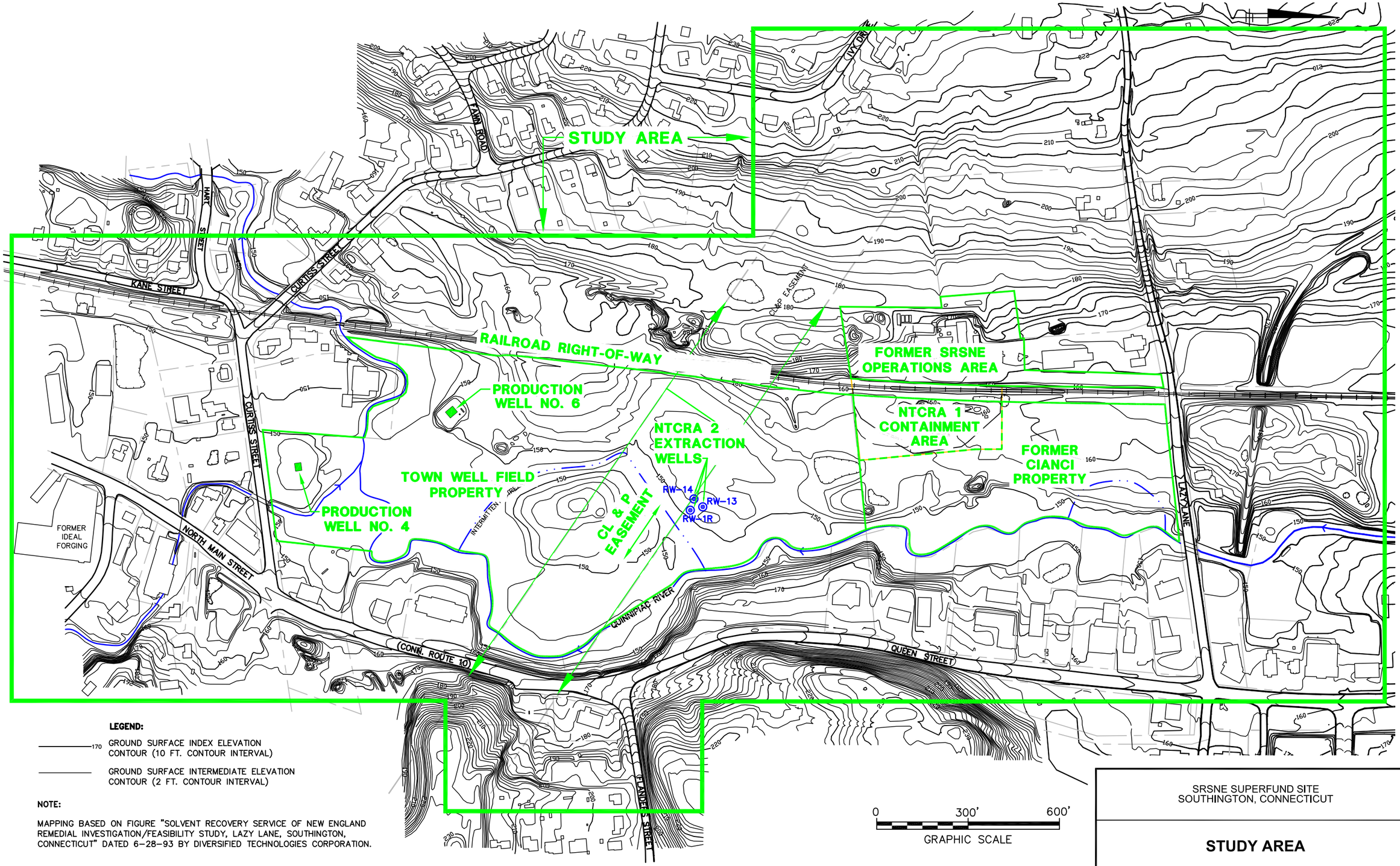
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
REMEDIAL DESIGN WORK PLAN

SITE LOCATION MAP

ARCADIS

FIGURE
1

02/27/09 SYRACUSE, NY-ENV/CAD DJH, LJP
B005463410000100001CDR\RDWP\54634N01.CDR



LEGEND:

170 GROUND SURFACE INDEX ELEVATION CONTOUR (10 FT. CONTOUR INTERVAL)

GROUND SURFACE INTERMEDIATE ELEVATION CONTOUR (2 FT. CONTOUR INTERVAL)

NOTE:

MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONNECTICUT" DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

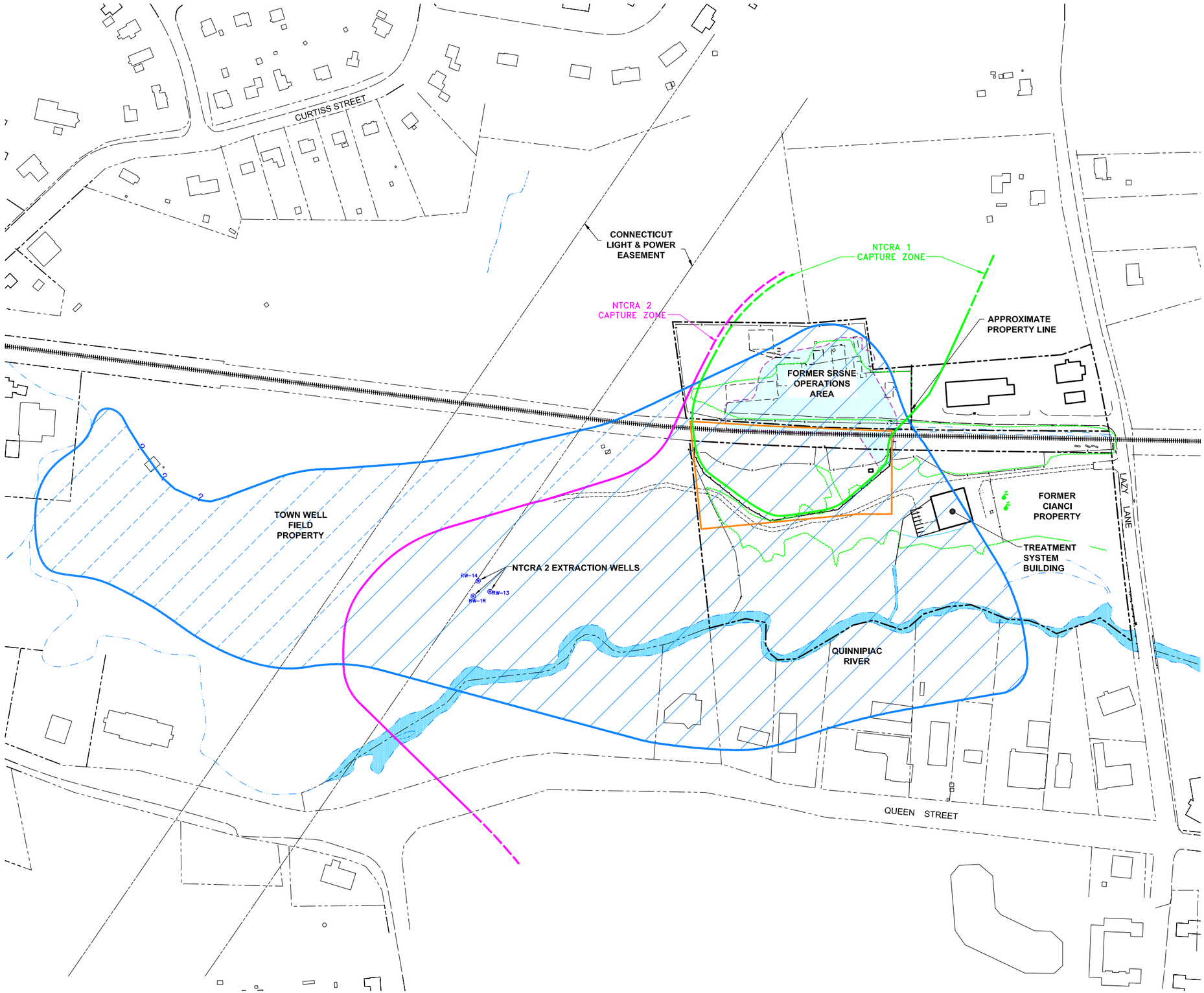
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT

STUDY AREA

ARCADIS

FIGURE 2

CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER, R. BASSETT, P. LISTER PM: M. GEFELL TR: R. STEVENSON LYR: ON=*;OFF=REF
G:\ENVCAD\Manchester\ACTIB\00546340000001001054634B02.DWG LAYOUT: 2 SAVED: 12/20/2012 10:39 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/20/2012 10:40 AM BY: SMALL, BRIAN
XREFS: 54634X01 IMAGES: PROJECTNAME: ---



LEGEND:

- PROPERTY LINE
- PROPERTY LINE – ADJOINER
- BUILDING
- BUILDING – ADJOINER
- FORMER BUILDING
- RAILROAD
- ROAD
- GRAVEL ROAD
- DRAINAGE SWALE
- RIVER
- EASEMENT
- CHAINLINK FENCE
- SHEETPILE
- NTCRA 1 CONTAINMENT AREA
- OVERBURDEN GROUNDWATER AREA
- SEVERED PLUME
- OVERBURDEN NAPL AREA

NOTES:

1. BASEMAP INFORMATION OBTAINED FROM A FIGURE CREATED BY CONKLIN & SOROKA, INC., ENTITLED "TOPOGRAPHIC SURVEY" DATED 1/13/09 AT A SCALE OF 1"=50'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. THIS FIGURE PRESENTS AN OVERLAY OF THE ESTIMATED EXTENTS OF THE GROUNDWATER PLUME IN THREE MONITORED OVERBURDEN ZONES, BASED ON PLUME DELINEATION LIMITS PRESENTED IN THE MONITORED NATURAL ATTENUATION REPORT (ARCADIS 2010).

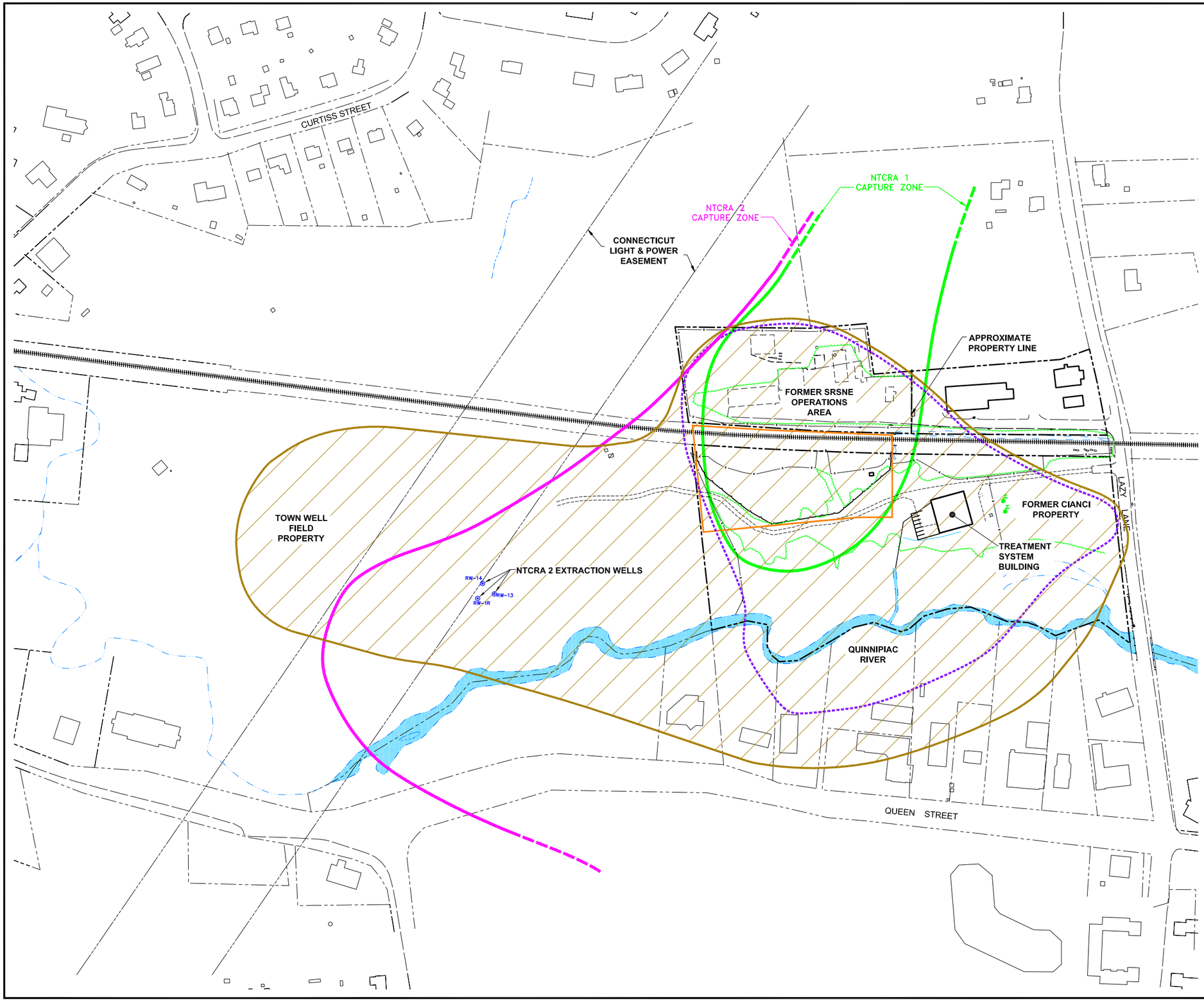
0 120' 240'
GRAPHIC SCALE

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

ESTIMATED GROUNDWATER PLUME AND NAPL AREAS - OVERBURDEN

ARCADIS

FIGURE
3A



LEGEND:

- PROPERTY LINE
- PROPERTY LINE – ADJOINER
- BUILDING
- BUILDING – ADJOINER
- FORMER BUILDING
- RAILROAD
- ROAD
- GRAVEL ROAD
- DRAINAGE SWALE
- RIVER
- EASEMENT
- CHAINLINK FENCE
- SHEETPILE
- NTCRA 1 CONTAINMENT AREA
- BEDROCK NAPL AREA
- BEDROCK GROUNDWATER AREA

NOTES:

1. BASEMAP INFORMATION OBTAINED FROM A FIGURE CREATED BY CONKLIN & SOROKA, INC., ENTITLED "TOPOGRAPHIC SURVEY" DATED 1/13/09 AT A SCALE OF 1"=50'.
2. ALL LOCATIONS ARE APPROXIMATE.
3. THIS FIGURE PRESENTS AN OVERLAY OF THE ESTIMATED EXTENTS OF THE GROUNDWATER PLUME IN TWO MONITORED BEDROCK ZONES, BASED ON PLUME DELINEATION LIMITS PRESENTED IN THE MONITORED NATURAL ATTENUATION REPORT (ARCADIS 2010).

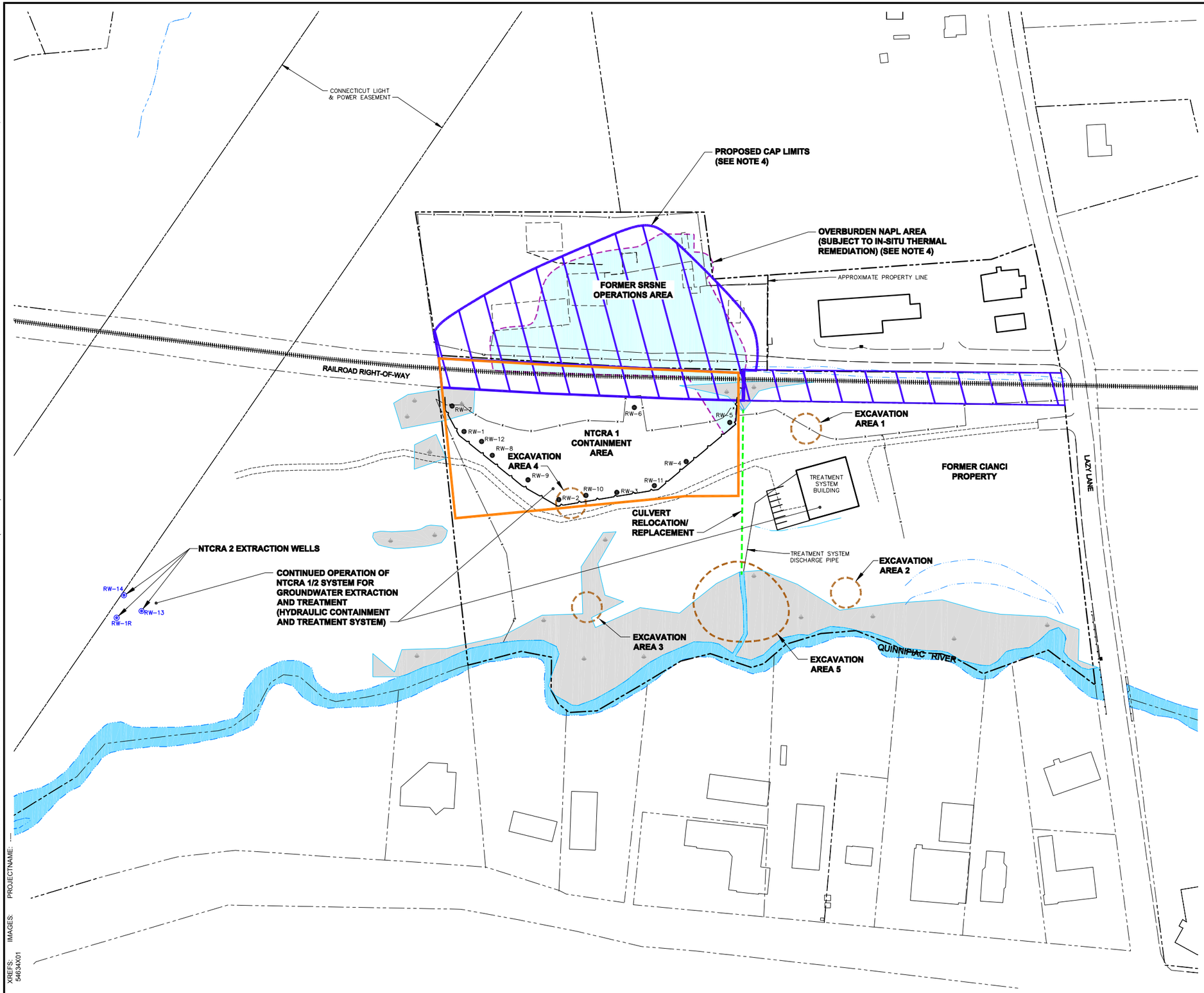
0 120' 240'
GRAPHIC SCALE

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

ESTIMATED GROUNDWATER PLUME AND NAPL AREAS - BEDROCK

ARCADIS

FIGURE
3B



LEGEND:

- PROPERTY LINE
- PROPERTY LINE – ADJOINER
- BUILDING
- BUILDING – ADJOINER
- FORMER BUILDING
- RAILROAD
- ROAD
- GRAVEL ROAD
- DRAINAGE SWALE
- RIVER
- EASEMENT
- CHAINLINK FENCE
- AREA OF DISCRETE SOIL REMOVAL ON FORMER CIANCI PROPERTY (SEE NOTE 4)
- SHEETPILE
- WETLAND
- RW-1 NTCRA 1 OVERBURDEN EXTRACTION WELL

NOTES:

1. SITE PLAN TAKEN FROM DIVERSIFIED TECHNOLOGIES CORP., 556 WASHINGTON AVE., NORTH HAVEN, CT, DATED 6/93. TOPOGRAPHY REPORTED TO HAVE BEEN DIGITIZED FROM TOWN OF SOUTHINGTON TOPOGRAPH MAPS G-7, G-8, G-9; PHOTOGRAPHY DATED NOV. 1978, SCALE: 1"=100'. PROPERTY LINES REPORTED TO HAVE BEEN DIGITIZED AND LOT NUMBERS TAKEN FROM "PROPERTY MAP, TOWN OF SOUTHINGTON" MAPS 134 & 147, SCALE: 1"=100' BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. BENCHMARK #1 IS AT ELEVATION 164.03. PK NAIL; S'LY SIDE; POLE #9049.
3. WETLAND AREAS WERE TAKEN FROM THE FINAL REMEDIAL INVESTIGATION REPORT (HNUS 1994).
4. THE LIMITS OF REMEDIAL ACTIVITIES ARE PRELIMINARY AND ARE SUBJECT TO CONFIRMATION/MODIFICATION BASED ON REMEDIAL DESIGN ACTIVITIES.

DRAFT

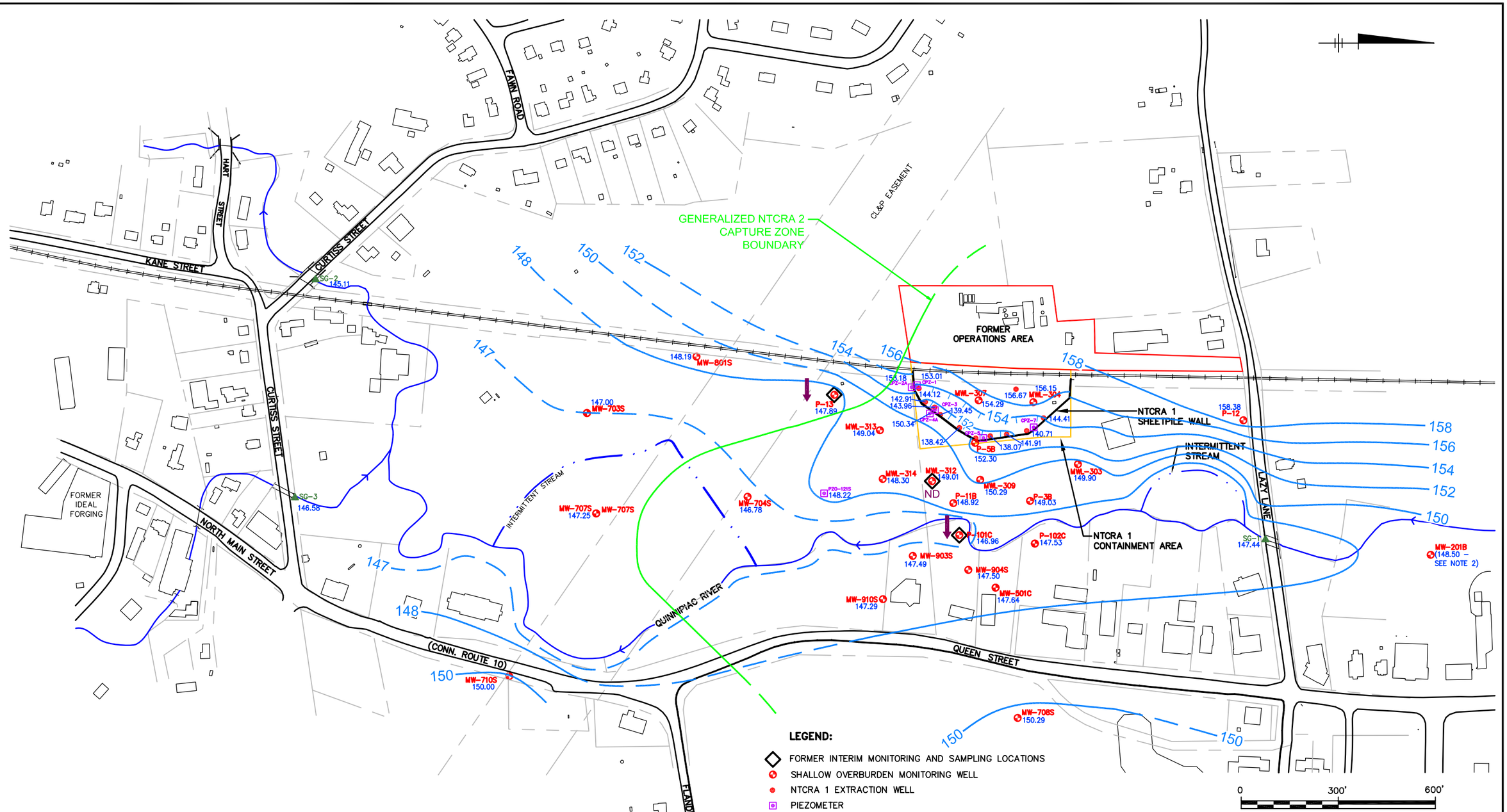
0 80' 160'
GRAPHIC SCALE

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
REMEDIAL DESIGN WORK PLAN

PLANNED REMEDIAL ACTIVITIES

ARCADIS

FIGURE
4



LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- SHALLOW OVERBURDEN MONITORING WELL
- NTCRA 1 EXTRACTION WELL
- PIEZOMETER
- STREAM/RIVER GAUGE POINT
- 150.29 HYDRAULIC HEAD VALUE
- 154 GROUNDWATER ELEVATION CONTOUR (FT–AMSL) CONTOUR INTERVAL = 2 FEET, UNLESS NOTED OTHERWISE

VOC CONCENTRATION TREND (90% C.I.)

- DECREASING
- ND EVENTS WITH NO DETECTED VOCs PRECLUDE TREND ANALYSIS

NOTES:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6–28–93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. GROUNDWATER ELEVATION AT MW–201B ESTIMATED BASED ON HISTORICAL MEASUREMENTS.

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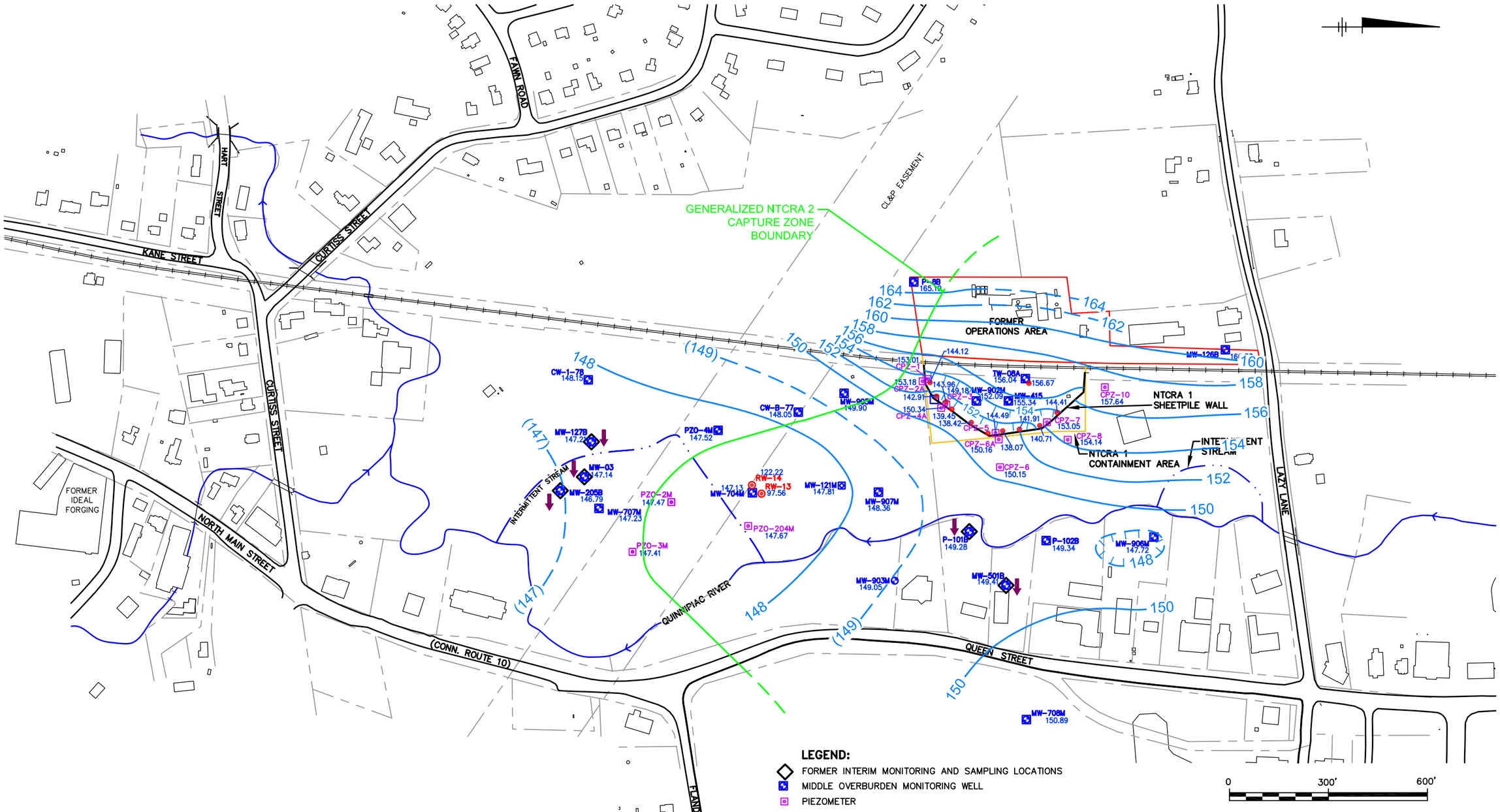
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #3

SHALLOW OVERBURDEN GROUNDWATER ELEVATION CONTOURS, MAY 10-12, 2010

ARCADIS

FIGURE
5



LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- MIDDLE OVERBURDEN MONITORING WELL
- PIEZOMETER
- NTCRA 1 EXTRACTION WELL
- NTCRA 2 EXTRACTION WELL
- MW-205B — WELL ID
- 146.79 — HYDRAULIC HEAD VALUE
- 154 — GROUNDWATER ELEVATION CONTOUR (FT–AMSL) CONTOUR INTERVAL = 2 FEET, UNLESS NOTED OTHERWISE (DASHED WHERE INFERRED)
- VOC CONCENTRATION TREND (90% C.I.)
- DECREASING

NOTES:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6–28–93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. HYDRAULIC HEAD VALUES ARE REPORTED IN FEET ABOVE MEAN SEA LEVEL (FT–AMSL) FOR MAY 2010 MEASUREMENT EVENT.
3. HEAD VALUES IN PARENTHESES WERE NOT USED FOR CONTOURING.

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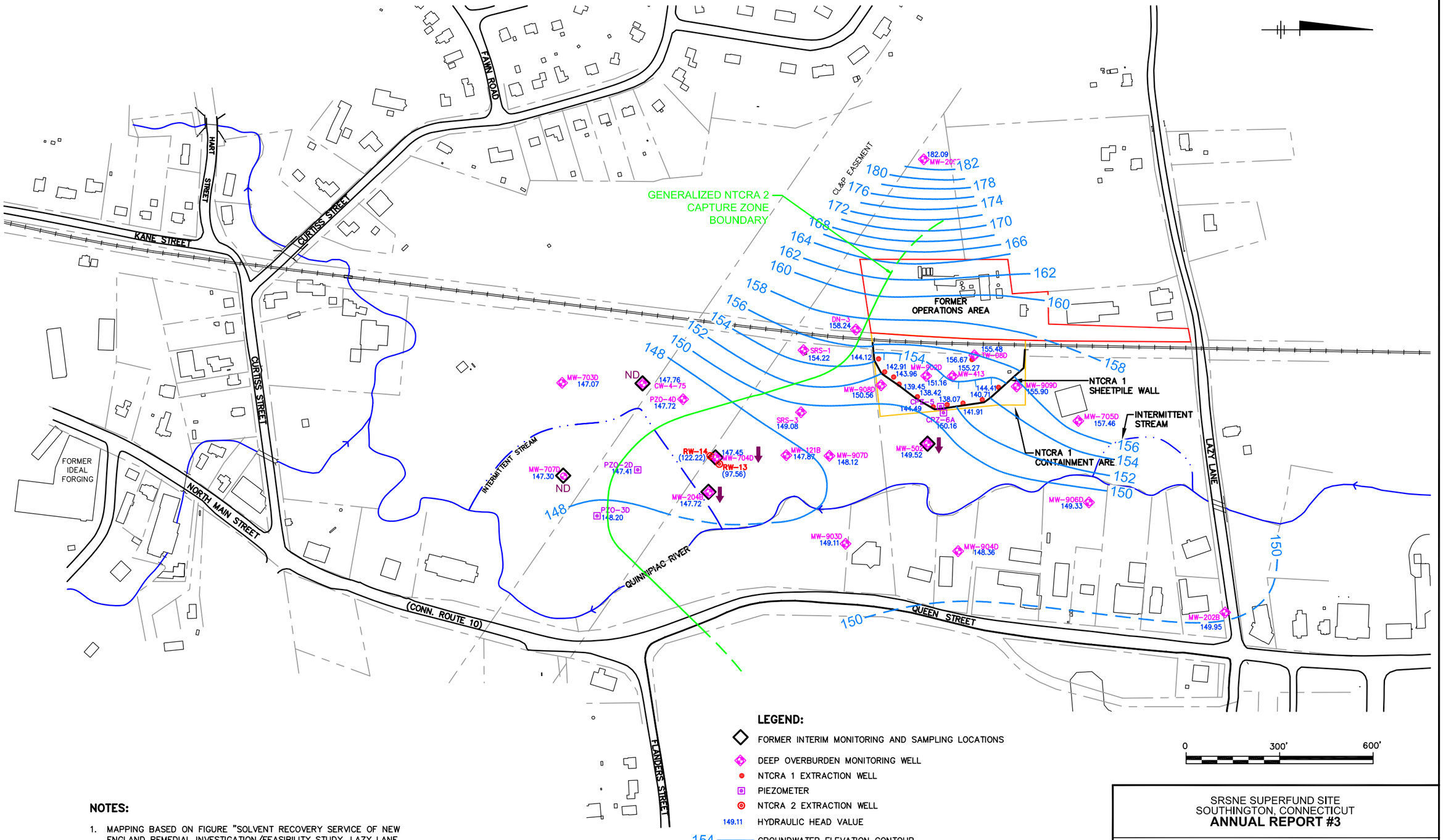
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #3

MIDDLE OVERBURDEN GROUNDWATER ELEVATION CONTOURS, MAY 10-12, 2010

ARCADIS

FIGURE
6



0 300' 600'

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- DEEP OVERBURDEN MONITORING WELL
- NTCRA 1 EXTRACTION WELL
- PIEZOMETER
- NTCRA 2 EXTRACTION WELL
- 149.11 HYDRAULIC HEAD VALUE
- 154 GROUNDWATER ELEVATION CONTOUR (FT–AMSL) CONTOUR INTERVAL = 2 FEET, UNLESS NOTED OTHERWISE

VOC CONCENTRATION TREND (90% C.I.)

- DECREASING
- ND EVENTS WITH NO DETECTED VOCs PRECLUDE TREND ANALYSIS

NOTES:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6–28–93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. HYDRAULIC HEAD VALUES ARE REPORTED IN FEET ABOVE MEAN SEA LEVEL (FT–AMSL) FOR MAY 2010 MEASUREMENT EVENT.
3. HEAD VALUES IN PARENTHESES WERE NOT USED FOR CONTOURING.

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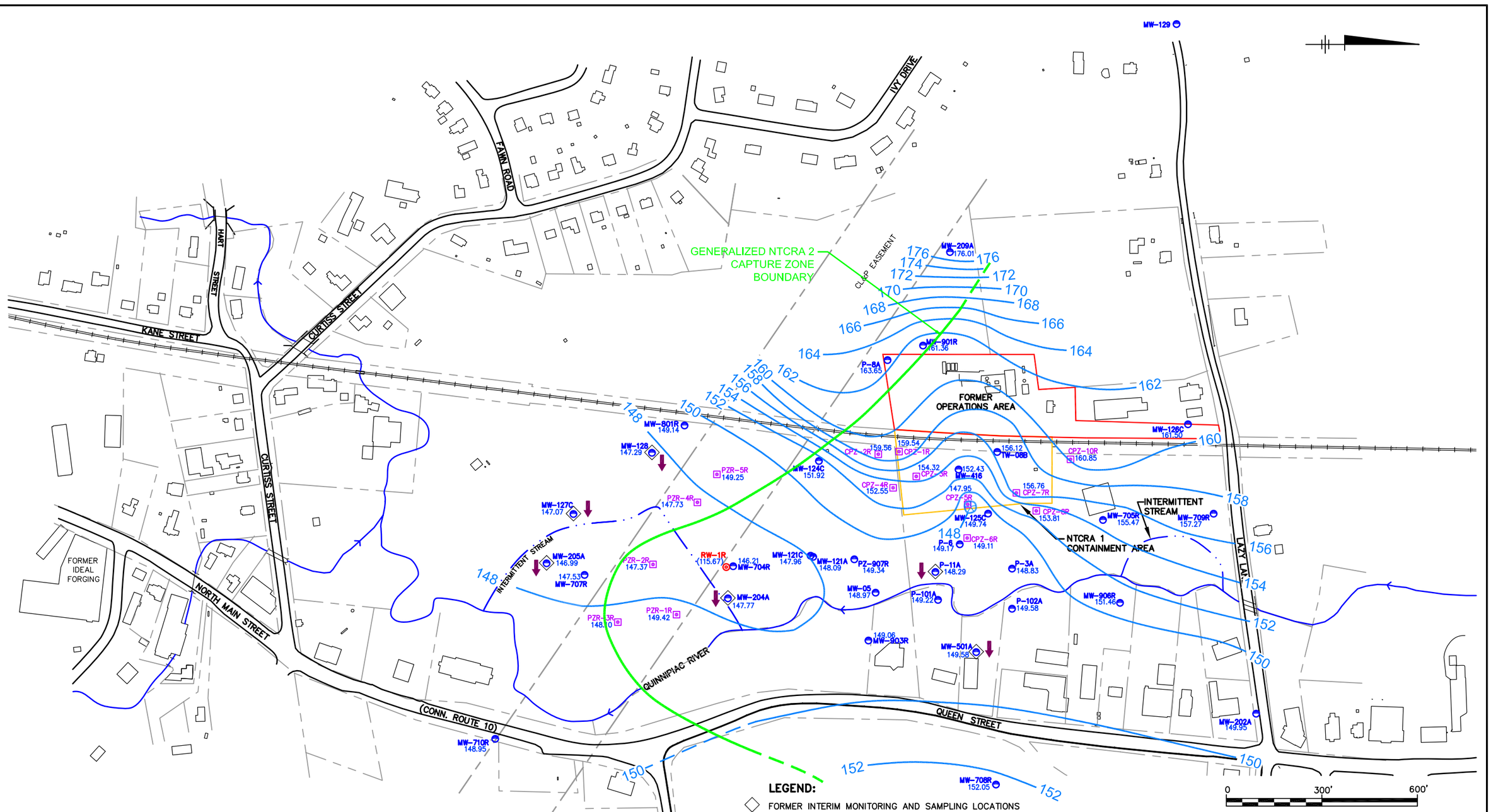
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #3

DEEP OVERBURDEN GROUNDWATER ELEVATION CONTOURS, MAY 10-12, 2010

ARCADIS

FIGURE
7



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1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. HYDRAULIC HEAD VALUES ARE REPORTED IN FEET ABOVE MEAN SEA LEVEL (FT-AMSL) FOR MAY 2010 MEASUREMENT EVENT.
3. HEAD VALUES IN PARENTHESES WERE NOT USED FOR CONTOURING.

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- SHALLOW BEDROCK MONITORING WELL
- PIEZOMETER
- NTCRA 2 EXTRACTION WELL
- 152.05 HYDRAULIC HEAD VALUE
- 154 GROUNDWATER ELEVATION CONTOUR (FT-AMSL) CONTOUR INTERVAL = 2 FEET, UNLESS NOTED OTHERWISE (DASHED WHERE INFERRED)

VOC CONCENTRATION TREND (90% C.I.)

- DECREASING

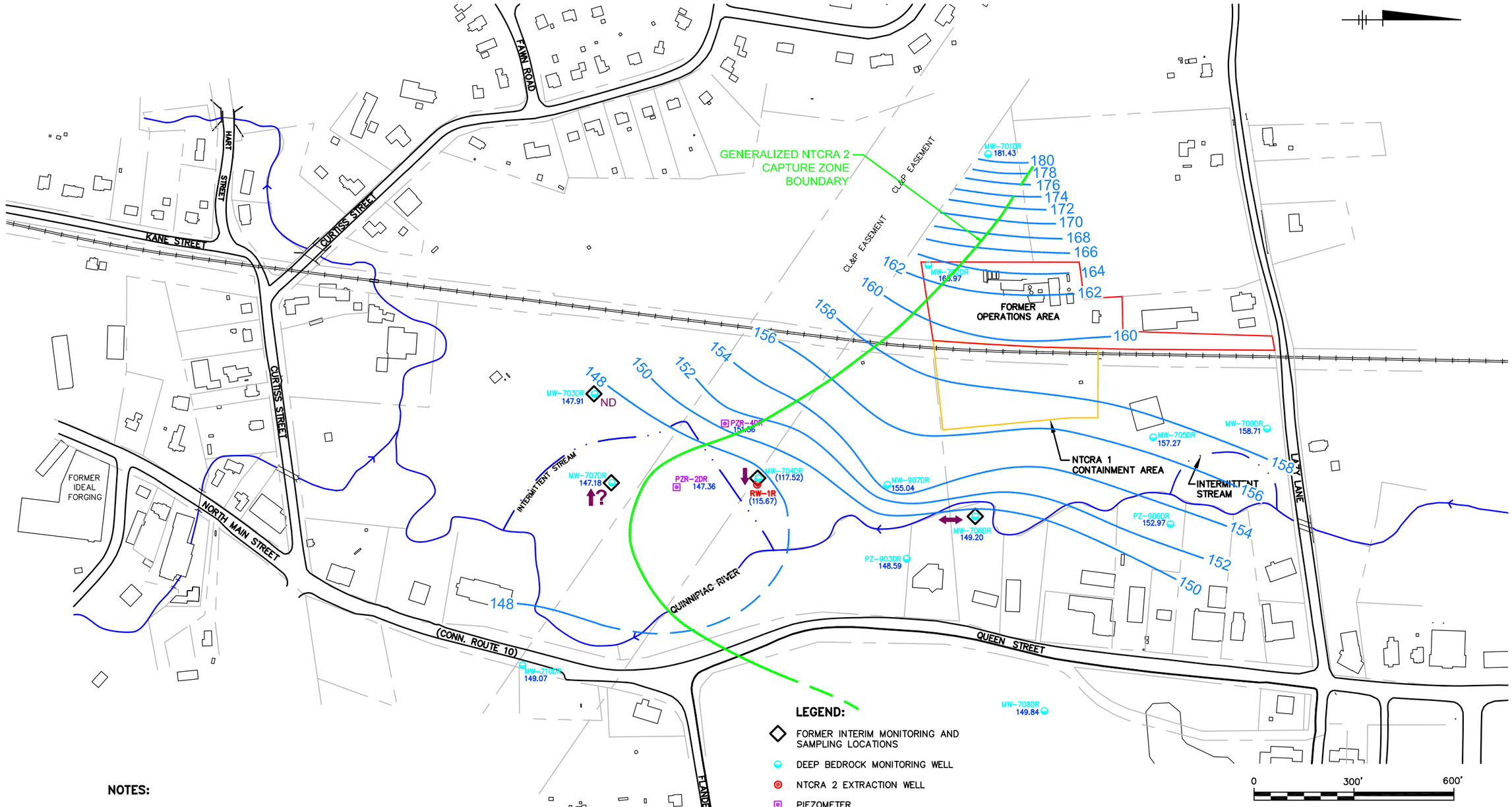
DRAFT

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #3

SHALLOW BEDROCK GROUNDWATER ELEVATION CONTOURS, MAY 10-12, 2010

ARCADIS

FIGURE
8



NOTES:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. HYDRAULIC HEAD VALUES ARE REPORTED IN FEET ABOVE MEAN SEA LEVEL (FT-AMSL) FOR MAY 2010 MEASUREMENT EVENT.
3. HEAD VALUES IN PARENTHESES WERE NOT USED FOR CONTOURING.

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- DEEP BEDROCK MONITORING WELL
- NTCRA 2 EXTRACTION WELL
- PIEZOMETER
- 149.84 HYDRAULIC HEAD VALUE
- 154 GROUNDWATER ELEVATION CONTOUR (FT-AMSL) CONTOUR INTERVAL = 2 FEET, UNLESS NOTED OTHERWISE (DASHED WHERE INFERRED)

VOC CONCENTRATION TREND (90% C.I.)

- ↑? INCREASING OR NO TREND
- ↔ NO TREND
- ↓ DECREASING
- ND EVENTS WITH NO DETECTED VOCs PRECLUDE TREND ANALYSIS

DRAFT

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #3

DEEP BEDROCK GROUNDWATER ELEVATION CONTOURS, MAY 10-12, 2010

ARCADIS

FIGURE
9

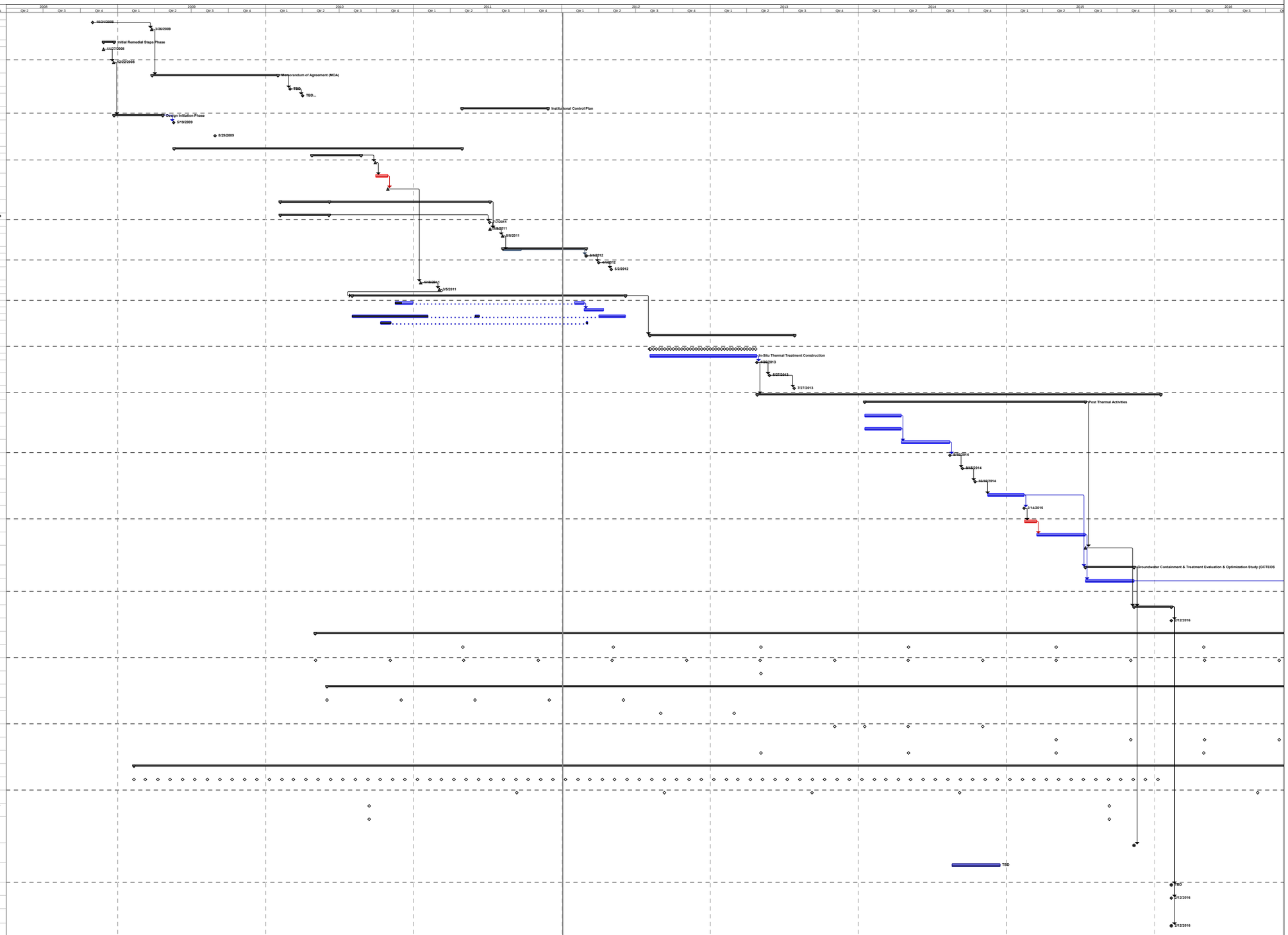
CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER PM: J. HOLDEN TM/TR: M. GEFELL LYR: ON=*;OFF=*REF; (FRZ)
G:\ENVCAD\Manchester\ACTIB\00546340000\00260054634W05.DWG LAYOUT: 9 SAVED: 12/22/2011 1:57 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/22/2011 1:57 PM BY: SMALL, BRIAN
XREFS: 54634X01 IMAGES: PROJECTNAME: ---

Attachments

de maximis, inc.

SRSNE RD/RA Project Schedule
Annual State of Compliance Report #4

ID	Deliverable/Activity	Trigger	Time Frame	SOW Sections
0	**RDRA Schedule**			
1	**Lodging of the Consent Decree**			
2	**Entry of the CD**			
3	**Initial Remedial Steps Phase**	EPA Approval of Contractors		V.B
4	**Notification of Supervising Contractor/Project Coordinator**	Lodging of the CD	Satisfied in the draft SOW.	V.B.1
5	**Notification/Selection of a Remedial Design Contractor**	Lodging of the CD	Notification/Selection of a Remedial Design Contractor	V.B.2
6	**Memorandum of Agreement (MOA)**	Entry of the CD.	Within 180 days of Entry of CD	V.B.3
10	**Supplemental Containment Action Plan**	EPA Approval of MOA	Within 30 days of signed MOA.	V.B.5
11	**Implementation of Supplemental Containment Action Plan (TBD)**	Upon notification by EPA, and consistent with the terms of the Memorandum of Agreement	As specified by EPA.	V.B.6
12	**Institutional Control Plan**	Completion of Vapor Intrusion Study	Within 30 days of completion of Vapor Intrusi	V.B.7
19	**Design Initiation Phase**			V.C
43	**Agency Review and Comment on Accelerated Pre Design Studies**			
44	**Agency Review and Comment on Remedial Design Work Plan and POP**			
45	**Pre-Design Studies**			
64	**Pre-ISTR Final Design Package (100 % Design)**	EPA approval or modification of Conce	Within 90 days of notice by EPA.	V.E.1
71	**Technical Information Meeting**	Submittal of 100% Design.		V.E.2
72	**Agency Review/Comment**			
73	**Agency Approval of Pre-ISTR Package (100% Design) with Comments**			
74	**ISTR Conceptual Design Package (75% Design)**	EPA approval or modification of RD Work Plan.	Within 120 days of EPA approval that necessary pre-design studies to be described in the RD Work Plan are complete.	V.D.1
75	**Pre-Design Activities Reports**			V.D.1.a
80	**Submit 75% Design Package**			
81	**Technical Information Meeting**			V.D.3
82	**Agency Approval of 75% Design Package with Comments**			
83	**ISTR Final Design Package (100% Design)**			V.E.3
86	**Submit ISTR Final Draft Package (100% Design)**			
87	**Technical Information Meeting**			
88	**Agency Approval of ISTR Design Package (100% Design) with Comments**			
89	**Pre-construction Conference(s)**	EPA approval or modification of Final C	Within 30 days of notice by EPA.	VI.C
90	**Pre-construction Public Meeting(s)**	EPA approval or modification of Final C	Within 45 days of notice by EPA.	VI.D
91	**Accelerated ISTR Construction Activities**			
92	AT&T Fiber Optic Relocation			
93	Partial CP-2 (culvert relocation) Construction			
94	OAR-2 Surface Preparation for ISTR Work			
95	Thermal Infrastructure Installation (gas, sewer, power)			
96	**Initiation of Remedial Action Construction Activities (ISTR and Soils)**	**EPA approval or modification of Final Design.**	**Within 60 days of notice by EPA.**	VI.E
97	**Meetings During Construction**	**Start of Construction**	**Weekly during construction**	VI.F
172	In-Situ Thermal Treatment Construction			
173	Thermal Final Construction Inspection	Within 60 days of notice by Settling Defendants.		VI.G
174	Submit Construction Completion Report	Within 30 days of Final Construction Inspection.	Within 30 Days	VI.H
175	Agency Approval of Completion Report			
176	**Thermal Treatment**			
181	**Post Thermal Activities**			
182	**Soil Investigation**	After In-Situ Thermal to re-assess the size of the area to be capped		V.C.i
183	**Vapor Control System Evaluation**	After In-Situ Thermal to determine whether (or not) a vapor control system is needed below the cap.		V.C.j
184	**Final Soil & RCRA C Cap Conceptual Design**			
185	**Final Soil & Multi Layer Cap Submit 75% Design Package**			
186	**Technical Information Meeting**			
187	**Agency Approval of 75% Final Soil & Multi Layer Cap Design Package with Comments**			
188	**Final Soil & Multi Layer Cap 100% Design Submittal**			
189	**Technical Information Meeting**			
190	**Agency Approval of Final Soil & Multi Layer Cap 100% Design**			
191	**Final Soil & Multi Layer Cap Construction**			
192	**Final Construction Inspection**	Settling Defendants conclude construction complete.	Within 60 days of notice by Settling Defendants.	VI.G
193	**Groundwater Containment & Treatment Evaluation & Optimization Study (GCTEOS**			V.C.4
194	**Optimization Studies**	Upon completion of the in-situ Thermal Treatment and capping components of the remedy	As directed by the EPA, or proposed by the Settling Defendants, no less frequently than every 10 years	V.C.6
195	**Additional Optimization Study(s) (TBD)**			V.C.6
196	**Completion Report**	Final construction inspection.	Within 30 days of inspection.	VI.H
212	**Commencement of Operation and Maintenance**	EPA approval or modification of Construction Completion Report.	Immediately upon notice by EPA.	VI.I
213	**Compliance Monitoring (CM)**			VII.B
214	**Annual Groundwater Sampling Event**			
226	**Biennial Groundwater Sampling Event**			
247	**Five-Year Review Sampling Event**			
251	**Sampling between Railroad Tracks and NTCRA 1 Sheet Pile Wall**			
252	**Pre ISTR Sampling**			
258	**ISTR Sampling**			
261	**Post ISTR Sampling (During Time to Achieve Equilibrium)**			
266	**Post ISTR Equilibrium Sampling**			
277	**Background Sampling Event (Metals Only)**			
283	**Compliance Reporting**			VIII
284	**Monthly Progress Reports**	**Lodging of the CD.**	**On the 10th day following lodging and monthly thereafter.**	VIII.A
369	**Annual State of Compliance Reports**	**One Year After the Lodging of the Consent Decree**	**Annually**	VIII.B
381	**Five Year Review Reports**	**Five Years after the date of the Record of Decision**	**Every Five years**	VII.A.D
385	**Compliance Monitoring (CM) Work Plan Evaluation(s)**	**No less frequently than once after implementation of the excavation and capping component, and long-term groundwater containment and treatment system.**	**As part of the five-year reviews.**	VII.B.3
389	**Interim Remedial Action Report**	EPA determination that long-term groundwater containment and treatment system is operational and functional.	Within 90 days of notice by EPA.	VIII.C
390	**Determination of Background Metals in Groundwater (TBD)**	Compliance with Interim Cleanup Levels for Groundwater.	No sooner than 365 days prior to submittal of Demonstration of Compliance Report.	VIII.E
391	**Demonstration of Compliance Report (TBD)**	Compliance with cleanup levels.	As demonstrated by Settling Defendants.	VIII.F
392	**Risk Assessment**			IV.A.1
393	**Site Closure (TBD)**			
394	**Summary of Cost Information (TBD)**	Compliance with cleanup levels.	As demonstrated by Settling Defendants.	VIII.G



de maximis, inc.

SRSNE RD/RA Project Schedule
Annual State of Compliance Report #2

ID	Deliverable/Activity	Trigger	Time Frame
0	**RDRA Schedule**		
1	**Lodging of the Consent Decree**		
2	**Entry of the CD**		
3	**Initial Remedial Steps Phase**	EPA Approval of Contractors	
4	**Notification of Supervising Contractor/Project Coordinator**	Lodging of the CD	Satisfied in the draft SOW.
5	**Notification/Selection of a Remedial Design Contractor**	Lodging of the CD	Notification/Selection of a Remedial Design Contractor
6	**Memorandum of Agreement (MOA)**	Entry of the CD.	Within 180 days of Entry of CD
10	**Supplemental Containment Action Plan**	EPA Approval of MOA	Within 30 days of signed MOA.
11	**Implementation of Supplemental Containment Action Plan (TBD)**	Upon notification by EPA, and consistent with the terms of the Memorandum of Agreement	As specified by EPA.
12	**Institutional Control Plan**	Completion of Vapor Intrusion Study	Within 30 days of completion of Vapor Intrusi
19	**Design Initiation Phase**		
43	**Agency Review and Comment on Accelerated Pre Design Studies**		
44	**Agency Review and Comment on Remedial Design Work Plan and POP**		
45	**Pre-Design Studies**		
64	**Pre-ISTR Final Design Package (100 % Design)**	EPA approval or modification of Conce	Within 90 days of notice by EPA.
71	**Technical Information Meeting**	Submittal of 100% Design.	
72	**Agency Review/Comment**		
73	**Agency Approval of Pre-ISTR Package (100% Design) with Comments**		
74	**ISTR Conceptual Design Package (75% Design)**	EPA approval or modification of RD Work Plan.	Within 120 days of EPA approval that necessary pre-design studies to be described in the RD Work Plan are complete.
75	**Pre-Design Activities Reports**		
80	**Submit 75% Design Package**		
81	**Technical Information Meeting**		
82	**Agency Approval of 75% Design Package with Comments**		
83	**ISTR Final Design Package (100% Design)**		
86	**Submit ISTR Final Draft Package (100% Design)**		
87	**Technical Information Meeting**		
88	**Agency Approval of ISTR Design Package (100% Design) with Comments**		
89	**Pre-construction Conference(s)**	EPA approval or modification of Final C	Within 30 days of notice by EPA.
90	**Pre-construction Public Meeting(s)**	EPA approval or modification of Final C	Within 45 days of notice by EPA.
91	**Accelerated ISTR Construction Activities**		
92	AT&T Fiber Optic Relocation		
93	Partial CP-2 (culvert relocation) Construction		
94	OAR-2 Surface Preparation for ISTR Work		
95	Thermal Infrastructure Installation (gas, sewer, power)		
96	**Initiation of Remedial Action Construction Activities (ISTR and Soils)**	**EPA approval or modification of Final Design.**	**Within 60 days of notice by EPA.**
97	**Meetings During Construction**	**Start of Construction**	**Weekly during construction**
172	In-Situ Thermal Treatment Construction		
173	Thermal Final Construction Inspection	Within 60 days of notice by Settling Defendants.	
174	Submit Construction Completion Report	Within 30 days of Final Construction Inspection.	Within 30 Days
175	Agency Approval of Completion Report		
176	**Thermal Treatment**		
181	**Post Thermal Activities**		
182	**Soil Investigation**	After In-Situ Thermal to re-assess the size of the area to be capped	
183	**Vapor Control System Evaluation**	After In-Situ Thermal to determine whether (or not) a vapor control system is needed below the cap.	
184	**Final Soil & RCRA C Cap Conceptual Design**		
185	**Final Soil & Multi Layer Cap Submit 75% Design Package**		
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385	**Compliance Monitoring (CM) Work Plan Evaluation(s)**	**No less frequently than once after implementation of the excavation and capping component, and long-term groundwater containment and treatment system.**	**As part of the five-year reviews.**
389	**Interim Remedial Action Report**	EPA determination that long-term groundwater containment and treatment system is operational and functional.	Within 90 days of notice by EPA.
390	**Determination of Background Metals in Groundwater (TBD)**	Compliance with Interim Cleanup Levels for Groundwater.	No sooner than 365 days prior to submittal of Demonstration of Compliance Report.
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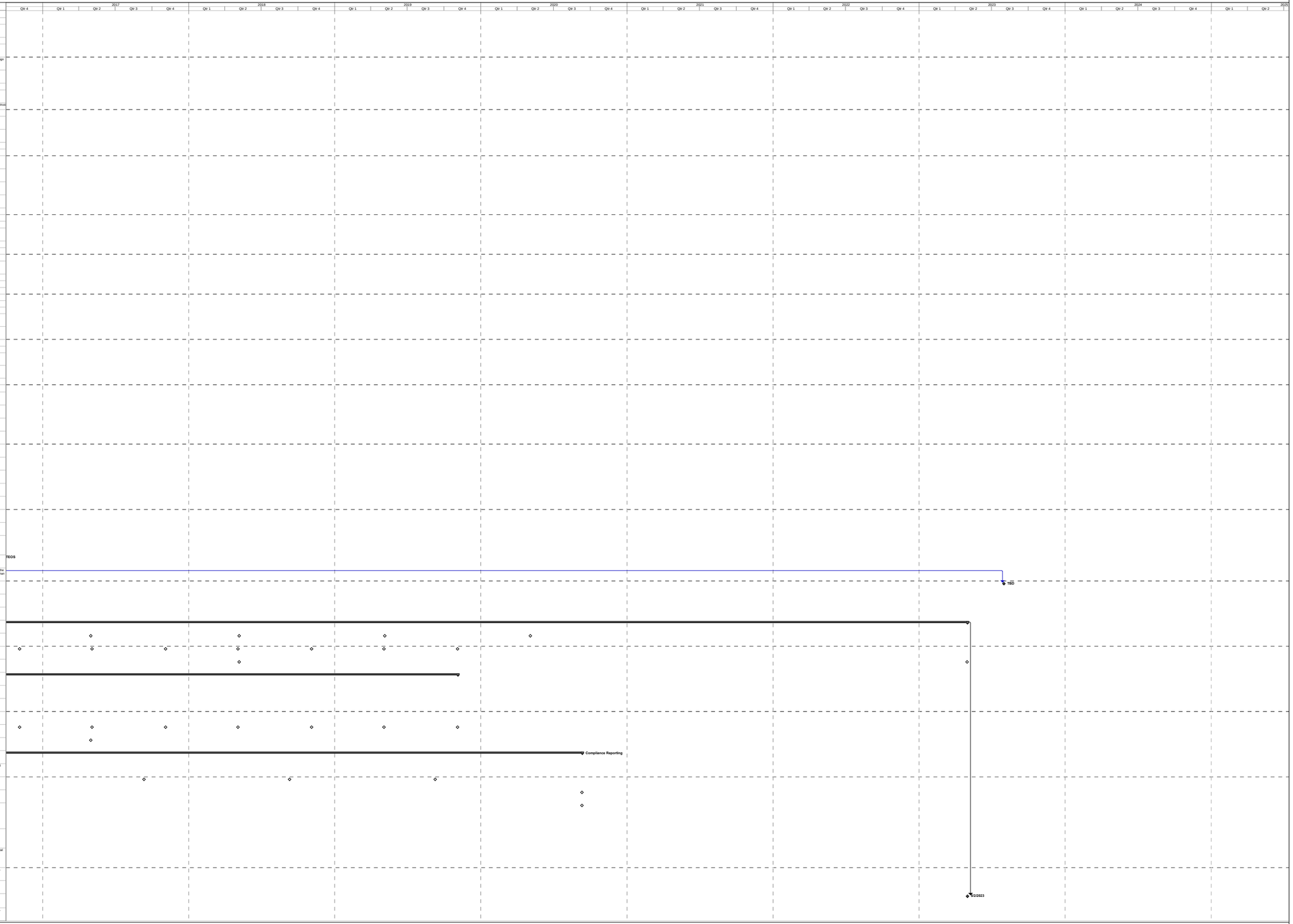
394	**Summary of Cost Information (TBD)**		



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Hydraulic Containment and Treatment System Annual Demonstration of Compliance Report No. 5

31 October 2012 Through 30 October 2013

Solvents Recovery Service of New England, Inc.
Superfund Site
Southington, Connecticut

Prepared for:
SRSNE PRP Group

Prepared by:

WESTON SOLUTIONS, INC.
Suite 3B
124 Hebron Avenue
Glastonbury, CT 06033
(860) 368-3200

3 DECEMBER 2013

HYDRAULIC CONTAINMENT AND TREATMENT SYSTEM ANNUAL DEMONSTRATION OF COMPLIANCE REPORT - NO. 5 31 OCTOBER 2012 THROUGH 30 OCTOBER 2013

SOLVENTS RECOVERY SERVICE OF NEW ENGLAND, INC. SUPERFUND SITE SOUTHINGTON, CONNECTICUT

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1.0 INTRODUCTION

This Demonstration of Compliance Report (DCR) was prepared by Weston Solutions, Inc. (WESTON) on behalf of the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site PRP Group. The DCR documents the effectiveness of the Non-Time-Critical Removal Action No. 1 and 2 (NTCRA-1 and NTCRA-2) hydraulic containment and treatment system at the SRSNE Site in Southington, Connecticut, based on data collected during the period of 31 October 2012 through 30 October 2013. The data presented in this DCR were obtained in accordance with the United States Environmental Protection Agency (USEPA) approved Demonstration of Compliance Plans (DCP) for NTCRA-1 and NTCRA-2 (BBL, June 1995 and November 1999), respectively. The data acquisition schedule, reporting and evaluation requirements for this and future DCRs were described in these DCPs.

This is the fifth annual DCR to be issued after lodging of the consent decree and submitted in accordance with the Remedial Design/Remedial Action (RD/RA) Statement of Work (SOW). This DCR follows 60 previously submitted DCRs prepared initially on a quarterly basis and changed to annual submissions in 2003.

1.1 NTCRA-1 BACKGROUND

The NTCRA-1 hydraulic containment system is installed in the containment area (Figure 1A), which was defined in the NTCRA-1 SOW. The containment system originally included an array of 12 overburden groundwater extraction wells (RW-1 through RW-12) and a downgradient barrier (steel sheet piling) that hydraulically and physically contains overburden groundwater entering the containment area from the SRSNE operations area.

The pre-design investigation results and the designs of the hydraulic barrier wall, extraction wells and treatment system are described in detail in the NTCRA-1 100% Groundwater Containment and Treatment System Design Report (100% Design Report, BBL, January 1994). The NTCRA-1 system was constructed between February and July 1995 and brought online in accordance with the USEPA-approved schedule on 19 July 1995.

The NTCRA-1 hydraulic containment and monitoring network remained as originally constructed until November 2009 when select recovery wells, monitoring wells and piezometers were abandoned in accordance with the Monitoring Well Network Evaluation, included as Attachment N to the Remedial Design Work Plan (Arcadis, April 2009). EPA was notified that the abandoned wells and piezometers would be removed from the NTCRA-1 monitoring program and DCP on 1 November 2009 (WESTON, December 2009). The second annual DCR (31 October 2009 to 30 October 2010) summarizes the recovery wells, monitoring wells and piezometers abandoned under this program and the rationale for abandonment of each well. As indicated in the second annual DCR, all monitoring wells and piezometers were abandoned in November and December 2009, with exception to former recovery wells RW-5 and RW-6. These wells were permanently taken out of service in November 2009, but not abandoned until December 2010.

As a result of the recovery well abandonment activities discussed above, the NTCRA-1 containment system now consists of ten overburden groundwater extraction wells (RW-1 through RW-4, and RW-7 through RW-12).

1.2 NTRCA-2 BACKGROUND

The NTCRA-2 hydraulic containment system is installed south of the NTCRA-1 containment area (Figure 1A), as defined in the NTCRA-2 SOW. The NTCRA-2 containment area encompasses the majority of the northern portion of the Town of Southington well field property and includes the shallow and deep bedrock, extending to a depth of 100 feet below the top of bedrock in the northern portion of this property (Figure 1A). Further upgradient (north), the NTCRA-2 containment area extends over 170 feet below the top of bedrock and over 200 feet below ground surface (BBL, November 1999).

The NTCRA-2 hydraulic containment system initially included two groundwater extraction wells (RW-13 and RW-1R) that, in combination with the NTCRA-1 containment system, contain bedrock groundwater migrating from the SRSNE operations area (Figure 1A). The design of the overburden and bedrock extraction wells RW-13 and RW-1R, respectively, are described in the NTCRA-2 100% Design Report (BBL, November 1999). Overburden recovery well RW-13 has been on-line since 14 July 1999 and bedrock recovery well RW-1R has been operating since 5 September 2001.

A third groundwater extraction well (RW-14) was added to the NTCRA-2 well field (Figure 1A) to further enhance long-term hydraulic containment of the overburden and bedrock groundwater in the NTCRA-2 well field. The design of the additional overburden extraction well is described in the RW-14 Completion Report (WESTON, November 2007). This overburden recovery well has been operating since 24 September 2007.

1.3 GROUNDWATER TREATMENT SYSTEM

The groundwater extracted by the NTCRA-1 and 2 containment systems is pumped directly to the groundwater treatment facility (Figure 1A). The treatment system consists of the following unit processes: influent equalization, metals pretreatment, filtration, ultraviolet oxidation (UV), and granular activated carbon adsorption. Vapor phase carbon adsorption is also used to capture contaminants that volatize during treatment. The system precipitates and extracts metals, reduces suspended solids, and destroys and captures volatile organic contaminants. Treated water is discharged to the Quinnipiac River in accordance with the Revised Connecticut Department of Environmental Protection (CTDEP) Substantive Requirements for Discharge of Pre-Treated Groundwater issued 6 November 1995.

1.4 REPORT ORGANIZATION

Section 2 of this report summarizes the acquisition and evaluation of field data used to verify the effectiveness of the hydraulic containment and treatment system and Section 3 provides an overview of operations and maintenance activities conducted at the site during this O&M period.

2.0 DATA ACQUISITION AND RESULTS

The data required to demonstrate the effectiveness of the hydraulic containment and treatment system were obtained in the form of hydraulic head measurements from wells and piezometers installed in the area of the containment system, flow measurements from the extraction well array, treatment system flow rates and analytical results.

2.1 NTCRA-1 CONTAINMENT SYSTEM MONITORING

The satisfactory performance of the NTCRA-1 containment system is verified through two reversal of gradient tests that determine whether groundwater flow is controlled by the system. These tests are demonstrated by comparing hydraulic head measurements at several monitoring locations. The specific wells and piezometers used for these comparisons are discussed in Sections 2.1.1 and 2.1.2. The gradient tests are:

Reversal of Gradient Test No. 1 (RGT-1): Confirms that overburden groundwater east and downgradient of the operations area is flowing in the direction of the groundwater extraction wells.

Reversal of Gradient Test No. 2 (RGT-2): Confirms that overburden groundwater flow is reversed and maintained in the direction of the groundwater extraction wells within the area enclosed by the hydraulic divide installed adjacent to the hydraulic containment system. RGT-2 is more crucial to a demonstration of compliance as it requires that overburden groundwater elevations within the barrier are at least 0.3 feet lower than those outside the wall in NTCRA-1.

2.1.1 RGT-1 RESULTS

To confirm that overburden groundwater east and downgradient of the operations area and within the containment area is flowing in the direction of the groundwater extraction wells, hydraulic head measurements were collected at the following overburden wells/piezometers located in the vicinity of the groundwater containment system:

- Extraction Wells RW-1 through RW-4 and RW-7 through RW-12;
- Monitoring Wells MW-415, MWL-304, MWL-305, MWL-307, and MWL-308

Overburden groundwater elevations were also measured at the following wells to assess the hydraulic response in the area between the hydraulic barrier wall and the Quinnipiac River:

- MWL-302, MWL-306, MWL-309, MWL-311, and TW-7A.

Monthly overburden hydraulic head data measured at the specified wells and compliance monitoring points from 31 October 2012 through 30 October 2013 are presented in Table 1. The resulting groundwater contour maps are presented as Figures 1A through 12A. The

contours indicate the horizontal hydraulic gradient between the SRSNE operations area and the extraction wells was eastward toward the extraction wells, fulfilling RGT-1.

The vertical hydraulic gradient between the overburden and bedrock in the vicinity of the hydraulic containment system is also evaluated to confirm satisfactory recovery well operation. Groundwater elevations were compared between bedrock well (MW-416) and the adjacent overburden well (MWL-307) on the same dates. This comparison indicates that the vertical component of the hydraulic gradient between the bedrock and the overburden was generally downward from the overburden to the bedrock within the containment area.

Hydraulic head data is also compared at overburden compliance piezometers CPZ-1, CPZ-3, CPZ-5, CPZ-7 and CPZ-9 and adjacent bedrock piezometers CPZ-1R, CPZ-3R, CPZ-5R, CPZ-7R and CPZ-9R. Monitoring indicates that the gradient was generally upward from the bedrock to the overburden in the vicinity of the pumping wells and the hydraulic barrier wall throughout the period covered by this DCR.

2.1.2 RGT-2 RESULTS

To confirm that groundwater flow is reversed and maintained in the direction of the groundwater extraction wells, hydraulic head measurements were collected weekly at eight fully penetrating overburden compliance piezometers (CPZ-1 2A, 3, 4A, 5, 6, 7 and 8). Compliance piezometers (CPZ-9 and 10) were removed from RGT-2 because CPZ-9 was abandoned in December 2009. As stated in the DCP, the hydraulic gradient is considered reversed and inward across the hydraulic barrier wall when the hydraulic head data measured at each compliance piezometer located inside the hydraulic barrier wall (CPZ-1, CPZ-3, CPZ-5 and CPZ-7) is at least 0.3 foot lower than the head measured at the corresponding compliance piezometer located outside the hydraulic barrier wall (CPZ-2A, CPZ-4A, CPZ-6 and CPZ-8, respectively).

Based on weekly hydraulic head measurements, the required 0.3 feet head differential was achieved in all four pairs (CPZ-1/CPZ-2A, CPZ-3/CPZ-4A, CPZ-5/CPZ-6 and CPZ-7/CPZ-8) for forty five (45) of the fifty two (52) weeks during the monitoring period. Compliance piezometer pairs CPZ-1/2A, CPZ-5/CPZ-6 and CPZ-7/CPZ-8 met the 0.3 feet head differential during the entire monitoring period. Compliance piezometer pair, CPZ-3/CPZ-4A did not achieve the required 0.3-foot differential on 7 weekly gauging rounds during the months of November and December 2012. Table 5 provides a summary of RGT-2 test results and highlights the weeks the required head differential was not maintained between CPZ-3/4A. The cause of the loss of hydraulic gradient reversal at these two compliance pairs is believed to be a result of excessively dry site conditions due to low precipitation and a substantial localized elevation decrease in the overburden water table outside of the sheet pile wall. Following substantial precipitation in December 2012, compliance at this pair was restored for the remainder of the monitoring period.

To verify the continuity of gradient reversal, daily hydraulic head measurements are also recorded via a data logger at compliance piezometers CPZ-5 and CPZ-6. Measurements collected in eight hour intervals (three times/day) as recorded by a data logger installed at compliance piezometers CPZ-5 and CPZ-6 also demonstrated compliance for the entire period covered in this report, with exception to one event of non-compliance encompassing a total of two days. A hydrograph of the data logger measurements from compliance pair CPZ-5 and CPZ-6 is presented as Figure 13 for the monitoring period.

A summary of NTCRA-1 non-compliance occurrences between 31 October 2012 and 30 October 2013 is presented below, along with an explanation of the cause and corrective measures taken to correct the problem.

NTCRA-1 – Non-Compliance Summary – 31 October 2012 to 30 October 2013		
Date	**Cause**	**Corrective Actions**
23-24 April 2013	Recovery Well RW-2 was out of service for redevelopment as part of planned recovery well maintenance.	No corrective action was warranted. This period of non-compliance was expected during recovery well redevelopment (maintenance) activities

2.2 NTCRA-2 CONTAINMENT SYSTEM MONITORING

The satisfactory performance of the NTCRA-2 hydraulic containment system is verified through two containment tests that compare hydraulic head measurements in NTCRA-2. The specific locations used for hydraulic head comparisons are presented in Sections 2.2.1 and 2.2.2. The containment tests are:

Containment Test Part 1 (CT-1): Confirms that within the NTCRA-2 containment area, bedrock groundwater east and downgradient of the operations area, is flowing in the direction of the hydraulic containment system.

Containment Test Part 2 (CT-2): Confirms that bedrock groundwater flow downgradient of the NTCRA-2 extraction system within the containment area is reversed and maintained in the direction of the hydraulic containment system.

2.2.1 CT-1 RESULTS

To confirm that VOC-impacted bedrock groundwater east and downgradient of the operations area and within the containment area is flowing in the direction of the extraction wells, hydraulic head measurements were obtained at the following pairs of wells/piezometers located upgradient of the hydraulic containment system:

- Shallow bedrock – MW-704R and MW-121A; and
- Deep Bedrock – MW-704DR and MW-705DR.

The hydraulic gradient is considered to be towards the extraction wells when the hydraulic head measured at the shallow (MW-704R) and deep (MW-704DR) bedrock monitoring wells located adjacent to extraction wells RW-13, RW-1R and RW-14 is lower than hydraulic head measurements at wells MW-121A and MW-705DR, respectively.

Monthly rounds of hydraulic head data measurements collected from 31 October 2012 to 30 October 2013 are presented in Table 1. The resulting contour maps for shallow bedrock and deep bedrock monitoring wells and piezometers are presented as contours on Figures 1B through 12B and Figures 1C through 12C, respectively. The contours indicate that groundwater flow in the shallow and deep bedrock is inward toward the NTCRA-2 extraction wells, fulfilling Containment Test Requirement No.1.

2.2.2 CT-2 RESULTS

To confirm that bedrock groundwater flow downgradient of the extraction system within the containment area is reversed and maintained in the direction of the extraction wells, hydraulic head measurements were obtained at the following locations:

- Shallow bedrock – MW-704R, MW-204A, PZR-2R, and PZR-4R; and
- Deep Bedrock – MW-704DR, PZR-2DR, and PZR-4DR.

The hydraulic gradient is considered reversed and inward toward the containment area when the hydraulic head measured at the shallow and deep bedrock monitoring wells MW-704R and MW-704DR, which are located adjacent to extraction wells RW-13, RW-1R and RW-14, is lower than the hydraulic head measurements at the remaining shallow and deep bedrock monitoring wells and piezometers listed above. Measurements taken at these locations are presented in Table 1 and as groundwater contours in Figures 1B through 12B and 1C through 12C.

To verify the continuity of gradient reversal, daily hydraulic head measurements are recorded via a data logger at the following locations:

- Shallow bedrock – MW-704R and PZR-2R; and
- Deep Bedrock – MW-704DR and PZR-2DR.

Daily hydraulic head measurements recorded via data loggers installed in NTCRA-2 compliance pairs MW-704R and PZR-2R (shallow bedrock) and MW-704DR and PZR-2DR (deep bedrock) indicated that the NTCRA-2 containment system met CT-2 for the monitoring period, with the exception to two periods of non-compliance outlined herein encompassing a total of nine (22) days.

Hydrographs of the data logger measurements obtained for shallow and deep bedrock compliance points between 31 October 2011 and 30 October 2012 are included as Figures 14A and 14B, respectively.

A summary of NTCRA-2 non-compliance occurrences during the monitoring period is presented below, along with an explanation of the cause and corrective measures taken to correct the problem.

NTCRA-2 – Non-Compliance Summary – 31 October 2012 to 30 October 2013		
Date	**Cause**	**Corrective Actions**
31 Oct. to 19 Nov. 2012	Recovery Well RW-1R was off-line while a bedrock well depth was extended in an attempt to improve recovery well yield.	No correction action warranted. This period of non-compliance was the result of improvements to Recovery Well RW-1R.
8-9 April 2013	Recovery Wells RW-13 and 14 were out of service for redevelopment as part of planned recovery well maintenance.	No corrective action was warranted. This period of non-compliance was expected during recovery well redevelopment (maintenance) activities

2.3 TREATMENT SYSTEM MONITORING

HCTS influent and effluent flow measurements and laboratory analytical data were obtained during the monitoring period. The flow and analytical data are presented and discussed in Sections 2.3.1 and 2.3.2, respectively.

2.3.1 HCTS INFLUENT AND EFFLUENT FLOW DATA

The influent and effluent flow rates of the groundwater treatment system were each recorded continuously using an in-line totalizing flow meter and strip chart recorder. The NTCRA-1 and NTCRA-2 recovery wells ran continuously throughout the monitoring period, with the exception of minor shutdowns during maintenance, individual recovery well failures or HCTS alarm shutdowns. During the monitoring period, NTCRA-2 recovery wells RW-13&14 were redeveloped once in April 2013 to maintain drawdown and groundwater hydraulic control during the monitoring period. All 10 NTCRA-1 recovery wells were also redeveloped in April 2013.

Approximately 18,978,000 gallons of groundwater were extracted, treated and discharged during the monitoring period. Refer to Table 2 for a summary of influent and effluent flow rates and totals. Throughout the period covered in this report, the system treated and discharged an average of 36.1 gallons per minute.

2.3.2 HCTS INFLUENT AND EFFLUENT ANALYTICAL DATA

Samples of groundwater treatment system influent and effluent were collected twice per month and analyzed for metals, VOCs, alcohols and total suspended solids. For the process effluent, the first round each month was also analyzed for total PCBs. Once every quarter, additional effluent samples were collected and tested for dioxins/furans. Analytical results from the influent and effluent sampling are summarized in Tables 3 and 4, respectively. In Table 4, the effluent sampling results are compared with the discharge limits established by the CTDEP in the Substantive Requirements for Discharge, dated 6 November 1995. As shown in Table 4, the treatment system effluent water quality was below discharge limits for the monitoring period.

In addition to the analyses discussed previously, effluent samples were collected and submitted for acute and chronic toxicity analysis in January, April, July and October 2013. The submitted effluent samples passed the acute and chronic toxicity test for both Daphnia Pulex and fathead minnows.

Process influent and effluent sampling for 1,4 dioxane was monitored quarterly during the monitoring period to collect additional data concerning this compound. Currently no discharge limit exists for 1,4-dioxane. Quarterly sample results for the year are presented below.

SRSNE - 1,4-Dioxane Sampling Summary		
Date	**Influent (ppb)**	**Effluent (ppb)**
1-Jan-13	66.0	29.0
2-Apr-13	43.0	20.0
1-Jul-13	42.0	35.0
2-Oct-13	57.0	23.0

3.0 Hydraulic Containment and Treatment System (HCTS) Operations and Maintenance Summary

The HCTS operations and maintenance (O&M) summary is divided into two sections. Section 3.1 highlights the major O&M related activities performed between 31 October 2012 and 30 October 2013. Section 3.2 discusses O&M issues that are on-going or anticipated during the future activities at the site.

3.1 OPERATIONS AND MAINTENANCE SUMMARY

The following briefly describes highlighted HCTS operations and maintenance activities or capital improvements conducted during the reporting period.

1. **November 2012– NTCRA-2 Recovery Well (RW-1R):** Deep bedrock well, RW-1R was temporarily taken out of operation in October and November 2012 in order to perform well surveys and drill the well deeper to increase its yield and plume capture effectiveness. This recovery well was placed back into service on 19 November 2013.

2. **December 2012 and January 2013 - Recovery Well (RW-1R) Testing and Monitoring – Adjustments:** Temporary trolls were employed to monitor select NTCRA-2 area deep bedrock wells for the months of December 2012 and January 2013 after restoration of Recovery Well RW-1R operations to confirm its change in performance. In December 2012, WESTON lowered the RW-1R operating level from approximately 32-feet to 72-feet below the top of casing (TOC). This process adjustment and subsequent testing included monitoring the recovery well's yield and area deep bedrock groundwater levels. In January the recovery well was shut down for approximately a week to evaluate its recharge. Testing results are presented on Figure 14B. Overall the process adjustment increased the average well yield from 0.06 to 0.12 gpm.

3. **November 2013 – RW-13 Vault Replacement and NTCRA-2 Fence Improvements:** As discussed in last year's DCR, the Vault for RW-13 was replaced in October 2012; however the vault hatch fabrication was delayed. In November the hatch was delivered and installed on the vault completing the RW-13 enhancements. Subsequently, the fence around the NTCRA-2 recovery well control panel was modified so recovery well RW-13 was not within the fence boundary improving access to the recovery well.

4. **December 2012 and September 2013 Gravity Pipe Cleaning:** In order to maintain acceptable treatment system hydraulic throughput, WESTON cleaned the metals precipitation gravity piping on two occasions during the monitoring period. All gravity piping between the Clarifier Feed Tank and Sand filter was cleaned during each event.

5. **December 2012 and September 2013 – Clarifier Feed, Flash Mix and Flocculation Tank and Mixer Cleaning:** In order to maintain acceptable treatment

system performance, the Clarifier Feed Tank, Flash Mix Tank and Flocculation Tank were each dewatered and each tank and the tank mixers were cleaned on two occasions.

6. **January 2013 - Clarifier Feed Pump P-100 – Seal Replacement:** The mechanical seal for this pump failed during December 2012. The seal was replaced in January 2013 to restore its operation to normal.

7. **January 2013 – Compressor Repair:** The right hand air compressor stopped operating normally during December 2012. During the month of January 2013, the compressor pump was rebuilt to restore its operation to normal.

8. **February 2013 – Fire Suppression System Backflow Preventer:** In January, a water leak was detected in fire suppression system back flow preventer. The leak was temporally plugged and the valve was rebuilt in February 2013.

9. **February 2013 – NTCRA-2 Influent Flow Meter Replacement:** The NTCRA-2 influent flow meter has been historically reading higher than actual. The inaccuracy was steadily worsening and was causing the estimated NTCRA-1 flow contribution to be negative. The flow meter was replaced with a new smaller 1.5" Neptune water meter. Significantly improved flow results have been observed for NTCRA-2 contribution following the meter replacement for the remainder of the DCR period however fouling and a pressure restriction has been observed at this new flow meter in the fall of 2013. Future consideration will be given to replacing the meter with a magnetic type flow meter which are less prone to fouling.

10. **April 2013- NTCRA-2 Recovery Well RW-13 and RW-14 Redevelopment:** Recovery Wells, RW-13 and RW-14 were redeveloped to improve hydraulic performance of the recovery well and maintain NTCRA-2 hydraulic gradient reversal objectives.

11. **April 2013 – NTCRA-1 Recovery Well Redevelopment:** All 10 NTCRA-1 recovery wells were redeveloped to improve hydraulic performance and maintain NTCRA-1 hydraulic gradient reversal objectives.

12. **April 2013 – Clarifier Feed Tank pH Probe Replacement:** The pH system for the Clarifier Feed Tank was not calibrating properly. This pH probe was replaced to restore its operation to normal.

13. **May 2013 – Primary and Secondary GAC Carbon Replacement:** Activated carbon in the primary and secondary carbon vessels (2000 lbs. each) was replaced with new carbon. The spent carbon was removed and recycled by Carbon Filtration Systems, Inc.

14. **August 2013 – Filter Press Sump Replacement:** In August the filter press sump pump stopped working. The pump was confirmed to be inoperable and a new pump was installed to restore operation to normal.

15. **Ultraviolet Oxidation System:** The following summarizes the major maintenance performed on the UV Equipment during the monitoring period:

- Two (2) UV lamps were replaced during the reporting period. All lamps were removed or replaced due to failure, excessive amperage draw or excessive hours.

During the monitoring period no additional UV reactor circuits failed. At the end of this monitoring period, UV-1 has 8 of 12 functional reactor circuits. UV- 2 has 7 of 12 functional circuits out of 12.

3.2 FUTURE HCTS OPERATIONS AND MAINTENANCE ACTION ITEMS

WESTON will continue to evaluate the overall HCTS and make recommendations for process improvements or modifications in the coming year. These recommendations will be summarized in the Monthly Operations and Maintenance HCTS report submissions. The following improvements are planned or being considered during the next DCR period.

- The SCADA computer has reached the end of its expected lifespan. This computer and the associated interface software will be replaced.

- The NTCRA-2 force main has begun to foul and thereby impacting the NTCRA-2 recovery well flow rate. This system will be modified to enable regular cleaning and maintenance so NTCRA-2 flows can be maintained.

- Installation of a Magnetic type flow meter for the NTCRA-2 influent to eliminate fouling concerns and maintenance is being evaluated.

TABLE 1 **31 October 2012 through 30 October 2013**

Hydraulic Head Measurements End of Month Gauging

[redacted]

Measuring Location	Location Elevation	29-Nov-12		28-Dec-12		29-Jan-13		26-Feb-13	
		Depth to Water	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*
CPZ-1	159.64	9.88	149.76	9.89	149.75	8.55	151.09	8.60	151.04
CPZ-1R	161.12	5.01	156.11	3.19	157.93	1.45	159.67	2.99	158.13
CPZ-2	158.64	7.62	151.02	6.50	152.14	5.82	152.82	5.08	153.56
CPZ-2A	158.82	7.41	151.41	6.29	152.53	5.50	153.32	4.62	154.20
CPZ-2R	160.97	4.85	156.12	3.09	157.88	1.32	159.65	1.14	159.83
CPZ-3	159.21	10.07	149.14	10.36	148.85	10.02	149.19	10.27	148.94
CPZ-3R	160.70	8.15	152.55	8.29	152.41	7.29	153.41	7.61	153.09
CPZ-4	158.80	10.65	148.15	8.62	150.18	9.11	149.69	8.28	150.52
CPZ-4A	159.44	10.80	148.64	9.61	149.83	9.40	150.04	9.08	150.36
CPZ-4R	158.76	8.09	150.67	7.35	151.41	6.52	152.24	6.44	152.32
CPZ-5	158.68	12.51	146.17	13.48	145.20	13.39	145.29	16.41	142.27
CPZ-5R	158.30	10.29	148.01	9.99	148.31	10.21	148.09	11.18	147.12
CPZ-6	154.48	5.45	149.03	4.51	149.97	4.97	149.51	4.61	149.87
CPZ-6A	158.05	8.55	149.50	7.92	150.13	6.30	151.75	8.13	149.92
CPZ-6R	154.39	7.03	147.36	5.94	148.45	6.18	148.21	5.91	148.48
CPZ-7	159.40	8.18	151.22	8.28	151.12	8.41	150.99	8.35	151.05
CPZ-7R	158.58	4.39	154.19	3.70	154.88	3.26	155.32	3.08	155.50
CPZ-8	160.11	6.68	153.43	6.10	154.01	6.62	153.49	6.26	153.85
CPZ-8R	160.62	8.92	151.70	7.24	153.38	7.54	153.08	7.14	153.48
CPZ-10	163.44	6.61	156.83	6.25	157.19	6.50	156.94	6.21	157.23
CPZ-10R	162.98	5.10	157.88	3.82	159.16	3.69	159.29	3.24	159.74
MW-121A	152.96	6.67	146.29	6.31	146.65	6.42	146.54	6.14	146.82
MW-125A	157.87	3.76	154.11	3.06	154.81	3.20	154.67	3.13	154.74
MW-125C	156.30	7.72	148.58	7.30	149.00	7.41	148.89	7.67	148.63
MW-204A	150.78	4.88	145.90	4.04	146.74	4.32	146.46	3.98	146.80
MW-415	160.75	7.52	153.23	7.26	153.49	7.37	153.38	7.08	153.67
MW-416	159.98	8.99	150.99	8.74	151.24	8.58	151.40	9.13	150.85
MW-704D	150.98	5.47	145.51	5.53	145.45	4.53	146.45	4.42	146.56
MW-704M	152.34	7.21	145.13	6.39	145.95	7.63	144.71	6.31	146.03
MW-704R	153.23	8.20	145.03	7.42	145.81	7.62	145.61	7.32	145.91
MW-704DR	152.84	31.02	121.82	58.75	94.09	58.55	94.29	58.82	94.02
MW-705DR	160.99	5.88	155.11	5.18	155.81	4.70	156.29	4.50	156.49
MWL-302	161.60	7.89	153.71	7.35	154.25	7.81	153.79	7.12	154.48
MWL-304	159.90	9.79	150.11	9.68	150.22	9.70	150.20	9.32	150.58
MWL-305	159.01	6.80	152.21	6.13	152.88	6.48	152.53	6.00	153.01
MWL-306	155.39	6.44	148.95	2.97	152.42	6.16	149.23	3.14	152.25
MWL-307	159.14	6.20	152.94	5.75	153.39	6.01	153.13	5.70	153.44
MWL-308	158.63	5.18	153.45	4.72	153.91	5.08	153.55	4.70	153.93
MWL-309	155.20	4.68	150.52	3.12	152.08	4.96	150.24	3.13	152.07
MWL-311	157.33	8.32	149.01	5.29	152.04	6.93	150.40	6.66	150.67
P-5A	157.61	9.58	148.03	9.01	148.60	9.13	148.48	9.55	148.06
P-5B	158.39	6.08	152.31	4.48	153.91	6.06	152.33	4.61	153.78
P-6	153.78	6.32	147.46	5.40	148.38	5.61	148.17	5.32	148.46
PZR-2R	153.78	7.77	146.01	7.02	146.76	7.37	146.41	6.89	146.89
PZR-2DR	154.67	8.88	145.79	5.93	148.74	8.42	146.25	7.93	146.74
PZR-4R	153.72	7.48	146.24	7.58	146.14	6.71	147.01	6.23	147.49
PZR-4DR	152.73	2.76	149.97	2.04	150.69	1.31	151.42	1.21	151.52
RW-1	157.61	16.59	141.02	16.49	141.12	16.81	140.80	16.90	140.71
RW-2	156.49	17.20	139.29	17.30	139.19	17.49	139.00	19.48	137.01
RW-3	157.35	17.09	140.26	17.46	139.89	17.44	139.91	16.80	140.55
RW-4	158.21	16.04	142.17	17.03	141.18	14.88	143.33	16.22	141.99
RW-7	157.09	17.82	139.27	17.10	139.99	16.26	140.83	17.61	139.48
RW-8	156.95	17.94	139.01	19.06	137.89	18.04	138.91	18.18	138.77
RW-9	156.72	18.04	138.68	18.60	138.12	18.16	138.56	17.74	138.98
RW-10	156.13	17.86	138.27	17.90	138.23	17.90	138.23	17.80	138.33
RW-11	157.82	16.97	140.85	16.98	140.84	17.84	139.98	16.84	140.98
RW-12	158.36	18.27	140.09	19.56	138.80	19.11	139.25	23.51	134.85
RW-13	151.64	44.82	106.82	43.44	108.20	43.04	108.60	47.74	103.90
RW-14	151.71	27.01	124.70	26.06	125.65	27.76	123.95	29.00	122.71
RW-1R	149.77	31.37	118.40	74.08	75.69	73.11	76.66	73.30	76.47
TW-7A	158.72	6.98	151.74	6.28	152.44	6.77	151.95	6.35	152.37
MW-702DR	181.38	21.01	160.37	18.99	162.39	17.01	164.37	16.36	165.02
P-8A	181.26	21.18	160.08	19.00	162.26	17.18	164.08	16.34	164.92
MW-707D	156.09	9.95	146.14	9.08	147.01	9.60	146.49	9.10	146.99
MW-707R	156.01	9.97	146.04	9.06	146.95	9.48	146.53	8.97	147.04
MW-707DR	156.80	10.88	145.92	10.21	146.59	10.62	146.18	10.15	146.65
PZ-02D	154.14	8.08	146.06	7.11	147.03	7.59	146.55	7.05	147.09
PZ-O2M	154.77	8.59	146.18	7.64	147.13	8.12	146.65	7.58	147.19
MW-3	153.79	7.71	146.08	6.85	146.94	7.30	146.49	6.67	147.12
MW-708R	224.95	75.99	148.96	76.35	148.60	76.33	148.62	76.31	148.64
MW-708DR	224.19	76.11	148.08	76.00	148.19	76.15	148.04	75.92	148.27
PZ-906DR	155.85	2.20	153.65	2.09	153.76	2.51	153.34	2.80	153.05

TABLE 1 **31 October 2012 through 30 October 2013**

Hydraulic Head Measurements End of Month Gauging

[redacted]

Measuring Location	Location Elevation	27-Mar-13		29-Apr-13		28-May-13		27-Jun-13	
		Depth to Water	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*
CPZ-1	159.64	6.86	152.78	7.92	151.72	8.88	150.76	6.31	153.33
CPZ-1R	161.12	2.93	158.19	2.93	158.19	3.00	158.12	2.82	158.30
CPZ-2	158.64	3.38	155.26	5.29	153.35	5.52	153.12	3.38	155.26
CPZ-2A	158.82	2.97	155.85	4.89	153.93	5.11	153.71	2.96	155.86
CPZ-2R	160.97	0.00	160.97	1.52	159.45	2.03	158.94	0.00	160.97
CPZ-3	159.21	8.89	150.32	9.69	149.52	9.99	149.22	9.06	150.15
CPZ-3R	160.70	4.65	156.05	7.13	153.57	7.41	153.29	4.96	155.74
CPZ-4	158.80	6.38	152.42	8.38	150.42	7.98	150.82	6.90	151.90
CPZ-4A	159.44	7.62	151.82	9.28	150.16	9.11	150.33	7.91	151.53
CPZ-4R	158.76	4.59	154.17	6.28	152.48	6.79	151.97	4.59	154.17
CPZ-5	158.68	15.16	143.52	17.56	141.12	17.89	140.79	18.30	140.38
CPZ-5R	158.30	9.45	148.85	12.45	145.85	11.50	146.80	12.05	146.25
CPZ-6	154.48	3.98	150.50	4.91	149.57	4.43	150.05	4.21	150.27
CPZ-6A	158.05	7.32	150.73	8.47	149.58	7.50	150.55	7.67	150.38
CPZ-6R	154.39	4.79	149.60	6.19	148.20	5.70	148.69	5.13	149.26
CPZ-7	159.40	6.46	152.94	10.50	148.90	12.74	146.66	12.92	146.48
CPZ-7R	158.58	0.00	158.58	3.01	155.57	3.55	155.03	0.51	158.07
CPZ-8	160.11	6.20	153.91	6.53	153.58	6.17	153.94	6.16	153.95
CPZ-8R	160.62	6.69	153.93	7.52	153.10	7.33	153.29	6.80	153.82
CPZ-10	163.44	6.31	157.13	6.45	156.99	6.30	157.14	6.10	157.34
CPZ-10R	162.98	1.33	161.65	3.32	159.66	3.50	159.48	1.10	161.88
MW-121A	152.96	4.97	147.99	6.37	146.59	6.19	146.77	5.18	147.78
MW-125A	157.87	2.48	155.39	3.48	154.39	3.38	154.49	2.78	155.09
MW-125C	156.30	6.20	150.10	8.11	148.19	7.77	148.53	7.80	148.50
MW-204A	150.78	3.00	147.78	4.60	146.18	4.21	146.57	3.42	147.36
MW-415	160.75	4.06	156.69	6.06	154.69	7.01	153.74	4.93	155.82
MW-416	159.98	6.60	153.38	8.79	151.19	9.18	150.80	7.52	152.46
MW-704D	150.98	3.37	147.61	5.43	145.55	4.98	146.00	4.06	146.92
MW-704M	152.34	5.28	147.06	7.46	144.88	6.99	145.35	6.18	146.16
MW-704R	153.23	6.42	146.81	8.63	144.60	8.05	145.18	7.30	145.93
MW-704DR	152.84	57.47	95.37	59.16	93.68	57.82	95.02	57.68	95.16
MW-705DR	160.99	2.73	158.26	4.29	156.70	4.72	156.27	2.49	158.50
MWL-302	161.60	7.58	154.02	7.63	153.97	3.47	158.13	7.41	154.19
MWL-304	159.90	5.96	153.94	8.15	151.75	9.15	150.75	6.85	153.05
MWL-305	159.01	4.00	155.01	5.54	153.47	6.20	152.81	4.73	154.28
MWL-306	155.39	4.51	150.88	5.81	149.58	4.88	150.51	4.36	151.03
MWL-307	159.14	3.67	155.47	4.66	154.48	5.61	153.53	3.61	155.53
MWL-308	158.63	2.52	156.11	3.92	154.71	4.67	153.96	3.15	155.48
MWL-309	155.20	3.70	151.50	4.80	150.40	3.15	152.05	4.80	150.40
MWL-311	157.33	5.28	152.05	6.72	150.61	5.85	151.48	5.96	151.37
P-5A	157.61	8.32	149.29	9.80	147.81	8.15	149.46	9.06	148.55
P-5B	158.39	5.08	153.31	6.06	152.33	4.90	153.49	5.68	152.71
P-6	153.78	4.27	149.51	5.40	148.38	4.98	148.80	4.48	149.30
PZR-2R	153.78	6.09	147.69	7.34	146.44	7.05	146.73	6.24	147.54
PZR-2DR	154.67	7.13	147.54	8.32	146.35	8.02	146.65	7.15	147.52
PZR-4R	153.72	5.20	148.52	6.58	147.14	6.40	147.32	5.26	148.46
PZR-4DR	152.73	0.00	152.73	1.21	151.52	1.42	151.31	0.00	152.73
RW-1	157.61	15.80	141.81	17.04	140.57	16.39	141.22	17.03	140.58
RW-2	156.49	20.34	136.15	23.40	133.09	21.17	135.32	21.01	135.48
RW-3	157.35	13.43	143.92	18.26	139.09	17.49	139.86	16.98	140.37
RW-4	158.21	12.46	145.75	16.85	141.36	16.66	141.55	15.95	142.26
RW-7	157.09	12.78	144.31	17.27	139.82	16.70	140.39	17.04	140.05
RW-8	156.95	16.86	140.09	18.44	138.51	17.80	139.15	18.20	138.75
RW-9	156.72	17.18	139.54	18.07	138.65	18.09	138.63	18.04	138.68
RW-10	156.13	12.24	143.89	18.15	137.98	17.47	138.66	18.18	137.95
RW-11	157.82	17.36	140.46	17.32	140.50	17.70	140.12	17.29	140.53
RW-12	158.36	18.77	139.59	18.09	140.27	17.77	140.59	19.96	138.40
RW-13	151.64	45.25	106.39	36.40	115.24	32.41	119.23	32.10	119.54
RW-14	151.71	31.22	120.49	10.15	141.56	10.38	141.33	10.01	141.70
RW-1R	149.77	73.81	75.96	73.40	76.37	72.86	76.91	72.60	77.17
TW-7A	158.72	5.96	152.76	6.77	151.95	6.20	152.52	6.11	152.61
MW-702DR	181.38	11.76	169.62	17.88	163.50	17.76	163.62	11.44	169.94
P-8A	181.26	11.68	169.58	17.82	163.44	17.65	163.61	11.40	169.86
MW-707D	156.09	8.55	147.54	9.20	146.89	9.08	147.01	8.49	147.60
MW-707R	156.01	8.26	147.75	9.32	146.69	9.13	146.88	8.46	147.55
MW-707DR	156.80	9.35	147.45	10.48	146.32	10.21	146.59	9.32	147.48
PZ-02D	154.14	6.38	147.76	7.41	146.73	7.13	147.01	6.52	147.62
PZ-O2M	154.77	6.91	147.86	7.90	146.87	7.65	147.12	7.03	147.74
MW-3	153.79	6.33	147.46	7.09	146.70	6.88	146.91	6.38	147.41
MW-708R	224.95	74.71	150.24	74.88	150.07	74.80	150.15	74.62	150.33
MW-708DR	224.19	74.79	149.40	75.50	148.69	75.60	148.59	75.51	148.68
PZ-906DR	155.85	3.22	152.63	3.26	152.59	3.16	152.69	4.55	151.30

TABLE 1 **31 October 2012 through 30 October 2013**

Hydraulic Head Measurements End of Month Gauging

[redacted]

Measuring Location	Location Elevation	30-Jul-13		26-Aug-13		26-Sep-13		29-Oct-13	
		Depth to Water	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*
CPZ-1	159.64	8.46	151.18	9.62	150.02	10.88	148.76	11.98	147.66
CPZ-1R	161.12	3.34	157.78	5.25	155.87	6.56	154.56	7.44	153.68
CPZ-2	158.64	6.26	152.38	7.62	151.02	8.55	150.09	9.52	149.12
CPZ-2A	158.82	5.90	152.92	7.37	151.45	8.28	150.54	9.52	149.30
CPZ-2R	160.97	3.20	157.77	5.20	155.77	6.45	154.52	7.38	153.59
CPZ-3	159.21	10.41	148.80	11.33	147.88	11.80	147.41	12.33	146.88
CPZ-3R	160.70	8.36	152.34	9.46	151.24	10.21	150.49	11.61	149.09
CPZ-4	158.80	9.63	149.17	10.81	147.99	11.67	147.13	12.59	146.21
CPZ-4A	159.44	10.01	149.43	11.00	148.44	11.69	147.75	12.22	147.22
CPZ-4R	158.76	7.18	151.58	8.38	150.38	9.15	149.61	11.00	147.76
CPZ-5	158.68	18.13	140.55	18.03	140.65	18.33	140.35	18.51	140.17
CPZ-5R	158.30	13.58	144.72	13.96	144.34	13.61	144.69	14.04	144.26
CPZ-6	154.48	5.30	149.18	5.72	148.76	5.70	148.78	6.40	148.08
CPZ-6A	158.05	8.67	149.38	8.98	149.07	9.26	148.79	9.82	148.23
CPZ-6R	154.39	6.55	147.84	7.28	147.11	7.69	146.70	8.31	146.08
CPZ-7	159.40	12.31	147.09	12.01	147.39	11.84	147.56	12.32	147.08
CPZ-7R	158.58	3.88	154.70	5.07	153.51	5.70	152.88	6.36	152.22
CPZ-8	160.11	6.38	153.73	6.58	153.53	6.57	153.54	6.94	153.17
CPZ-8R	160.62	7.65	152.97	8.00	152.62	8.20	152.42	8.66	151.96
CPZ-10	163.44	6.29	157.15	6.48	156.96	6.50	156.94	7.07	156.37
CPZ-10R	162.98	4.23	158.75	5.21	157.77	5.62	157.36	6.38	156.60
MW-121A	152.96	6.48	146.48	7.41	145.55	7.73	145.23	8.33	144.63
MW-125A	157.87	3.59	154.28	3.86	154.01	3.82	154.05	4.11	153.76
MW-125C	156.30	8.57	147.73	9.09	147.21	9.20	147.10	9.65	146.65
MW-204A	150.78	4.48	146.30	5.55	145.23	5.62	145.16	6.38	144.40
MW-415	160.75	6.90	153.85	8.01	152.74	8.68	152.07	9.32	151.43
MW-416	159.98	9.50	150.48	10.40	149.58	10.97	149.01	11.60	148.38
MW-704D	150.98	5.21	145.77	6.31	144.67	6.49	144.49	7.37	143.61
MW-704M	152.34	7.23	145.11	8.41	143.93	8.52	143.82	9.50	142.84
MW-704R	153.23	8.32	144.91	9.48	143.75	9.89	143.34	11.83	141.40
MW-704DR	152.84	58.96	93.88	59.49	93.35	60.40	92.44	60.98	91.86
MW-705DR	160.99	4.92	156.07	5.79	155.20	6.31	154.68	6.92	154.07
MWL-302	161.60	7.55	154.05	7.66	153.94	7.65	153.95	7.87	153.73
MWL-304	159.90	9.07	150.83	10.30	149.60	10.91	148.99	11.55	148.35
MWL-305	159.01	6.09	152.92	6.05	152.96	8.01	151.00	9.03	149.98
MWL-306	155.39	7.09	148.30	7.61	147.78	7.44	147.95	7.98	147.41
MWL-307	159.14	5.60	153.54	6.69	152.45	7.40	151.74	7.92	151.22
MWL-308	158.63	4.72	153.91	5.71	152.92	6.37	152.26	7.19	151.44
MWL-309	155.20	6.21	148.99	8.21	146.99	5.89	149.31	7.02	148.18
MWL-311	157.33	8.21	149.12	8.96	148.37	9.78	147.55	10.80	146.53
P-5A	157.61	10.28	147.33	10.71	146.90	11.00	146.61	11.60	146.01
P-5B	158.39	6.27	152.12	6.52	151.87	6.28	152.11	6.78	151.61
P-6	153.78	5.71	148.07	6.28	147.50	6.74	147.04	7.36	146.42
PZR-2R	153.78	7.48	146.30	8.21	145.57	8.39	145.39	8.91	144.87
PZR-2DR	154.67	8.49	146.18	9.22	145.45	9.35	145.32	9.92	144.75
PZR-4R	153.72	6.99	146.73	7.85	145.87	8.14	145.58	8.64	145.08
PZR-4DR	152.73	1.88	150.85	3.09	149.64	3.67	149.06	4.49	148.24
RW-1	157.61	17.41	140.20	16.60	141.01	18.03	139.58	18.08	139.53
RW-2	156.49	22.51	133.98	21.03	135.46	22.60	133.89	22.06	134.43
RW-3	157.35	17.12	140.23	16.77	140.58	17.90	139.45	17.90	139.45
RW-4	158.21	15.90	142.31	17.03	141.18	15.96	142.25	15.96	142.25
RW-7	157.09	15.96	141.13	17.20	139.89	17.34	139.75	17.25	139.84
RW-8	156.95	17.40	139.55	17.84	139.11	18.01	138.94	17.80	139.15
RW-9	156.72	18.16	138.56	18.18	138.54	18.46	138.26	17.47	139.25
RW-10	156.13	18.70	137.43	17.36	138.77	18.60	137.53	19.09	137.04
RW-11	157.82	18.21	139.61	17.97	139.85	18.10	139.72	18.32	139.50
RW-12	158.36	21.60	136.76	20.94	137.42	20.39	137.97	20.99	137.37
RW-13	151.64	33.78	117.86	47.20	104.44	46.44	105.20	50.70	100.94
RW-14	151.71	10.92	140.79	13.80	137.91	13.18	138.53	16.10	135.61
RW-1R	149.77	73.43	76.34	74.22	75.55	72.90	76.87	73.22	76.55
TW-7A	158.72	6.84	151.88	7.08	151.64	7.24	151.48	7.71	151.01
MW-702DR	181.38	19.90	161.48	21.60	159.78	22.62	158.76	23.56	157.82
P-8A	181.26	19.96	161.30	21.76	159.50	22.80	158.46	23.65	157.61
MW-707D	156.09	9.50	146.59	10.01	146.08	9.99	146.10	10.49	145.60
MW-707R	156.01	9.68	146.33	10.28	145.73	10.38	145.63	10.92	145.09
MW-707DR	156.80	10.72	146.08	11.40	145.40	11.47	145.33	11.96	144.84
PZ-02D	154.14	7.64	146.50	8.38	145.76	8.46	145.68	8.91	145.23
PZ-O2M	154.77	8.18	146.59	8.87	145.90	8.93	145.84	9.42	145.35
MW-3	153.79	7.31	146.48	7.88	145.91	7.80	145.99	8.25	145.54
MW-708R	224.95	74.84	150.11	74.90	150.05	74.96	149.99	76.55	148.40
MW-708DR	224.19	75.52	148.67	75.60	148.59	75.61	148.58	76.95	147.24
PZ-906DR	155.85	4.23	151.62	4.03	151.82	3.85	152.00	3.68	152.17

TABLE 2

31 October 2012 through 30 October 2013

Influent and Effluent GWCT System Flow Data Summary

Date	Influent Flow Summary (NCTRA 1 and 2 Combined)			NCTRA-1 Flow Summary [2]	NCTRA-2 Flow Summary			Effluent Flow Summary (NTCRA 1 and 2 Combined)		
	Total Cumulative Flow (gallons)	*Total Flow Since Previous (gallons)*	*Avg. Rate Since Prev. (GPM)*	*Avg. Rate Since Prev. (GPM)*	*Total Cumulative Flow (gallons)*	*Total Flow Since Previous (gallons)*	*Avg. Rate Since Prev. (GPM)*	*Total Cumulative Flow (gallons)*	*Total Flow Since Previous (gallons)*	*Avg. Rate Since Prev. (GPM)*
10/30/2012	229,765,000	1,147,000	25.7	3.1	112,965,160	1,006,700	22.6	244,448,000	1,175,000	26.3
11/30/2012	231,230,000	1,465,000	32.8	5.7	114,174,960	1,209,800	27.1	245,942,000	1,494,000	33.5
1/1/2013	232,575,000	1,345,000	29.2	-2.9	115,651,860	1,476,900	32.1	247,312,000	1,370,000	29.7
1/31/2013	233,715,000	1,140,000	26.4	-4.9	117,003,660	1,351,800	31.3	248,481,000	1,169,000	27.1
2/28/2013	234,831,000	1,116,000	27.7	3.2	117,991,560	987,900	24.5	249,623,000	1,142,000	28.3
3/30/2013	236,262,000	1,431,000	33.1	10.9	118,950,860	959,300	22.2	251,082,000	1,459,000	33.8
4/30/2013	238,084,000	1,822,000	40.8	8.1	120,409,860	1,459,000	32.7	252,937,000	1,855,000	41.6
5/31/2013	239,914,000	1,830,000	41.0	7.3	121,912,360	1,502,500	33.7	254,797,000	1,860,000	41.7
6/28/2013	241,607,000	1,693,000	42.0	9.9	123,207,860	1,295,500	32.1	256,525,000	1,728,000	42.9
7/31/2013	243,464,000	1,857,000	39.1	8.8	124,647,860	1,440,000	30.3	258,434,000	1,909,000	40.2
8/30/2013	245,143,000	1,679,000	38.9	5.7	126,078,960	1,431,100	33.1	260,159,000	1,725,000	39.9
9/30/2013	246,730,000	1,587,000	35.6	3.9	127,492,660	1,413,700	31.7	261,800,000	1,641,000	36.8
10/30/2013	248,297,000	1,567,000	36.3	2.9	128,933,560	1,440,900	33.4	263,426,000	1,626,000	37.6
Yearly Averages [1]			**35.3**	**4.9**			**30.4**			**36.1**
Cumulative Totals:	**248,297,000**	**18,532,000**			**128,933,560**	**15,968,400**		**263,426,000**	**18,978,000**	

Notes:

1: The average yearly flows are calculated by dividing the total cumulative annual flow by the duration in minutes.

2: The NTCRA-2 Flow Meter is reading higher than actual causing the calculated NTCRA-1 flow to be lower than actual.

Table 3

November 2012

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	11/1/2012	11/14/2012
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	0.001
Tetrachloroethene (mg/L)	<0.01	<0.001
Toluene (mg/L)	1.27	0.045
Ethylbenzene (mg/L)	0.42	0.013
Xylenes, Total (mg/L)	0.29	0.01
Vinyl chloride (mg/L)	0.24	0.012
1,1-Dichloroethene (mg/L)	<0.01	<0.001
Tetrahydrofuran (mg/L)	<0.50	<0.050
1,2-Dichloroethene[1] (mg/L)	0.56	0.016
1,2-Dichloroethane (mg/L)	<0.01	<0.001
1,1,1-Trichloroethane (mg/L)	<0.01	<0.001
1,1,2-Trichloroethane (mg/L)	<0.01	<0.001
Methylene chloride (mg/L)	0.04	<0.001
Styrene (mg/L)	<0.01	<0.001
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**2.82**	**0.097**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	2.92	2.81
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

December 2012

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	12/7/2012	12/20/2012
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	0.001	0.001
Tetrachloroethene (mg/L)	<0.001	<0.001
Toluene (mg/L)	0.003	0.012
Ethylbenzene (mg/L)	<0.001	0.002
Xylenes, Total (mg/L)	<0.001	0.002
Vinyl chloride (mg/L)	0.002	0.003
1,1-Dichloroethene (mg/L)	<0.001	<0.001
Tetrahydrofuran (mg/L)	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	0.002	0.005
1,2-Dichloroethane (mg/L)	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	<0.001	<0.001
1,1,2-Trichloroethane (mg/L)	<0.001	<0.001
Methylene chloride (mg/L)	<0.001	<0.001
Styrene (mg/L)	<0.001	<0.001
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**0.008**	**0.025**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	0.01
Iron, Total (mg/L)	3.25	4.2
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

January 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	1/1/2013	**1/17/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	0.001	<0.01
Tetrachloroethene (mg/L)	<0.001	<0.01
Toluene (mg/L)	0.099	1.45
Ethylbenzene (mg/L)	0.026	0.39
Xylenes, Total (mg/L)	0.020	0.31
Vinyl chloride (mg/L)	0.026	0.35
1,1-Dichloroethene (mg/L)	<0.001	<0.01
Tetrahydrofuran (mg/L)	<0.050	<0.50
1,2-Dichloroethene[1] (mg/L)	0.042	0.48
1,2-Dichloroethane (mg/L)	<0.001	<0.01
1,1,1-Trichloroethane (mg/L)	<0.001	<0.01
1,1,2-Trichloroethane (mg/L)	<0.001	<0.01
Methylene chloride (mg/L)	0.002	0.10
Styrene (mg/L)	<0.001	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.050	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.050	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.050	<0.50
Total VOCs[2]	**0.22**	**3.08**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	1.36	1.20
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

February 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	2/4/2013	**2/20/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	1.14	1.61
Ethylbenzene (mg/L)	0.30	0.45
Xylenes, Total (mg/L)	0.22	0.34
Vinyl chloride (mg/L)	0.30	0.31
1,1-Dichloroethene (mg/L)	<0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	0.38	0.51
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	<0.01	<0.01
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	<0.01	0.04
Styrene (mg/L)	<0.01	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**2.34**	**3.26**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	8.35	3.42
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

March 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	3/7/2013	**3/21/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	1.75	1.83
Ethylbenzene (mg/L)	0.51	0.58
Xylenes, Total (mg/L)	0.35	0.33
Vinyl chloride (mg/L)	0.32	0.32
1,1-Dichloroethene (mg/L)	<0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	0.40	0.59
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	<0.01	0.02
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.03	0.04
Styrene (mg/L)	<0.01	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**3.36**	**3.71**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	5.98	8.54
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

April 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	4/2/2013	**4/18/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	1.90	0.72
Ethylbenzene (mg/L)	0.54	0.14
Xylenes, Total (mg/L)	0.28	0.07
Vinyl chloride (mg/L)	0.43	0.16
1,1-Dichloroethene (mg/L)	<0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	0.85	0.28
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.05	0.02
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.05	<0.01
Styrene (mg/L)	<0.01	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**4.1**	**1.39**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	9.54	5.90
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

May 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	5/2/2013	**5/13/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	0.01	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	2.90	0.65
Ethylbenzene (mg/L)	0.72	0.16
Xylenes, Total (mg/L)	0.41	0.09
Vinyl chloride (mg/L)	0.65	0.13
1,1-Dichloroethene (mg/L)	<0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	1.38	0.30
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.08	0.02
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.06	0.05
Styrene (mg/L)	<0.01	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**6.21**	**1.4**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	22.3	11.2
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

June 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	6/7/2013	6/21/2013
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	4.03	1.44
Ethylbenzene (mg/L)	1.11	0.33
Xylenes, Total (mg/L)	0.70	0.25
Vinyl chloride (mg/L)	0.56	0.22
1,1-Dichloroethene (mg/L)	0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	1.24	0.39
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.07	0.02
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.05	0.07
Styrene (mg/L)	<0.01	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**7.77**	**2.72**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	6.37	5.94
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

July 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	7/1/2013	7/17/2013
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	2.57	1.81
Ethylbenzene (mg/L)	0.63	0.48
Xylenes, Total (mg/L)	0.48	0.31
Vinyl chloride (mg/L)	0.52	0.41
1,1-Dichloroethene (mg/L)	<0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	0.75	0.53
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.03	0.03
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.05	0.04
Styrene (mg/L)	<0.01	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**5.03**	**3.61**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	0.01
Iron, Total (mg/L)	3.36	5.71
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

August 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	8/2/2013	**8/16/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	2.16	0.89
Ethylbenzene (mg/L)	0.66	0.21
Xylenes, Total (mg/L)	0.44	0.13
Vinyl chloride (mg/L)	0.62	0.36
1,1-Dichloroethene (mg/L)	<0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	0.91	0.41
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.04	<0.01
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.06	0.05
Styrene (mg/L)	<0.01	<0.01
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.50
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.50
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**4.89**	**2.05**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	5.80	5.58
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

September 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	9/6/2013	**9/19/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.001
Tetrachloroethene (mg/L)	<0.01	<0.001
Toluene (mg/L)	0.44	0.410
Ethylbenzene (mg/L)	0.08	0.070
Xylenes, Total (mg/L)	0.04	0.040
Vinyl chloride (mg/L)	0.10	0.140
1,1-Dichloroethene (mg/L)	<0.01	<0.001
Tetrahydrofuran (mg/L)	<0.50	<0.050
1,2-Dichloroethene[1] (mg/L)	0.12	0.120
1,2-Dichloroethane (mg/L)	<0.01	<0.001
1,1,1-Trichloroethane (mg/L)	<0.01	<0.001
1,1,2-Trichloroethane (mg/L)	<0.01	<0.001
Methylene chloride (mg/L)	0.02	0.040
Styrene (mg/L)	<0.01	<0.001
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.050
Total VOCs[2]	**0.80**	**0.82**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	2.09	4.93
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 3

October 2013

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	10/2/2013	**10/18/2013**
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.001
Tetrachloroethene (mg/L)	<0.01	<0.001
Toluene (mg/L)	2.07	0.012
Ethylbenzene (mg/L)	0.57	0.002
Xylenes, Total (mg/L)	0.45	0.001
Vinyl chloride (mg/L)	0.81	0.003
1,1-Dichloroethene (mg/L)	<0.01	<0.001
Tetrahydrofuran (mg/L)	<0.50	<0.050
1,2-Dichloroethene[1] (mg/L)	0.81	0.003
1,2-Dichloroethane (mg/L)	<0.01	<0.001
1,1,1-Trichloroethane (mg/L)	0.01	<0.001
1,1,2-Trichloroethane (mg/L)	<0.01	<0.001
Methylene chloride (mg/L)	0.62	<0.001
Styrene (mg/L)	<0.01	<0.001
Alcohols		
Ethanol (mg/L)	<5.0	<5.0
Methanol (mg/L)	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	<5.0	<5.0
Ketones		
Acetone (mg/L)	<0.50	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.050
Total VOCs[2]	**5.34**	**0.021**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	3.79	4.32
Lead, Total (mg/L)	<0.005	<0.005
Nickel, Total (mg/L)	<0.05	<0.05
Zinc, Total (mg/L)	<0.05	<0.05

NOTES:

mg/L = Milligrams per liter unless otherwise noted.

[1] = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

[2] = Total VOCs is the total sum of detected compounds (mg/l)

Table 4

November 2012

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		11/1/2012	11/14/2012
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.100	0.095
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.006	0.005
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.003	<0.001
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.109**	**0.1**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	0.01 mg/l or 1.82 g/day	<0.01 mg/l or <1.82 g/day
Iron, Total (mg/l)	**5.0**	0.1	<0.05
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.91 g/day	<0.005 mg/l or <0.91 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <9.12 g/day	<0.05 mg/l or <9.12 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	7.00	6.89
Total Suspended Solids (mg/L)	**30**	1	<1
Dioxins (pg/L)	**NL**	NS	<36
Furans (pg/L)	**NL**	NS	<51

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

December 2012

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		12/7/2012	12/20/2012
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.076	0.087
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.004	0.005
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.001	0.002
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.081**	**0.094**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <1.62 g/day	<0.01 mg/l or< 1.62 g/day
Iron, Total (mg/l)	**5.0**	0.5	0.2
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.81 g/day	<0.005 mg/l or <0.81 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <8.1 g/day	<0.05 mg/l or <8.1 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.85	6.77
Total Suspended Solids (mg/L)	**30**	2	2
Dioxins (pg/L)	**NL**	NS	NS
Furans (pg/L)	**NL**	NS	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

January 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		1/1/2013	1/17/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.099	0.087
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.005	0.004
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.001	0.001
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.105**	**0.092**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	0.01 mg/l or 1.47 g/day	<0.01 mg/l or <1.47 g/day
Iron, Total (mg/l)	**5.0**	0.22	0.06
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.74 g/day	<0.005 mg/l or <0.74 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <7.37 g/day	<0.05 mg/l or <7.37 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.82	6.73
Total Suspended Solids (mg/L)	**30**	1	<1
Dioxins (pg/L)	**NL**	<36	NS
Furans (pg/L)	**NL**	<51	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

February 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		2/4/2013	2/20/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.070	0.083
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.003	0.003
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.002	0.001
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.075**	**0.087**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or 1.54 g/day	<0.01 mg/l or <1.54 g/day
Iron, Total (mg/l)	**5.0**	0.08	0.32
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.77 g/day	<0.005 mg/l or <0.77 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <7.72 g/day	<0.05 mg/l or <7.72 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.73	6.68
Total Suspended Solids (mg/L)	**30**	1	2
Dioxins (pg/L)	**NL**	NS	NS
Furans (pg/L)	**NL**	NS	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

March 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		3/7/2013	3/21/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	0.002
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.105	0.074
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.004	0.007
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.001	0.004
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.110**	**0.087**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <1.85 g/day	<0.01 mg/l or <1.85 g/day
Iron, Total (mg/l)	**5.0**	0.29	0.33
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.92 g/day	<0.005 mg/l or <0.92 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <9.23 g/day	<0.05 mg/l or <9.23 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.77	6.83
Total Suspended Solids (mg/L)	**30**	<1	<1
Dioxins (pg/L)	**NL**	NS	NS
Furans (pg/L)	**NL**	NS	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

April 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		4/2/2013	4/18/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.071	0.053
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.012	0.011
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	<0.001	<0.001
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.083**	**0.06**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <2.26 g/day	<0.01 mg/l or <2.26 g/day
Iron, Total (mg/l)	**5.0**	0.58	0.26
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1.13 g/day	<0.005 mg/l or <1.13 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <11.32 g/day	<0.05 mg/l or <11.32 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.78	6.83
Total Suspended Solids (mg/L)	**30**	2	<1
Dioxins (pg/L)	**NL**	<36	NS
Furans (pg/L)	**NL**	<51	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

May 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		5/2/2013	5/13/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.101	0.039
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.021	0.004
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.011	<0.001
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.133**	**0.043**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <2.27 g/day	<0.01 mg/l or <2.27 g/day
Iron, Total (mg/l)	**5.0**	0.55	0.29
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1.14 g/day	<0.005 mg/l or <1.14 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <11.36 g/day	<0.05 mg/l or <11.36 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.81	7.29
Total Suspended Solids (mg/L)	**30**	<1	<1
Dioxins (pg/L)	**NL**	NS	NS
Furans (pg/L)	**NL**	NS	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

June 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		6/7/2013	6/21/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	<0.001	<0.001
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	<0.001	<0.001
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	<0.001	0.009
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0**	**0.009**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <2.34 g/day	<0.01 mg/l or 2.34 g/day
Iron, Total (mg/l)	**5.0**	0.64	0.31
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1.17 g/day	<0.005 mg/l or <1.17 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <11.68 g/day	<0.05 mg/l or <11.68 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.98	7.07
Total Suspended Solids (mg/L)	**30**	<1	2
Dioxins (pg/L)	**NL**	NS	NS
Furans (pg/L)	**NL**	NS	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

July 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		7/1/2013	7/17/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	0.002
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	<0.001	0.001
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	<0.001	<0.001
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	<0.001	<0.001
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0**	**0.003**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <2.19 g/day	0.02 mg/l or 4.38 g/day
Iron, Total (mg/l)	**5.0**	0.23	0.27
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1.09 g/day	<0.005 mg/l or <1.09 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <10.95 g/day	<0.05 mg/l or <10.95 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.80	6.94
Total Suspended Solids (mg/L)	**30**	3	2
Dioxins (pg/L)	**NL**	53	NS
Furans (pg/L)	**NL**	<51	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

August 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		8/2/2013	8/16/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.003	0.004
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	<0.001	<0.001
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.007	0.006
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.01**	**0.01**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <2.18 g/day	<0.01 mg/l or <2.18 g/day
Iron, Total (mg/l)	**5.0**	0.12	0.16
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1.09 g/day	<0.005 mg/l or <1.09 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <10.88 g/day	<0.05 mg/l or <10.88 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.79	6.90
Total Suspended Solids (mg/L)	**30**	1	1
Dioxins (pg/L)	**NL**	NS	NS
Furans (pg/L)	**NL**	NS	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

September 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		9/6/2013	9/19/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.007	0.009
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	<0.001	<0.001
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.009	0.004
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.016**	**0.013**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <2 g/day	<0.01 mg/l or <2 g/day
Iron, Total (mg/l)	**5.0**	0.13	0.17
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1 g/day	<0.005 mg/l or <1 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <10.02 g/day	<0.05 mg/l or <10.02 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.93	6.77
Total Suspended Solids (mg/L)	**30**	3	<1
Dioxins (pg/L)	**NL**	NS	NS
Furans (pg/L)	**NL**	NS	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

Table 4

October 2013

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		10/2/2013	10/18/2013
A. ORGANIC PARAMETERS			
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	**0.973**	<0.001	<0.001
Tetrachloroethene (mg/L)	**0.106**	<0.001	<0.001
Toluene (mg/L)	**4.000**	<0.001	<0.001
Ethylbenzene (mg/L)	**1.000**	<0.001	<0.001
Xylenes, Total (mg/L)	**0.500**	<0.001	<0.001
Vinyl chloride (mg/L)	**4.500**	<0.001	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.010	0.009
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	<0.001	<0.001
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	<0.001	0.002
Styrene (mg/L)	**0.500**	<0.001	<0.001
Alcohols			
Ethanol (mg/L)	**20.0**	<5.0	<5.0
Methanol (mg/L)	**10.0**	<5.0	<5.0
2-Butanol (sec-Butanol) (mg/L)	**30.0**	<5.0	<5.0
2-Propanol (Isopropanol) (mg/L)	**10.0**	<5.0	<5.0
Ketones			
Acetone (mg/L)	**35.0**	<0.050	<0.050
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.050	<0.050
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.050	<0.050
Total VOCs[2]		**0.010**	**0.011**
B. INORGANIC PARAMETERS			
Metals	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*	*(mg/L) or (g/day)*
Copper, Total (g/day)[3]	**15.8 g/day**	<0.01 mg/l or <2.05 g/day	<0.01 mg/l or <2.05 g/day
Iron, Total (mg/l)	**5.0**	0.12	0.50
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1.03 g/day	<0.005 mg/l or <1.03 g/day
Nickel, Total (mg/l)	**0.5**	<0.05	<0.05
Zinc, Total (g/day)[3]	**40.3 g/day**	<0.05 mg/l or <10.26 g/day	<0.05 mg/l or <10.26 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.86	6.78
Total Suspended Solids (mg/L)	**30**	1	<1
Dioxins (pg/L)	**NL**	<36	NS
Furans (pg/L)	**NL**	<51	NS

NOTES:

1 = 1,2-Dichloroethene represents total cis and trans 1,2-Dichloroethene.

2 = Total VOCs is the total sum of detected compounds (mg/l)

3 = Inorganic results reported in grams per day are based on average monthly effluent flow

NL = no limit specified.

NS = not sampled (total PCBs analysis required monthly; dioxin/furan analysis required quarterly).

mg/L = Milligrams per liter

µg/L = micrograms per liter

pg/L = picograms per liter

g/day = grams per day

s.u. = Standard pH units

TABLE 5

31 October 2012 through 30 October 2013

Weekly NTCRA-1 Compliance Piezometer Pair Summary

Date	CPZ-1/CPZ-2A	CPZ-3/CPZ-4A	CPZ-5/CPZ-6	CPZ-7/CPZ-8
01-Nov-12	0.32	-0.78	4.01	1.94
06-Nov-12	0.62	-0.77	4.20	1.96
12-Nov-12	1.10	-0.10	4.53	2.25
20-Nov-12	1.59	-0.30	4.71	2.26
29-Nov-12	1.65	-0.50	2.86	2.21
12-Dec-12	1.52	-0.43	4.48	2.41
18-Dec-12	1.02	-0.42	4.19	2.99
28-Dec-12	2.78	0.98	4.77	2.89
03-Jan-13	2.75	0.90	3.08	2.79
08-Jan-13	2.26	0.68	3.18	3.05
15-Jan-13	3.20	0.94	4.62	2.78
24-Jan-13	2.31	0.86	4.24	2.48
29-Jan-13	2.23	0.85	4.22	2.50
05-Feb-13	2.75	1.24	8.07	2.74
13-Feb-13	2.60	1.14	8.02	2.75
20-Feb-13	3.19	1.24	7.47	3.20
26-Feb-13	3.16	1.42	7.60	2.80
05-Mar-13	3.31	1.96	7.36	3.21
11-Mar-13	3.37	1.88	7.63	1.64
18-Mar-13	3.40	1.77	7.64	2.59
27-Mar-13	3.07	1.50	6.98	0.97
01-Apr-13	3.06	1.53	7.01	1.35
11-Apr-13	2.62	1.37	7.10	1.13
16-Apr-13	2.43	1.22	6.51	0.42
23-Apr-13	1.68	1.02	6.50	3.02
29-Apr-13	2.21	0.64	8.45	4.68
02-May-13	2.13	0.42	8.75	5.06
08-May-13	2.20	0.44	8.68	4.52
16-May-13	2.49	0.57	8.88	6.54
21-May-13	2.45	0.56	8.87	7.92
28-May-13	2.95	1.11	9.26	7.28
05-Jun-13	2.71	0.81	9.13	7.78
13-Jun-13	2.69	0.79	9.54	7.41
18-Jun-13	3.66	2.00	9.72	5.66
27-Jun-13	2.53	1.38	9.89	7.47
01-Jul-13	2.57	2.75	9.78	7.21
05-Jul-13	2.50	2.75	9.97	10.58
17-Jul-13	1.37	1.93	8.82	6.05
24-Jul-13	1.90	0.84	8.90	5.72
30-Jul-13	1.74	0.63	8.63	6.64
02-Aug-13	1.67	0.95	8.52	6.37
07-Aug-13	1.56	0.74	8.94	5.96
14-Aug-13	1.55	0.62	8.59	6.82
20-Aug-13	1.41	0.45	8.30	6.29
26-Aug-13	1.43	0.56	8.11	6.14
03-Sep-13	1.66	0.78	9.27	6.48
10-Sep-13	1.58	0.44	8.57	5.86
16-Sep-13	1.62	0.39	8.29	5.90
26-Sep-13	1.78	0.34	8.43	5.98
02-Oct-13	1.87	0.33	8.87	6.32
07-Oct-13	1.91	0.33	9.10	6.42
15-Oct-13	1.90	0.35	8.45	6.13
22-Oct-13	1.91	0.33	8.46	6.07
29-Oct-13	1.64	0.34	7.91	6.09

Highlighted Cells - are weeks that the 0.30-foot hydraulic gradient reversal standard for a specific Compliance Piezometer Pair was not maintained during weekly gauging.

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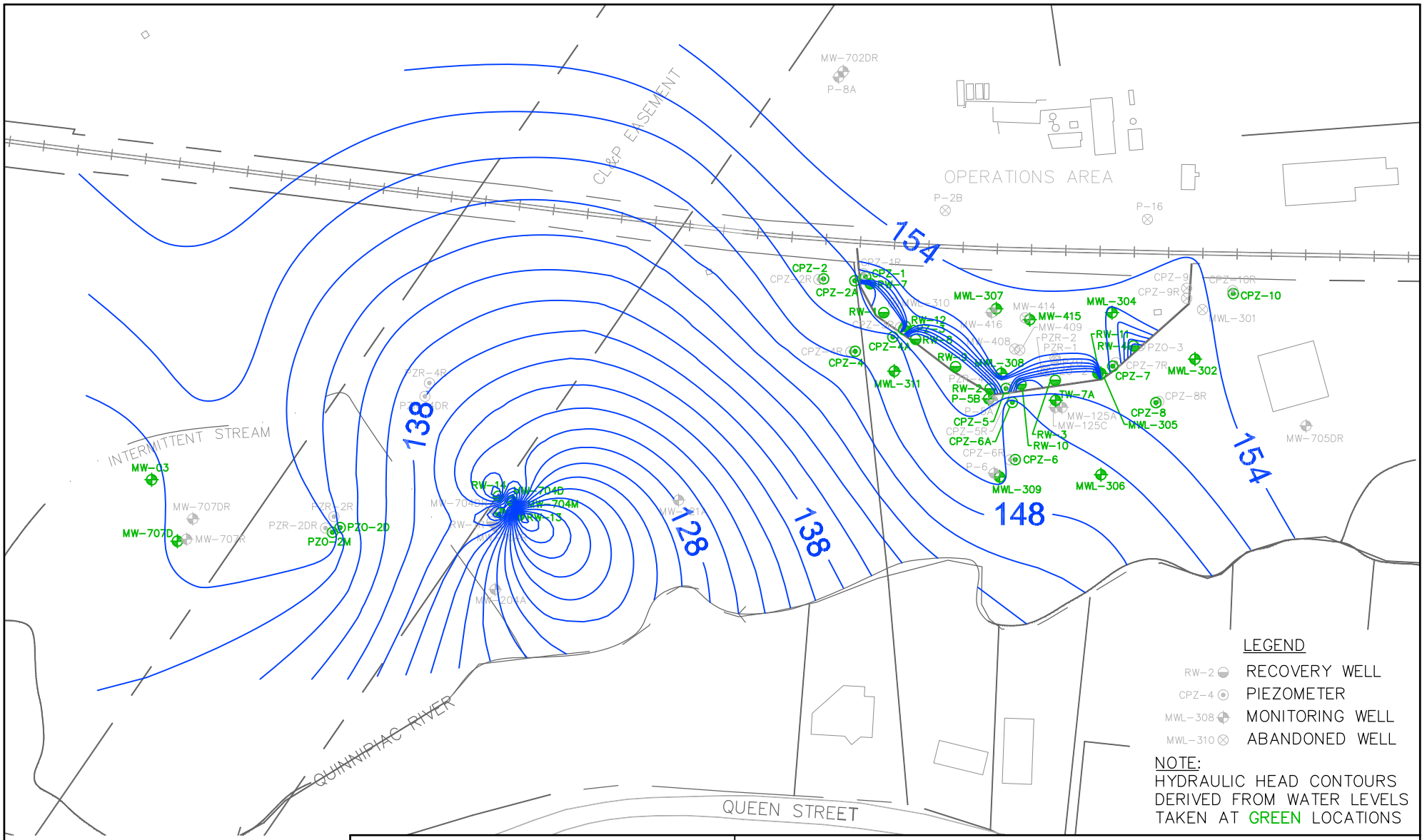

OVERBURDEN HYDRAULIC HEAD CONTOURS NOVEMBER 29, 2012

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

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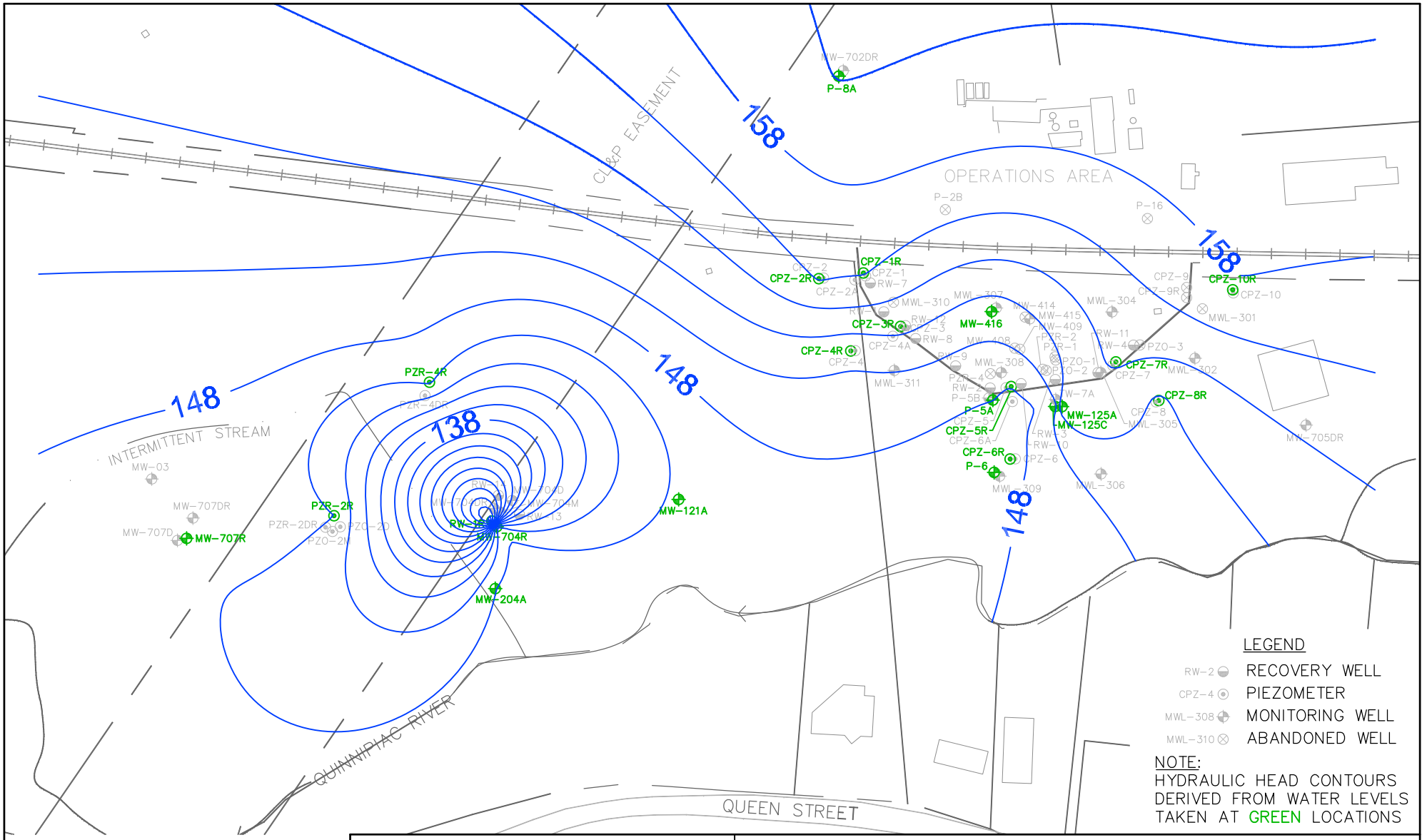

GRAPHIC SCALE

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APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS NOVEMBER 29, 2012

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BEG	DEC 2012			13056.001.017
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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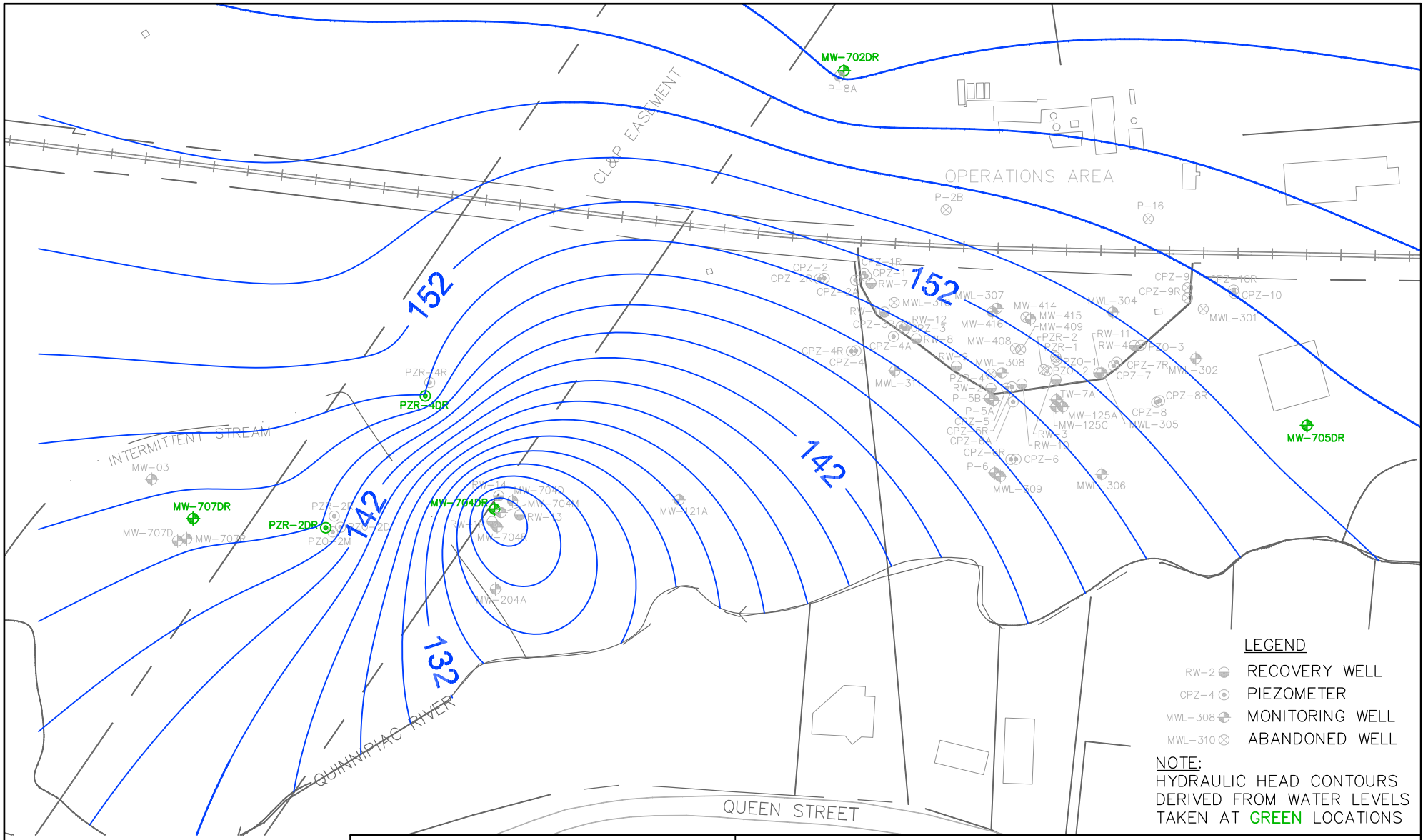

LEGEND

RW-2 RECOVERY WELL

CPZ-4 PIEZOMETER

MWL-308 MONITORING WELL

MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS NOVEMBER 29, 2012

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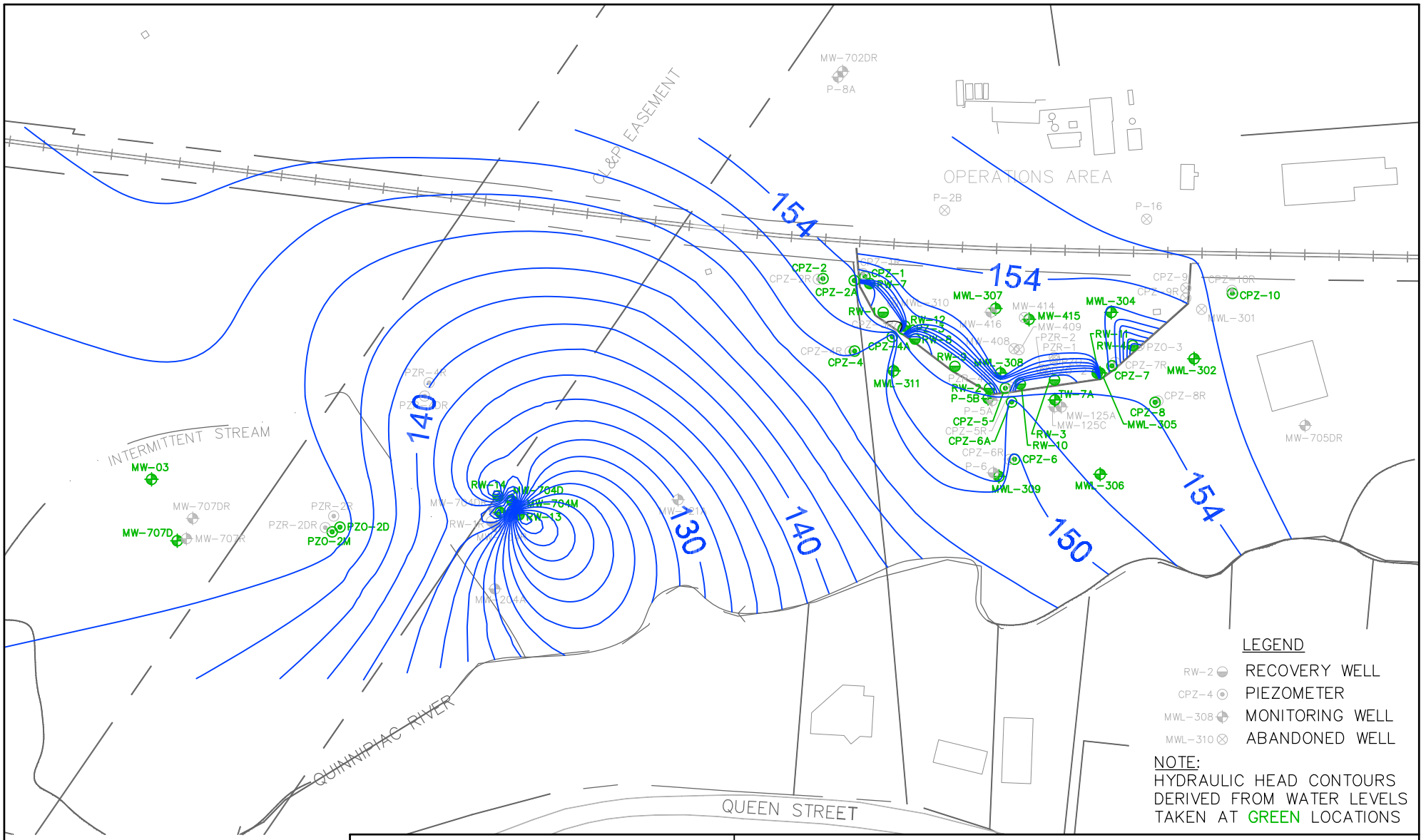

LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS DECEMBER 28, 2012

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CONCORD NEW HAMPSHIRE

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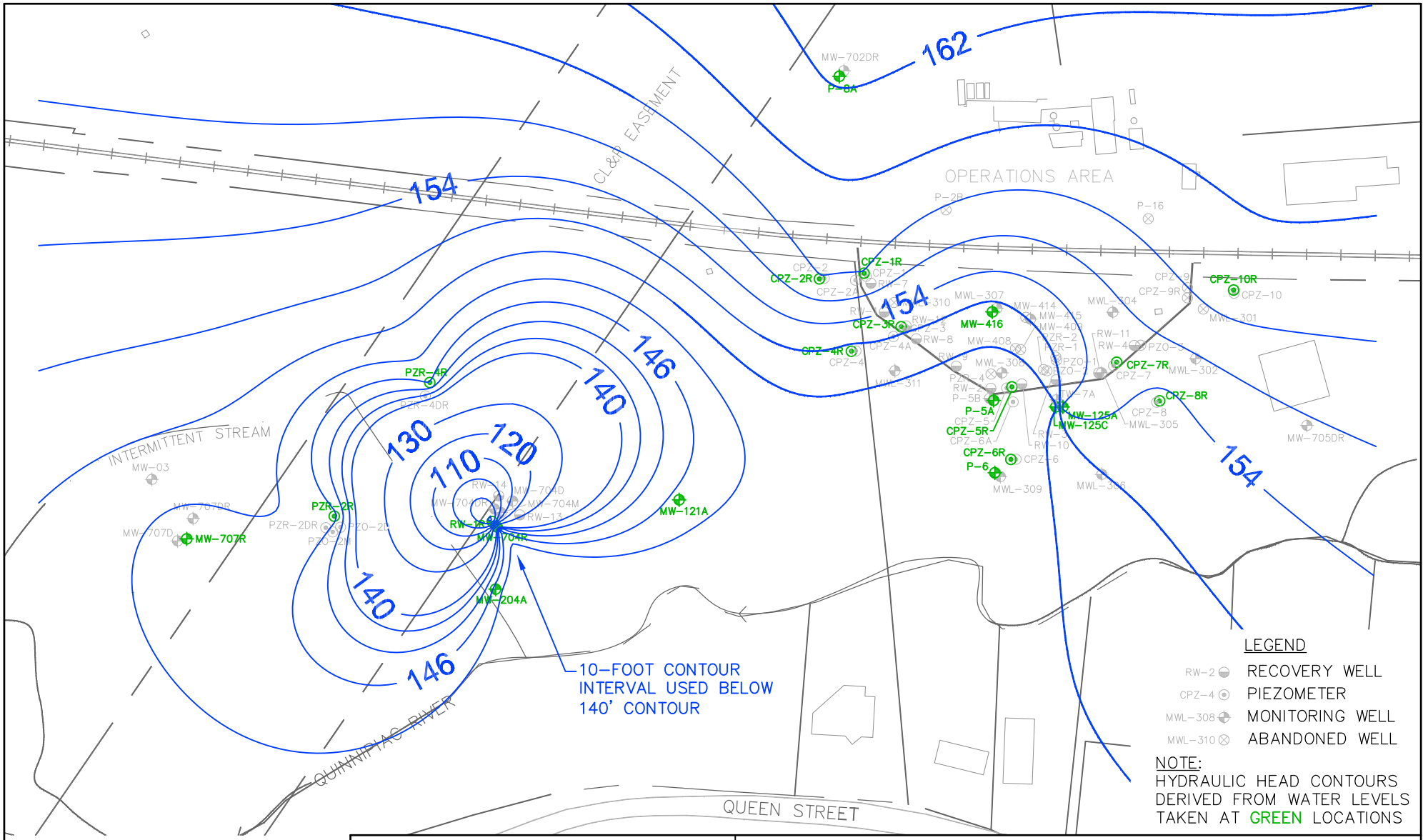

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS DECEMBER 28, 2012

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CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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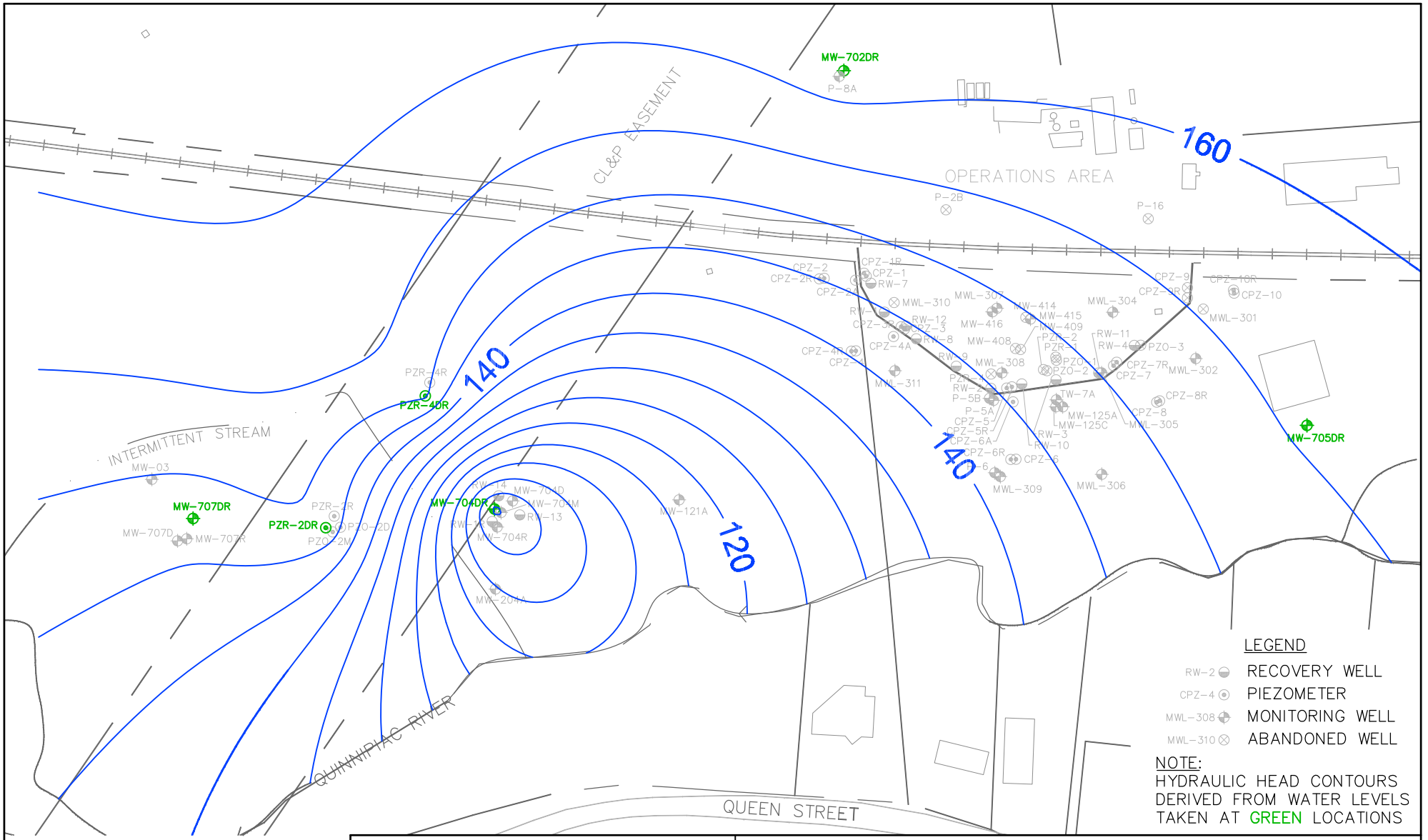

LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS DECEMBER 28, 2012

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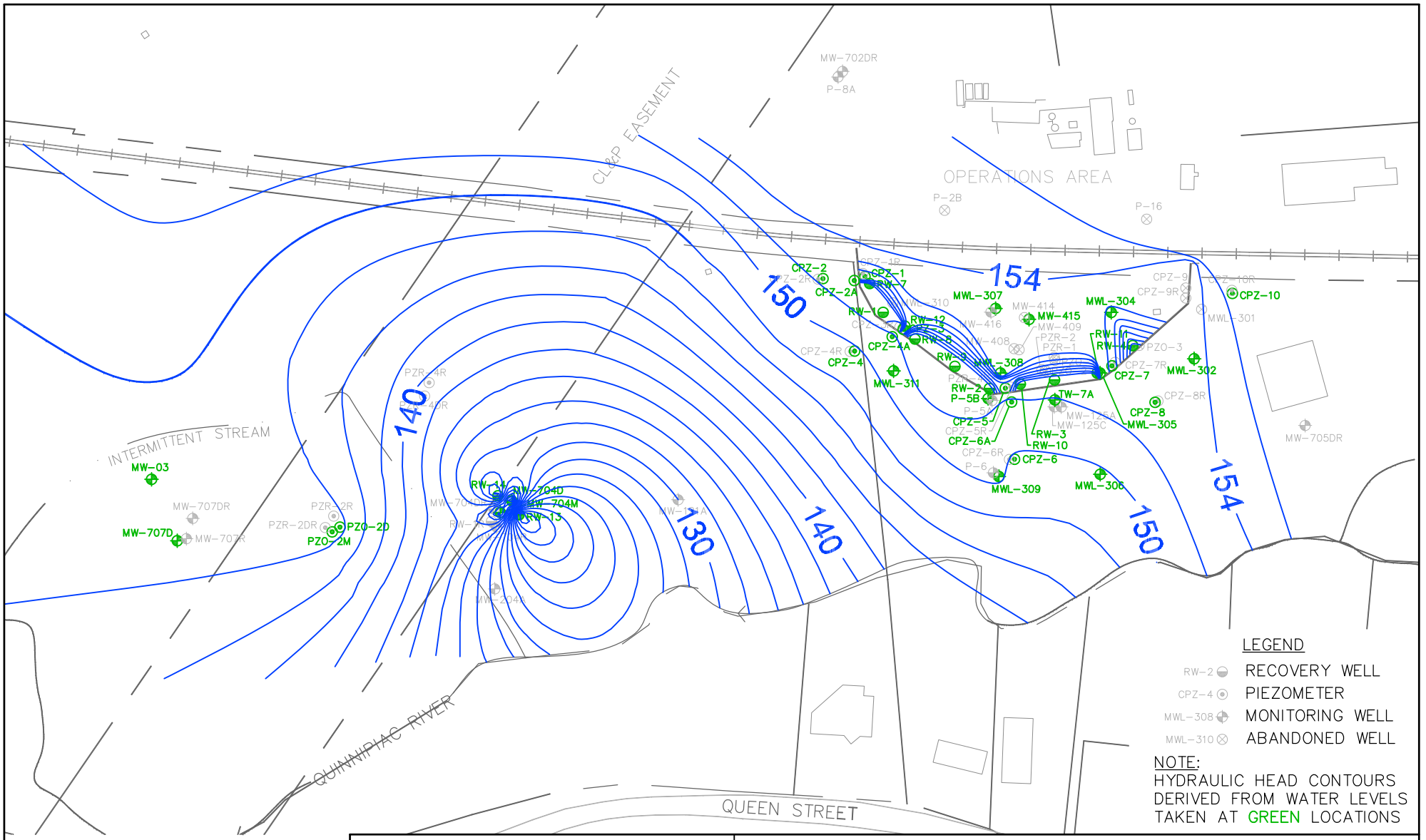

GRAPHIC SCALE

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APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS JANUARY 29, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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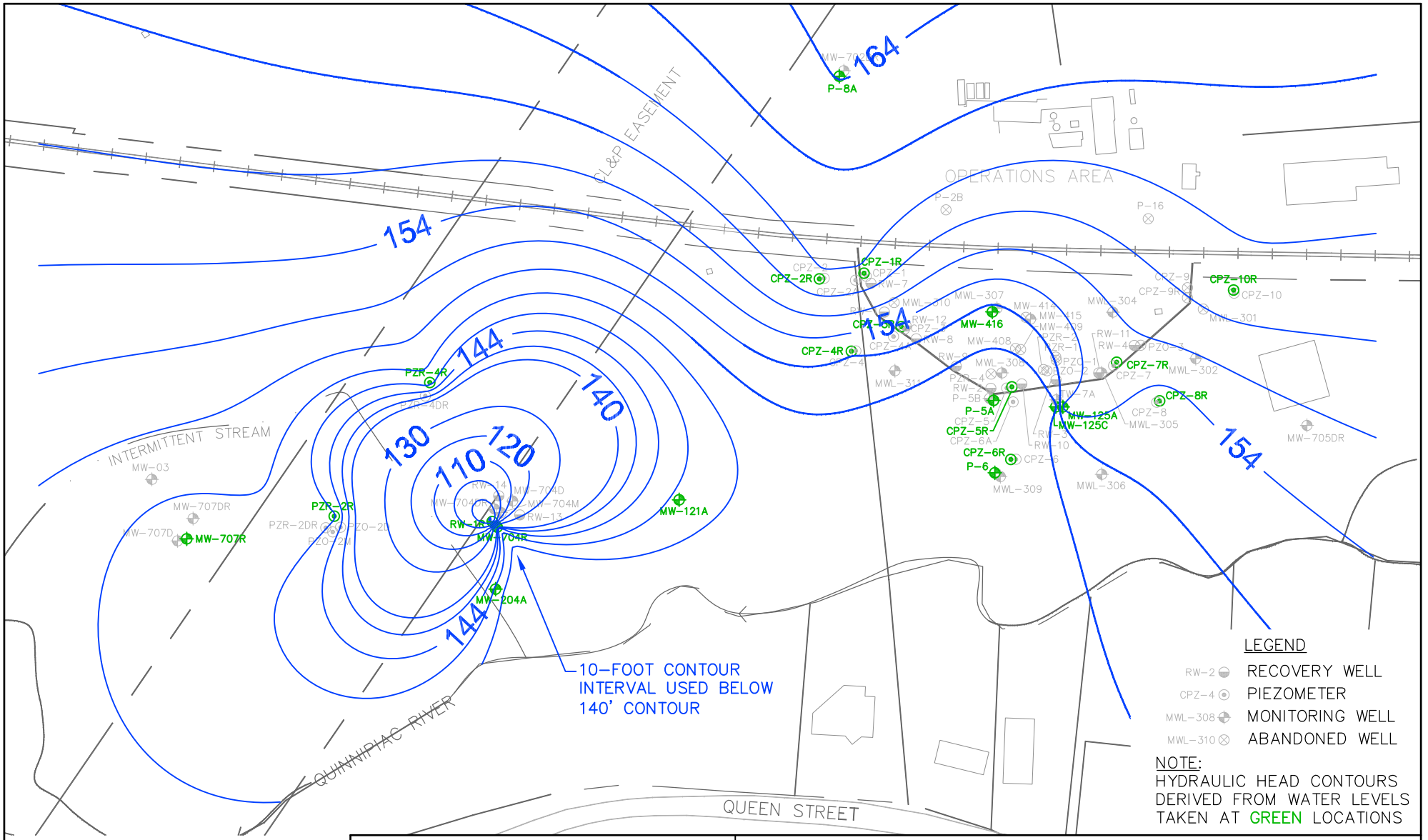

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS JANUARY 29, 2013

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SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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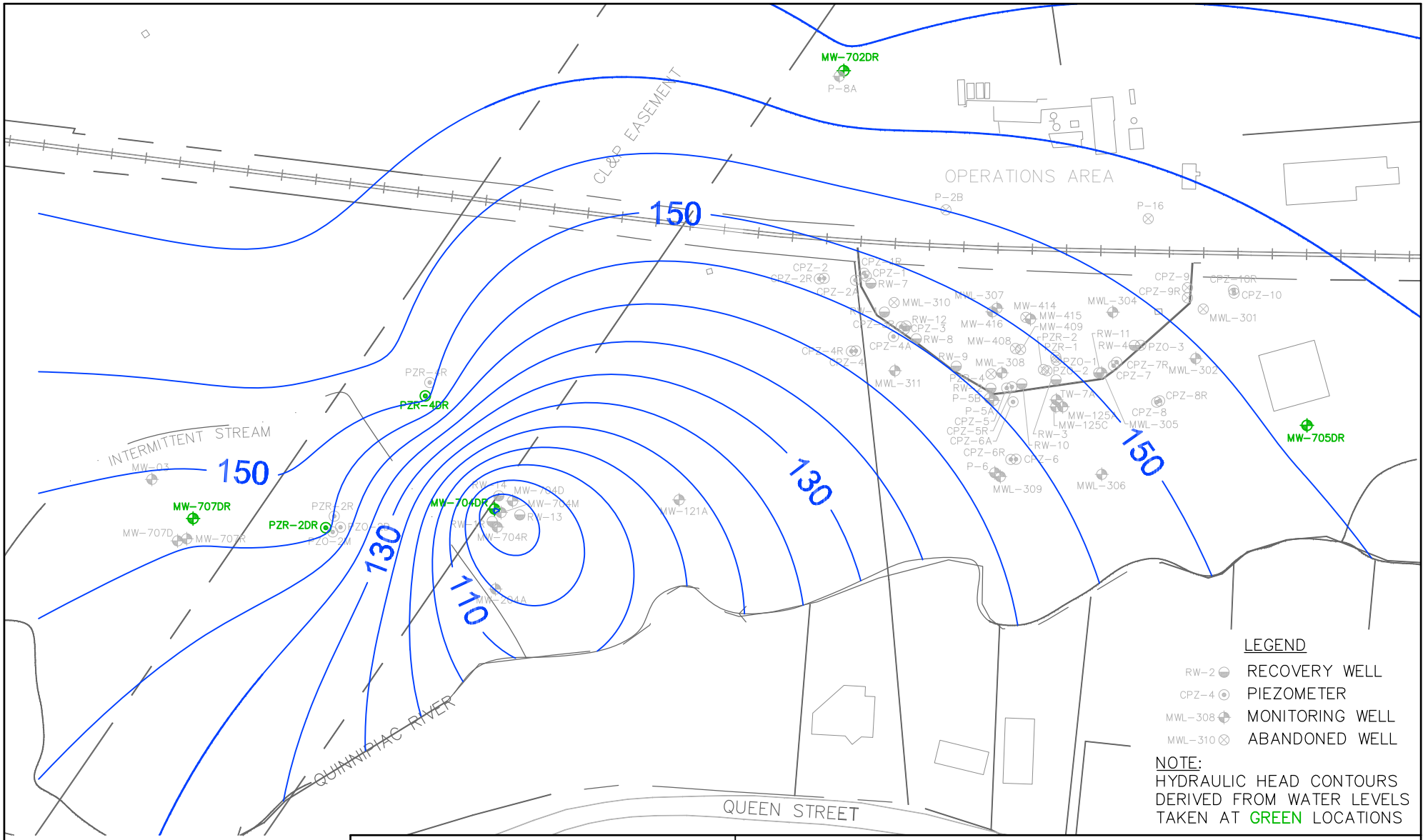

DEEP BEDROCK HYDRAULIC HEAD CONTOURS JANUARY 29, 2013

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SOUTHINGTON, CONNECTICUT

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DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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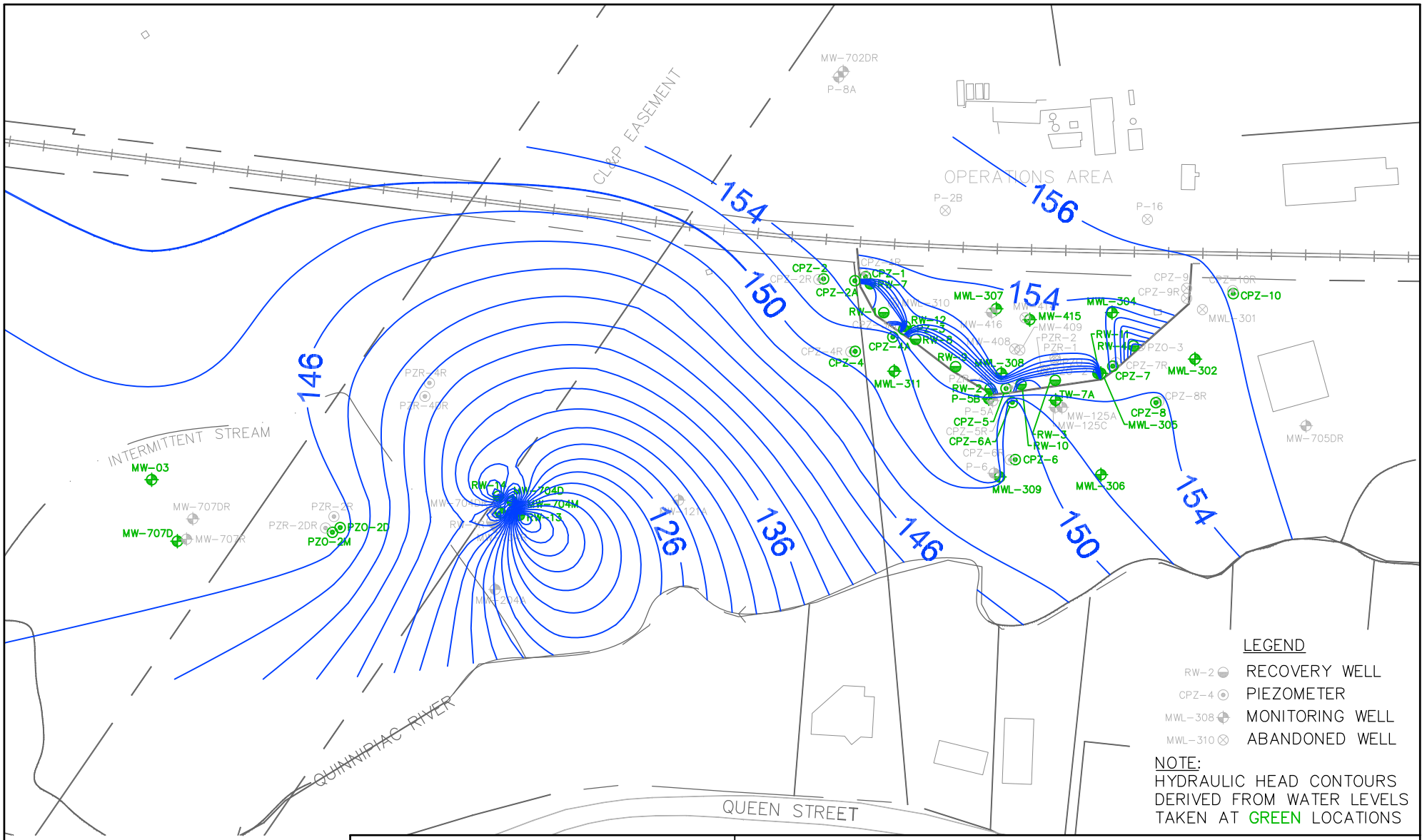

LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS FEBRUARY 26, 2013

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WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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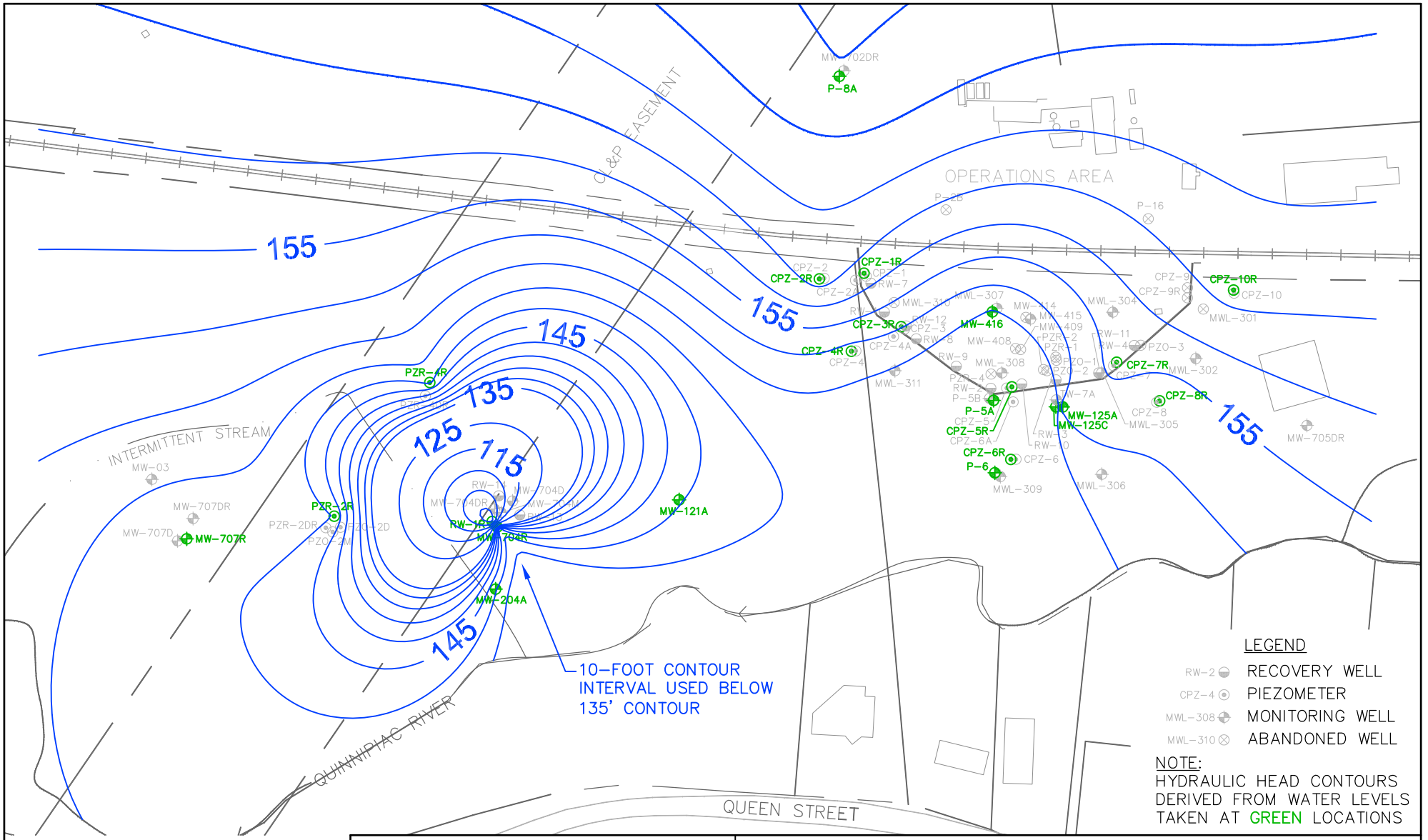

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS FEBRUARY 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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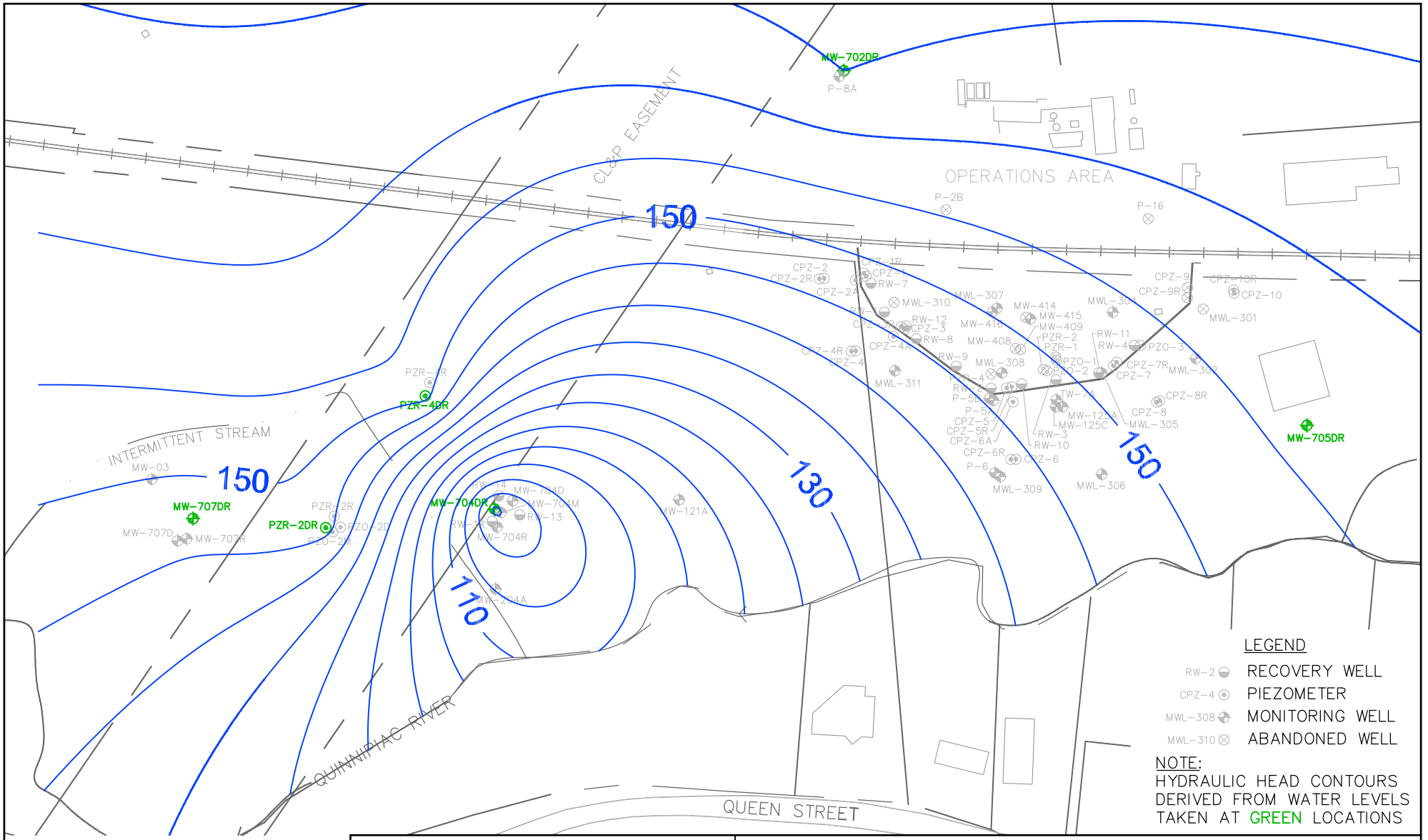

LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS FEBRUARY 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAR 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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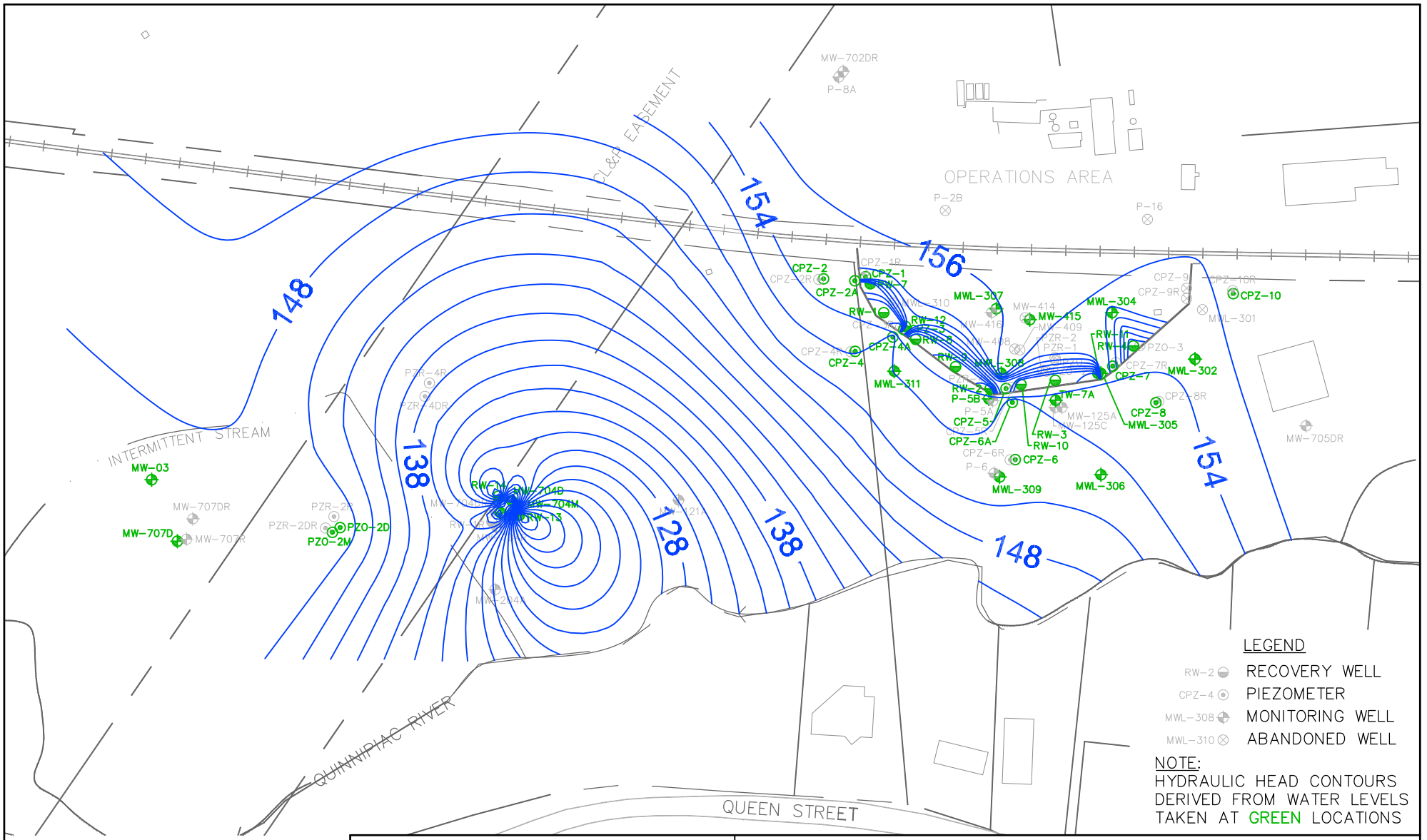

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS MARCH 27, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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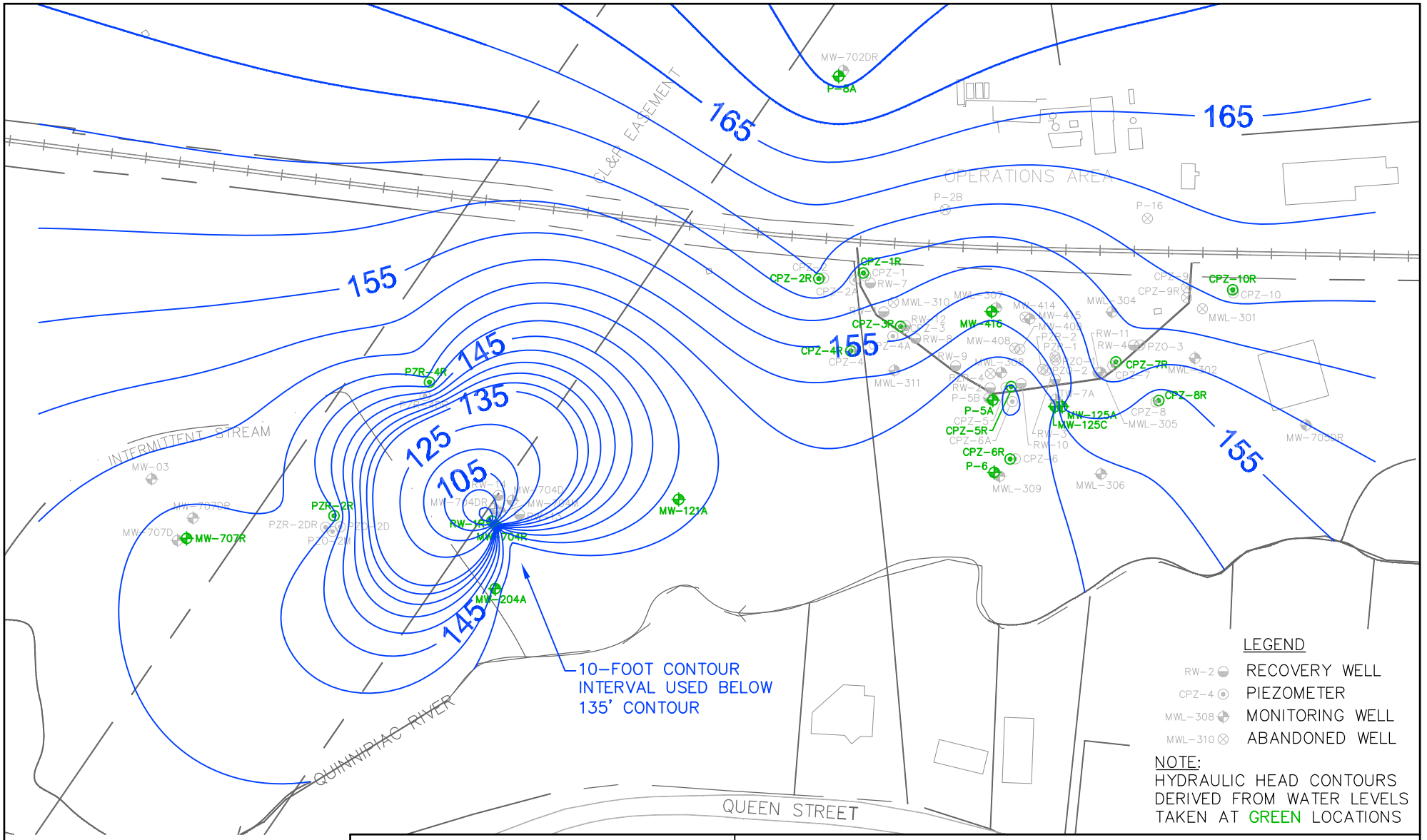

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS MARCH 27, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	APR 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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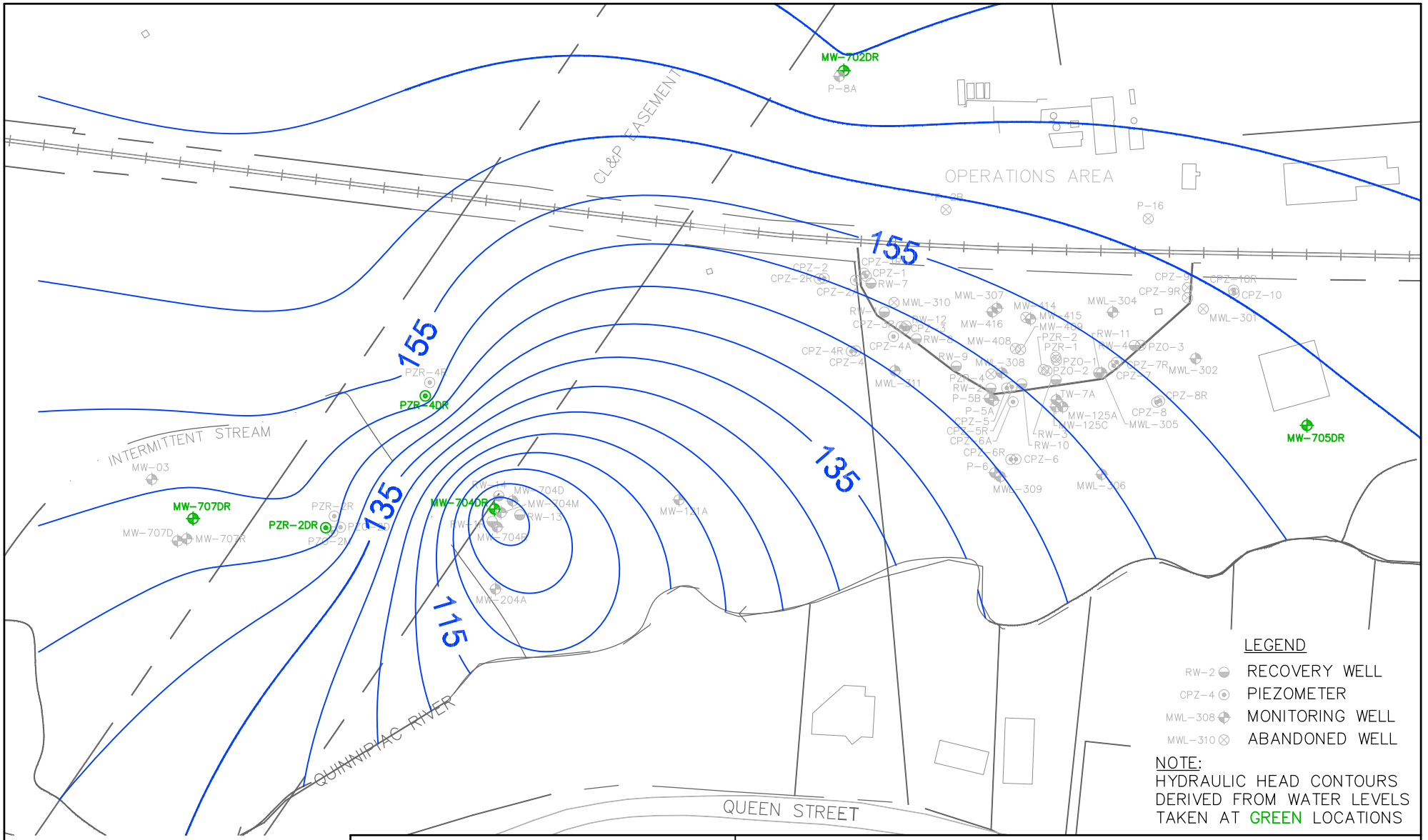

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS MARCH 27, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	APR 2013			13056.001.018
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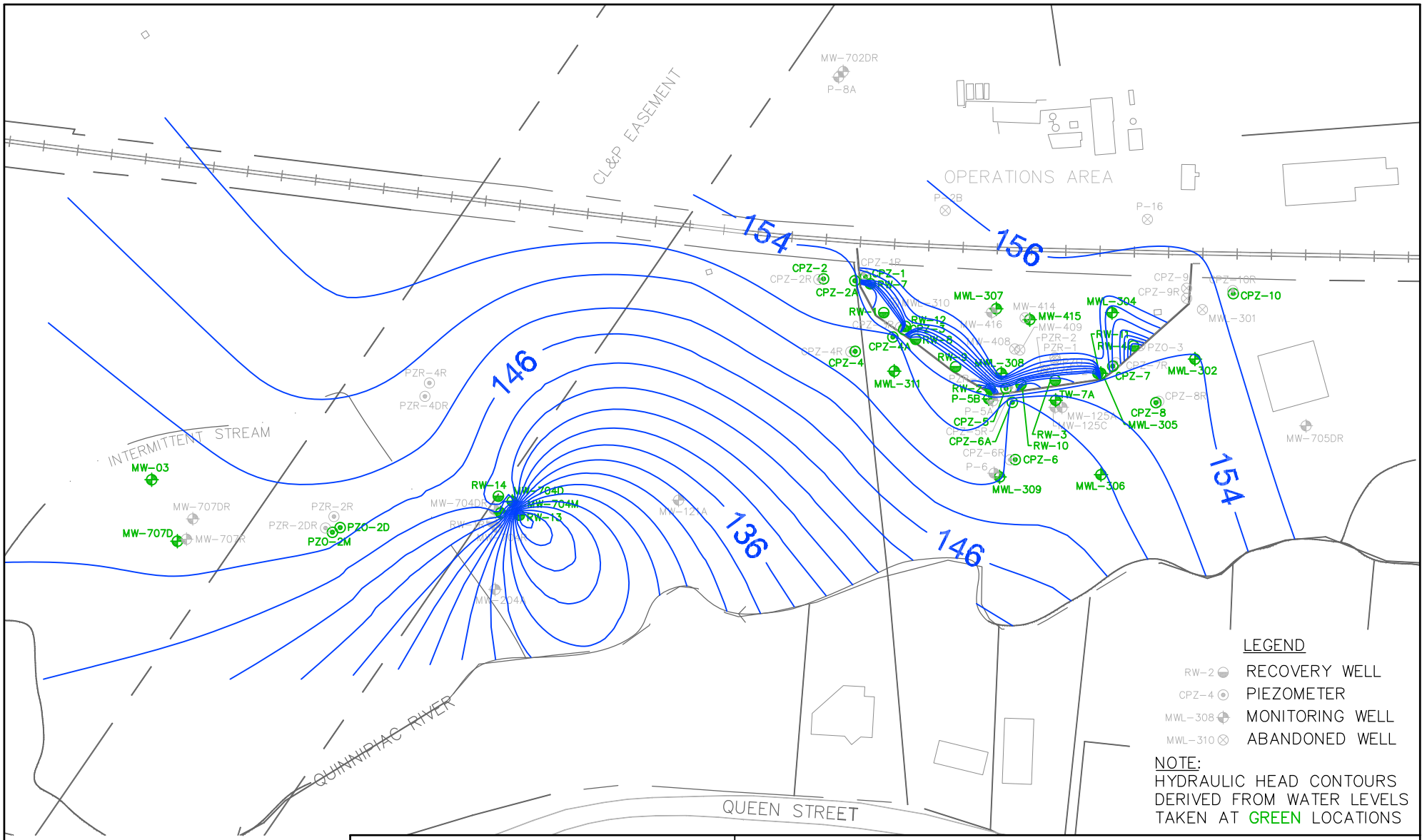

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS APRIL 29, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAY 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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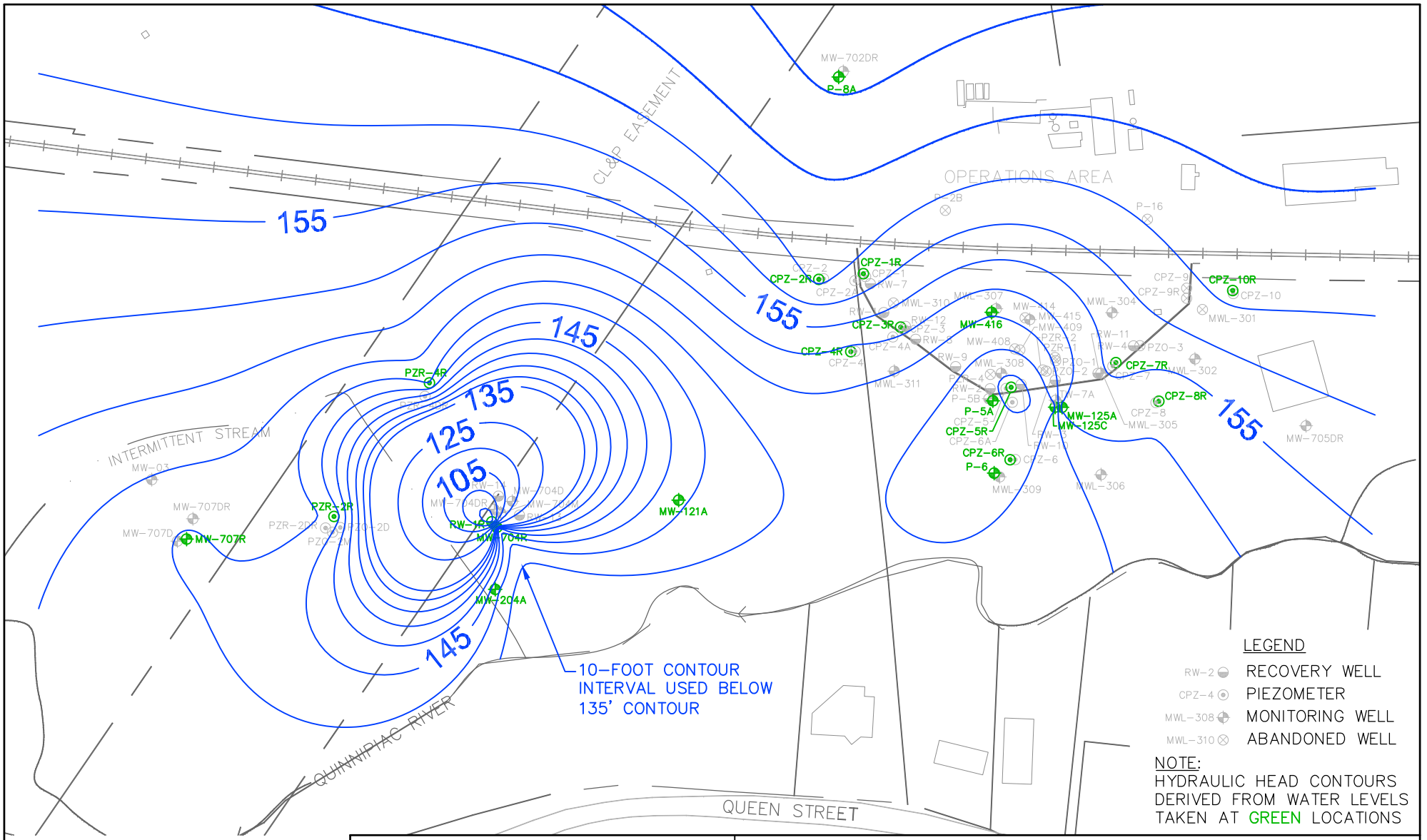

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS APRIL 29, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAY 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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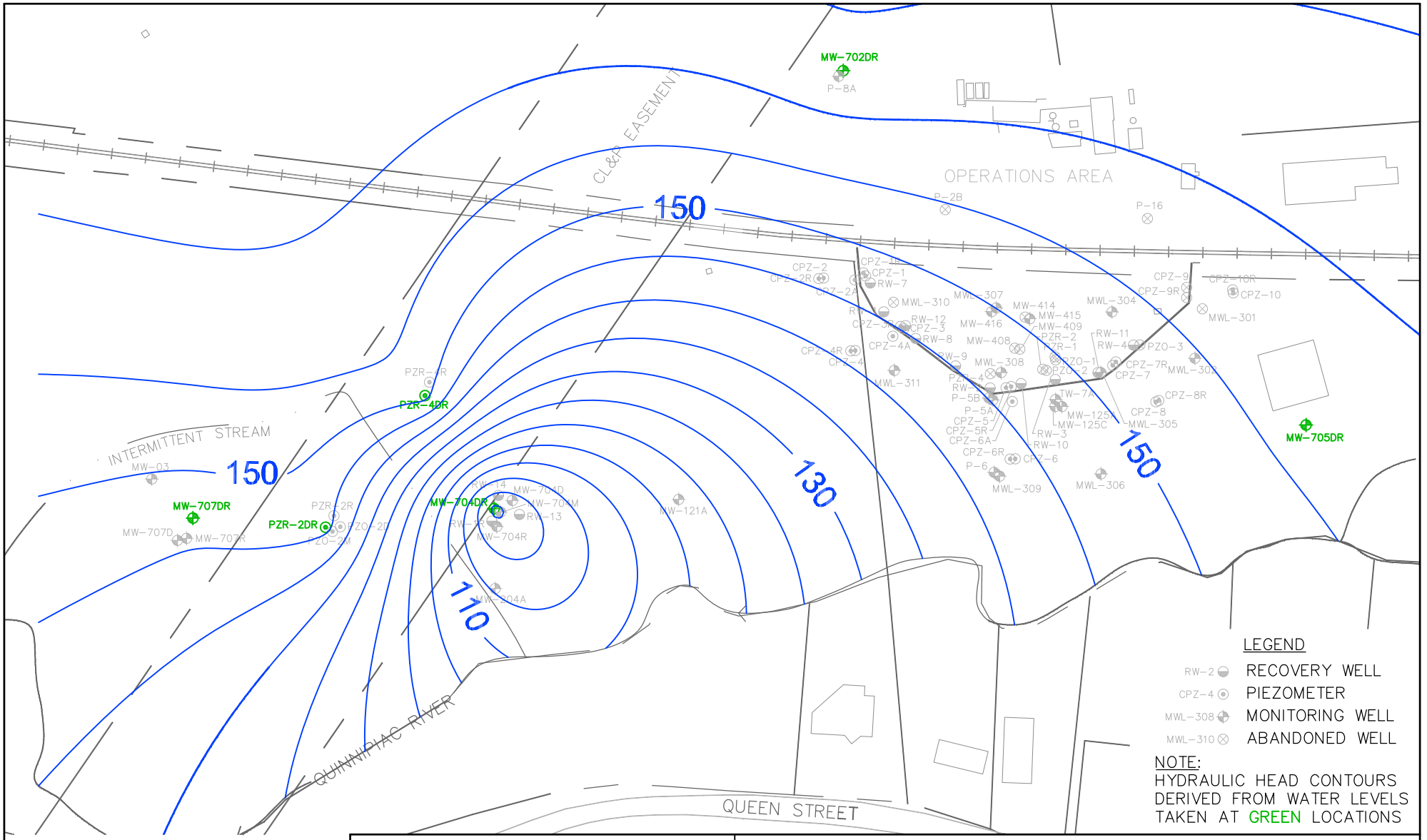

LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS APRIL 29, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAY 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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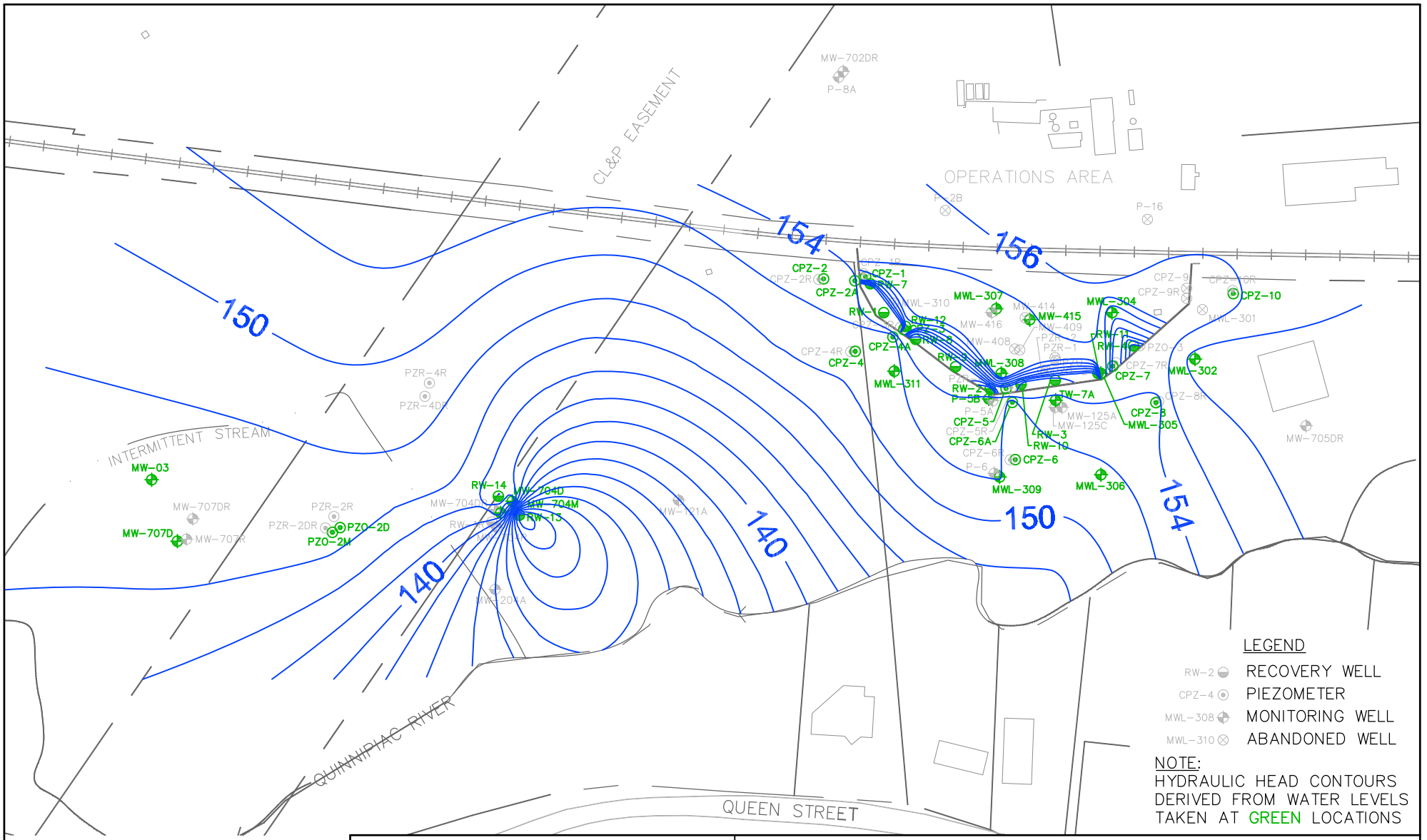

LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS MAY 28, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUN 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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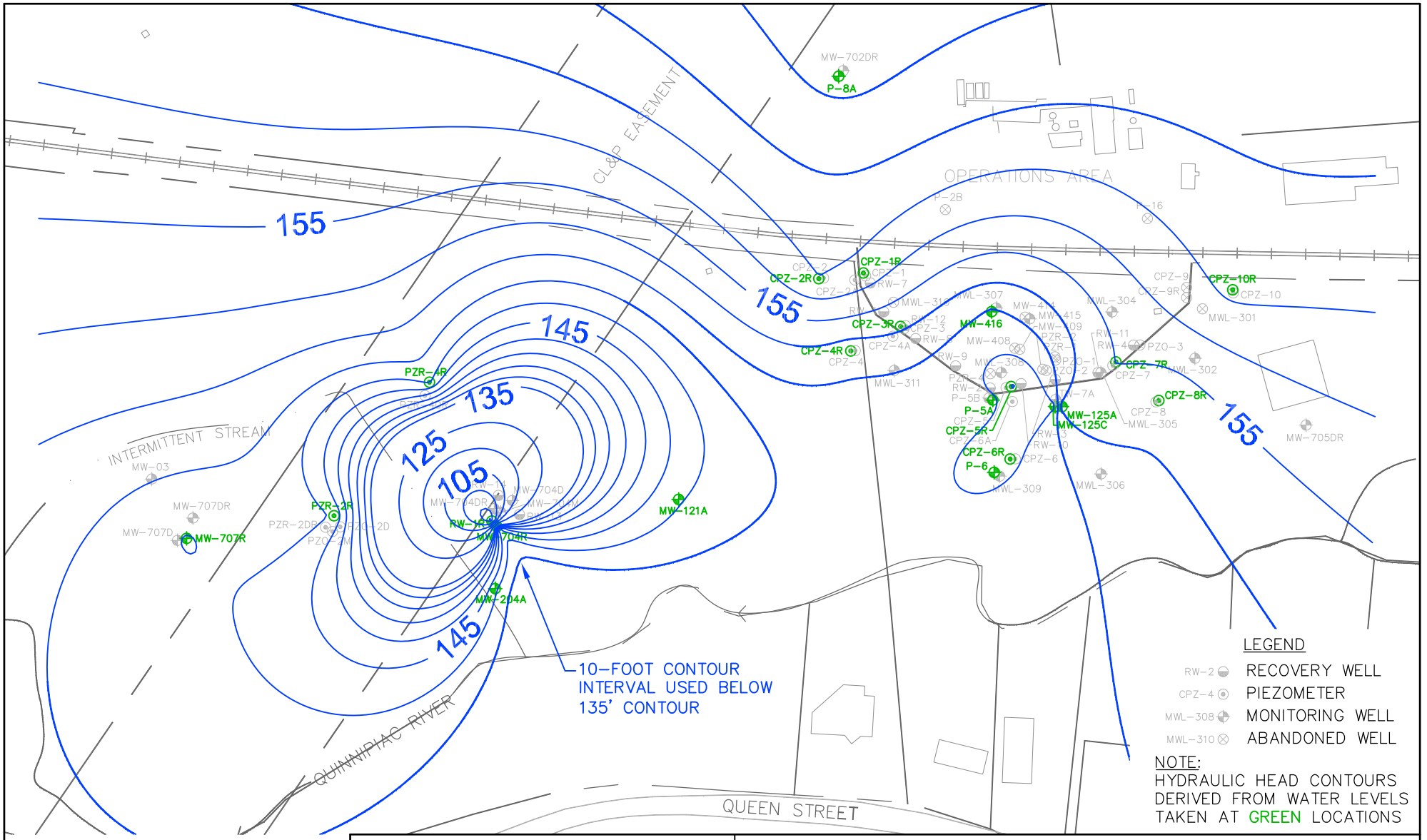

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS MAY 28, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUN 2013			13056.001.018
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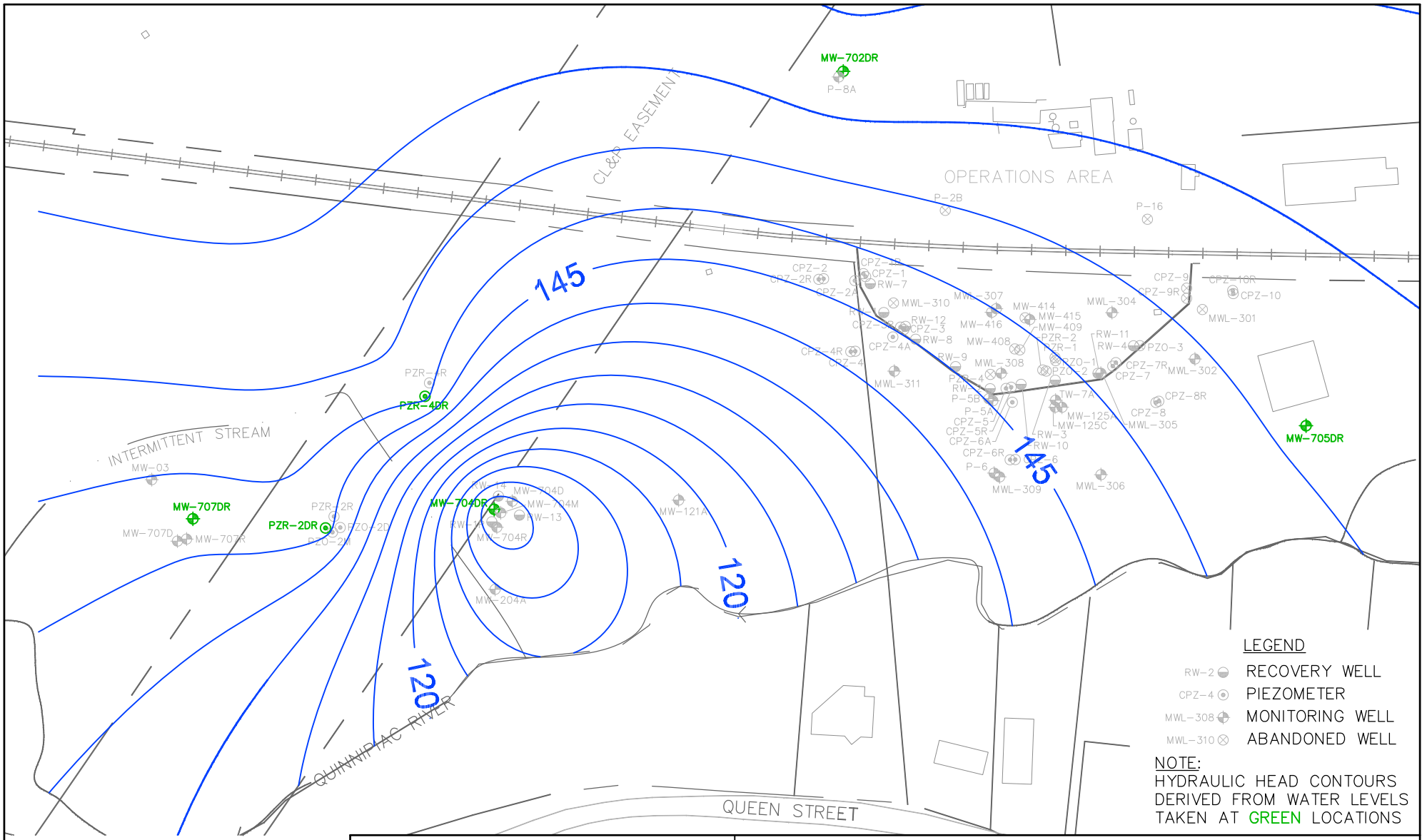

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS MAY 28, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUN 2013			13056.001.018
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DRAFT

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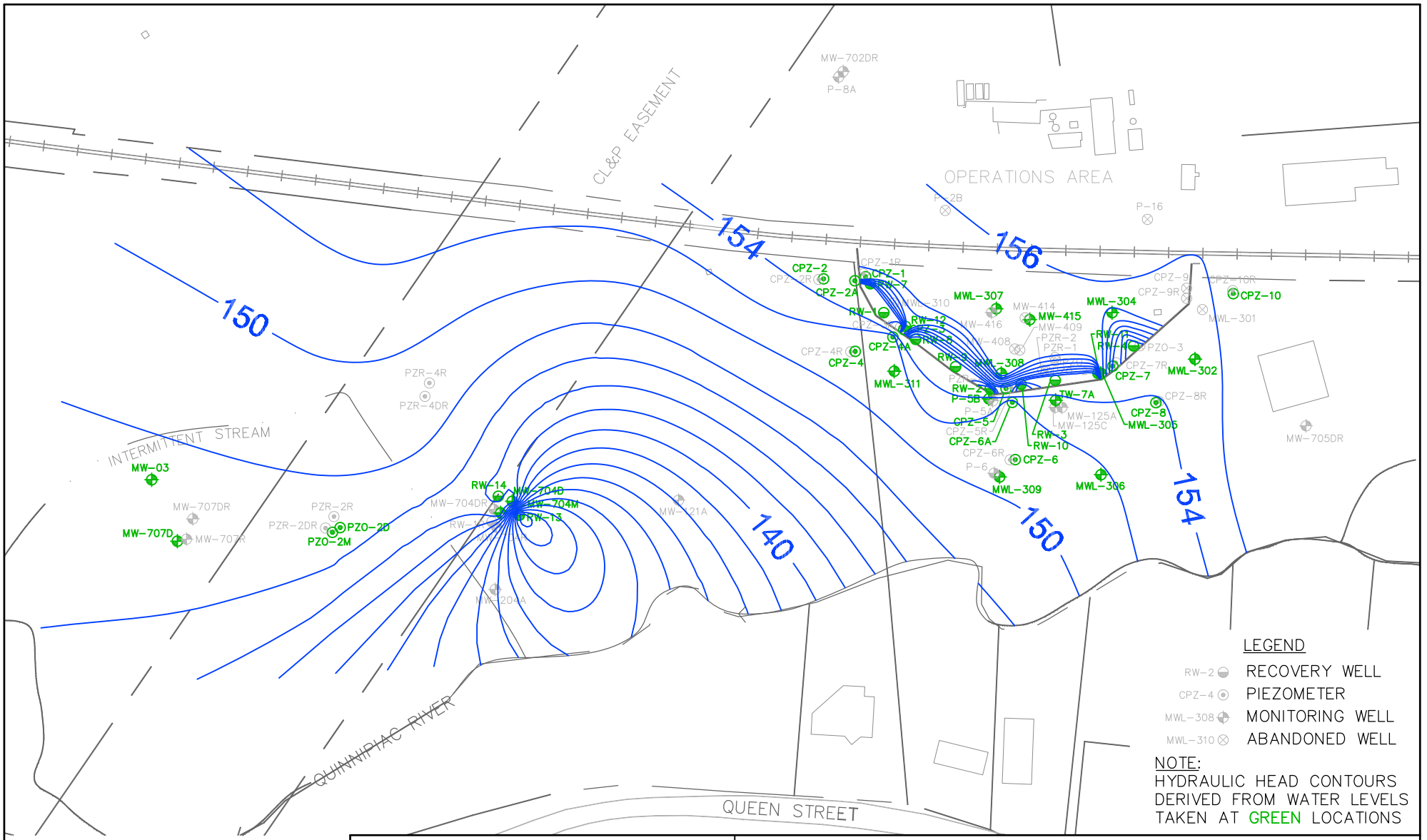

LEGEND

- RW-2 RECOVERY WELL
- CPZ-4 PIEZOMETER
- MWL-308 MONITORING WELL
- MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS JUNE 27, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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DRAFT

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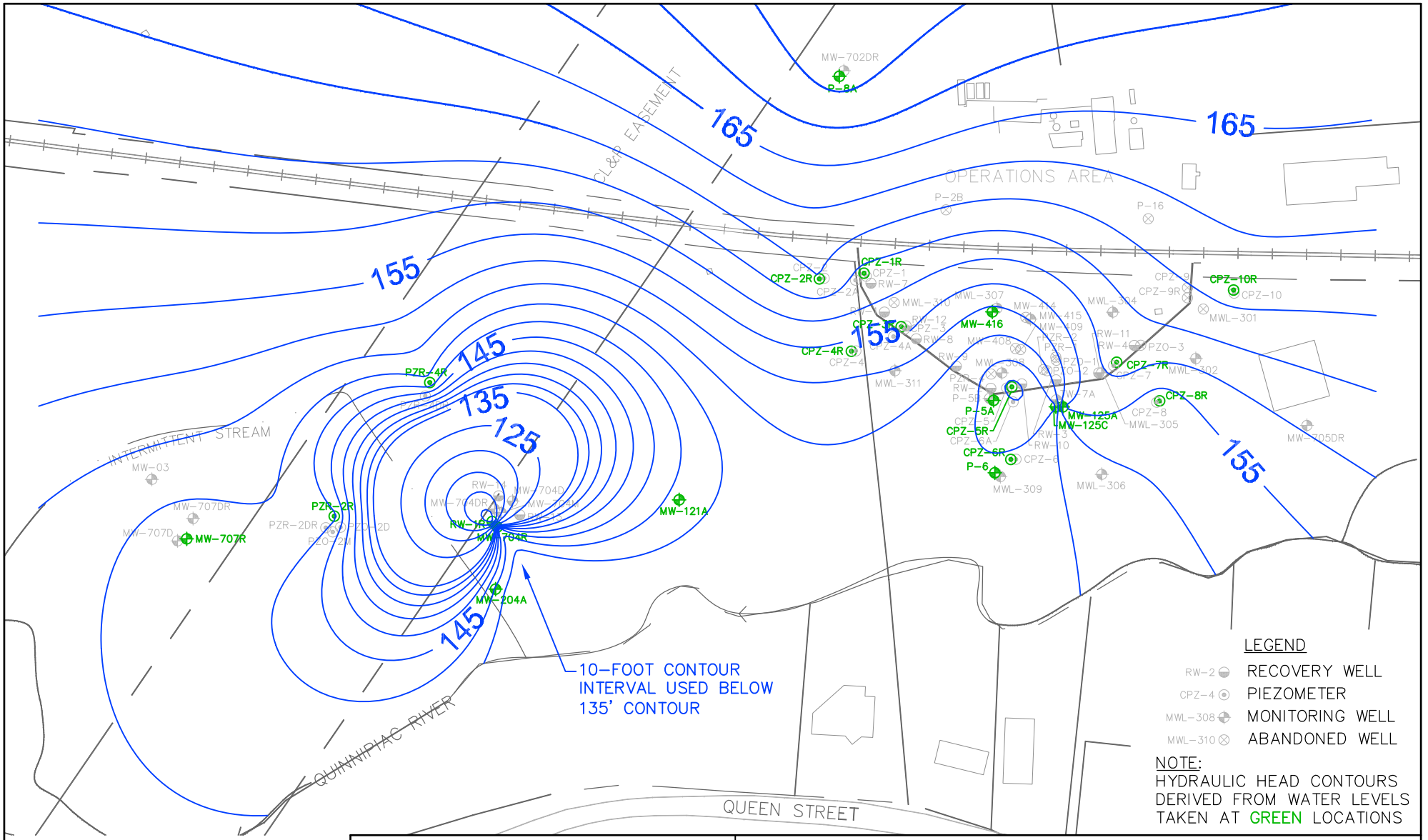

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS JUNE 27, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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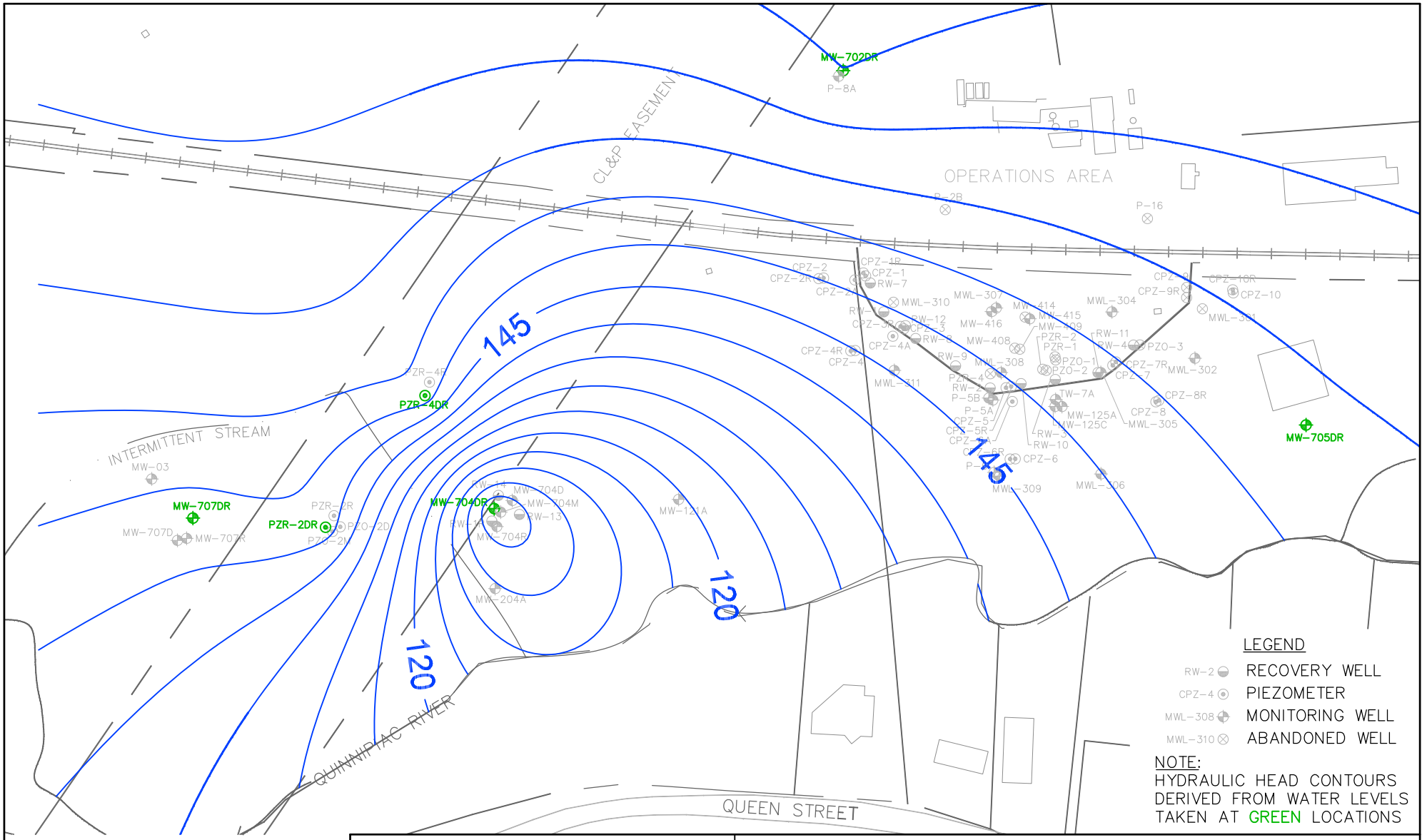

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS JUNE 27, 2013

SRSNE
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WESTON SOLUTIONS
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DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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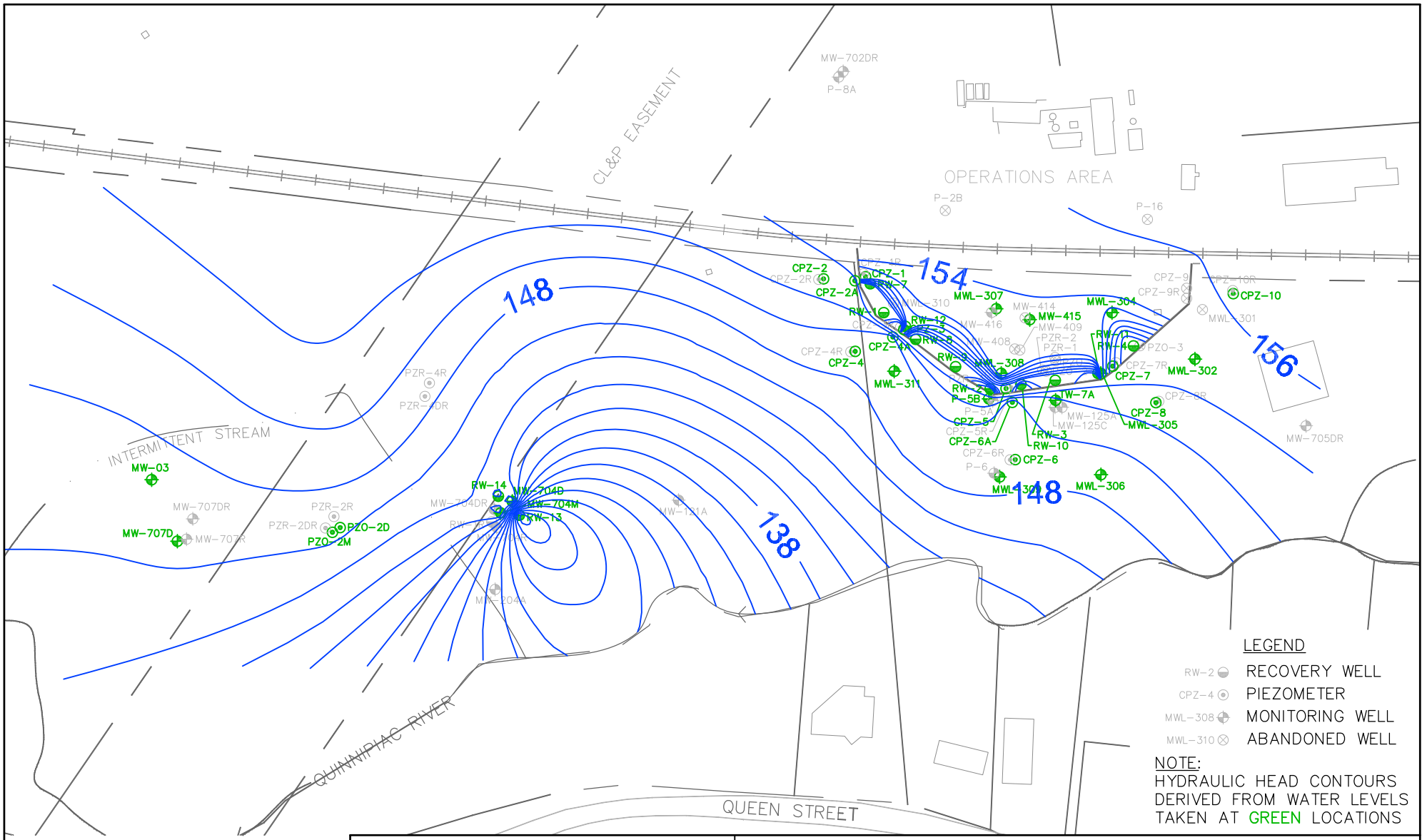

LEGEND

- RW-2 RECOVERY WELL
- CPZ-4 PIEZOMETER
- MWL-308 MONITORING WELL
- MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS JULY 30, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	AUG 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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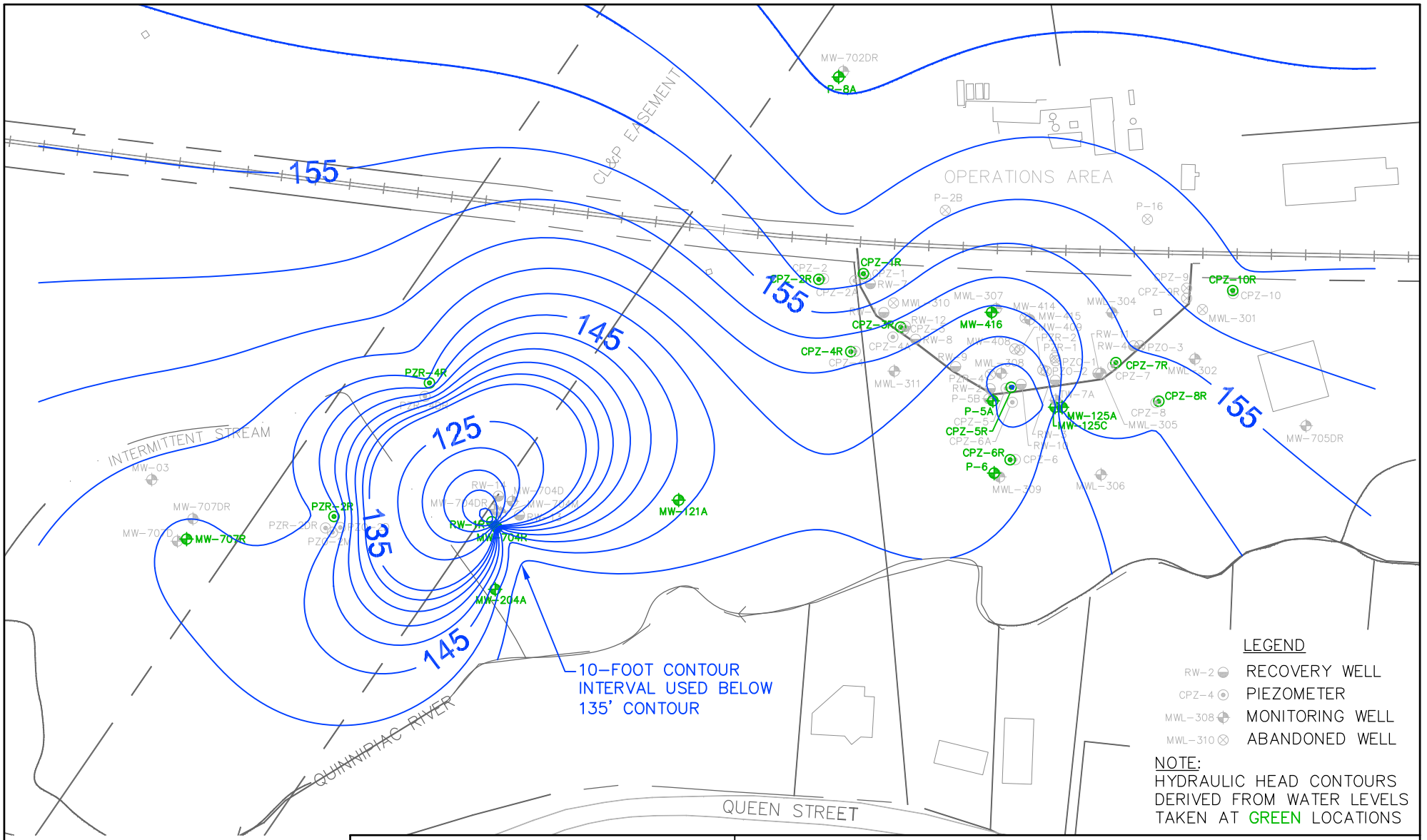

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS JULY 30, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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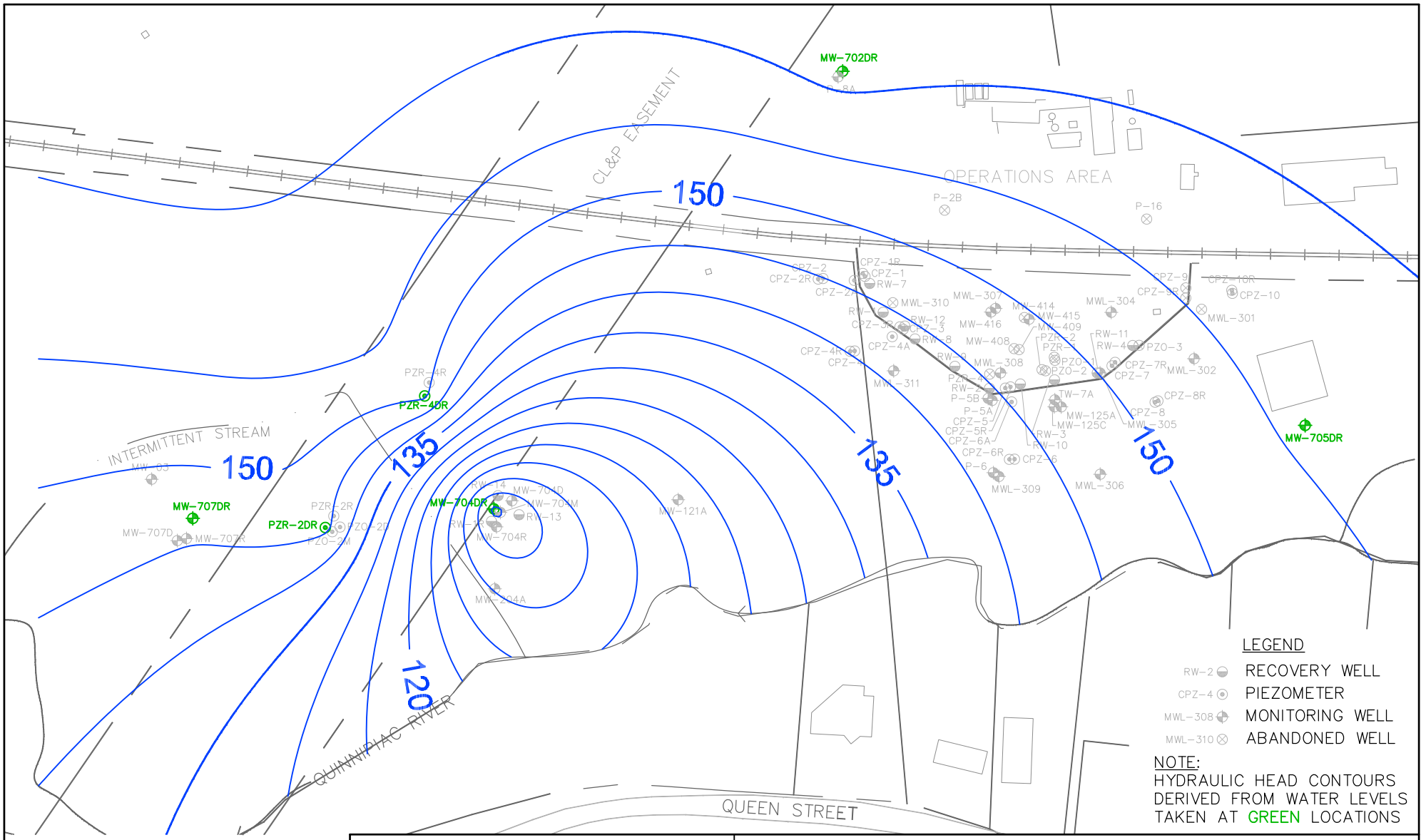

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS JULY 30, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	AUG 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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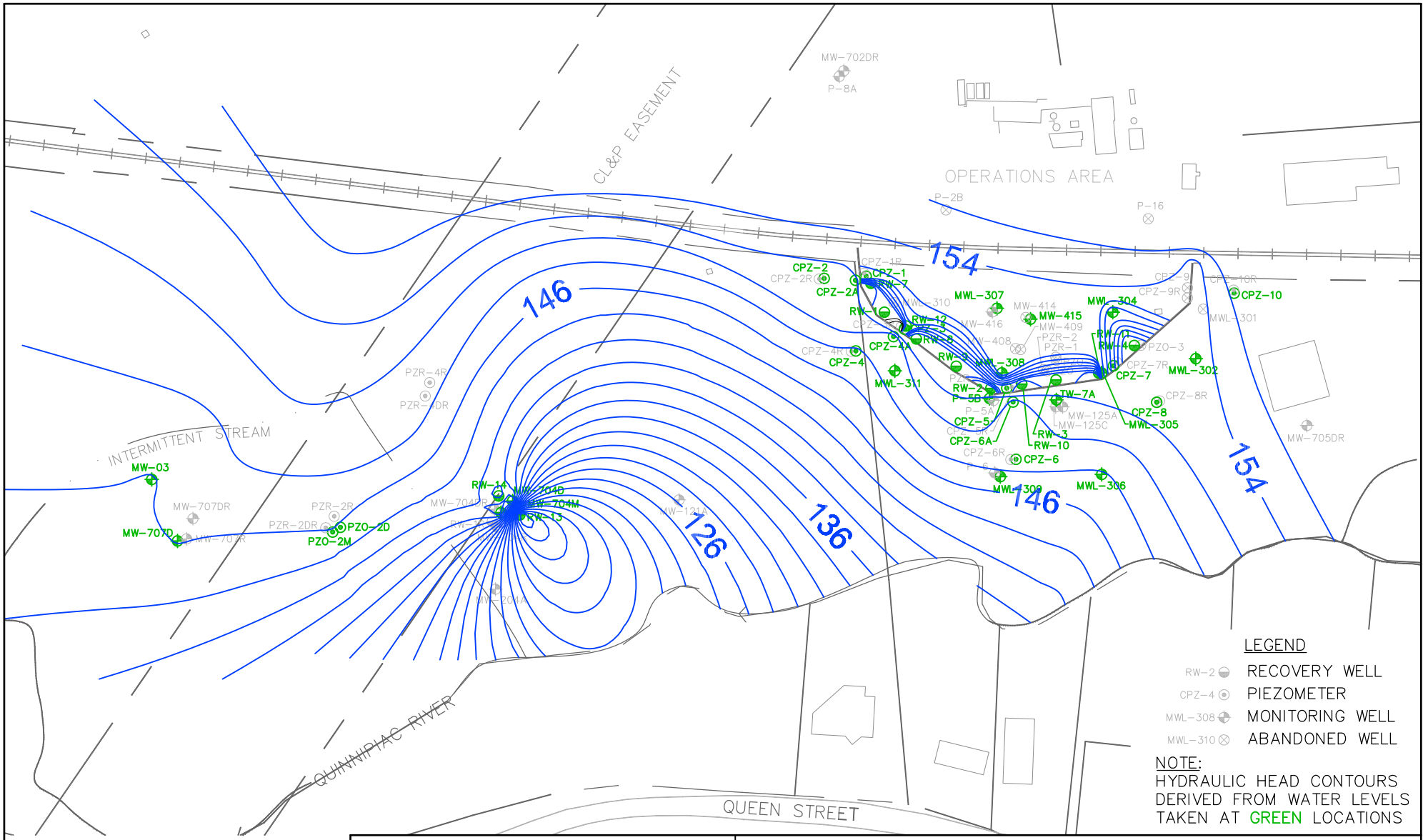

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS AUGUST 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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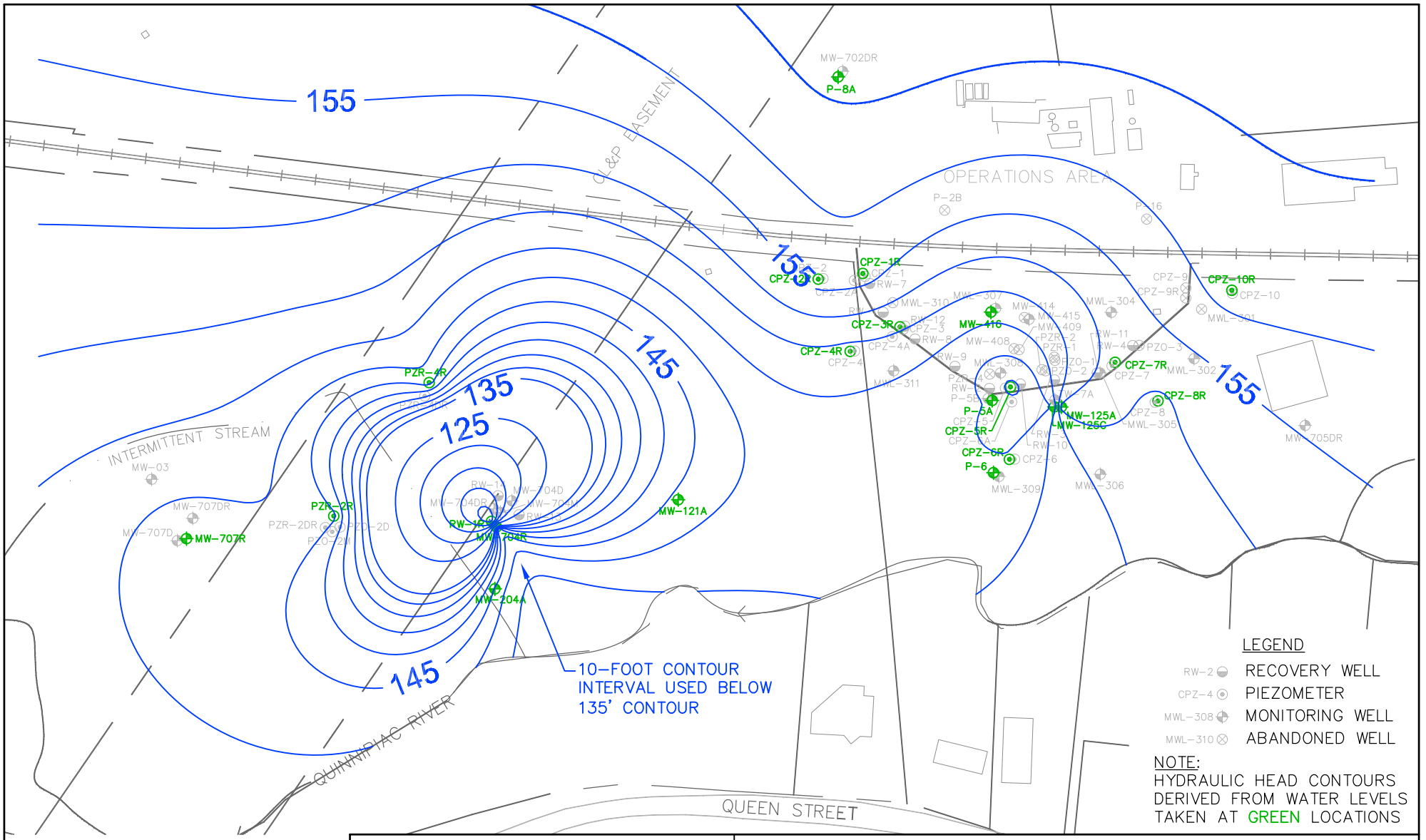

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS AUGUST 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	SEP 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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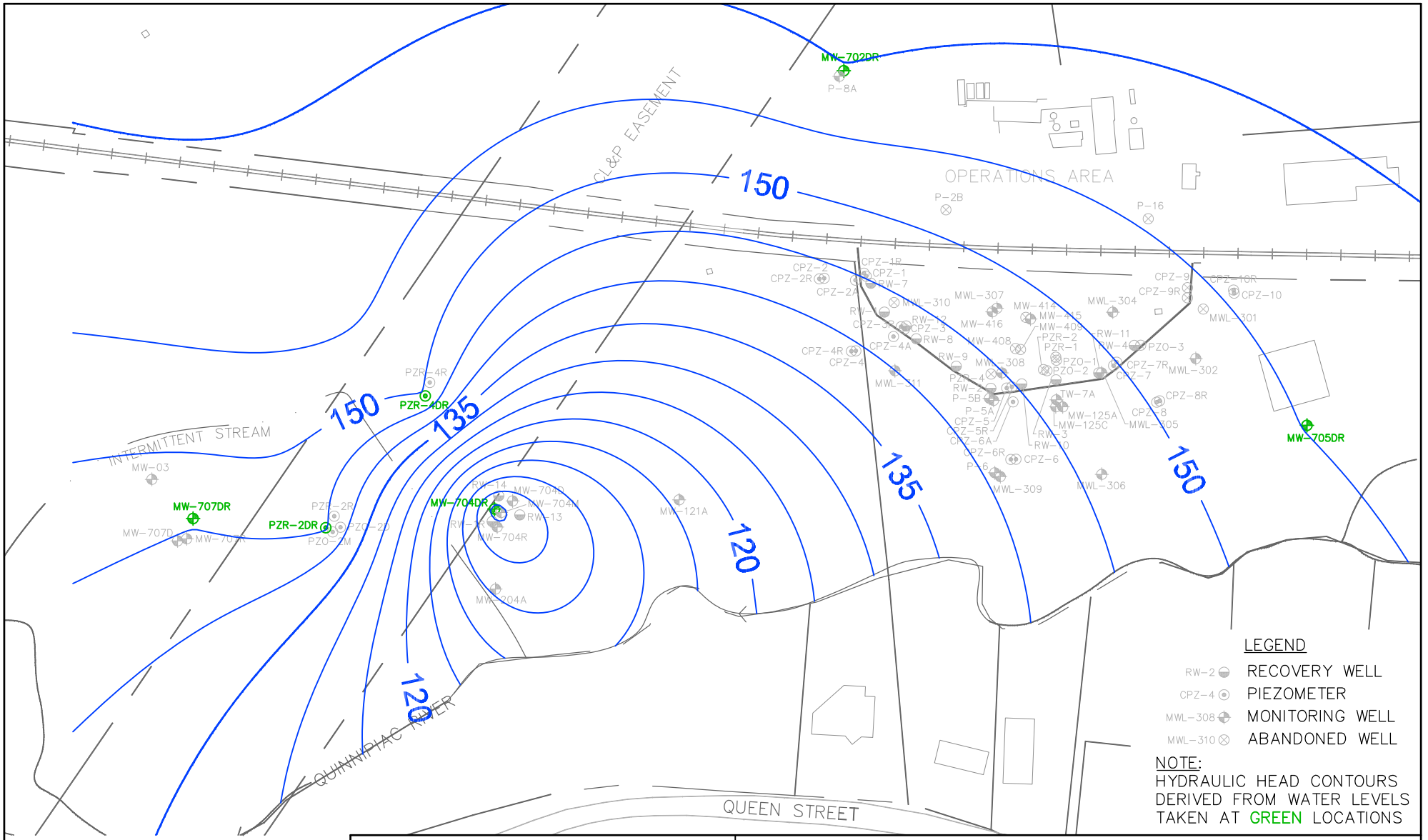

LEGEND

- RW-2 RECOVERY WELL
- CPZ-4 PIEZOMETER
- MWL-308 MONITORING WELL
- MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS AUGUST 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
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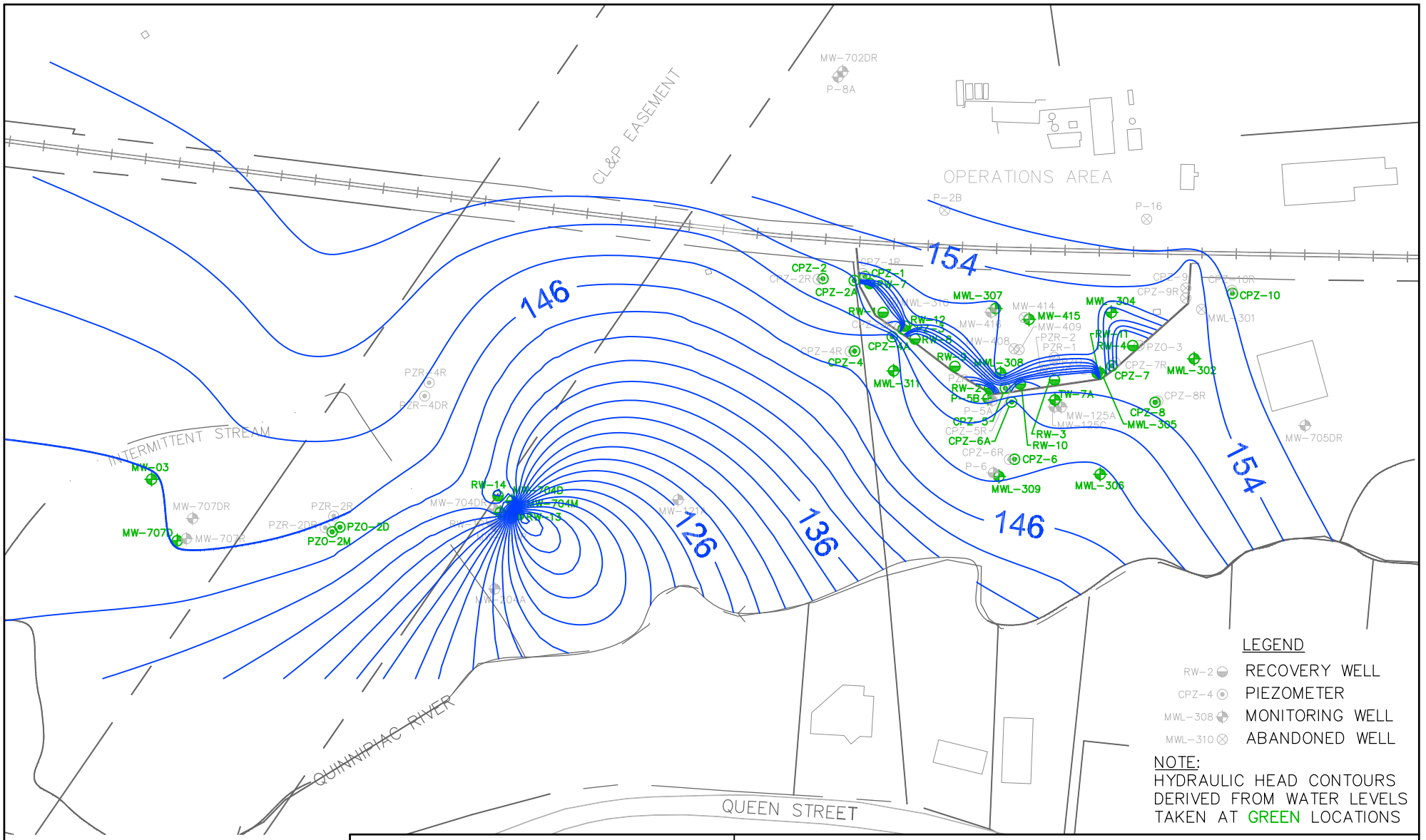

LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS SEPTEMBER 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	OCT 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		11A

DRAFT

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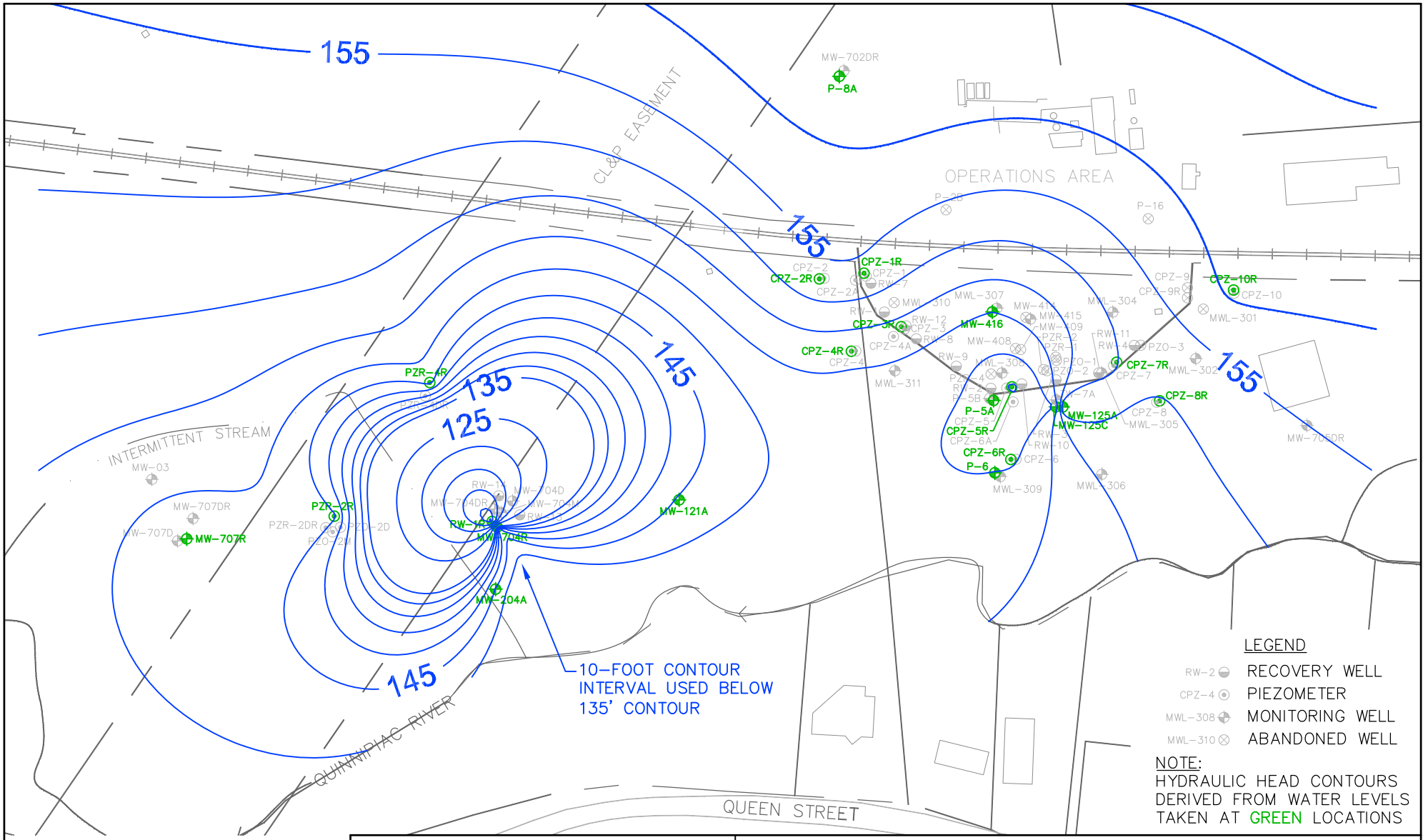

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS SEPTEMBER 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	OCT 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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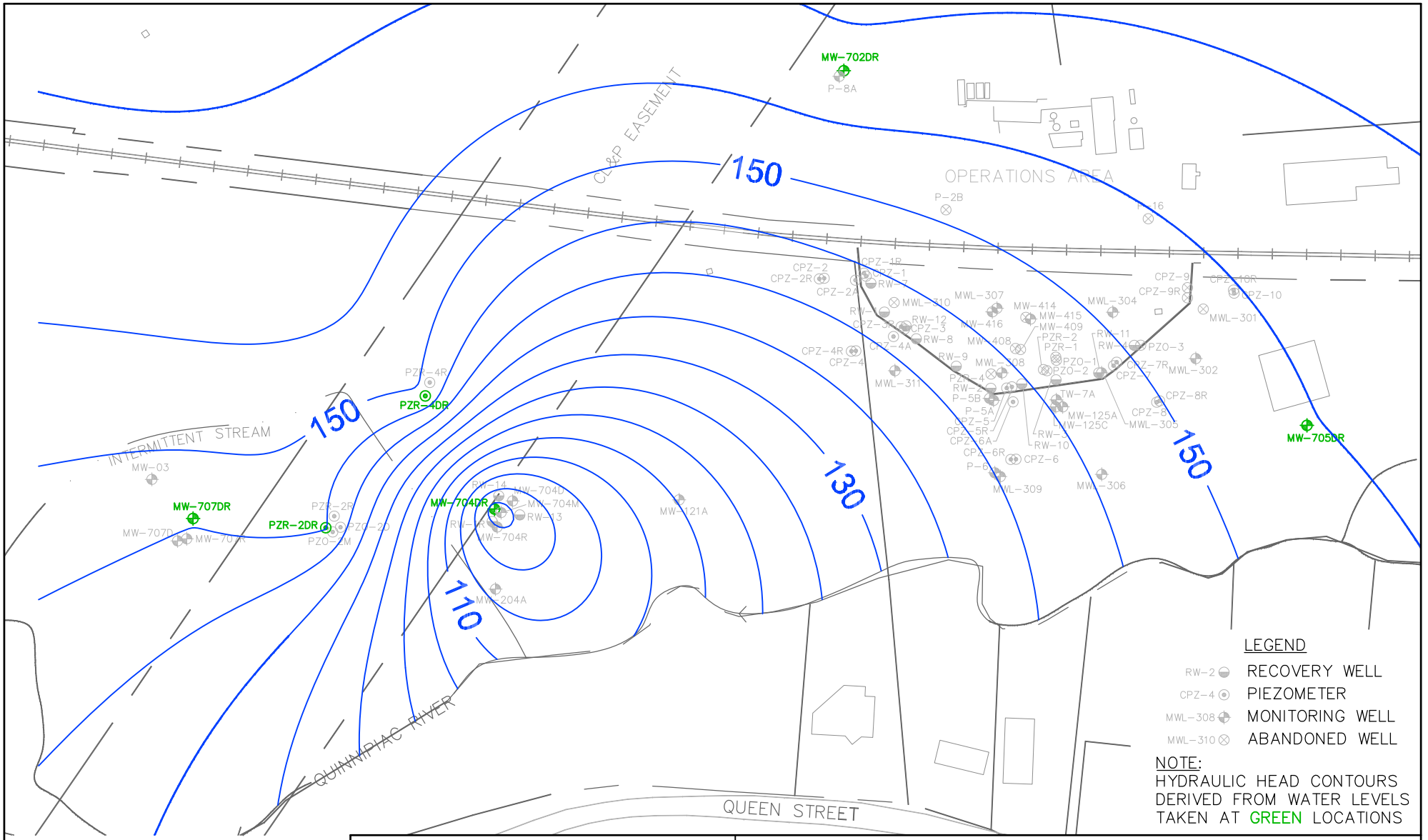

LEGEND

RW-2 RECOVERY WELL

CPZ-4 PIEZOMETER

MWL-308 MONITORING WELL

MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS SEPTEMBER 26, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	OCT 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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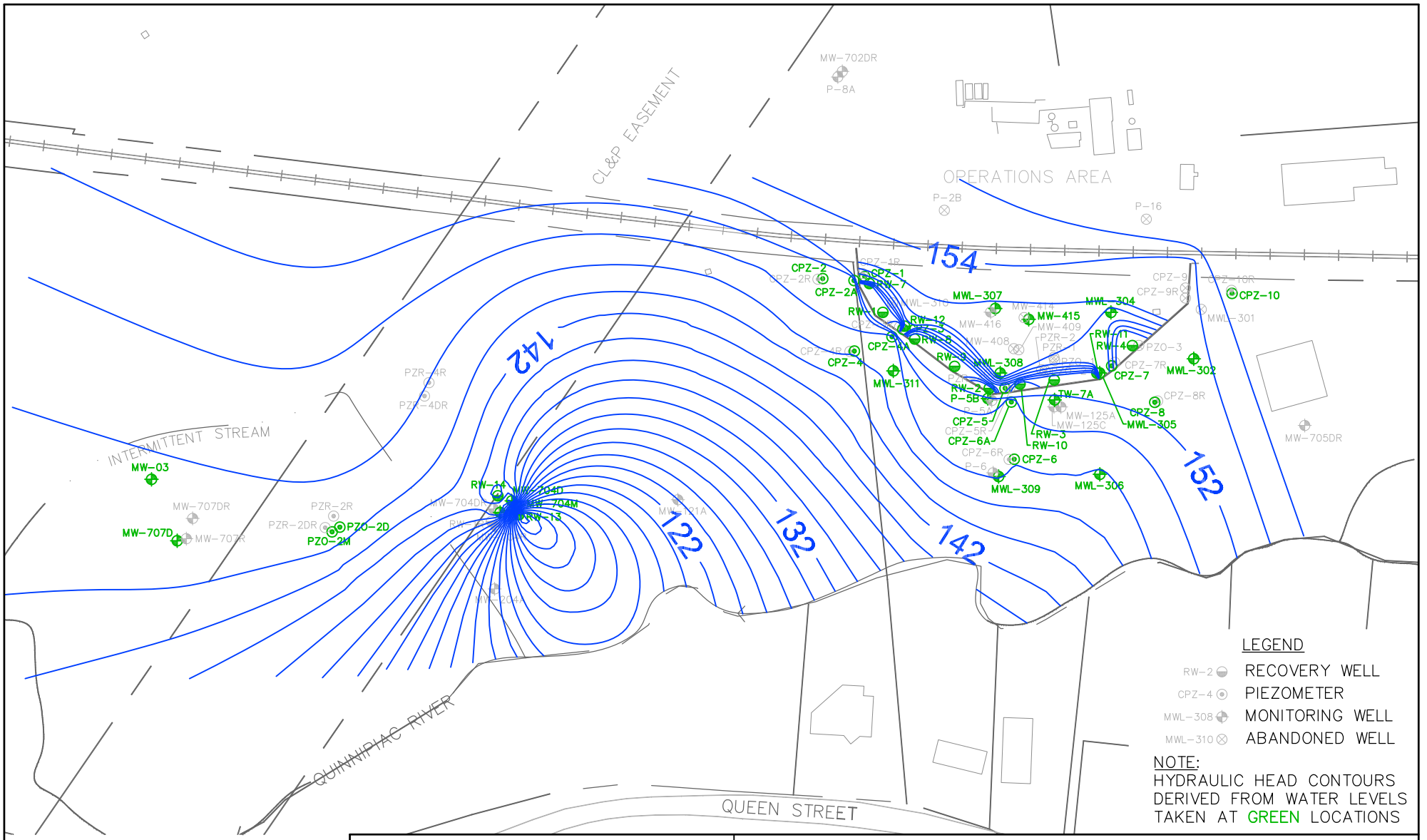

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS OCTOBER 29, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	NOV 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		12A

DRAFT

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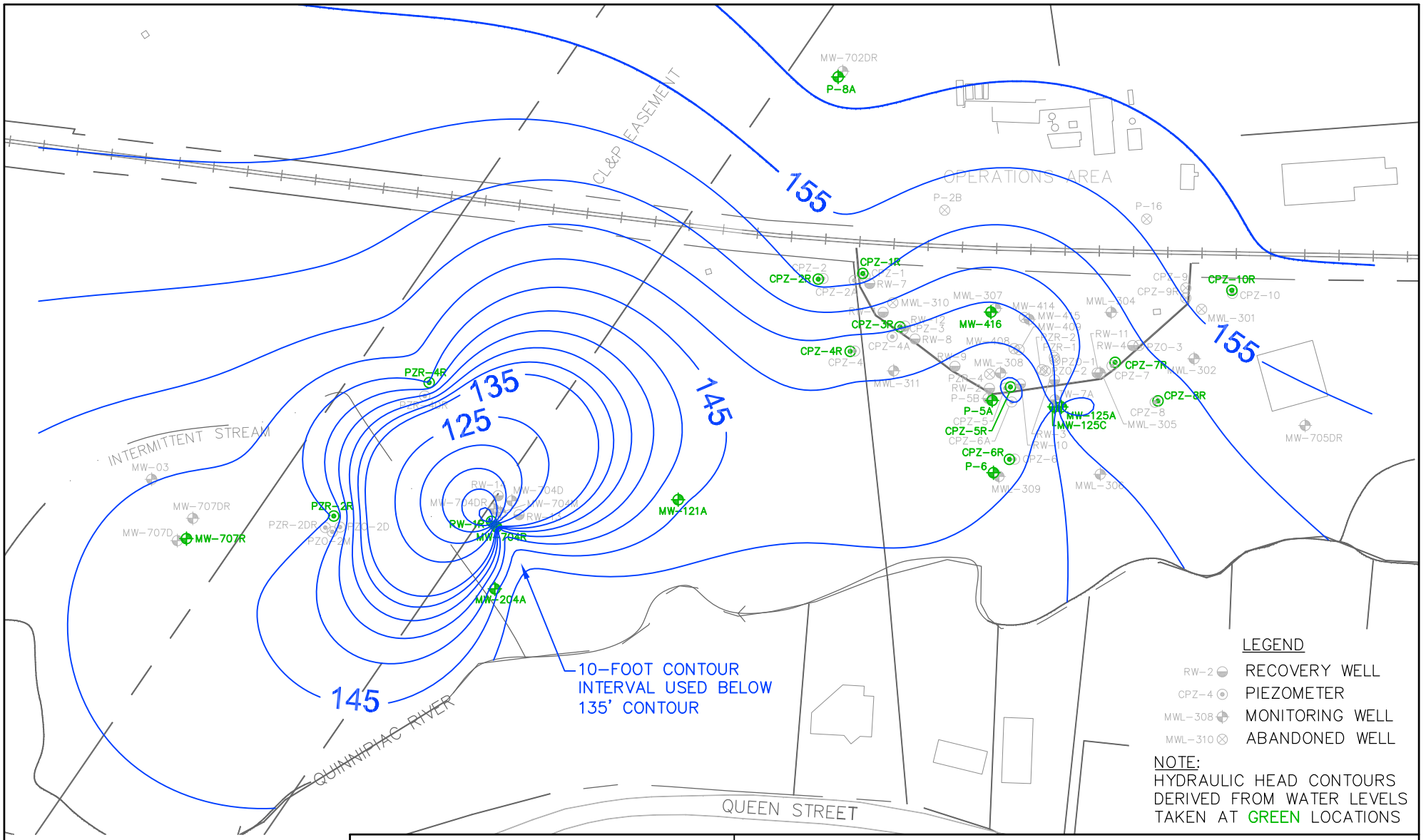

GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS OCTOBER 29, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

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DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	NOV 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
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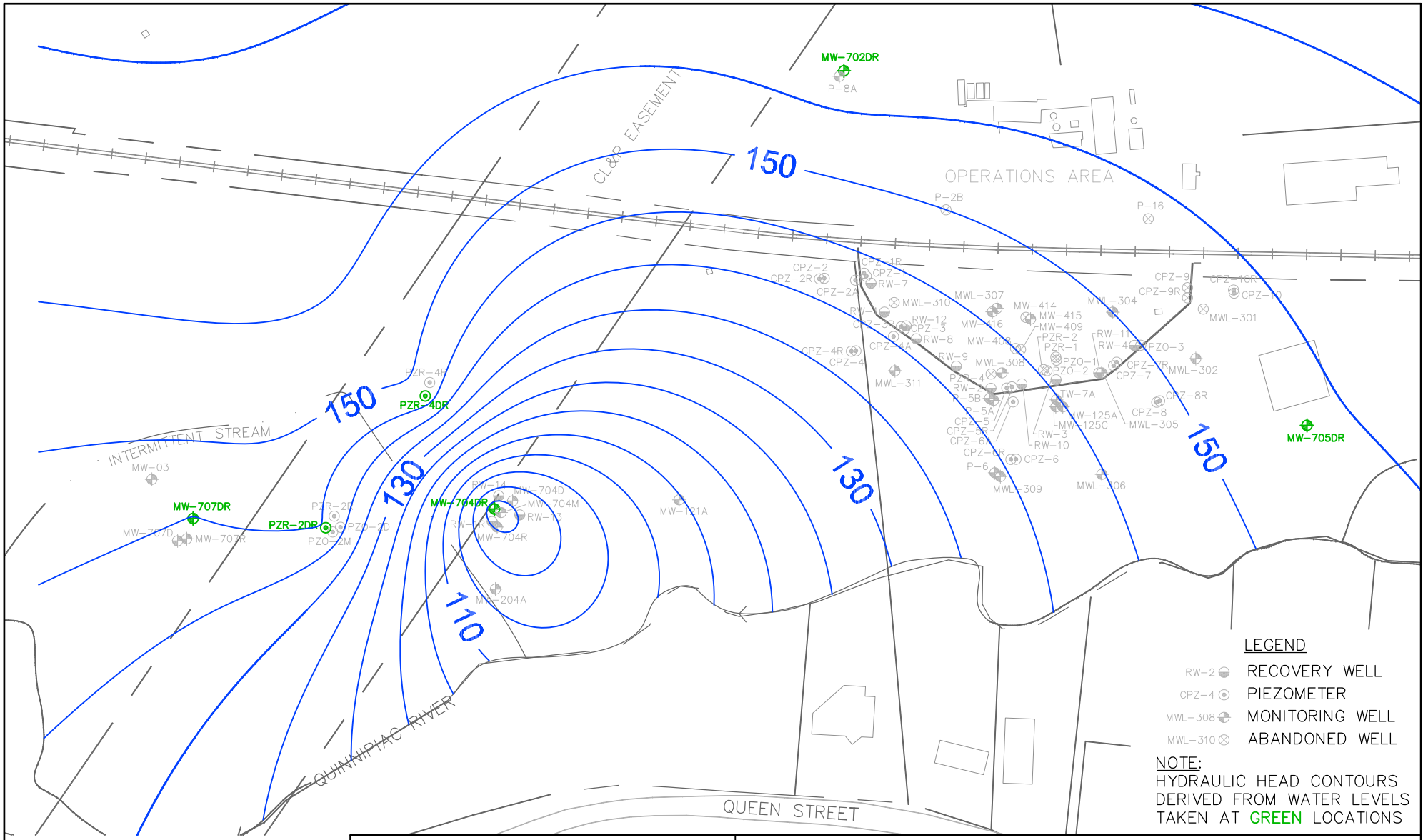


LEGEND

RW-2 RECOVERY WELL
CPZ-4 PIEZOMETER
MWL-308 MONITORING WELL
MWL-310 ABANDONED WELL

NOTE:
HYDRAULIC HEAD CONTOURS DERIVED FROM WATER LEVELS TAKEN AT GREEN LOCATIONS

GRAPHIC SCALE
200 100 0 100 200
APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS OCTOBER 29, 2013

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	NOV 2013			13056.001.018
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		12C

FIGURE 13

31 Oct. 2012 through 30 Oct. 2013

Hydraulic Gradient Between CPZ-05 and CPZ-06
NTCRA-1 Overburdern Compliance Pair

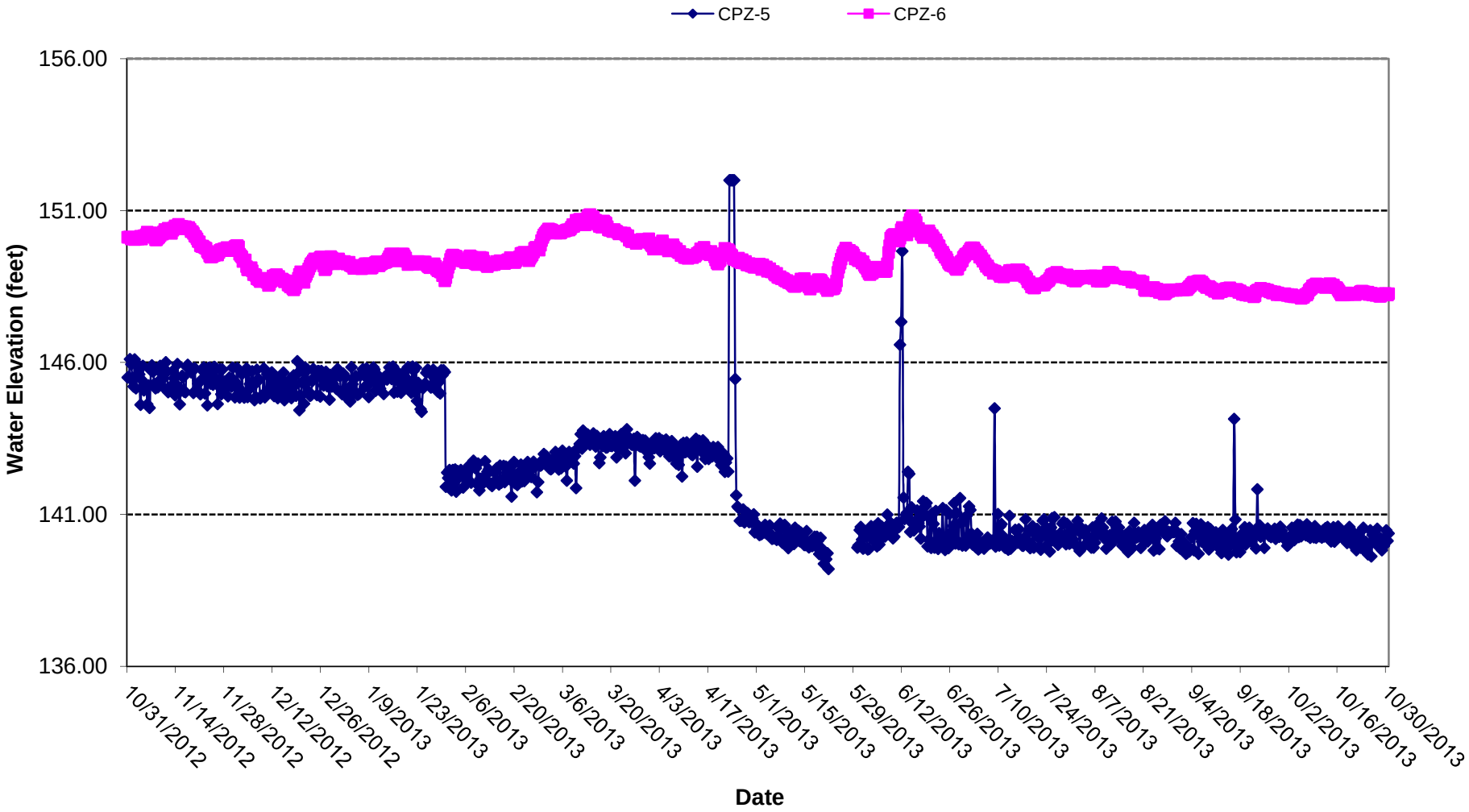


FIGURE 14A

31 Oct. 2012 through 30 Oct. 2013

Hydraulic Gradient Between MW-704R and PZR-2R
NTCRA-2 Shallow Bedrock Compliance Pair

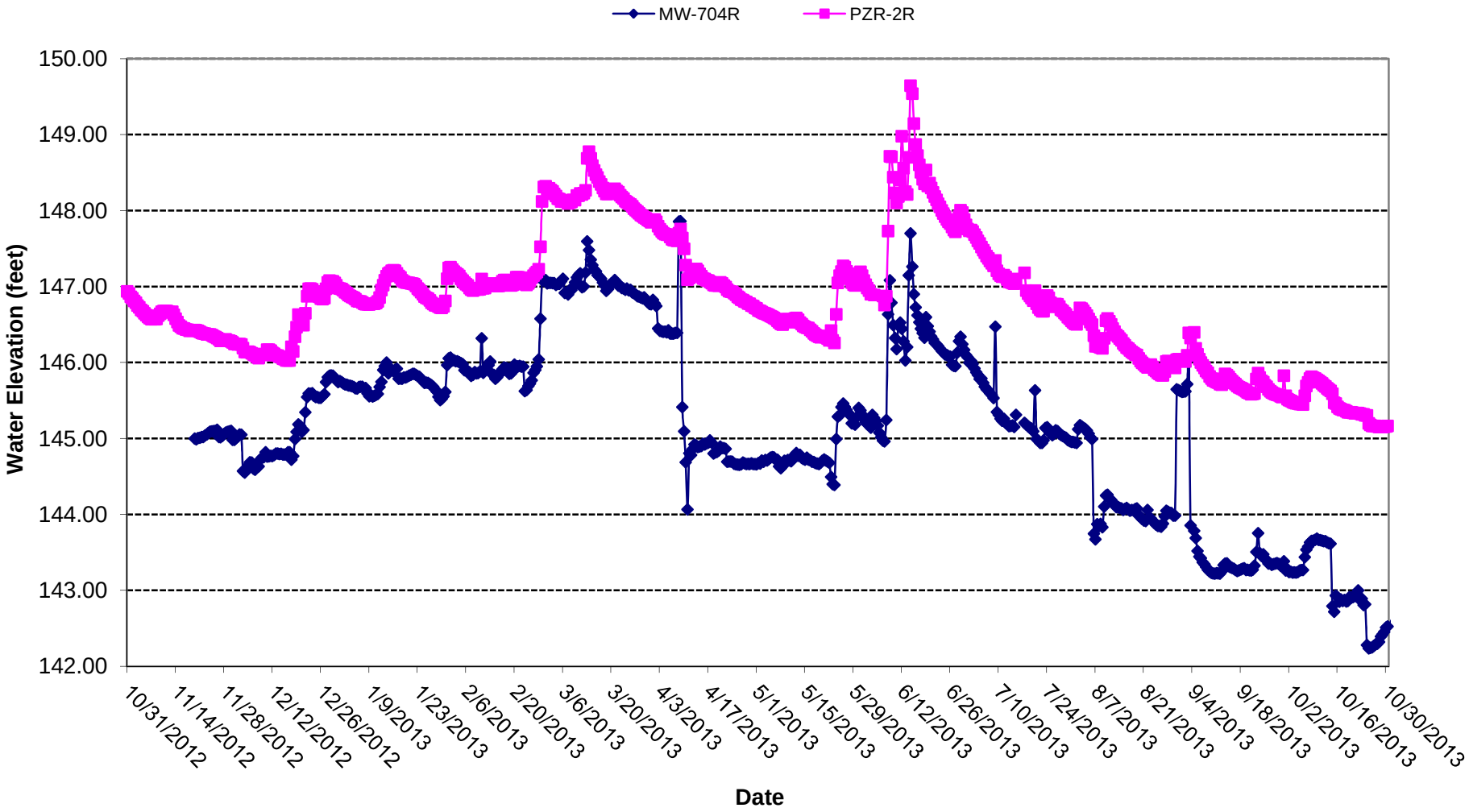
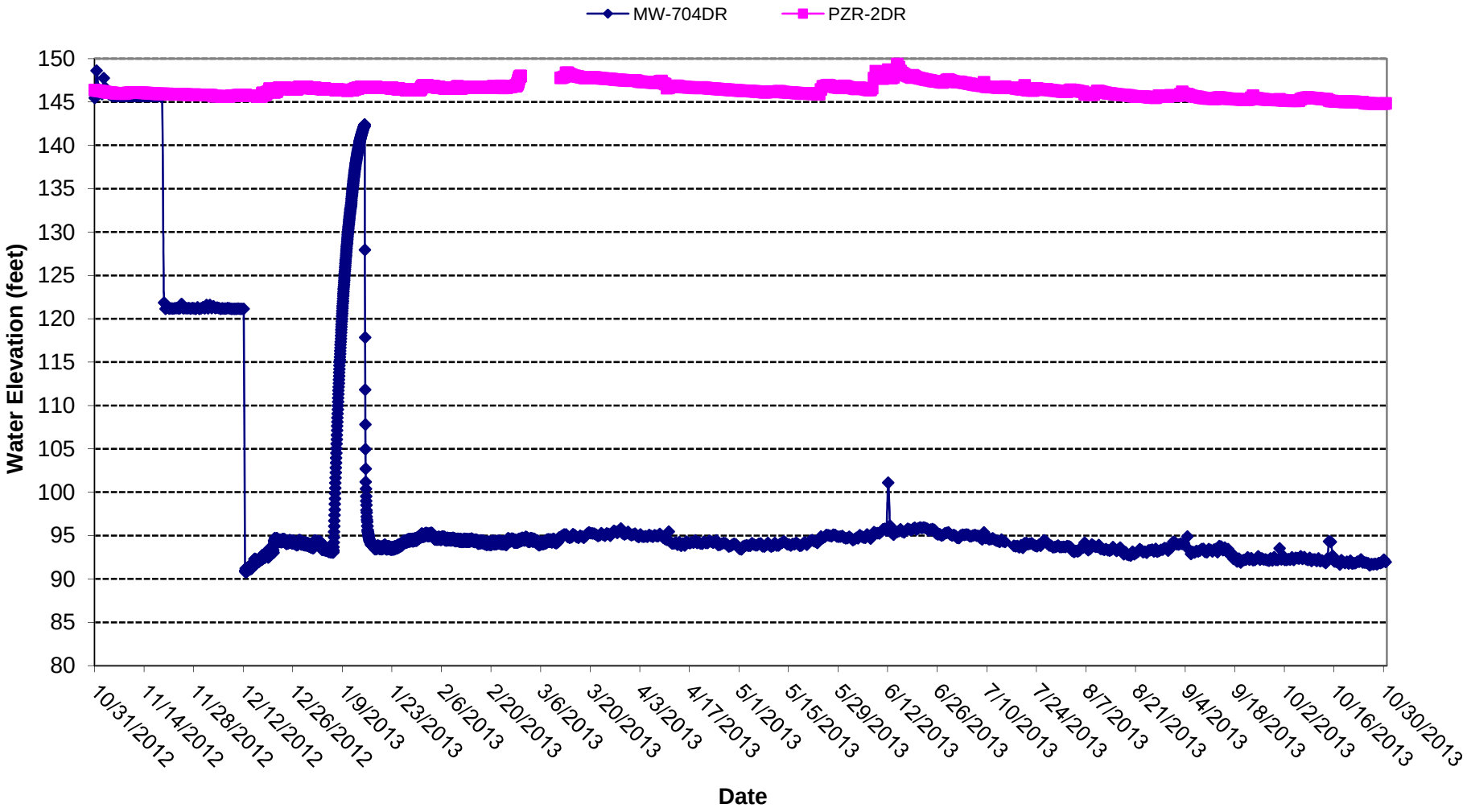


FIGURE 14B

31 Oct. 2012 through 30 Oct. 2013

Hydraulic Gradient Between MW-704DR and PZR-2DR
NTCRA-2 Deep Bedrock Compliance Pair



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SRSNE Site Group

2013 Groundwater Sampling and Monitored Natural Attenuation Report

Solvents Recovery Service of New England, Inc.
(SRSNE) Superfund Site
Southington, Connecticut

November 2013

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2013 Groundwater Sampling and Monitored Natural Attenuation Report

Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

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Executive Summary

This *2013 Groundwater Sampling and Monitored Natural Attenuation Report* (MNA Report) was prepared to address certain requirements of the Statement of Work (SOW) for the Remedial Design/Remedial Action (RD/RA) activities at the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site in Southington, Connecticut (Site). Specifically, this report summarizes the 2013 groundwater sampling event performed in accordance with the *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Work Plan; Attachment N to the Remedial Design Work Plan [RDWP]; ARCADIS 2010b), and presents the results and interpretation of data collected in support of MNA as a remedy for groundwater that contains Site-related constituents of concern (COCs) at concentrations above risk levels or regulatory limits. Monitored natural attenuation is a component of the overall remedial strategy for Site groundwater as described in the United States Environmental Protection Agency's (USEPA's) 2005 Record of Decision (ROD) for the Site.

In accordance with the Work Plan, the 2013 annual groundwater sampling event was performed in June 2013 and included sampling of groundwater at 45 monitoring wells for analysis of volatile organic compounds (VOCs), target analyte list (TAL) metals, and/or MNA parameters, as indicated in the Work Plan. With the exception of recently installed wells, these sampled wells were also sampled for the full suite of potential site-related constituents in 2010 as part of the "comprehensive" event. The next "comprehensive" sampling event is scheduled in 2014 in support of the Five-Year Review.

The June 2013 results indicate that:

- VOCs above Action Levels (the more stringent of the USEPA Maximum Contaminant Levels [MCLs] or Connecticut Class GA Groundwater Protection Criteria [GWPC]) are generally contained within the previously estimated containment boundary of the hydraulic containment and treatment system (HCTS). The exception is at monitoring well MW-707DR, a deep bedrock monitoring well located just beyond the southern extent of the estimated capture zone boundary. Benzene was detected at a concentration of 1.3 micrograms per liter (μg/L) in the June 2013 sample, which is slightly above the Action Level of 1.0 μg/L. This is consistent with the benzene concentration detected at well MW-707DR in June 2012 (1.1 μg/L). Note that actions were evaluated following the 2012 annual sampling event to increase the bedrock capture zone,

resulting in the vertical extension of bedrock groundwater extraction well RW-1R and adjustments to its pumping equipment in late 2012 (ARCADIS 2013a; 2013b). The effect of those modifications in terms of improving groundwater quality and/or hydraulic capture at well MW-707DR are being evaluated.

- Tetrachloroethene (PCE) and trichloroethene (TCE) were detected at middle overburden monitoring well PZO-2M at concentrations of 79 μg/L and 250 μg/L, respectively, in the June 2013 sample. These concentrations are above the Action Level of 5.0 μg/L for both compounds. This was the first detection of PCE above the Action Level at this well. TCE was detected above the Action Level at this well in June 2012 (9.9 μg/L). This well was re-sampled for confirmation purposes later in June 2013; PCE and TCE were again detected at concentrations similar to those in the initial June 2013 sample. Additional groundwater sampling was performed in July 2013 (and will continue to be performed) to further assess concentration trends in the vicinity of this well.

- Benzene, PCE and TCE were also detected at deep bedrock monitoring well MW-1003DR at concentrations above the respective Action Levels. This well was also re-sampled later in June 2013 and the results confirmed. Additional groundwater sampling was performed in July 2013 (and will continue to be performed) to further assess concentration trends in the vicinity of this well.

- No metals (either total or dissolved) exceeded their respective MCLs or GWPC, with the exception of total manganese measured at well MW-126B in 2013 (680 μg/L total manganese, compared to the GWPC of 500 μg/L). MW-126B is an upgradient, background well located north of the former Operations Area of the SRSNE Site.

This MNA Report fulfills the requirement set forth in Section VII.A.2 of the SOW and the reporting approach outlined in the MNA Plan that was presented as Attachment L to the RDWP (ARCADIS 2009). This MNA Report presents results of an evaluation of the effectiveness of MNA as a remedial measure for COCs in groundwater in the Site. As an extension of the prior evaluations (presented in the 2010 through 2012 MNA Reports), this evaluation considers groundwater monitoring results from the June 2013 annual groundwater monitoring event for VOCs, TAL metals and MNA parameters at a subset of monitoring wells; evaluation of current concentration trends for total VOCs in groundwater at select monitoring locations; estimates of bulk attenuation rates

for total VOCs in groundwater; and presentation of HCTS COC mass extraction rates with time. Results of these evaluations indicated:

- Detected concentrations of VOCs above Action Levels are contained within the previously estimated containment boundary of the HCTS; the only exception is monitoring well MW-707DR, as discussed above. Groundwater quality at this well will continue to be monitored to evaluate the effects of modifications to the well depth and pumping equipment at bedrock groundwater extraction well RW-1R (ARCADIS 2013a).

- Groundwater total VOC concentrations are generally declining or remaining stable with time throughout the Site groundwater COC plume. Notable exceptions include increases in total VOC concentrations at:

    - Four of the nine overburden wells sampled within the NTCRA 1 containment area in June 2013 (MW-415, MWL-307, TW-08A and TW-08D).

    - Middle overburden monitoring well PZO-2M, which is located in the Connecticut Light & Power (CL&P) easement (downgradient of the former Operations Area) and within the HCTS capture zone.

    - Deep bedrock monitoring well MW-1003DR, which is also located in the CL&P easement (downgradient of the former Operations Area) and within the HCTS capture zone.

- Estimated bulk VOC attenuation rates were comparable to attenuation rates for individual COCs presented in the *Feasibility Study* (FS) (Blasland, Bouck & Lee, Inc. [BBL] and USEPA 2005).

- Compliance monitoring data from the HCTS indicate generally stable COC mass extraction rates since the early 2000s.

These results support continued use of MNA as a remedy for COCs in Site groundwater.

ARCADIS

1. Introduction

1.1 Purpose

This *2013 Groundwater Sampling and Monitored Natural Attenuation Report* (MNA Report) was prepared on behalf of the SRSNE Site Group, an unincorporated association of Settling Defendants to a Consent Decree (CD), to address certain requirements of the Statement of Work (SOW) for the Remedial Design/Remedial Action (RD/RA) at the Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site in Southington, Connecticut (Site) (Figure 1). The CD was lodged on October 30, 2008 with the United States District Court for the District of Connecticut in connection with Civil Actions No. 3:08cv1509 (SRU) and No. 3:08cv1504 (WWE) and was entered by the Court on March 26, 2009.

This MNA Report presents the results and evaluation of data collected during the June 2013 annual groundwater monitoring event conducted in accordance with the Remedial Design Work Plan (RDWP) and the MNA Plan (Attachment L to the RDWP [ARCADIS 2009]), and in fulfillment of the requirements of the SOW (Sections IV.B.5.e and IV.B.5.f).

Section VII.A.2 of the SOW requires the submittal of annual MNA Reports as part of the Annual State of Compliance Reports. Monitored natural attenuation is a component of the overall remedial strategy set forth for the Site in the Record of Decision (ROD) (United States Environmental Protection Agency [USEPA] 2005) for groundwater containing Site-related constituents of concern (COCs) at concentrations exceeding acceptable risk levels or regulatory limits.

1.2 Scope

In accordance with the *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Work Plan; Attachment N to the RDWP [ARCADIS 2010b]), the 2013 annual groundwater sampling event was performed in June 2013 and included sampling of groundwater from 28 “R”, 4 “M”, 3 “B” and 10 “N”-designated monitoring wells. As further described in Section 3.1, the letter designations generally pertain to the locations, monitoring scope, and sampling frequency of monitoring wells. Having been sampled for all parameters in 2010, the analytical suite for these wells in 2013 included only volatile organic compounds (VOCs), target analyte list (TAL) metals, and/or MNA parameters, as indicated in the Work Plan for each well designation.

Monitored natural attenuation refers to the reliance on natural attenuation (NA) processes, within the context of a carefully controlled and monitored site cleanup approach, to achieve site-specific remediation objectives within a time frame that is reasonable compared to that offered by more active methods. Natural attenuation is the reduction in mass or concentration of COCs in groundwater over time or distance from the source of the impact due to naturally occurring processes. Attenuation processes include nondestructive physical processes (e.g., advection, dilution, dispersion, volatilization, dissolution, and sorption) and destructive chemical and biological processes.

The MNA remedy at the Site applies to the groundwater and non-aqueous phase liquid (NAPL) and addresses the following areas of the Site, in accordance with the SOW:

- Groundwater and saturated glacial deposits (gravel, sand, silt and clay) in the "Overburden Groundwater" unit that contain COC concentrations above acceptable risk levels or regulatory criteria; and

- Groundwater and fractured rock in the "Bedrock Groundwater" unit that contain COC concentrations above acceptable risk levels or regulatory criteria.

As part of the MNA remedy, COCs in overburden and bedrock groundwater are monitored. The Site COCs include VOCs such as chlorinated ethenes and ethanes, ketones, aromatic compounds and 1,4-dioxane; TAL metals; semi-volatile organic compounds (SVOCs); and polychlorinated biphenyls (PCBs).

In addition to monitoring COC concentrations, the MNA Plan specifies long-term monitoring of a suite of geochemical parameters ("MNA parameters") to confirm geochemical evidence of NA and to verify that biochemical processes continue to support COC degradation in Site groundwater. The MNA parameters monitored at the Site include anions (sulfate, chloride, nitrate, nitrite), total organic carbon (TOC), iron (ferric, ferrous), divalent manganese, light hydrocarbons (methane, ethane, ethene), dissolved oxygen (DO), oxidation/reduction potential (ORP), pH, alkalinity, and temperature.

1.3 Document Organization

The remainder of this MNA Report is organized into the following sections:

- **Section 2 – Annual Groundwater Sampling Event – 2013:** summarizes the groundwater sampling activities performed in June 2013 and evaluates the data.

- **Section 3 – MNA Background:** describes the MNA performance monitoring program at the Site, including the Site conceptual model, MNA remedy, and performance standards.

- **Section 4 – Performance Monitoring:** describes the MNA performance monitoring program at the Site, including monitoring locations, parameters, frequency and objectives.

- **Section 5 – MNA Evaluation:** evaluates Site data based on results from the June 2013 annual sampling event, and discusses the analysis of performance monitoring data, including the data quality assessment process, data interpretation approach, and statistical procedures.

- **Section 6 – Summary:** presents a summary of conclusions from the MNA evaluation and provides recommendations for action.

- **Section 7 – References:** lists the references cited within this MNA Report.

2. Annual Groundwater Sampling Event – 2013

2.1 Scope of Work

The 2013 annual groundwater sampling event was conducted to satisfy the requirements of SOW Sections IV.B.5.d, IV.B.5.e and IV.B.5.f. A brief summary of the requirements of each of these sections is presented below:

- **IV.B.5.d** – biennial monitoring of VOCs and MNA parameters at a select subset of monitoring wells in the overburden aquifer in the area between the railroad tracks and the non-time-critical removal action (NTCRA) 1 sheet pile wall (i.e., overburden "N" wells).

- **IV.B.5.e** – annual monitoring of VOCs and MNA parameters at a select subset of monitoring wells in the bedrock aquifer in the area between the railroad tracks and the NTCRA 1 sheet pile wall (i.e., bedrock "N" wells).

- **IV.B.5.f** – annual monitoring of VOCs and biennial monitoring of MNA parameters at a select subset of monitoring wells in the overburden and bedrock aquifers in the area outside the NTCRA 1 sheet pile wall (i.e., "R" wells).

In addition to the SOW-required sampling, the background monitoring wells – specifically the "M" and "B" wells – were sampled for TAL metals. As outlined in SOW Section VIII.F, Interim Cleanup Levels (ICLs) for metals need to be established prior to submittal of the Demonstration of Compliance Report. To that end, metals will be analyzed on an annual basis to establish a dataset sufficient for determining the appropriate background metals concentrations at the Site.

In total, 45 monitoring wells were sampled as part of the 2013 monitoring event. Of these, 34 were sampled using HydraSleeve™ samplers and the remaining 11 were sampled using low-flow methods.

2.2 Summary of Field Activities

The 2013 annual groundwater sampling event was conducted June 3-6, 2013. Procedures used for gauging and sampling the 11 monitoring wells using low-flow methods were consistent with those outlined in the *Summary of Initial (2010) Comprehensive Groundwater Sampling Event* (ARCADIS January 2011a). HydraSleeves™ were used to collect samples from 34 of the 45 wells,

consistent with the approach proposed in a memorandum dated July 7, 2011, and approved by the USEPA in a letter dated May 21, 2012. In summary, the approved HydraSleeve™ sampling approach included the following conditions:

- Used for "routine" samples collected for tracking changes and trends in the groundwater over time. It does not apply to samples collected for specific decision points such as evaluating remedy protectiveness for five-year reviews, capture zone analysis, confirming results of modeling, risk assessments, etc.

- To be used only for sampling of VOCs and MNA parameters.

- Used for any well that has been given an "R" or "N" designation and that contains one or more constituents at a concentration greater than or equal to ten times the ICL, or, is located within the hydraulic capture zone.

Samples were submitted to Alpha Analytical (Alpha) of Westborough, Massachusetts, for analysis of VOCs and TAL Metals, and to Microseeps, Inc. of Pittsburgh, Pennsylvania for analysis of MNA parameters. A tabular summary of the sampling event is provided below:

SOW Section	Well Group	# of Wells Intended		# of Wells Sampled		Analytical Parameters
		LF	HS	LF	HS	
IV.B.5.d	Overburden "N"	0	8	0	8	VOCs, MNA Parameters
IV.B.5.e	Bedrock "N"	0	2	0	2	
IV.B.5.f	"R"	4	26	4	24	VOCs
VIII.F	"M"	5	--	4	--	TAL Metals
	"B"	3	--	3	--	

LF – Wells sampled using low-flow method
HS – Wells sampled using HydraSleeve™ samplers

Deviations from the intended scope were based on the following:

- "R" monitoring wells CPZ-8R and MW-705DR were not sampled due to the presence of dense non-aqueous phase liquid (DNAPL) in these bedrock wells.

- "M" monitoring well MW-901D was not sampled due to insufficient water in this overburden well (i.e., dry) at the time of sampling.

In addition to the above scope, two monitoring wells, MW-1003DR and PZO-2M, were re-sampled on June 19, 2013 to confirm the results of the initial June 2013 samples at these wells. Monitoring well locations in each of the five hydrostratigraphic zones are shown on Figures 2 through 6. Field sampling forms and equipment calibration logs from the sampling event are included in Appendices A and B, respectively.

2.3 Results

Groundwater analytical results from the June 2013 annual groundwater monitoring event are provided in Tables 1, 2 and 3 for VOCs (including June 19, 2013 re-sampling results), metals and MNA parameters, respectively. Groundwater data were validated consistent with the procedures outlined in the *Summary of Initial (2010) Comprehensive Groundwater Sampling Event* (ARCADIS January 2011a). Qualifiers and modifications made via the validation process are reflected in Tables 1, 2 and 3.

2.3.1 Groundwater Elevations

Synoptic groundwater elevation measurements are only collected during five-year comprehensive monitoring events, and therefore were not collected during the June 2013 groundwater monitoring event. Groundwater gauging data from the initial comprehensive event (May-June 2010) were included in the *Summary of Initial (2010) Comprehensive Groundwater Sampling Event* (ARCADIS January 2011a).

2.3.2 VOCs

Groundwater VOC concentrations from the June 2013 groundwater monitoring event (and subsequent re-sampling on June 19, 2013 for the two wells discussed above) are provided in Table 1. Groundwater VOC concentrations were compared against USEPA Maximum Contaminant Levels (MCLs) and

Connecticut Class GA Groundwater Protection Criteria (GWPC), with the lower of the two criteria, referred to as the "Action Level", used as the criterion for the comparison for each VOC. The Action Levels are based on drinking water standards. Groundwater VOC concentrations that exceeded their respective Action Levels are highlighted in Table 1. For comparison, the ICLs specified in Table L-1 of the ROD (USEPA 2005) are also listed in Table 1.

Concentrations of VOCs greater than Action Levels are generally contained within the previously estimated capture zone boundary of the Hydraulic Containment and Treatment System (HCTS). The only exception is monitoring well MW-707DR, a deep bedrock well located just beyond the southern extent of the capture zone boundary, south of the Connecticut Light & Power (CL&P) easement. Benzene was detected at this well at a concentration of 1.3 micrograms per liter (μg/L) in the June 2013 sample, compared to the Action Level of 1.0 μg/L. This result is consistent with the June 2012 sampling result, (1.1 μg/L of benzene). The HCTS underwent modifications to improve deep bedrock groundwater extraction at well RW-1R in late 2012 and early 2013 (ARCADIS 2013a), and the benzene concentration at well MW-707DR will continue to be monitored to evaluate the effectiveness of the HCTS modifications.

Tetrachloroethene (PCE) and trichloroethene (TCE) were detected at monitoring well PZO-2M at concentrations of 79 μg/L and 250 μg/L, respectively, in the June 2013 sample. These concentrations are above the Action Level of 5.0 μg/L for both compounds. This was the first detection of PCE above the Action Level at this well. TCE was detected above the Action Level at this well in June 2012 (9.9 μg/L), indicating an increase in TCE concentration between 2012 and 2013 at this location. Therefore, this well was re-sampled later in June 2013 to confirm this result; both PCE and TCE were detected at concentrations similar to those in the initial June 2013 sample. Although this well is within the interpreted capture zone of the HCTS, additional groundwater sampling was performed in July 2013 (and will continue to be performed) to further assess concentration trends in the vicinity of this well. The next interim sampling is event is planned for September 2013. Since the July and September interim events are collected outside the approved scope/methods for trend evaluation, the data will be presented under separate cover after evaluating both datasets.

Benzene, PCE and TCE were also detected at monitoring well MW-1003DR at concentrations above the respective Action Levels. This well was also re-sampled later in June 2013 and the results confirmed. This well is located in

the CL&P easement (downgradient of the former Operations Area) and within the interpreted HCTS capture zone. Additional groundwater sampling was performed in July 2013, and will continue to be performed to further assess concentration trends in the vicinity of this well.

As noted in the 2012 MNA Report, total VOC concentrations at shallow bedrock monitoring well P-11A increased notably between 2011 (583 μg/L) and 2012 (approximately 26,400 μg/L). This well is located at the downgradient edge of the bedrock NAPL zone delineated during the Remedial Investigation (RI; Blasland, Bouck & Lee, Inc. [BBL] June 1998), and within the HCTS capture zone. The total VOC concentration in June 2013 decreased to approximately 8,200 μg/L, although concentrations remain elevated relative to pre-2012 results. VOC concentrations at this well will continue to be monitored as part of future sampling events.

VOC Plume Delineation

Data from the 2010-2013 groundwater monitoring events were used to update the VOC plume maps, originally presented in the *Summary of Initial (2010) Comprehensive Groundwater Sampling Event* (ARCADIS January 2011a), for each of the five hydrostratigraphic units. Using the approach that was initially presented in the Remedial Investigation (RI; BBL June 1998), groundwater VOC results (the most recent data available at each well) were used to derive VOC regulatory exceedance ratios by dividing detected concentrations of VOCs by the lower of the federal standard (MCL) or the state standard (GWPC), which are the ARARs-based "Action Levels"; these generally represent drinking water standards. An exceedance ratio value greater than 1.0 indicates that the detected VOC concentration exceeded the Action Level. Exceedance ratio values less than 1.0 indicate that the detected VOC concentrations were less than the Action Levels. The highest (and in some cases, the two highest) VOC exceedance ratio(s) for each well, and the specific compound associated with each ratio, are summarized for each hydrostratigraphic unit on Figures 7 through 11. These regulatory exceedance ratios were used to delineate groundwater with VOCs above MCLs or GWPCs, as shown by the light green contour lines on Figures 7 through 11.

2.3.3 SVOCs and PCBs

SVOC and PCB data are only collected in conjunction with five-year comprehensive monitoring events, and therefore were not included in the June 2013 groundwater monitoring event. Previously collected SVOC and PCB data (May-June 2010) were evaluated in the *Monitored Natural Attenuation Report* (ARCADIS September 2010a).

2.3.4 TAL Metals

Groundwater concentrations of TAL metals during the June 2013 groundwater monitoring event are summarized in Table 2. Groundwater TAL metals concentrations were compared against the Action Levels (i.e., the lower of the MCLs and GWPCs). ICLs have not yet been developed for metals in groundwater because they are a function of background concentrations, which are to be established in the future based on background sampling performed through that time.

No metals (either total or dissolved) exceeded their respective Action Levels, with the exception of total manganese measured at MW-126B in 2013 (680 μg/L total manganese and 702 μg/L in a duplicate, compared to the GWPC of 500 μg/L). MW-126B is an upgradient, background well located north of the former Operations Area of the SRSNE Site. MW-209B, which exceeded the Action Level for manganese during the 2012 sampling event, was below the Action Level in 2013 (26.8 μg/L).

2.3.5 MNA Parameters

Concentrations and distributions of electron acceptors, electron donors, and byproducts of microbially mediated reactions are evaluated to verify the types of geochemical and biodegradation processes active in Site groundwater. Concentrations of MNA parameters during the June 2013 annual groundwater monitoring event are provided in Table 3.

3. MNA Background

An MNA remedy requires a strong scientific basis supported by appropriate monitoring. When properly employed, MNA is an effective remedy – based on thorough analysis of site-specific data – to understand, monitor, predict, and document COC transport and NA processes.

3.1 Site Conceptual Model

For any MNA remedy to succeed, it is important to understand the Site Conceptual Model (SCM). The SCM combines available site information into a comprehensive picture of the nature and extent of the COCs and the processes controlling their transport and fate in the environment. The level of site characterization necessary to support a comprehensive evaluation of MNA can be more detailed than that needed to support active remediation.

The SCM, including information regarding the Site operational history, regulatory status, geology, hydrogeology, and surface water hydrology, and the distribution and mass of COCs in Site groundwater, including delineation of NAPL zones and dissolved-phase groundwater plume, and VOC mass estimates, is provided in Section 2 of the RDWP (ARCADIS 2009) and fulfills the requirements set forth in the SOW, Section V.C.1.I.

The MNA conceptual model for the Site may be described in terms of source condition, dissolved plume stability, and MNA processes, and is summarized as follows:

Source Condition: The source of groundwater-quality impacts was extensively characterized during the Remedial Investigation (RI; BBL 1998) and Feasibility Study (FS; BBL and USEPA 2005), and consists of zones containing NAPL in overburden soils and bedrock. The NAPL is a complex mixture of chlorinated and other solvents. The NAPL zones in overburden soils and bedrock contain mixtures of dissolved NAPL-related chlorinated ethenes, ethanes and methanes, as well as aromatic hydrocarbons, ketones, phthalates, ethers, furan and alcohols. These NAPL zones are currently hydraulically contained by the NTCRA 1 sheet-pile wall and overburden groundwater extraction wells and the NTCRA 2 overburden and bedrock extraction wells. Upon entry of the CD, the NTCRA 1 and NTCRA 2 systems became known as the HCTS. The NAPL zones have formed a dissolved-phase chemical plume that has been severed by the HCTS. The Overburden NAPL zone contains the majority of the Site VOCs, and will be treated with *in situ* thermal remediation to remove the vast

majority of these VOCs, resulting in a greatly diminished source zone upgradient of the NTCRA 1 sheet-pile wall.

Dissolved Plume Stability: The dissolved-phase chemical plumes in overburden and bedrock groundwater within the source area are stable and are likely shrinking in time due to the combination of hydraulic containment and active *in situ* biodegradation processes in groundwater within the capture zone of the HCTS. *In situ* biodegradation processes within the capture zone of the HCTS were characterized as "robust" in the FS (BBL and USEPA 2005). The dissolved-phase chemical plume in overburden and bedrock groundwater in the severed portion of the plume, beyond the capture zone of the HCTS, are generally shrinking with time due to the combination of hydraulic containment of the higher concentration portions of the dissolved-phase chemical plume and NA processes. Total dissolved-phase VOC concentration trends in groundwater within the HCTS containment boundary and the severed plume indicate statistically significantly decreasing concentration trends.

NA Processes: Natural attenuation processes that have contributed to plume stabilization and shrinkage within the overburden and bedrock include *in situ* abiotic and biodegradation reactions, sorption to aquifer solids, flow path mixing, and matrix diffusion. Reductive dechlorination is a prominent removal mechanism that continues to operate at the Site, as evidenced by the production of cis-1,2-dichloroethene (cDCE), vinyl chloride (VC), 1,1-dichloroethane (1,1-DCA), ethene, ethane, and chloride, which are dechlorination (i.e., "breakdown") products of tetrachloroethene (PCE), TCE, and 1,1,1-trichloroethane (TCA). There are also anaerobic oxidation reactions occurring that remove cDCE, VC, and ethene by oxidation to carbon dioxide (CO_2).

3.2 Selection of MNA Remedy

As a result of the demonstrated efficacy of NA for treating COCs in Site groundwater, MNA was included as a component of several remedial alternatives evaluated in the FS (BBL and USEPA 2005). Based on evaluations presented in the FS, the USEPA selected MNA as a component of the remedial approach for the Site.

The ROD for the Site was issued by the USEPA in September 2005 (USEPA 2005). The selected remedy consists of MNA of the groundwater plume, including:

- Groundwater outside the capture zone of the HCTS until groundwater cleanup levels are achieved;
- Groundwater within the capture zone of the HCTS until groundwater cleanup levels are achieved; and
- Groundwater in the NAPL area of the overburden and bedrock aquifers, until groundwater cleanup levels are achieved.

3.3 Identified Data Gaps

The SOW identified two data gaps associated with implementing the MNA remedy component at the Site. The identified data gaps and the strategies used for addressing them are as follows:

- *Incomplete plume delineation in the severed plume*. This data gap has been addressed by the installation and sampling of additional groundwater monitoring wells near the eastern edge of the severed plume, east of the Quinnipiac River and in the CL&P easement as presented in the *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Attachment N to the RDWP) and subsequent discussions with USEPA. In addition to the new plume delineation wells installed prior to the start of the May–June 2010 comprehensive groundwater sampling (including MW-903S, MW-903M, MW-903D, MW-903R, PZ-903DR, MW-904S, MW-904D, MW-906M, MW-906D, MW-906R, PZ-906DR, and MW-910S), three other well clusters (MW-1001M/MW-1001R, MW-1002DR/MW-1002R and MW-1003DR/MW-1003R) have been installed to address this data gap.
- *Long-term monitoring data demonstrating the effectiveness of MNA as a remedy component.* This data gap is being addressed through the preparation, submittal, approval, and implementation of the MNA Plan.

3.4 Objectives of MNA Performance Monitoring

The MNA Plan, in conjunction with the *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Attachment N to the RDWP), describes the monitoring and analysis steps required to meet the following objectives of MNA performance monitoring, as specified in Section VII.A.1 of the SOW:

- Complete the delineation of COCs in groundwater in three dimensions;
- Assess the temporal and spatial variations in groundwater chemistry and geochemistry;
- Assess the progress in meeting the long-term remedial goal of groundwater restoration throughout the Site to its natural quality; and
- Evaluate the effectiveness of institutional controls.

Based on the results of MNA performance monitoring, decisions related to the MNA program, described in detail in the MNA Plan, may include:

- Continuation of the performance monitoring program without change.
- Continuation of the performance monitoring program with action.
- Modification of the institutional controls.

3.5 Performance Standards

The remedial action will be implemented in compliance with applicable or relevant and appropriate requirements (ARARs) identified in the ROD (USEPA 2005). These requirements include compliance with performance standards for the affected groundwater, soil and wetland soil, and for NAPL that is present in the subsurface in the overburden and bedrock. The following subsections discuss performance standards applicable to MNA and the means for demonstrating compliance with these standards.

3.5.1 MNA-Related Performance Standards

Performance standards pertaining to MNA at the Site, as set forth in the SOW, are described in detail in the MNA Plan for Groundwater, NAPL outside of the Overburden NAPL Area, and the Severed Plume.

3.5.2 Demonstration of Compliance Report

As specified in Section VIII.G of the SOW, a Demonstration of Compliance Report will be prepared in accordance with the evaluation procedures defined in 40 CFR Section 264.97 when groundwater COC concentrations have remained below the ICLs for three consecutive years as outlined in 40 CFR Section 264.96(c). If the USEPA, after reasonable opportunity for review and comment by the Connecticut Department of Energy and Environmental Protection (CT DEEP), approves the Demonstration of Compliance Report and agrees that the ICLs have been achieved, a risk assessment of residual groundwater conditions will be performed.

4. MNA Performance Monitoring

4.1 Introduction

The MNA Plan specified the performance monitoring program for Site groundwater as it relates to the MNA component of the remedy, while Section IV.B.5 of the SOW set forth requirements for an environmental monitoring program to be implemented to evaluate the performance of the HCTS and the overall effectiveness of the Site remedy, including the MNA component. These groundwater MNA monitoring requirements were summarized in the MNA Plan.

The following subsections describe the MNA program monitoring locations, monitoring frequency, monitoring parameters, and data quality objectives (DQOs) designed to meet the environmental monitoring program requirements set forth in Section IV.B.5 of the SOW. Groundwater monitoring is conducted to monitor changes in groundwater COC concentrations, changes in plume size and shape, and the effectiveness of NA processes in reducing concentrations of COCs in groundwater. Groundwater samples from June 2013 were collected in accordance with the monitoring frequency outlined in the MNA Plan.

4.2 Groundwater Performance Monitoring Locations

Groundwater performance monitoring locations were chosen to provide robust, three-dimensional coverage of COCs in overburden and bedrock groundwater at the Site, with monitoring well cluster locations providing vertical assessment of COC concentrations and groundwater geochemistry. Monitoring locations were identified in the *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Attachment N to the RDWP) and are shown on Figures 2 through 6 of this MNA Report.

In accordance with the SOW, selected MNA monitoring locations include upgradient (background) sampling locations, in-plume sampling locations (HCTS capture zones and severed plume), side-gradient sampling locations outside of plume areas, and downgradient locations. Monitoring locations are designated by well groups (e.g., “N”) to define the purpose of each sampling location. Well group designations that are relevant to MNA monitoring are summarized in the MNA Plan and shown on Figures 2 through 6.

4.3 MNA Monitoring Parameters

The primary classes of data included in the MNA monitoring program are: Site-specific groundwater COCs; groundwater MNA parameters; groundwater hydraulic information; and HCTS COC mass removal estimates. Each of these primary data classes are described below.

Site-specific COCs are the chemical constituents that were identified during Site investigations and risk assessment and are required to be addressed by the response actions set forth in the ROD (USEPA 2005). Site-specific COCs for groundwater include selected VOCs, 1,4-dioxane, TAL metals, SVOCs, and PCBs.

Groundwater MNA parameters were selected to confirm dominant biotransformation processes, evaluate the potential for continued transformation of COCs, and identify zones of dominant geochemical conditions. These parameters include: iron (ferric and ferrous), divalent manganese, light hydrocarbons (methane, ethane, ethane), alkalinity, chloride, nitrate–nitrogen, nitrite–nitrogen, pH, sulfate and TOC. In addition to laboratory-analyzed MNA parameters, the following MNA parameters are collected as field measurements: pH, DO, ORP, and temperature.

The hydraulic parameter of interest is groundwater elevation. Groundwater elevations are characterized in all five groundwater depth zones, and provide a basis to assess the horizontal and vertical components of hydraulic gradients that control three-dimensional migration of COCs. Synoptic groundwater elevation measurements are only collected in conjunction with five-year comprehensive monitoring events, and therefore were not collected during the June 2013 groundwater monitoring event.

Estimates of groundwater COC mass removal from the HCTS, obtained as part of the compliance monitoring program for the HCTS operations, are used to evaluate potential trends in COC mass removal from the HCTS and can be used to evaluate future efficacy of groundwater remedies, including MNA.

4.4 Monitoring Frequency

Monitoring frequencies were designed to meet requirements of the environmental monitoring program set forth in Section IV.B.5 of the SOW and are summarized in the MNA Plan. Detailed monitoring frequency information is provided in the *Monitoring Well Network Evaluation and Groundwater Monitoring Program* (Attachment N to the RDWP). Any proposed changes to the long-term monitoring program will be submitted as part of the Annual State of Compliance Report(s).

4.5 MNA Monitoring Objectives

The MNA performance monitoring program set forth in the MNA Plan was designed to evaluate the MNA monitoring objectives listed below (USEPA 1999; USEPA 2004) and described in detail in the MNA Plan.

- Provide timely warning of potential impact to receptors.
- Detect changes in plume size/concentration.
- Determine temporal variability of data.
- Detect changes in geochemistry that warn of potential changes in COC attenuation.
- Yield data necessary to reliably evaluate progress toward COC reduction objectives.

4.6 Data Quality Objectives

The DQO process is a systematic planning tool based on the scientific method that is used to establish criteria for data quality and to develop data collection designs (USEPA 1994). The DQOs for the data described in this MNA Report are provided in the *Quality Assurance Project Plan* (QAPP; [Rev. 2] ARCADIS 2012b; Attachment C to the RD Project Operations Plan [POP]).

5. MNA Evaluation

This section evaluates the effectiveness of the MNA program based on the data collected to date (including the June 2013 groundwater monitoring event, and June 19, 2013 re-sampling of MW-1003DR and PZO-2M). Data analysis, interpretation and reporting methods were completed in accordance with the following regulatory guidance documents:

- *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water* (USEPA 1998)
- *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites* (USEPA 1999)
- *Performance Monitoring of MNA Remedies for VOCs in Ground Water* (USEPA 2004)

In general, data interpretation included:

- Placing the MNA performance monitoring data in the context of time, location, sampling and analytical methods.
- Applying appropriate statistical tests to detect changes and trends in COC concentrations, and attainment of remedial objectives.

These data interpretation methods and results are presented in the following sections.

5.1 Total VOC Concentration Trends

Data collected during previous sampling events (RI and Interim Monitoring Sampling [IMS] events) and presented in the MNA Plan and the 2010-2012 MNA reports indicate an overall decline in groundwater concentrations with time, supporting the selection of MNA as a remedial measure for COCs in groundwater at the Site. This section builds upon results of the previous MNA evaluations discussed in detail in the MNA Plan and the three preceding MNA reports (2010, 2011 and 2012). Included in this section are a discussion of concentration trends for total VOCs in groundwater at select monitoring locations, estimates of bulk attenuation rates for total VOCs in groundwater at

locations with decreasing concentration trends, and presentation of COC mass extraction rates and cumulative mass removal for the HCTS.

5.1.1 Trend Analysis

The final IMS Report (BBL 2005) compared groundwater VOC concentrations reported in the RI with concentrations measured at 25 IMS locations during the April 2005 (final) IMS event. Trend analyses were updated using total VOC concentration data collected at 21 IMS monitoring locations (within the NTCRA 2 portion of the HCTS, the severed plume, and the interior of the VOC plume) during the RI, IMS program, 2010, 2011, and 2012 groundwater sampling events. These trend analyses have been updated with total VOC concentrations from the June 2013 annual groundwater monitoring event. The trend results are summarized in Table 4. Because only 11 of the monitoring locations with long-term time-concentration data sets were sampled during the June 2013 sampling event, only those trend analyses were updated. However, the previous trend results for wells that were not sampled in June 2013 are also included in Table 4. Results of the 2013 trend analyses are similar to the results of the trend analyses conducted in 2010 through 2012, which indicated that most of the IMS monitoring locations had statistically significant declining total VOC concentration trends.

Groundwater total VOC concentrations plotted versus time were updated for the 11 IMS monitoring locations that were sampled during the June 2013 biennial groundwater sampling event (Figures 12 through 16). As shown on the figures, total VOC concentrations are generally declining or stable at all groundwater depth intervals, consistent with previous results.

Non-parametric Mann-Kendall and Sen's slope trend analyses and parametric linear regression trend analyses were conducted to evaluate trend direction and statistical significance of the groundwater total VOC concentration trends at the Site. The Mann-Kendall test provides a yes/no determination for the existence of a slope that is significantly different from zero, while the Sen's slope test provides an estimate of the value for the slope. The linear regression test estimates slope and confidence level and quantifies how well the data correlate to the estimated trend line. Trend analyses were conducted with natural log (ln) normalized total VOC concentrations using all three test methods for all sampling locations.

A 90% confidence level with a corresponding p-value less than or equal to 0.10 was used to determine statistical significance for the trend analyses. Mann-Kendall and linear regression trend results with p-values greater than 0.10 were not considered to be statistically significant. The trend direction was defined as decreasing if total VOC concentrations decreased with time (negative slope), and increasing if total VOC concentrations increased with time (positive slope); however, the trend was not considered significant unless the relationship for the test was significant at a confidence level of 90%. For the linear regression analysis, the correlation coefficient, or R^2, is a measure of how well the linear regression fits the data. Values close to 1 are considered to be a good fit, while R^2 values close to 0 are considered to be a poor fit.

Results of the trend analyses indicate significant decreasing total VOC concentration trends at 16 of the 21 monitoring locations (8 of the 11 wells sampled in June 2013) based on the Mann-Kendall and/or the linear regression test. The Sen's slope test indicates 13 (7 from June 2013) significant decreasing total VOC concentration trends of the 21 monitoring locations analyzed.

Monitoring wells sampled in June 2013 that indicate statistically significant decreasing total VOC concentration trends with linear regression and/or Mann-Kendall analysis include P-13, P-101C, MW-03, P-101B, MW-502, MW-704D, MW-127C, and MW-704DR (Table 4). It should be noted that although P-13 and MW-502 are currently statistically significantly decreasing, concentrations of total VOCs appear to be increasing within the past four monitoring events for P-13, and the past three monitoring events for MW-502. However, concentrations of total VOCs at both monitoring wells are below historical maxima for each monitoring well.

Monitoring well P-11A did not indicate a statistically significant concentration trend with linear regression, Mann-Kendall, or Sen's slope analyses. A decreasing trend had previously been shown at this location; however, the total VOC concentration in June 2012 (26,400 μg/L) was higher than previous results. Although the total VOC concentration decreased in June 2013 (8,237.7 μg/L), it continues to be elevated compared to recent analytical history.

Total VOCs in groundwater at MW-706DR decreased (2,835 μg/L in June 2013 compared to 8,418 μg/L in June 2012 and 10,860 μg/L in May 2011). Although Mann-Kendall and Sen's slope tests indicate no significant trend at

MW-706DR, the linear regression analysis indicates a statistically insignificant decreasing concentration trend. While these results qualitatively suggest improving recent conditions, the historically consistent concentrations at this location and the lack of statistically significant concentration trends potentially indicate the presence of DNAPL in the vicinity of this deep bedrock monitoring location.

Only one location, MW-707DR, indicates a significant increasing total VOC concentration trend based on the Mann-Kendall, Sen's slope and linear regression tests using data through June 2013. This is consistent with the total VOC concentration trend results in 2010, 2011, and 2012 at this location. The maximum total VOC concentration measured at MW-707DR was 18 μg/L (April 2000) and 33% of the historical samples have been below detection for all VOC constituents, indicating generally low concentrations of VOCs in groundwater at this location. The total VOC concentration measured at MW-707DR in June 2013 was 9.59 μg/L. This total VOC concentration is higher than the June 2012 and August 2012 results (4.41 μg/L and 5.06 μg/L, respectively), however it is comparable to the October 2004 result (9.8 μg/L). Linear regression, Mann-Kendall, and Sen's slope trend tests were also performed for the subset of data beginning in April 2004 to exclude the previous monitoring events in which VOC constituents were below detection. Since April 2004, total VOC concentrations do not indicate a statistically significant concentration trend, suggesting relatively stable total VOC concentrations since that time.

5.1.2 Total VOC Attenuation Rate

Results from the linear regression and Sen's slope analyses were used to estimate attenuation rates for total VOCs in groundwater at the Site. Attenuation rates were calculated in accordance with the USEPA guidance document on determining first-order attenuation rate constants for MNA studies (USEPA 2002). Following this guidance, the natural log of COC groundwater concentration versus time was used and a best-fit linear regression line was generated for total VOC concentrations for each monitoring location that had a statistically significant decreasing total VOC concentration trend. Slopes derived from the Sen's slope test were also used to estimate attenuation rates. The slope of the linear regression line and the slope from the Sen's slope test provide estimates of the total VOC attenuation rate constant (k_{point}) in groundwater at the respective monitoring locations.

$$k_{point} = [slope\ of\ best\text{-}fit\ regression\ line]$$

The half-life ($t_{1/2}$) for total VOC concentrations in groundwater was estimated for each sampling location from the equation:

$$t_{1/2} = 0.693 / k_{point}$$

where: 0.693 is the negative of the natural log of 0.5 (half of the starting total VOC concentration).

Estimated half-life values for total VOCs in groundwater range from 592 to 3,060 days (1.6 to 8.4 years) based on linear regression results and from 574 to 3,232 days (1.6 to 8.9 years) based on Sen's slope results. These estimated half-life values for total VOC concentrations compare well with literature values of attenuation rates presented for individual compounds in Appendix H of the FS (BBL and USEPA 2005) and indicate that overall COC concentrations in groundwater are attenuating.

5.2 Estimate of COC Mass Flux in Groundwater

As part of the compliance monitoring program, COC mass extraction rates and cumulative mass removal are monitored for the HCTS. With the exception of the severed plume and incidental discharge to surface water, the HCTS captures the entire dissolved phase groundwater COC plume at the Site. Therefore, the HCTS COC mass extraction rates and cumulative mass extraction data represent the total mass flux for the dissolved phase COC groundwater plume and can be used to monitor changes in groundwater total dissolved-phase COC mass flux with time.

Total VOC mass extraction rates and cumulative mass extraction for the HCTS were plotted for the July 1995 to June 2013 time period (Figure 17). Mass extraction rates are expressed in units of pounds per day and the cumulative mass extraction is expressed in units of pounds. Mass extraction rates have ranged between about 0.1 to 10 pounds per day and appear to be generally stable with time since about 2001. The total mass of VOCs removed by the HCTS between system startup in 1995 and June 2013 is approximately 17,340 pounds. The mass of COCs removed via the HCTS is small compared with the estimated mass removal that is occurring via *in situ* degradation. As described in detail in the FS (BBL and USEPA 2005) and summarized in the MNA Plan

(ARCADIS November 2010), the quantity of TCE and degradation products being biodegraded *in situ* was calculated to be approximately 17,000 to 41,000 pounds per year within the NTCRA 1 area alone.

The mass extraction data will continue to be collected as part of the HCTS compliance monitoring program and will be periodically evaluated as part of the MNA performance monitoring program.

5.3 Distribution of VOCs in NAPL and Groundwater

An assessment of the distribution of select VOCs in NAPL and groundwater samples was conducted as part of the 2010 comprehensive MNA report to gain insight into how VOC distributions in NAPL and Site groundwater varied by location and with time. VOCs evaluated in the assessment included:

- chlorinated ethenes (PCE, TCE, cDCE, 1,1-dichloroethene [1,1-DCE], and VC);
- chlorinated ethanes (TCA, 1,1-DCA, and chloroethane [CA]);
- ketones (2-butanone [MEK], 4-methyl-2-pentanone [MIBK], and acetone);
- toluene, ethylbenzene, and xylenes (TEX); and
- methylene chloride, styrene, tetrahydrofuran (THF), and 1,4-dioxane.

Data used for assessment of distribution of VOCs in NAPL and groundwater were presented in the 2010 comprehensive MNA report. The assessment concluded that NAPL samples were composed primarily of PCE, TCE, TCA, TEX, methylene chloride, and styrene, with lesser contributions from cDCE, 1,1-DCE, and 1,1-DCA. Ketones generally were not detected in NAPL samples. 1,4-dioxane were not analyzed for these samples. Overall, the results indicated that the detected groundwater constituents are generally consistent with NAPL constituents, with the exception of ketones. The general absence of detectable ketones in the NAPL samples likely relates to the elevated detection levels associated with the NAPL samples.

Molar VOC concentration plots were also presented in the 2010 comprehensive MNA report. In general, constituent concentrations in groundwater were greatest in the NTCRA 1 area with consistently decreasing primary constituent (e.g., TCE, TCA, ketones, and TEX) concentrations observed in directions downgradient from the NTCRA 1 area. These results clearly demonstrate that degradation of the parent compounds is occurring in Site groundwater.

Groundwater molar VOC concentration plots for select groundwater monitoring locations with samples collected during multiple sampling events illustrate that some locations have clear declining concentration trends for most or all constituents. Shifts in the relative distribution of chlorinated VOCs (CVOCs) towards greater proportions of daughter products to parent demonstrate ongoing degradation of CVOCs in Site groundwater.

In summary, molar concentration plots of select CVOCs provide a means for readily comparing the distribution of COC concentrations in Site groundwater with distance from the source area, as well as with depth and with time at discrete locations. Molar concentration plots will be updated as part of the five-year comprehensive MNA event.

5.4 Evaluation of Monitoring Objectives

5.4.1 Evaluation of Changes in Environmental Conditions that May Reduce Efficiency of MNA

MNA data will be used to evaluate potential changes in environmental conditions that may reduce the efficiency of MNA. Currently, the only anticipated environmental changes that may reduce the efficiency of MNA are within the capture zone of the Site NTCRA 1 groundwater containment system due to the addition of heat and removal of electron donors during *in situ* thermal treatment of the Overburden NAPL Area. Future MNA Reports will assess potential effects on MNA efficiency due to thermal treatment in the Overburden NAPL Area.

Changes in the composition and availability of electron donors with time may affect the efficiency of NA. As electron donors, such as ketones, aromatic compounds, and alcohols are consumed, the efficiency of NA may decline. As noted in the 2010 comprehensive MNA report, alcohols are currently only

minimally detected in Site groundwater. As concentrations of these readily available electron donors decline, other electron donor sources may be available to support continued NA of COCs in Site groundwater. Other potential electron donor sources include natural organic matter in the aquifer matrix, natural organic matter in groundwater, as well as recycling of microbial biomass. The efficiency of NA for remediation of COCs in Site groundwater will continue to be monitored via the MNA remedial program using techniques set forth in the MNA Plan and in this MNA Report including, but not limited to:

- Defining changes in the VOC regulatory plume boundaries, including exceedance of MCLs and GWPC as well as exceedance of ICLs.
- Evaluation of COC concentration trends with time.
- Assessment of changes in the distribution of COCs, especially ketones, alcohols, and aromatic compounds.
- Continued monitoring of groundwater redox conditions.

If changes in the efficiency of NA result in a loss of effectiveness of MNA as a remedy for COCs in Site groundwater, contingencies will be considered, as described in the MNA Plan.

5.4.2 Evaluation of Potentially Toxic and/or Mobile Transformation Products

Potentially toxic transformation products include regulated chemical intermediates, such as cDCE, 1,1-DCE, 1,1-DCA, CA, and VC, and regulated transition metals (e.g., manganese and arsenic). Locations with concentrations of cDCE, 1,1-DCE, 1,1-DCA, CA, VC that exceed MCLs or GWPC are within the overburden and bedrock groundwater containment boundary. With exception to the total manganese concentration at monitoring well upgradient/ background well MW-126B at (680 μg/L and 702 μg/L in duplicate) exceeding the screening criteria of 500 μg/L, metals detected in groundwater samples collected in 2013 did not exceed MCLs or GWPC screening levels (Table 2).

5.4.3 Evaluation of Plume Stability

In terms of plume stability, a dissolved-phase chemical plume in groundwater may be characterized as a:

- Shrinking plume, in which the plume volume decreases through time.
- Stable plume, in which the plume volume does not change through time.
- Growing plume, in which the plume volume increases through time.

In general, shrinking plumes are indicated by decreasing chemical concentrations through time, growing plumes may be indicated by increasing or stable chemical concentrations through time, and stable plumes are indicated by plume volume estimates that do not change significantly through time. Currently available long-term monitoring data indicate that the plume of COCs in Site groundwater is generally shrinking or is stable.

5.4.4 Evaluation of No Unacceptable Impacts to Downgradient Receptors

Groundwater and surface water monitoring data collected during the RI and the IMS program indicate that there are no potential impacts to downgradient receptors. The water supply wells within the Town Well Field Property are dormant and are beyond the zone of COC concentrations in groundwater that are above drinking water standards. Therefore, there are no receptors within the vicinity of the groundwater plume with COC concentrations above drinking water standards. Monitoring of surface water in the Quinnipiac River demonstrated that surface water is not impacted by the Site COC-impacted groundwater plume. Monitoring of groundwater within the Town Well Field will continue as part of the MNA program.

5.4.5 Evaluation of New Releases of COCs

Evaluation of new releases of COCs is not needed because potential sources of new releases have been removed from the Site, the former source area is located within the capture zone of the HCTS, and the Overburden NAPL Area (also within the capture zone) is to be remediated via *in situ* thermal remediation.

5.4.6 Evaluation of Institutional Controls

The draft *Institutional Control Plan* (IC Plan), which is a remedial design submittal required by Section V.B.7 of the SOW, was initially submitted to the USEPA in February 2011. Based on comments received and further

coordination with the regulatory agencies, a revised draft IC Plan was provided to the USEPA in May 2013. It describes the proposed scope and monitoring program associated with institutional controls to be implemented at the Site. Once the IC Plan is approved and institutional controls are established, any observed or pending changes in land or resource uses or ownership (e.g., property ownership change, housing developments, and well installations) will be evaluated in view of their current and possible future impact on the effectiveness of the institutional controls and the performance monitoring operations.

5.4.7 COC Mass Flux / Mass Reduction

COC mass flux and mass reduction can be conservatively evaluated by monitoring groundwater COC mass recovery from the HCTS. Because extraction of groundwater COCs by the HCTS does not account for the mass of COCs degraded *in situ*, this method of estimating mass reduction provides a minimum estimate of mass reduction. With the exception of the severed plume and de minimis discharges to surface water immediately adjacent to the river, the Site-related groundwater plume is essentially contained within the HCTS capture zone. As a result, the groundwater extracted via the HCTS represents the majority of the mass flux of COCs within the plume. Groundwater extraction rate and COC concentration information collected periodically during system operation, maintenance and monitoring (OMM) activities as part of the compliance monitoring program for the HCTS will be used to evaluate changes in COC mass flux with time. As shown on Figure 17, COC mass extraction rates have been relatively stable since the early 2000s.

5.5 Contingency Measures

An evaluation of contingency measures will be performed if progress in meeting long-term groundwater restoration goals is inadequate, as determined by the USEPA. While the specific measures to be undertaken may depend on several factors (e.g., the nature, location, apparent source, or timeframe at which the inadequacy is identified), examples of possible contingency measures are provided in the MNA Plan. Any contingency measure considered will first be approved by USEPA, in consultation with CT DEEP, prior to implementation.

6. Summary

The 2013 annual groundwater monitoring event was conducted June 3-6, 2013, and included the sampling of 45 monitoring wells for VOCs, MNA parameters and/or TAL metals. Results from the annual event indicate that:

- VOCs above Action Levels (the more stringent of the USEPA MCLs or Connecticut Class GA GWPC) are generally contained within the previously estimated containment boundary of the HCTS. The exception is at monitoring well MW-707DR, a deep bedrock well located just beyond the southern extent of the capture zone boundary. Benzene was detected at a concentration of 1.3 μg/L in the June 2013 sample, which is slightly above the Action Level of 1.0 μg/L. This is consistent with the benzene concentration detected at well MW-707DR in June 2012 (1.1 μg/L). Note that actions were evaluated following the 2012 annual sampling event to increase the bedrock capture zone, resulting in the vertical extension of bedrock groundwater extraction well RW-1R and adjustments to its pumping equipment in late 2012 (ARCADIS 2013a; 2013b). The effect of those modifications in terms of improving groundwater quality and/or hydraulic capture at well MW-707DR are being evaluated.

- PCE and TCE were detected in middle overburden monitoring well PZO-2M at concentrations of 79 μg/L and 250 μg/L, respectively, in the June 2013 sample. These concentrations are above the Action Level of 5.0 μg/L for both compounds. This was the first detection of PCE above the Action Level at this well. TCE was detected above the Action Level at this well in June 2012 (9.9 μg/L). This well was re-sampled for confirmation purposes later in June 2013; PCE and TCE were again detected at concentrations similar to those in the initial June 2013 sample. Additional groundwater sampling was performed in July 2013 (and will continue to be performed) to further assess concentration trends in the vicinity of this well.

- Benzene, PCE and TCE were also detected at deep bedrock monitoring well MW-1003DR at concentrations above the respective Action Levels. This well was also re-sampled later in June 2013 and the results confirmed. Additional groundwater sampling was performed in July 2013 (and will continue to be performed) to further assess concentration trends in the vicinity of this well.

- No metals (either total or dissolved) exceeded their respective MCLs or GWPC, with the exception of total manganese measured at well MW-126B in 2013 (680 μg/L total manganese, compared to the GWPC of 500 μg/L). MW-126B is an upgradient, background well located north of the former Operations Area of the SRSNE Site.

- As noted in the 2012 MNA Report, total VOC concentrations at shallow bedrock monitoring well P-11A increased notably between 2011 (583 μg/L) and 2012 (approximately 26,400 μg/L). This well is located at the downgradient edge of the bedrock NAPL zone delineated during the RI (BBL June 1998), and within the HCTS capture zone. The total VOC concentration in June 2013 decreased significantly (to approximately 8,200 μg/L) relative to the June 2012, though concentrations remain elevated. VOC concentrations at this well will continue to be monitored as part of future sampling events.

Section 5 presents an evaluation of the effectiveness of MNA as a remedial measure for COCs in groundwater in the Site, including presentation of groundwater monitoring results from the June 2013 annual groundwater monitoring event; evaluation of concentration trends for total VOCs in groundwater at select monitoring locations; estimates of bulk attenuation rates for total VOCs in groundwater; and presentation of HCTS COC mass extraction rates with time. Results of these evaluations indicate:

- Detected concentrations of VOCs above Action Levels are contained within the previously estimated containment boundary of the HCTS; the only exception is monitoring well MW-707DR, as discussed above. Groundwater quality at this well will continue to be monitored to evaluate the effects of modifications to the well depth and pumping equipment at bedrock groundwater extraction well RW-1R (ARCADIS 2013a).

- Groundwater total VOC concentrations are generally declining or remaining stable with time throughout the Site groundwater COC plume. Notable exceptions include increases in total VOC concentrations at:

    - Four of the nine overburden wells sampled within the NTCRA 1 containment area in June 2013 (MW-415, MWL-307, TW-08A and TW-08D).

  - Middle overburden monitoring well PZO-2M, which is located in the CL&P easement (downgradient of the former Operations Area) and within the HCTS capture zone.

  - Deep bedrock monitoring well MW-1003DR, which is also located in the CL&P easement (downgradient of the former Operations Area) and within the HCTS capture zone.

- Estimated bulk VOC attenuation rates were comparable to attenuation rates for individual COCs presented in the FS (BBL and USEPA 2005).

- Compliance monitoring data from the HCTS indicate generally stable COC mass extraction rates since the early 2000s.

These results support continued use of MNA as a remedy for COCs in Site groundwater.

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Tables

Table 1 – VOCs – Groundwater Sample Results – June 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					CPZ-4A		MW-03		MW-1002DR		MW-1002DR		MW-1002R		MW-1003DR		MW-1003DR		MW-1003R		MW-121B	
Sample Date					6/3/2013		6/3/2013		6/4/2013		6/4/2013		6/6/2013		6/5/2013		6/19/2013		6/6/2013		6/3/2013	
Field Sample ID					CPZ-4A-HS-06032013		MW-03-06032013		MW-1002DR-HS-06042013		DUP-GW-06042013#2		MW-1002R-HS-06062013		MW-1003DR-HS-06052013		MW-1003DR-HS-06192013		MW-1003R-HS-06062013		MW-121B-HS-06032013	
Well Group					R		R		R		R		R		R		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																		
VOCs (8260B)																						
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	2.5	U	5	U	0.5	U	0.5	U	2.5	U	0.5	U	1	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	**1.8**	--	0.5	U	**0.84**	J	5	U	0.5	U	**27**	--	**20**	--	0.5	U	1	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	3.8	U	7.5	U	0.75	U	0.75	U	3.8	U	0.75	U	1.5	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**4.8**	--	**0.44**	J	3.8	U	7.5	U	0.75	U	**0.5**	J	3.8	U	0.75	U	1.5	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	**0.88**	--	0.5	U	**3.1**	--	**3.1**	J	0.5	U	**1.6**	--	**1.3**	J	0.5	U	1	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	12	U	25	U	2.5	U	2.5	U	12	U	2.5	U	5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	12	U	25	U	2.5	U	2.5	U	12	U	2.5	U	5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	2.5	U	5	U	0.5	U	0.5	U	2.5	U	0.5	U	1	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	12	U	25	U	2.5	U	2.5	U	12	U	2.5	U	5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	25	U	50	U	5	U	**2**	J	25	U	5	U	10	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	25	U	50	U	5	U	5	U	25	U	5	U	10	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	25	UJ	50	U	5	U	**1.7**	J	25	U	5	U	10	U
Acetone	67-64-1	ug/L	700	5	5	UJ	5	UJ	25	UJ	50	UJ	5	U	**14**	--	25	U	5	U	10	UJ
Benzene	71-43-2	ug/L	1	0.5	**1.9**	--	**0.16**	J	2.5	U	5	U	**1.1**	--	**2.6**	--	**2.3**	J	**0.17**	J	**16**	--
Bromomethane	74-83-9	ug/L	9.8	0.5	1	UJ	1	UJ	5	UJ	10	UJ	1	UJ	**0.4**	J	5	U	1	UJ	2	UJ
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	5	U	25	U	50	U	**16**	--	5	U	25	U	5	U	10	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	2.5	U	5	U	0.5	U	0.5	U	2.5	U	0.5	U	1	U
Chlorobenzene	108-90-7	ug/L	100	0.5	**0.92**	--	0.5	U	2.5	U	5	U	0.5	U	0.5	U	2.5	U	0.5	U	**9**	--
Chloroethane	75-00-3	ug/L	12.1	0.5	**24**	J	1	UJ	5	U	10	U	1	U	**0.19**	J	5	U	**0.16**	J	**40**	J
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	0.75	U	3.8	U	7.5	U	**0.23**	J	0.75	U	3.8	U	**0.52**	J	1.5	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	12	U	25	U	**0.19**	J	2.5	U	12	U	**0.24**	J	5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**2.5**	J	**0.26**	J	**26**	--	**26**	--	0.5	U	**5.5**	--	**5.3**	--	**0.32**	J	1	UJ
Ethylbenzene	100-41-4	ug/L	700	0.5	**0.81**	--	**0.71**	--	2.5	U	5	U	0.5	U	**11**	--	**8.3**	--	0.5	U	**2.5**	--
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	3	U	6	U	0.6	U	0.6	U	3	U	0.6	U	1.2	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	**3.5**	J	**4**	J	5	U	5	U	25	U	5	U	10	U
Naphthalene	91-20-3	ug/L	280	0.5	**0.23**	J	**0.38**	J	12	U	25	U	2.5	U	2.5	U	12	U	2.5	U	5	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	5	U	10	U	1	U	**1.9**	--	**1.8**	J	1	U	2	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	0.5	U	**21**	--	**21**	--	0.5	U	**90**	--	**81**	--	0.5	U	1	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	**35**	--	5	U	25	U	50	U	5	U	5	UJ	25	U	5	U	**210**	--
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	**2.5**	--	3.8	U	7.5	U	0.75	U	**86**	--	**78**	--	0.75	U	1.5	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	3.8	U	7.5	U	0.75	U	0.75	U	3.8	U	0.75	U	1.5	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	2.5	U	5	U	0.5	U	0.5	U	2.5	U	0.5	U	1	U
Trichloroethene	79-01-6	ug/L	5	0.5	**1.7**	--	**0.52**	--	**460**	--	**480**	--	0.5	U	**740**	--	**660**	--	**0.42**	J	1	U
Vinyl chloride	75-01-4	ug/L	2	0.5	**2.6**	--	1	U	5	U	10	U	1	U	1	U	5	U	1	U	2	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	**4.1**	--	**4.2**	--	5	U	10	U	1	U	**34**	--	**26**	--	1	U	**3**	--

Notes:

U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWPC)
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs – Groundwater Sample Results – June 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Analyte	CAS No.	Unit	Action Level	ICL	Sample Location		MW-121C		MW-121M		MW-124C		MW-127C		MW-413		MW-415		MW-416		MW-502		MW-704D	
					Sample Date		6/3/2013		6/3/2013		6/4/2013		6/5/2013		6/6/2013		6/6/2013		6/6/2013		6/4/2013		6/3/2013	
					Field Sample ID		MW-121C-HS-06032013		MW-121M-HS-06032013		MW-124C-HS-06042013		MW-127C-06052013		MW-413-HS-06062013		MW-415-HS-06062013		MW-416-HS-06062013		MW-502-HS-06042013		MW-704D-HS-06032013	
					Well Group		R		R		R		R		N		N		N		R		R	
VOCs (8260B)																								
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5		0.5	U	0.5	U	0.5	U	0.5	U	5	U	10	U	2.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5		0.5	U	0.5	U	**7.7**	--	**2.4**	--	**23**	--	**38**	--	**110**	--	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5		0.75	U	0.75	U	0.75	U	0.75	U	7.5	U	15	U	3.8	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5		0.75	U	0.75	U	**2.4**	--	**4.3**	--	**170**	--	**500**	--	**22**	--	0.75	U	**0.57**	J
1,1-Dichloroethene	75-35-4	ug/L	7	0.5		0.5	U	0.5	U	**4.6**	--	**1.1**	--	**1.8**	J	**5.3**	J	**39**	--	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2		2.5	U	2.5	U	2.5	U	2.5	U	25	U	50	U	12	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5		**0.18**	J	2.5	U	2.5	U	2.5	U	25	U	50	U	12	U	**0.34**	J	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5		**0.46**	J	0.5	U	0.5	U	0.5	U	**10**	--	**4.2**	J	2.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5		**0.2**	J	2.5	U	2.5	U	2.5	U	25	U	50	U	12	U	**0.29**	J	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5		5	U	5	U	5	U	5	U	50	U	**620**	--	25	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5		5	U	5	U	5	U	5	U	50	U	100	U	25	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5		5	U	5	U	5	UJ	5	U	**95**	--	**180**	--	25	U	**4**	J	5	U
Acetone	67-64-1	ug/L	700	5		5	UJ	5	UJ	5	UJ	5	U	50	U	**230**	--	25	U	5	UJ	5	UJ
Benzene	71-43-2	ug/L	1	0.5		**13**	--	**0.95**	--	0.5	U	0.5	U	**6.1**	--	10	U	2.5	U	**64**	--	**0.19**	J
Bromomethane	74-83-9	ug/L	9.8	0.5		1	UJ	1	UJ	1	UJ	1	UJ	10	UJ	20	UJ	5	UJ	1	UJ	1	UJ
Carbon disulfide	75-15-0	ug/L	700	0.5		5	U	5	U	5	U	5	U	50	U	100	U	25	U	5	U	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5		0.5	U	0.5	U	0.5	U	0.5	U	5	U	10	U	2.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5		**7.4**	--	**0.87**	--	0.5	U	0.5	U	5	U	**7.5**	J	2.5	U	**27**	--	**1.3**	--
Chloroethane	75-00-3	ug/L	12.1	0.5		**34**	J	**15**	J	1	U	1	U	**110**	--	**900**	--	**1.1**	J	**61**	--	**7.5**	J
Chloroform	67-66-3	ug/L	6	0.5		0.75	U	0.75	U	**0.25**	J	0.75	U	7.5	U	15	U	3.8	U	0.75	U	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5		2.5	U	2.5	U	2.5	U	2.5	U	25	U	**19**	J	12	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5		0.5	UJ	0.5	UJ	**5.9**	--	**1.4**	--	**840**	--	**1400**	--	**300**	--	0.5	U	0.5	UJ
Ethylbenzene	100-41-4	ug/L	700	0.5		**0.17**	J	0.5	U	0.5	U	**0.28**	J	**57**	--	**270**	--	2.5	U	**99**	--	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45		0.6	U	0.6	U	0.6	U	0.6	U	6	U	12	U	3	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5		5	U	5	U	5	U	5	U	**3.2**	J	**120**	--	25	U	5	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5		2.5	U	2.5	U	2.5	U	2.5	U	25	U	50	U	12	U	**1.5**	J	2.5	U
Styrene	100-42-5	ug/L	100	0.5		1	U	1	U	1	U	1	U	10	U	20	U	5	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5		0.5	U	0.5	U	**0.28**	J	0.5	U	**23**	--	10	U	**17**	--	0.5	U	0.5	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5		**110**	--	**8.8**	--	5	U	5	U	**79**	--	**39**	J	**7**	J	**3800**	--	**3.4**	J
Toluene	108-88-3	ug/L	1000	0.5		**0.35**	J	0.75	U	0.75	U	1.2	U	**210**	--	**1300**	--	3.8	U	**5.3**	--	0.75	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5		0.75	U	0.75	U	0.75	U	0.75	U	**3.8**	J	**8.2**	J	**0.89**	J	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5		0.5	U	0.5	U	0.5	U	0.5	U	5	U	10	U	2.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5		0.5	U	0.5	U	**1.6**	--	**0.43**	J	**59**	--	10	U	**280**	--	0.5	U	0.5	U
Vinyl chloride	75-01-4	ug/L	2	0.5		1	U	1	U	1	U	1	U	**1600**	--	**710**	--	**35**	--	1	U	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5		**1.6**	--	1	U	1	U	**1.6**	J	**65**	--	**660**	--	5	U	**270**	--	1	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWPC)
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs – Groundwater Sample Results – June 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

					Sample Location		MW-704DR		MW-704M		MW-706DR		MW-707DR		MW-902D		MW-902M		MW-907D		MW-907DR		MW-907M	
					Sample Date		6/3/2013		6/5/2013		6/4/2013		6/4/2013		6/5/2013		6/5/2013		6/3/2013		6/3/2013		6/3/2013	
					Field Sample ID		MW-704DR-HS-06032013		MW-704M-HS-06052013		MW-706DR-HS-06042013		MW-707DR-06042013		MW-902D-HS-06052013		MW-902M-HS-06052013		MW-907D-HS-06032013		MW-907DR-HS-06032013		MW-907M-HS-06032013	
					Well Group		R		R		R		R		N		N		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																				
VOCs (8260B)																								
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	25	U	0.5	U	5	U	5	U	5	U	5	U	500	U	20	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	0.5	U	0.5	U	25	U	**0.4**	J	**10**	--	**20**	--	5	U	**1200**	--	20	U		
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	38	U	0.75	U	7.5	U	7.5	U	7.5	U	750	U	30	U		
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**2.8**	--	**0.16**	J	**7.7**	J	**1.3**	--	**82**	--	**230**	--	7.5	U	750	U	30	U		
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	0.5	U	0.5	U	**20**	J	**0.16**	J	**3.1**	J	**4.6**	J	5	U	**220**	J	20	U		
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	120	U	2.5	U	25	U	**2.7**	J	25	U	2500	U	100	U		
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	120	U	2.5	U	25	U	**3**	J	25	U	2500	U	100	U		
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	**0.25**	J	0.5	U	25	U	0.5	U	**2**	J	**8.6**	--	5	U	500	U	20	U		
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	120	U	2.5	U	25	U	25	U	25	U	2500	U	100	U		
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	250	U	5	U	**21**	J	**160**	--	50	U	5000	U	200	U		
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	250	U	5	U	50	U	50	U	50	U	5000	U	200	U		
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	250	UJ	5	UJ	**5.4**	J	**44**	J	50	U	5000	U	200	U		
Acetone	67-64-1	ug/L	700	5	5	UJ	5	U	250	UJ	5	UJ	50	U	**130**	--	50	UJ	5000	UJ	200	UJ		
Benzene	71-43-2	ug/L	1	0.5	**2.9**	--	**0.17**	J	25	U	**1.3**	--	**1.6**	J	**9.2**	--	**29**	--	500	U	**58**	--		
Bromomethane	74-83-9	ug/L	9.8	0.5	1	UJ	1	UJ	50	UJ	1	UJ	10	UJ	10	UJ	10	UJ	1000	UJ	40	UJ		
Carbon disulfide	75-15-0	ug/L	700	0.5	**0.61**	J	5	U	250	U	5	U	50	U	50	U	50	U	5000	U	200	U		
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	25	U	0.5	U	5	U	5	U	5	U	500	U	20	U		
Chlorobenzene	108-90-7	ug/L	100	0.5	**1.7**	--	**1.6**	--	25	U	0.5	U	5	U	5	U	**14**	--	500	U	**27**	--		
Chloroethane	75-00-3	ug/L	12.1	0.5	**22**	J	**0.66**	J	50	U	1	U	**140**	--	**2100**	--	**64**	J	1000	UJ	**130**	J		
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	0.75	U	38	U	0.75	U	7.5	U	7.5	U	7.5	U	750	U	30	U		
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	120	U	2.5	U	25	U	25	U	25	U	2500	U	100	U		
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**2.9**	J	**0.46**	J	**2100**	--	**0.59**	--	**300**	--	**540**	--	5	UJ	**620**	J	20	UJ		
Ethylbenzene	100-41-4	ug/L	700	0.5	**1**	--	0.5	U	25	U	**0.59**	--	**94**	--	**540**	--	5	U	**460**	J	20	U		
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	30	U	0.6	U	6	U	6	U	6	U	600	U	24	U		
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	**17**	J	5	U	**9.7**	J	**48**	J	50	U	5000	U	200	U		
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	120	U	**0.24**	J	25	U	**10**	J	25	U	2500	U	100	U		
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	50	U	1	U	10	U	10	U	10	U	1000	U	40	U		
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	0.5	U	**31**	--	0.5	U	5	U	5	U	5	U	**5800**	--	20	U		
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	**8.8**	--	**2.2**	J	250	U	**1.6**	J	**13**	J	**150**	J	**640**	--	5000	U	**3600**	--		
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	0.75	U	**18**	J	1.9	U	**510**	--	**2200**	--	7.5	U	**3800**	--	30	U		
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	38	U	0.75	U	7.5	U	**3.5**	J	7.5	U	750	U	30	U		
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	25	U	0.5	U	5	U	5	U	5	U	500	U	20	U		
Trichloroethene	79-01-6	ug/L	5	0.5	**3.6**	--	0.5	U	**580**	--	**0.21**	J	5	U	5	U	5	U	**63000**	--	20	U		
Vinyl chloride	75-01-4	ug/L	2	0.5	**0.24**	J	**0.16**	J	**61**	--	1	U	**250**	--	**430**	--	10	U	1000	U	40	U		
Xylenes, Total	1330-20-7	ug/L	530	0.5	**1.8**	J	1	U	50	U	**3.2**	J	**140**	--	**850**	--	10	U	**1300**	J	40	U		

Notes:

U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWPC)
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs – Groundwater Sample Results – June 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					MWL-304		MWL-307		MWL-309		P-101B		P-101C		P-11A		P-13		PZO-2D		PZO-2D	
Sample Date					6/5/2013		6/5/2013		6/6/2013		6/4/2013		6/4/2013		6/6/2013		6/5/2013		6/3/2013		6/3/2013	
Field Sample ID					MWL-304-HS-06052013		MWL-307-HS-06052013		MWL-309-HS-06062013		P-101B-HS-06042013		P-101C-HS-06042013		P-11A-HS-06062013		P-13-06052013		PZO-2D-HS-06032013		DUP-GW-06032013-#1	
Well Group					N		N		R		R		R		R		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																		
VOCs (8260B)																						
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	**1.2**	--	**110**	--	0.5	U	0.5	U	0.5	U	**45**	--	**5.6**	--	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	75	U	0.75	U	0.75	U	0.75	U	7.5	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**8.9**	--	**760**	--	**1**	--	**1**	--	**3**	--	**8.6**	--	**1.6**	--	**0.17**	J	**0.2**	J
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	0.5	U	**72**	--	0.5	U	0.5	U	0.5	U	**37**	--	**0.66**	--	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	250	U	2.5	U	2.5	U	2.5	U	**2.6**	J	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	250	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	250	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U	2.5	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	**1200**	--	5	U	5	U	5	U	50	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	500	U	5	U	5	U	5	U	50	UJ	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	**820**	--	5	U	5	UJ	5	U	50	U	5	U	5	U	5	U
Acetone	67-64-1	ug/L	700	5	5	U	**260**	J	5	U	5	UJ	5	UJ	50	U	5	U	5	UJ	5	UJ
Benzene	71-43-2	ug/L	1	0.5	**0.54**	--	**39**	J	0.5	U	**4.9**	--	**0.72**	--	**20**	--	**0.22**	J	0.5	U	0.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5	1	UJ	100	UJ	1	UJ	1	UJ	1	UJ	10	UJ	1	UJ	1	UJ	1	UJ
Carbon disulfide	75-15-0	ug/L	700	0.5	**0.57**	J	500	U	5	U	5	U	5	U	**3.2**	J	5	U	5	U	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	50	U	0.5	U	**1.9**	--	**0.43**	J	5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	**1.7**	--	**3000**	--	1	U	**15**	--	1	U	**11**	--	1	U	1	UJ	1	UJ
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	75	U	0.75	U	0.75	U	0.75	U	7.5	U	0.75	U	0.75	U	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	250	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**21**	--	**3800**	--	0.5	U	**0.72**	--	**0.65**	--	**4000**	--	**2.1**	--	**0.26**	J	**0.36**	J
Ethylbenzene	100-41-4	ug/L	700	0.5	**8.7**	--	**1800**	--	0.5	U	0.5	U	0.5	U	**420**	--	**0.76**	--	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	60	U	0.6	U	0.6	U	0.6	U	6	U	0.6	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	**110**	J	5	U	5	U	5	U	50	U	5	U	5	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	250	U	2.5	U	2.5	U	2.5	U	**4.6**	J	2.5	U	2.5	U	2.5	U
Styrene	100-42-5	ug/L	100	0.5	1	U	100	U	1	U	1	U	1	U	**19**	--	1	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	50	U	0.5	U	0.5	U	0.5	U	**410**	--	**0.51**	--	**0.22**	J	**0.25**	J
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	UJ	**120**	J	5	U	**4.9**	J	**1.9**	J	**54**	J	5	U	5	U	5	U
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	**16000**	--	0.75	U	0.75	U	0.75	U	**660**	--	**3.6**	--	0.75	U	0.75	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	**24**	J	0.75	U	0.75	U	0.75	U	**2.7**	J	0.75	U	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	0.5	U	50	U	0.5	U	0.5	U	0.5	U	**1100**	--	**0.63**	--	**1.2**	--	**1.3**	--
Vinyl chloride	75-01-4	ug/L	2	0.5	**73**	--	**2000**	--	1	U	**1.9**	--	**1.3**	--	**600**	--	1	U	1	U	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	**1.6**	--	**3000**	--	1	U	**0.46**	J	1	U	**840**	--	**4.3**	--	1	U	1	U

Notes:

U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWPC)
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs – Groundwater Sample Results – June 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					PZO-2M		PZO-2M		PZR-2R		TW-08A		TW-08B		TW-08D	
Sample Date					6/5/2013		6/19/2013		6/5/2013		6/5/2013		6/5/2013		6/5/2013	
Field Sample ID					PZO-2M-HS-06052013		PZO-2M-HS-06192013		PZR-2R-HS-06052013		TW-08A-HS-06052013		TW-08B-HS-06052013		TW-08D-HS-06052013	
Well Group					R		R		R		N		N		N	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**												
VOCs (8260B)																
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	1.2	U	0.5	U	100	U	250	U	10	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	**5.8**	--	**4.8**	--	0.5	U	**310**	--	**8600**	--	**240**	--
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	1.9	U	0.75	U	150	U	**72**	J	15	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	0.75	U	1.9	U	0.75	U	**670**	--	**2100**	--	**420**	--
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	**0.14**	J	1.2	U	0.5	U	**70**	J	**2000**	--	**110**	--
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	6.2	U	2.5	U	500	U	1200	U	50	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	6.2	U	2.5	U	500	U	1200	U	**6.4**	J
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	1.2	U	0.5	U	**28**	J	**170**	J	**110**	--
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	6.2	U	2.5	U	500	U	1200	U	50	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	12	U	5	U	1000	U	2500	U	100	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	12	U	5	U	1000	U	2500	U	100	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	12	U	5	U	1000	U	**2000**	J	100	U
Acetone	67-64-1	ug/L	700	5	5	U	12	U	5	U	1000	U	**870**	J	**89**	J
Benzene	71-43-2	ug/L	1	0.5	0.5	U	1.2	U	0.5	U	**36**	J	**370**	--	**86**	--
Bromomethane	74-83-9	ug/L	9.8	0.5	1	UJ	2.5	U	1	UJ	200	UJ	500	UJ	20	UJ
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	12	U	5	U	1000	U	2500	U	**9.2**	J
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	1.2	U	0.5	U	100	U	250	U	10	U
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	1.2	U	0.5	U	100	U	250	U	10	U
Chloroethane	75-00-3	ug/L	12.1	0.5	1	U	2.5	U	1	U	**120**	J	**980**	--	**520**	--
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	1.9	U	0.75	U	150	U	**110**	J	15	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	6.2	U	2.5	U	500	U	1200	U	50	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**0.48**	J	1.2	U	0.5	U	**13000**	--	**330000**	--	**7000**	--
Ethylbenzene	100-41-4	ug/L	700	0.5	**0.35**	J	**0.71**	J	0.5	U	**1200**	--	**3400**	--	**1200**	--
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	1.5	U	0.6	U	120	U	300	U	12	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	12	U	5	U	**120**	J	**660**	J	**39**	J
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	6.2	U	2.5	U	500	U	1200	U	**13**	J
Styrene	100-42-5	ug/L	100	0.5	1	U	2.5	U	1	U	200	U	**380**	J	20	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	**79**	--	**72**	--	0.5	U	100	U	**7200**	--	10	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	UJ	12	U	5	U	1000	U	**610**	J	**420**	J
Toluene	108-88-3	ug/L	1000	0.5	1.6	U	**3.5**	--	0.75	U	**2200**	--	**29000**	--	**5100**	--
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	1.9	U	0.75	U	150	U	**140**	J	**28**	--
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	1.2	U	0.5	U	100	U	250	U	10	U
Trichloroethene	79-01-6	ug/L	5	0.5	**250**	--	**230**	--	0.5	U	100	U	**24000**	--	**6**	J
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	2.5	U	1	U	**14000**	--	**14000**	--	**15000**	--
Xylenes, Total	1330-20-7	ug/L	530	0.5	**0.81**	J	**2.3**	J	1	U	**1800**	--	**9200**	--	**3900**	--

Notes:

U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWPC)
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 2 – Metals – Groundwater Sample Results – June 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Analyte	CAS No.	Unit	Action Level	Sample Location		MW-126B		MW-126C		MW-209A		MW-209B		MW-701DR		MW-901R		P-12	
				Sample Date		6/4/2013		6/4/2013		6/4/2013		6/4/2013		6/4/2013		6/5/2013		6/3/2013	
				Field Sample ID		MW-126B-06042013	DUP-GW-06042013#1	MW-126C-06042013		MW-209A-06042013		MW-209B-06042013		MW-701DR-06042013		MW-901R-06052013		P-12-06032013	
				Well Group		M	M	B		B		B		M		M		M	
Metals (SW6020)																			
Aluminum (Dissolved)	7429-90-5	ug/L	--	10	U	10	U	10	U	10	U	10	U	10	U	10	U	**225**	--
Aluminum (Total)	7429-90-5	ug/L	--	10	U	10	UJ	**48.4**	--	**12.6**	--	**327**	--	**41.8**	--	**199**	--	**403**	--
Antimony (Dissolved)	7440-36-0	ug/L	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.248**	J	0.5	U
Antimony (Total)	7440-36-0	ug/L	6	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1	U	0.5	U
Arsenic (Dissolved)	7440-38-2	ug/L	--	0.5	U	0.5	U	0.5	U	**0.231**	J	0.5	U	**0.987**	--	**0.274**	J	**0.247**	J
Arsenic (Total)	7440-38-2	ug/L	10	0.5	U	0.5	U	0.5	U	**0.199**	J	0.5	U	**1.003**	--	**0.304**	J	**0.172**	J
Barium (Dissolved)	7440-39-3	ug/L	--	**565.8**	--	**563.2**	--	**418.1**	--	**221.3**	--	**149.2**	--	**104.4**	--	**243.3**	--	**174.8**	--
Barium (Total)	7440-39-3	ug/L	1000	**599**	--	**589.2**	--	**430.5**	--	**227.7**	--	**157.8**	--	**107.9**	--	**233.5**	--	**178.4**	--
Beryllium (Dissolved)	7440-41-7	ug/L	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Beryllium (Total)	7440-41-7	ug/L	4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cadmium (Dissolved)	7440-43-9	ug/L	--	**0.056**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cadmium (Total)	7440-43-9	ug/L	5	**0.078**	J	**0.101**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chromium (Dissolved)	7440-47-3	ug/L	--	0.5	U	0.5	U	0.5	U	0.567	U	0.577	U	0.869	U	**0.305**	J	0.5	U
Chromium (Total)	7440-47-3	ug/L	100	**0.21**	J	0.5	U	0.5	U	0.552	U	**1.09**	--	0.921	U	**0.567**	--	0.72	U
Cobalt (Dissolved)	7440-48-4	ug/L	--	**0.248**	J	**0.278**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.26**	J
Cobalt (Total)	7440-48-4	ug/L	10	**0.239**	J	**0.258**	J	0.5	U	0.5	U	**0.308**	J	0.5	U	**0.114**	J	**0.366**	J
Copper (Dissolved)	7440-50-8	ug/L	--	1.114	U	**1.787**	J	1.256	UJ	1.105	UJ	**1.209**	J	0.778	UJ	**1.09**	--	0.926	U
Copper (Total)	7440-50-8	ug/L	1300	1.069	U	**3.205**	--	0.525	U	0.5	U	**2.193**	--	1.123	U	**0.592**	--	0.86	U
Iron (Dissolved)	7439-89-6	ug/L	--	50	U	50	U	50	U	50	U	50	U	50	U	50	U	**273**	--
Iron (Total)	7439-89-6	ug/L	--	50	U	50	U	50	U	50	U	**389**	--	**49**	J	**168**	--	**494**	--
Lead (Dissolved)	7439-92-1	ug/L	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.279**	J
Lead (Total)	7439-92-1	ug/L	15	0.5	U	0.5	U	0.5	U	0.5	U	**0.72**	--	**0.259**	J	**0.231**	J	**0.256**	J
Manganese (Dissolved)	7439-96-5	ug/L	--	**654.5**	--	**659.7**	--	0.693	U	**0.7**	--	2.077	U	0.773	U	**1.08**	--	22.55	U
Manganese (Total)	7439-96-5	ug/L	500	**679.9**	--	**702.2**	--	**0.602**	--	**2.083**	--	**26.85**	--	**3.393**	--	**9.519**	--	15.41	U
Nickel (Dissolved)	7440-02-0	ug/L	--	1.322	U	**2.329**	J	1.14	U	0.698	U	0.789	U	0.732	U	**0.712**	J	0.5	U
Nickel (Total)	7440-02-0	ug/L	100	**1.285**	--	**1.269**	J	0.5	U	0.176	U	**1.018**	--	0.118	U	**0.329**	J	0.873	U
Silver (Dissolved)	7440-22-4	ug/L	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver (Total)	7440-22-4	ug/L	36	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Thallium (Dissolved)	7440-28-0	ug/L	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Thallium (Total)	7440-28-0	ug/L	2	0.58	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vanadium (Dissolved)	7440-62-2	ug/L	--	**0.236**	J	**0.305**	J	**0.423**	J	**0.754**	--	**0.274**	J	**7.479**	--	**0.569**	--	**1.844**	--
Vanadium (Total)	7440-62-2	ug/L	50	**0.191**	J	**0.427**	J	**0.443**	J	**0.754**	J	**0.859**	--	**8.021**	J	**1.257**	--	**1.733**	--
Zinc (Dissolved)	7440-66-6	ug/L	--	14.26	U	15.56	U	10.92	U	8.498	U	12.37	U	13.68	U	**13.3**	--	12.68	U
Zinc (Total)	7440-66-6	ug/L	5000	5.638	U	16.95	U	13.8	U	18.96	U	17.94	U	21.1	U	**12.29**	--	5	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWPC)
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 3 – MNA Parameters - Groundwater Sample Results – June 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location			MW-413		MW-415		MW-416		MW-902D		MW-902M		MWL-304		MWL-304		MWL-307		TW-08A		TW-08B		TW-08D	
Sample Date			6/6/2013		6/6/2013		6/6/2013		6/5/2013		6/5/2013		6/5/2013		6/5/2013		6/5/2013		6/5/2013		6/5/2013		6/5/2013	
Field Sample ID			MW-413-HS-06062013		MW-415-HS-06062013		MW-416-HS-06062013		MW-902D-HS-06052013		MW-902M-HS-06052013		MWL-304-HS-06052013		DUP-GW-06052013-#1		MWL-307-HS-06052013		TW-08A-HS-06052013		TW-08B-HS-06052013		TW-08D-HS-06052013	
Well Group			N		N		N		N		N		N		N		N		N		N		N	
Analyte	**CAS No.**	**Unit**																						
MNA (Water)																								
Alkalinity	ALK	mg/L	**124**	--	**87**	--	**106**	--	**126**	--	**175**	--	**160**	--	**153**	--	**158**	--	**223**	--	**170**	--	**153**	--
Chloride	16887-00-6	mg/L	**27.1**	--	**17.8**	--	**9.49**	--	**13.1**	J	**49.4**	J	**4.06**	J	**6.36**	J	**58.8**	J	**38.9**	J	**265**	J	**63**	J
Sulfate	14808-79-8	mg/L	**2.43**	--	**9.83**	--	**119**	--	**3.76**	--	**1.95**	--	**13.4**	--	**12.9**	--	**2.44**	--	**2.93**	--	**6.62**	--	**2.13**	--
Nitrite as N	14797-65-0	mg/L	**0.037**	J	**0.039**	J	0.05	U	**0.033**	J	**0.016**	J	0.05	U	**0.018**	J	**0.062**	--	**0.022**	J	**0.024**	J	**0.018**	J
Nitrate as N	14797-55-8	mg/L	**0.078**	J	**0.272**	--	**0.458**	--	**0.084**	J	0.1	U	0.019	U	0.025	U	**0.064**	J	0.023	U	0.029	U	0.026	U
Iron (Dissolved)	7439-89-6	ug/L	**20000**	--	**12000**	--	100	U	**14000**	J	**6400**	--	**13000**	--	--	--	**33000**	J	**30000**	--	**5900**	--	**22000**	--
Manganese (Dissolved)	7439-96-5	ug/L	**4280**	--	**1840**	--	**26.6**	--	**3100**	--	**908**	J	**1840**	--	--	--	**6990**	J	**6670**	--	**6140**	--	**6610**	--
Total Organic Carbon	TOC	mg/L	**6.8**	J	**16**	J	**0.63**	J	**6**	J	**18**	J	**5.6**	J	**5.6**	J	**51**	J	**16**	J	**28**	J	**34**	J
			--	--	**--**	--	**--**	--	**--**	--	**--**	--	**--**	--	**--**	--	**--**	--	**--**	--	**--**	--	**--**	--
MNA (Water Gas)			**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Ethane	74-84-0	ug/L	**0.65**	--	**6.1**	--	**370**	--	**60**	--	**190**	--	**3.4**	--	**2.6**	--	**16**	--	**130**	--	**45**	--	**56**	--
Ethene	74-85-1	ug/L	**1.8**	--	**130**	--	**1500**	J	**200**	--	**600**	--	**81**	--	**73**	--	**470**	--	**1300**	J	**2300**	J	**5500**	J
Methane	74-82-8	ug/L	**78**	J	**460**	J	**1400**	--	**840**	--	**1500**	--	**750**	--	**570**	--	**770**	--	**2600**	--	**1800**	--	**1300**	--

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
mg/L = milligrams per liter
Bold = Analyte detected above the laboratory reporting limit

Table 4 - Statistical Summary of Groundwater Total VOC Concentration Trends
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

DRAFT

Well	Constituent	Data Range					Linear Regression Analysis						Mann-Kendall Analysis			Sen's Slope Analysis	
		Minimum Concentration (µg/L)	Maximum Concentration (µg/L)	% of Data Below Laboratory Minimum Detection Limit	Start Date	End Date	Correlation Coefficient, R^2	p-value of Correlation	Estimated Attenuation Half-life (days)	Trend Direction (slope of trend line)	Trend Significant?	Comments	p-value of Correlation	Trend Direction	Trend Significant?	Estimated Attenuation Half-life (days)	Trend Direction
Shallow Overburden Wells																	
P-13	Total VOCs	2.4	69	0	3/28/1995	6/5/2013	0.35	0.006	2,670	Decreasing	Yes		< 0.001	Decreasing	Yes	2,120	Decreasing
MWL-312	Total VOCs	<0.5	49	76	3/27/1995	5/20/2010	0.18	0.09	1,400	Decreasing	Yes	76% of results below detection	0.245	Decreasing	No	NA	No Trend
P-101C	Total VOCs	8.0	479	0	3/27/1995	6/4/2013	0.69	<0.001	1,774	Decreasing	Yes		< 0.001	Decreasing	Yes	1,955	Decreasing
Middle Overburden Wells																	
MW-03	Total VOCs	0.7	120	0	12/5/1996	6/3/2013	0.15	0.098	2,111	Decreasing	Yes		0.093	Decreasing	Yes	NA	NS
MW-205B	Total VOCs	<0.5	24	12	3/23/1995	5/14/2010	0.26	0.04	1,644	Decreasing	Yes		0.008	Decreasing	Yes	1,690	Decreasing
P-101B	Total VOCs	12	187,400	0	3/27/1995	6/4/2013	0.71	<0.001	592	Decreasing	Yes		< 0.001	Decreasing	Yes	574	Decreasing
MW-127B	Total VOCs	<0.5	22	12	3/23/1995	5/19/2010	0.22	0.06	1,643	Decreasing	Yes		0.059	Decreasing	Yes	1,824	No Trend
MW-501B	Total VOCs	1.8	65	0	3/24/1995	5/24/2010	0.55	<0.001	1,022	Decreasing	Yes		0.001	Decreasing	Yes	990	Decreasing
Deep Overburden Wells																	
MW-204B	Total VOCs	<0.5	87	18	3/28/1995	5/17/2010	0.23	0.05	1,251	Decreasing	Yes		0.002	Decreasing	Yes	642	Decreasing
MW-502	Total VOCs	630	118,160	0	3/21/1995	6/4/2013	0.71	<0.001	1,076	Decreasing	Yes		0.001	Decreasing	Yes	2,139	Decreasing
MW-704D	Total VOCs	7.0	665	0	12/18/1996	6/3/2013	0.14	0.11	NA	Decreasing	No		0.058	Decreasing	Yes	2,276	Decreasing
MW-707D	Total VOCs	<0.5	21	56	12/6/1996	5/13/2010	<0.001	0.92	NA	No Trend	No	56% of results below detection	0.482	NS	No	NA	No Trend
Shallow Bedrock Wells																	
MW-127C	Total VOCs	11.51	147	0	3/23/1995	6/5/2013	0.51	<0.001	3,013	Decreasing	Yes		0.003	Decreasing	Yes	3,222	Decreasing
MW-128	Total VOCs	3.0	15	0	3/23/1995	5/19/2010	0.46	0.003	3,060	Decreasing	Yes		0.001	Decreasing	Yes	2,310	Decreasing
MW-204A	Total VOCs	2.0	682	0	3/28/1995	5/15/2010	0.55	<0.001	773	Decreasing	Yes		< 0.001	Decreasing	Yes	654	Decreasing
MW-501A	Total VOCs	10	118	0	3/24/1995	5/21/2010	0.82	<0.001	1,590	Decreasing	Yes		< 0.001	Decreasing	Yes	1,507	Decreasing
P-11A	Total VOCs	223	26,400	0	3/27/1995	6/6/2013	0.05	0.34	NA	No Trend	No	Changed from decreasing in 2011	0.230	NS	No	NA	NS
Deep Bedrock Wells																	
MW-703DR	Total VOCs	<0.5	8.0	81	12/9/1996	5/12/2010	<0.001	0.97	NA	No Trend	No	81% of results below detection	0.482	NS	No	NA	No Trend
MW-704DR	Total VOCs	11	455	0	12/17/1996	6/3/2013	0.49	<0.001	2,454	Decreasing	Yes		0.002	Decreasing	Yes	3,232	Decreasing
MW-706DR	Total VOCs	2,835	11,240	0	12/10/1996	6/4/2013	0.13	0.13	NA	Decreasing	No		0.245	NS	No	NA	NS
MW-707DR	Total VOCs	<0.5	18	33	12/30/1996	6/4/2013	0.28	0.01	NA	Increasing	Yes		0.010	Increasing	Yes	NA	Increasing
MW-707DR	Total VOCs	4.22	16.86	0	4/20/2004	6/4/2013	0.08	0.47	NA	No Trend	No	Using data starting in April 2004	0.381	NS	No	NA	NS

Notes and Assumptions:
µg/L = micrograms per liter
NS = no significant trend
NA = not applicable due to increasing trend or non-significant trend

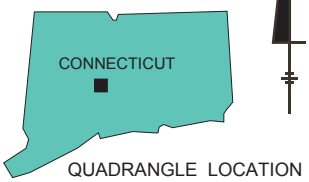
ARCADIS

Figures

REFERENCE: SOUTHINGTON, CONN. USGS QUAD. 1968 PR 1992, MERIDEN, CONN. USGS QUAD. 1966 PR 1984, NEW BRITAIN, CONN. USGS QUAD. 1966 PR 1984, & BRISTOL, CONN. USGS QUAD 1967 PR 1984

2000' 0 2000'

APPROX. SCALE: 1" = 2000'



QUADRANGLE LOCATION

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

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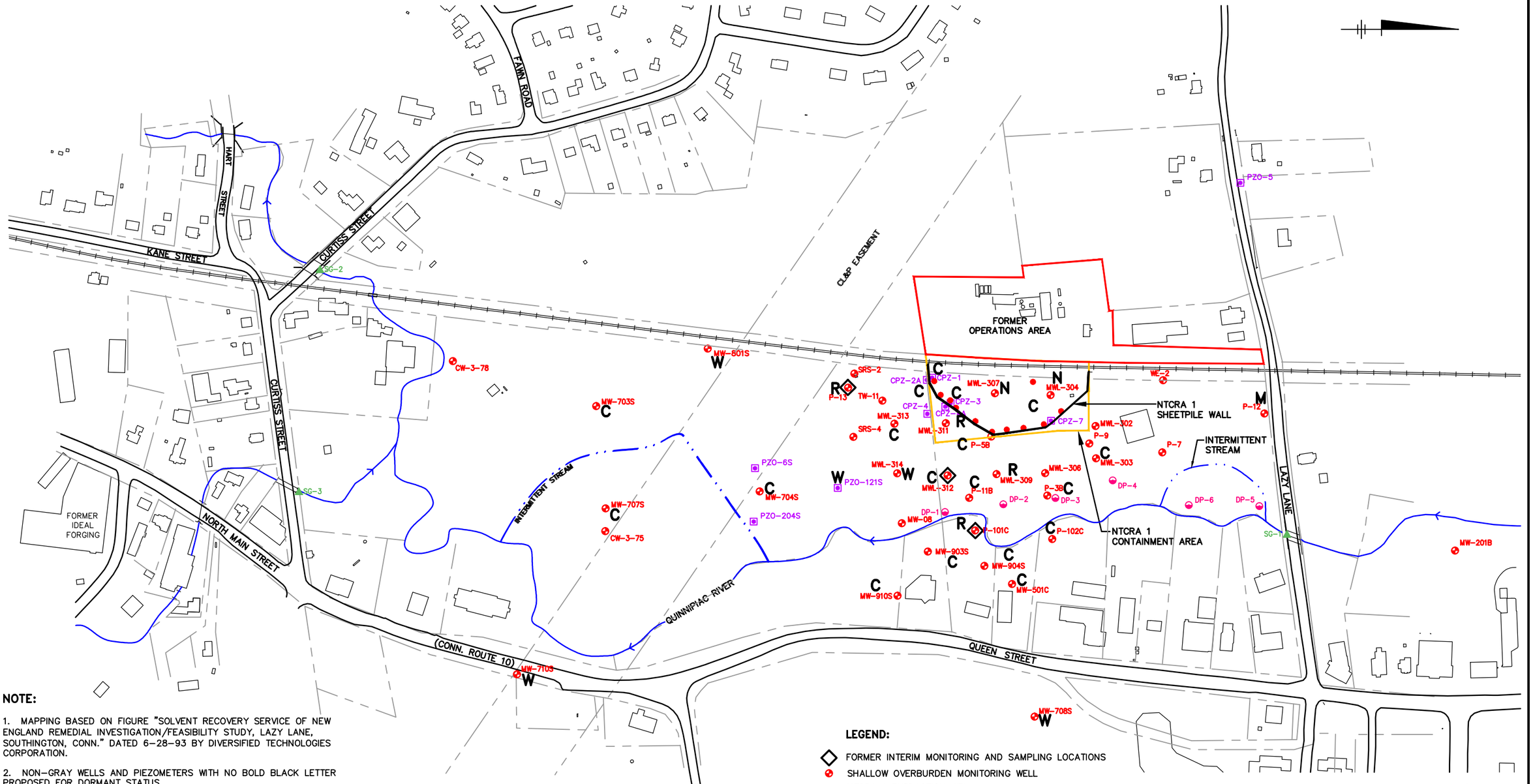

NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. NON-GRAY WELLS AND PIEZOMETERS WITH NO BOLD BLACK LETTER PROPOSED FOR DORMANT STATUS.

KEY:

- **N** NTCRA 1 AREA MONITORING WELL
- **M** BACKGROUND MONITORING WELL FOR METALS SAMPLING ONLY
- **R** MONITORING WELL FOR ROUTINE VOC AND MNA MONITORING
- **C** MONITORING WELL FOR COMPREHENSIVE SAMPLING ROUNDS ONLY
- **W** MONITORING WELL FOR WATER LEVEL MEASUREMENT ONLY

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- SHALLOW OVERBURDEN MONITORING WELL
- NTCRA 1 EXTRACTION WELL
- PIEZOMETER
- NTCRA 1 WETLAND DRIVEPOINT
- STREAM/RIVER GAUGE POINT

0 300' 600'

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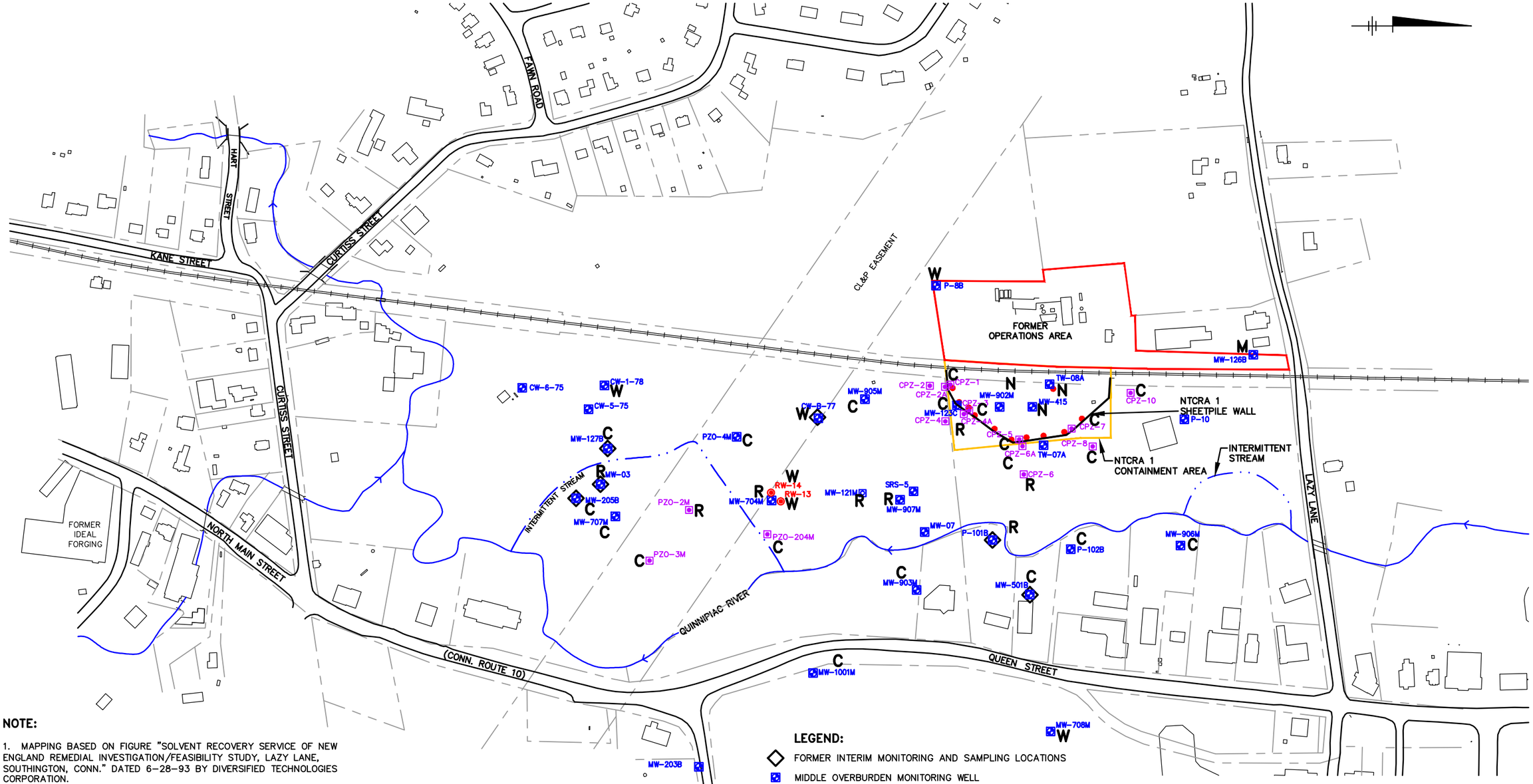
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER MONITORING LOCATIONS SHALLOW OVERBURDEN

ARCADIS

FIGURE
2



NOTE:

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- **W** MONITORING WELL FOR WATER LEVEL MEASUREMENT ONLY

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- MIDDLE OVERBURDEN MONITORING WELL
- PIEZOMETER
- NTCRA 1 EXTRACTION WELL
- NTCRA 2 EXTRACTION WELL

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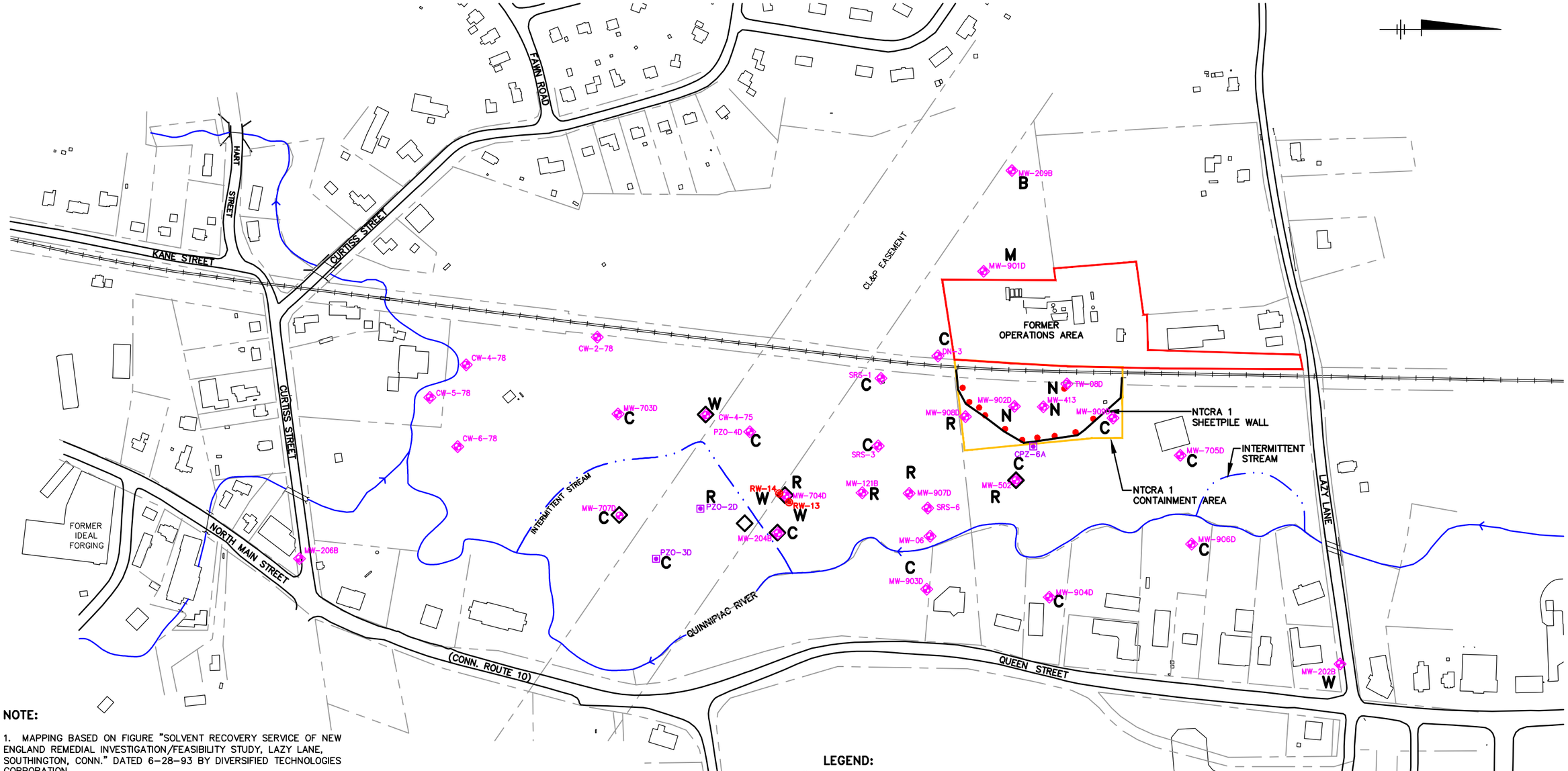
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER MONITORING LOCATIONS MIDDLE OVERBURDEN

ARCADIS

FIGURE 3



NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. NON-GRAY WELLS AND PIEZOMETERS WITH NO BOLD BLACK LETTER PROPOSED FOR DORMANT STATUS.

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- **B** BACKGROUND MONITORING WELL FOR METALS AND MNA SAMPLING
- **C** MONITORING WELL FOR COMPREHENSIVE SAMPLING ROUNDS ONLY
- **W** MONITORING WELL FOR WATER LEVEL MEASUREMENT ONLY

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- DEEP OVERBURDEN MONITORING WELL
- NTCRA 1 EXTRACTION WELL
- PIEZOMETER
- NTCRA 2 EXTRACTION WELL

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SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER MONITORING LOCATIONS DEEP OVERBURDEN

ARCADIS

FIGURE 4

CITY: SYRACUSE,NY GROUP: ENVCAD DB: P. LISTER PM: M.GEFELL TM: M. GEFELL TR: R. STEVENSON LYR: ON=*;OFF=*REF, (FRZ)
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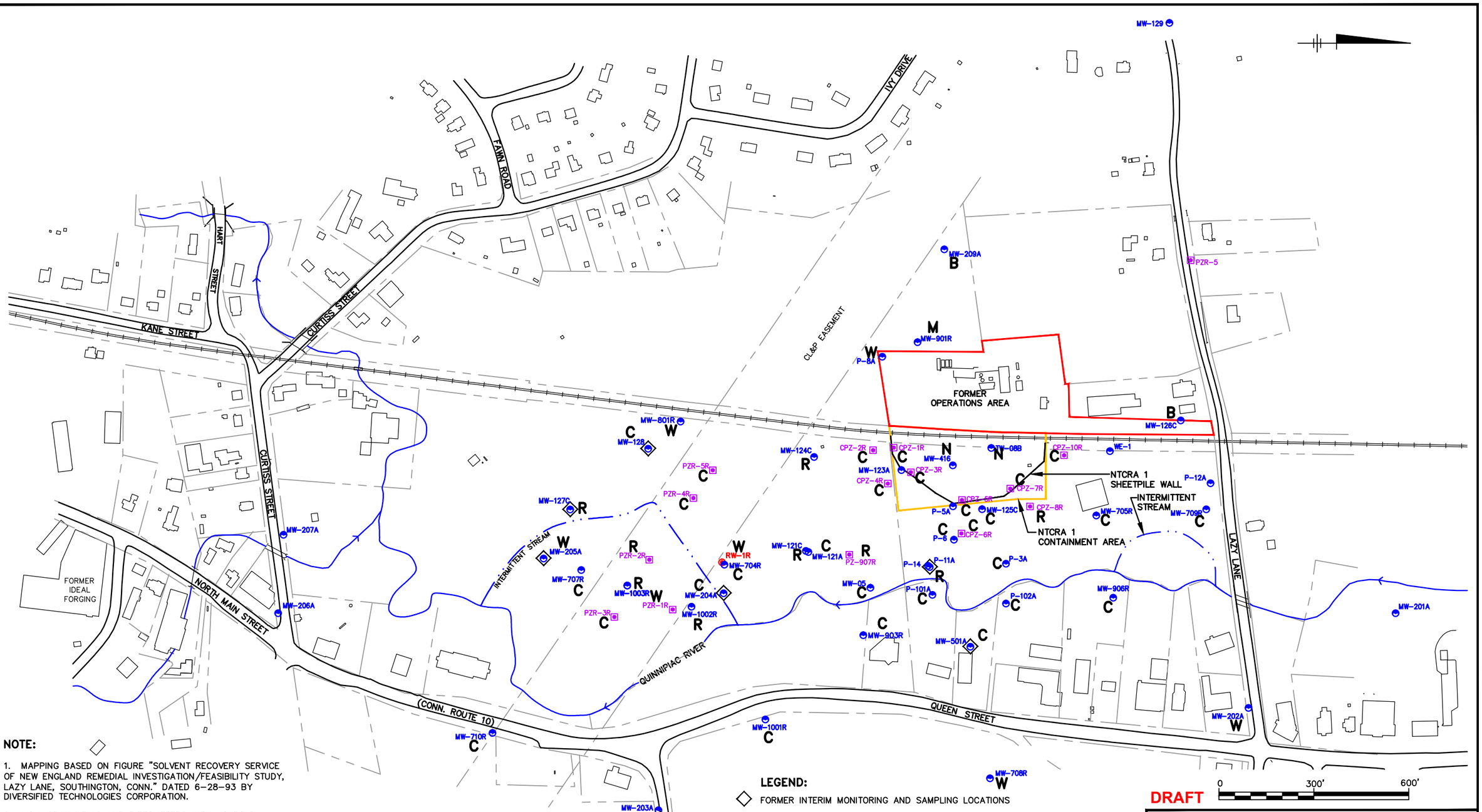

NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. NON-GRAY WELLS AND PIEZOMETERS WITH NO BOLD BLACK LETTER PROPOSED FOR DORMANT STATUS.

KEY:

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- **W** MONITORING WELL FOR WATER LEVEL MEASUREMENT ONLY

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- SHALLOW BEDROCK MONITORING WELL
- PIEZOMETER
- NTCRA 2 EXTRACTION WELL

0 300' 600'

DRAFT

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER MONITORING LOCATIONS SHALLOW BEDROCK

ARCADIS

FIGURE 5

CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER PM: M. GEFELL TM: M. GEFELL TR: R. STEVENSON LYR: ON=*;OFF=REF; (FR2)
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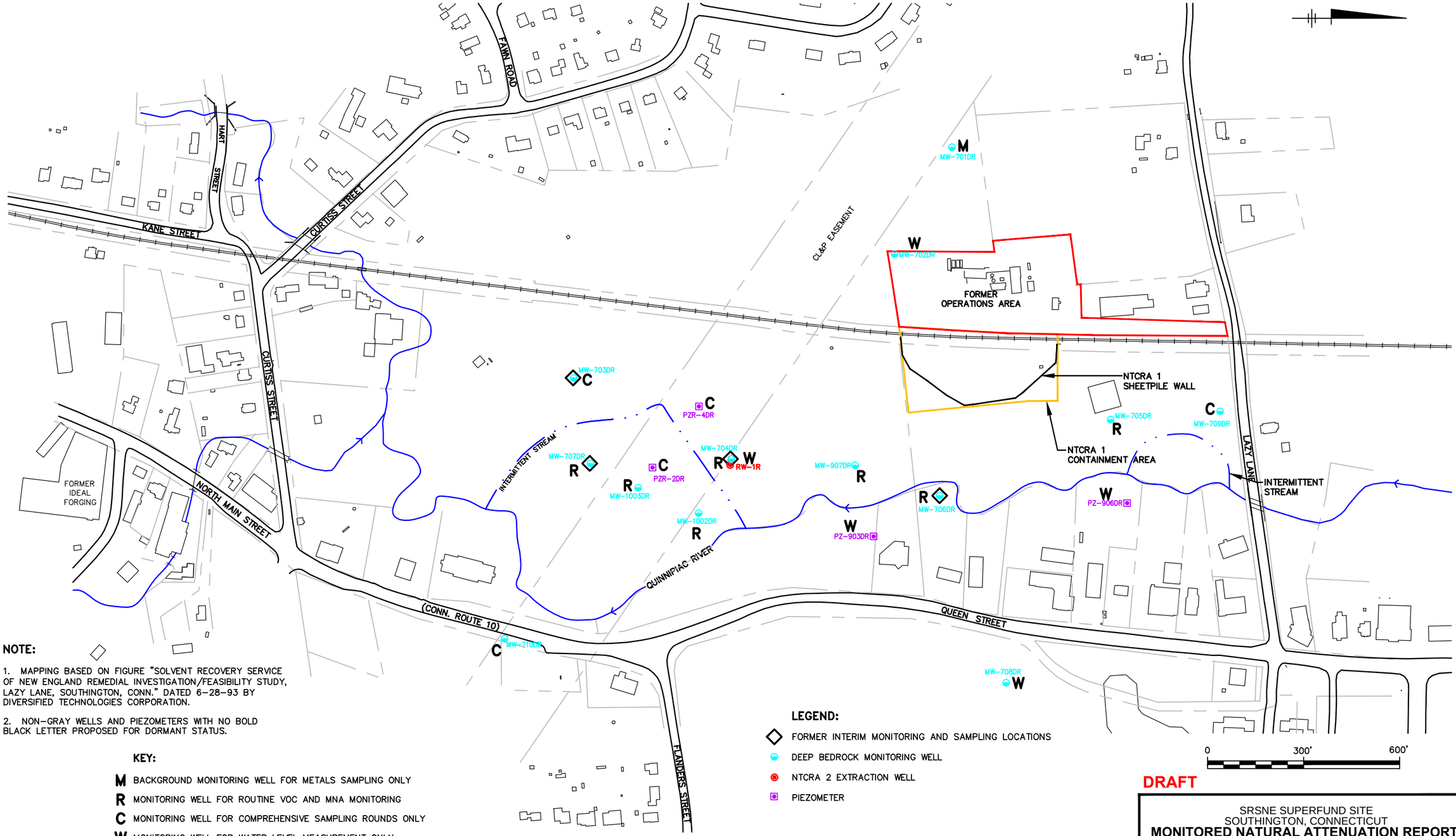

NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. NON-GRAY WELLS AND PIEZOMETERS WITH NO BOLD BLACK LETTER PROPOSED FOR DORMANT STATUS.

KEY:

- **M** BACKGROUND MONITORING WELL FOR METALS SAMPLING ONLY
- **R** MONITORING WELL FOR ROUTINE VOC AND MNA MONITORING
- **C** MONITORING WELL FOR COMPREHENSIVE SAMPLING ROUNDS ONLY
- **W** MONITORING WELL FOR WATER LEVEL MEASUREMENT ONLY

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- DEEP BEDROCK MONITORING WELL
- NTCRA 2 EXTRACTION WELL
- PIEZOMETER

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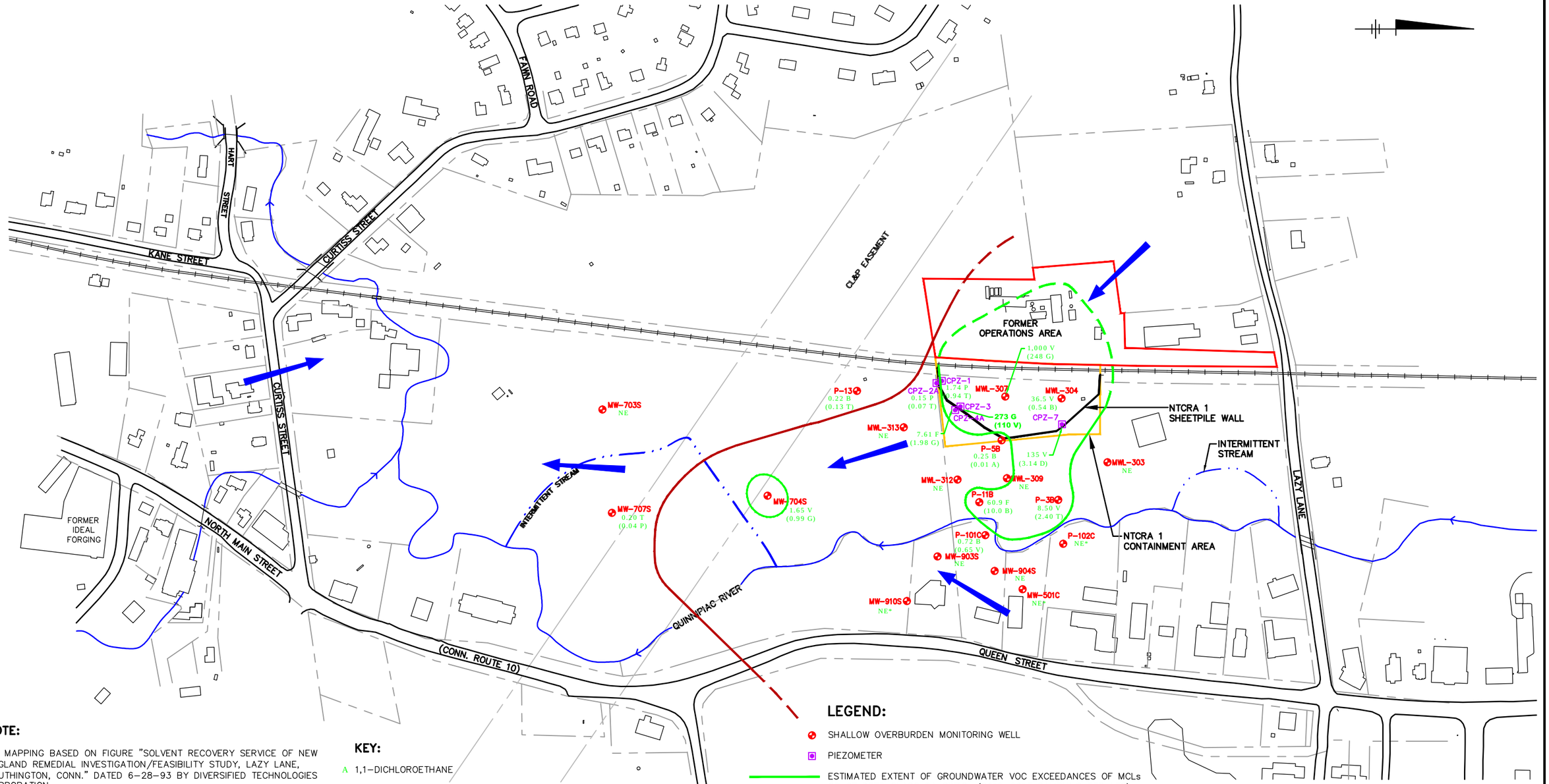
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER MONITORING LOCATIONS DEEP BEDROCK

ARCADIS

FIGURE 6

CITY: SYRACUSE, NY DIV/GROUP: ENV/IM-DV DB: P. LISTER PM: J. HOLDEN TM/TR: R. STEVENSON LYR: ON=*;OFF=REF,(FRZ)
G:\ENV\CAD\SYRACUSE\ACTIB\00546340000\01700\DWG\546340C06.DWG LAYOUT: 6 SAVED: 11/30/2012 10:31 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 11/30/2012 10:31 AM BY: LISTER, PAUL
XREFS: IMAGES: PROJECTNAME: ----
546340X01



NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. POSTED DATA ARE THE LATEST SAMPLING RESULTS AT EACH WELL, AS OF JUNE 2013. NOT ALL WELLS WERE SAMPLED IN JUNE 2013.

KEY:

- A 1,1-DICHLOROETHANE
- B BENZENE
- D CIS-1,2-DICHLOROETHENE
- F TETRAHYDROFURAN
- G CHLOROETHANE
- P TETRACHLOROETHENE
- T TRICHLOROETHENE
- V VINYL CHLORIDE
- NE EXCEEDANCE RATIO LESS THAN 0.10

LEGEND:

- SHALLOW OVERBURDEN MONITORING WELL
- PIEZOMETER
- ESTIMATED EXTENT OF GROUNDWATER VOC EXCEEDANCES OF MCLs OR CT DEEP CLASS GA GWPCs (2010-2013 SAMPLING RESULTS) (DASHED WHERE INFERRED)
- ESTIMATED NTCRA 2 CAPTURE ZONE BOUNDARY
- GENERALIZED GROUNDWATER FLOW DIRECTION
- P-101C 0.72 B (0.65 V) — WELL WITH REGULATORY EXCEEDANCE RATIO. NUMBERS >1.0 INDICATE GROUNDWATER REGULATORY LIMIT EXCEEDED. NUMBERS <1.0 INDICATE EXCEEDANCE RATIO FOR COMPOUNDS DETECTED BELOW REGULATORY LIMIT. FIRST NUMBER INDICATES MAXIMUM MULTIPLE OF A DETECTED VOC OVER REGULATORY LIMIT (e.g., 130 INDICATES 130 x LIMIT). LETTER INDICATES COMPOUND WITH INDICATED EXCEEDANCE RATIO (e.g., P = TETRACHLOROETHENE). NUMBERS IN PARENTHESES INDICATE OTHER EXCEEDANCE RATIOS FOR SELECT COMPOUNDS AND WELLS. COMPOUNDS DETECTED IN BLANK(S) ARE NOT INCLUDED IN THIS EVALUATION.
- * NO DETECTIONS ABOVE INTERIM CLEANUP LEVELS (ICLs) AT THIS LOCATION.

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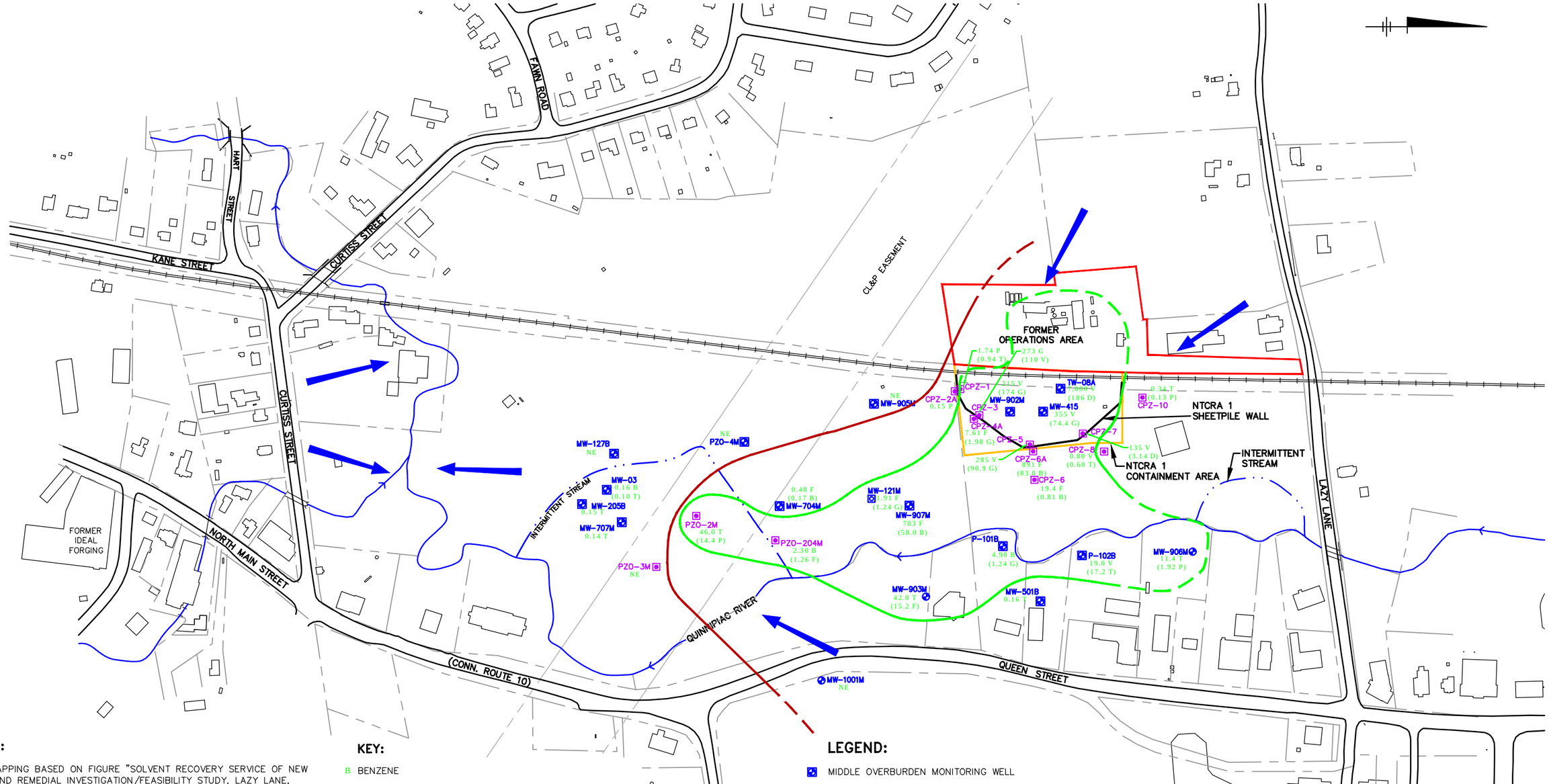
MONITORED NATURAL ATTENUATION REPORT

VOC EXCEEDANCE PLUME SHALLOW OVERBURDEN

ARCADIS

FIGURE 7



NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6–28–93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. POSTED DATA ARE THE LATEST SAMPLING RESULTS AT EACH WELL, AS OF JUNE 2013. NOT ALL WELLS WERE SAMPLED IN JUNE 2013.

KEY:

- B BENZENE
- D CIS–1,2–DICHLOROETHENE
- F TETRAHYDROFURAN
- G CHLOROETHANE
- P TETRACHLOROETHENE
- T TRICHLOROETHENE
- V VINYL CHLORIDE
- NE EXCEEDANCE RATIO LESS THAN 0.10

LEGEND:

- MIDDLE OVERBURDEN MONITORING WELL
- PIEZOMETER
- ESTIMATED EXTENT OF GROUNDWATER VOC EXCEEDANCES OF MCLs OR CT DEEP CLASS GA GWPCs (2010–2013 SAMPLING RESULTS) (DASHED WHERE INFERRED)
- ESTIMATED NTCRA 2 CAPTURE ZONE BOUNDARY
- GENERALIZED GROUNDWATER FLOW DIRECTION

MW-903M 42.0 T (15.2 F) — WELL WITH REGULATORY EXCEEDANCE RATIO. NUMBERS >1.0 INDICATE GROUNDWATER REGULATORY LIMIT EXCEEDED. NUMBERS <1.0 INDICATE EXCEEDANCE RATIO FOR COMPOUNDS DETECTED BELOW REGULATORY LIMIT. FIRST NUMBER INDICATES MAXIMUM MULTIPLE OF A DETECTED VOC OVER REGULATORY LIMIT (e.g., 130 INDICATES 130 x LIMIT). LETTER INDICATES COMPOUND WITH INDICATED EXCEEDANCE RATIO (e.g., P = TETRACHLOROETHENE). NUMBERS IN PARENTHESES INDICATE OTHER EXCEEDANCE RATIOS FOR SELECT COMPOUNDS AND WELLS. COMPOUNDS DETECTED IN BLANK(S) ARE NOT INCLUDED IN THIS EVALUATION.

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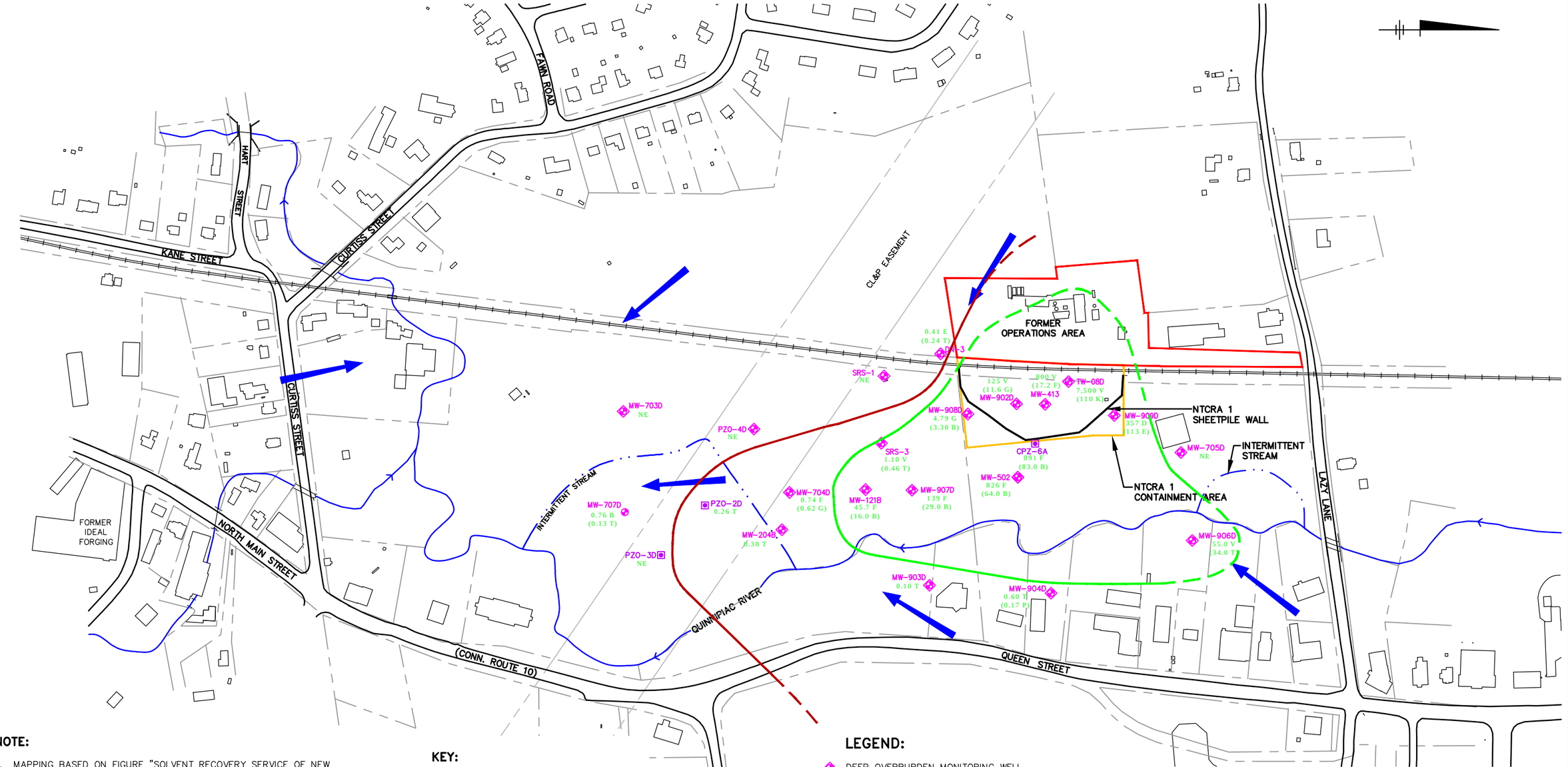
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

VOC EXCEEDANCE PLUME MIDDLE OVERBURDEN

ARCADIS

FIGURE **8**



NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. POSTED DATA ARE THE LATEST SAMPLING RESULTS AT EACH WELL, AS OF JUNE 2013. NOT ALL WELLS WERE SAMPLED IN JUNE 2013.

KEY:

- B BENZENE
- D CIS-1,2-DICHLOROETHENE
- E 1,1-DICHLOROETHENE
- F TETRAHYDROFURAN
- G CHLOROETHANE
- K 1,2-DICHLOROETHANE
- P TETRACHLOROETHENE
- T TRICHLOROETHENE
- V VINYL CHLORIDE
- NE EXCEEDANCE RATIO LESS THAN 0.10

LEGEND:

- DEEP OVERBURDEN MONITORING WELL
- PIEZOMETER
- ESTIMATED EXTENT OF GROUNDWATER VOC EXCEEDANCES OF MCLs OR CT DEEP CLASS GA GWPCs (2010-2013 SAMPLING RESULTS) (DASHED WHERE INFERRED)
- ESTIMATED NTCRA 2 CAPTURE ZONE BOUNDARY
- GENERALIZED GROUNDWATER FLOW DIRECTION
- MW-502 826 F (64.0 B) WELL WITH REGULATORY EXCEEDANCE RATIO. NUMBERS >1.0 INDICATE GROUNDWATER REGULATORY LIMIT EXCEEDED. NUMBERS <1.0 INDICATE EXCEEDANCE RATIO FOR COMPOUNDS DETECTED BELOW REGULATORY LIMIT. FIRST NUMBER INDICATES MAXIMUM MULTIPLE OF A DETECTED VOC OVER REGULATORY LIMIT (e.g., 130 INDICATES 130 x LIMIT). LETTER INDICATES COMPOUND WITH INDICATED EXCEEDANCE RATIO (e.g., P = TETRACHLOROETHENE). NUMBERS IN PARENTHESES INDICATE OTHER EXCEEDANCE RATIOS FOR SELECT COMPOUNDS AND WELLS. COMPOUNDS DETECTED IN BLANK(S) ARE NOT INCLUDED IN THIS EVALUATION.

0 300' 600'

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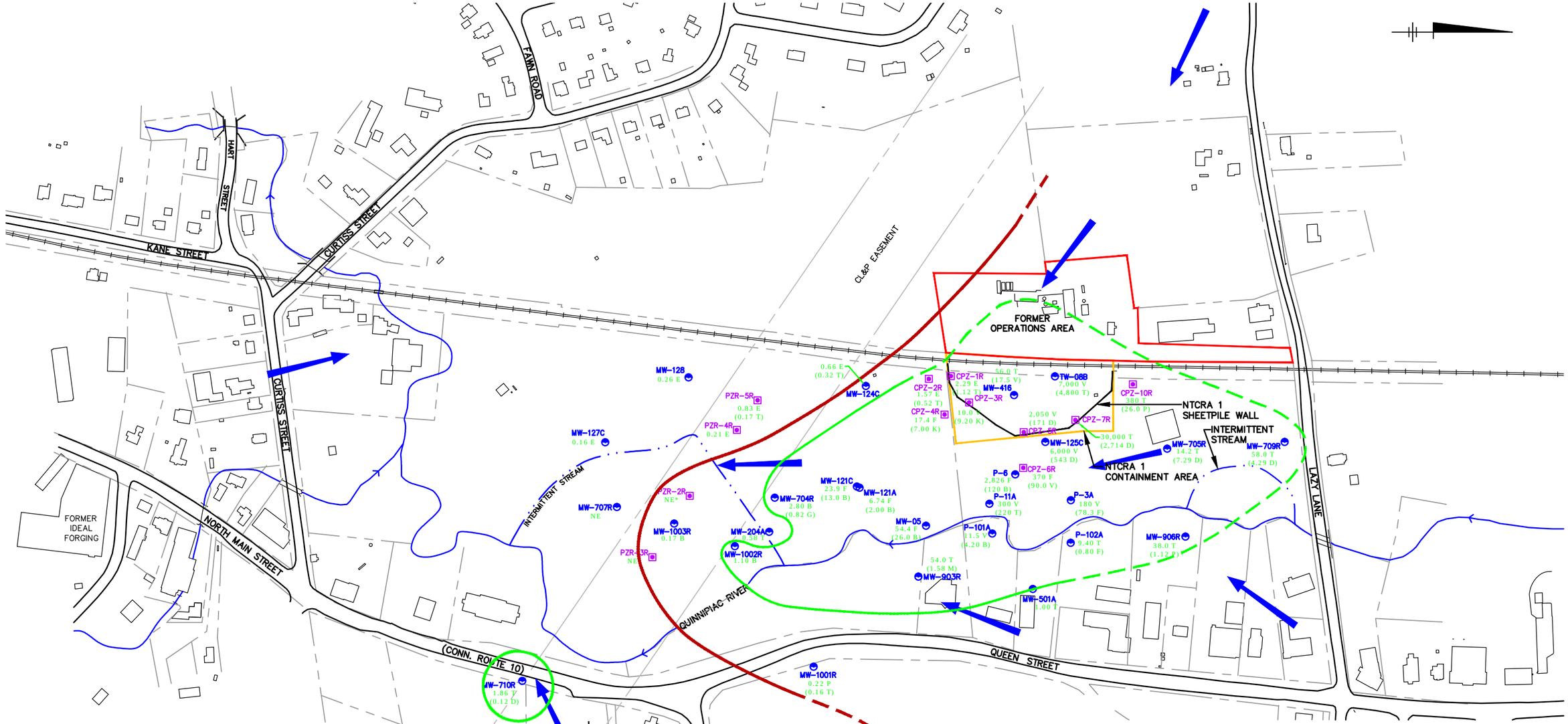
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

VOC EXCEEDANCE PLUME DEEP OVERBURDEN

ARCADIS

FIGURE 9



NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. POSTED DATA ARE THE LATEST SAMPLING RESULTS AT EACH WELL, AS OF JUNE 2013. NOT ALL WELLS WERE SAMPLED IN JUNE 2013.

KEY:

- B BENZENE
- D CIS-1,2-DICHLOROETHENE
- E 1,1-DICHLOROETHENE
- F TETRAHYDROFURAN
- G CHLOROETHANE
- K 1,2-DICHLOROETHANE
- M METHYLENE CHLORIDE
- P TETRACHLOROETHENE
- T TRICHLOROETHENE
- V VINYL CHLORIDE
- NE EXCEEDANCE RATIO LESS THAN 0.10

LEGEND:

- SHALLOW BEDROCK MONITORING WELL
- PIEZOMETER
- ESTIMATED EXTENT OF GROUNDWATER VOC EXCEEDANCES OF MCLs OR CT DEEP CLASS GA GWPCs (2010-2013 SAMPLING RESULTS) (DASHED WHERE INFERRED)
- ESTIMATED NTCRA 2 CAPTURE ZONE BOUNDARY
- GENERALIZED GROUNDWATER FLOW DIRECTION
- P-11A 300 V (220 T) WELL WITH REGULATORY EXCEEDANCE RATIO. NUMBERS >1.0 INDICATE GROUNDWATER REGULATORY LIMIT EXCEEDED. NUMBERS <1.0 INDICATE EXCEEDANCE RATIO FOR COMPOUNDS DETECTED BELOW REGULATORY LIMIT. FIRST NUMBER INDICATES MAXIMUM MULTIPLE OF A DETECTED VOC OVER REGULATORY LIMIT (e.g., 130 INDICATES 130 x LIMIT). LETTER INDICATES COMPOUND WITH INDICATED EXCEEDANCE RATIO (e.g., P = TETRACHLOROETHENE). NUMBERS IN PARENTHESES INDICATE OTHER EXCEEDANCE RATIOS FOR SELECT COMPOUNDS AND WELLS. COMPOUNDS DETECTED IN BLANK(S) ARE NOT INCLUDED IN THIS EVALUATION.
- * NO DETECTIONS ABOVE INTERIM CLEANUP LEVELS (ICLs) AT THIS LOCATION.

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0 300' 600'

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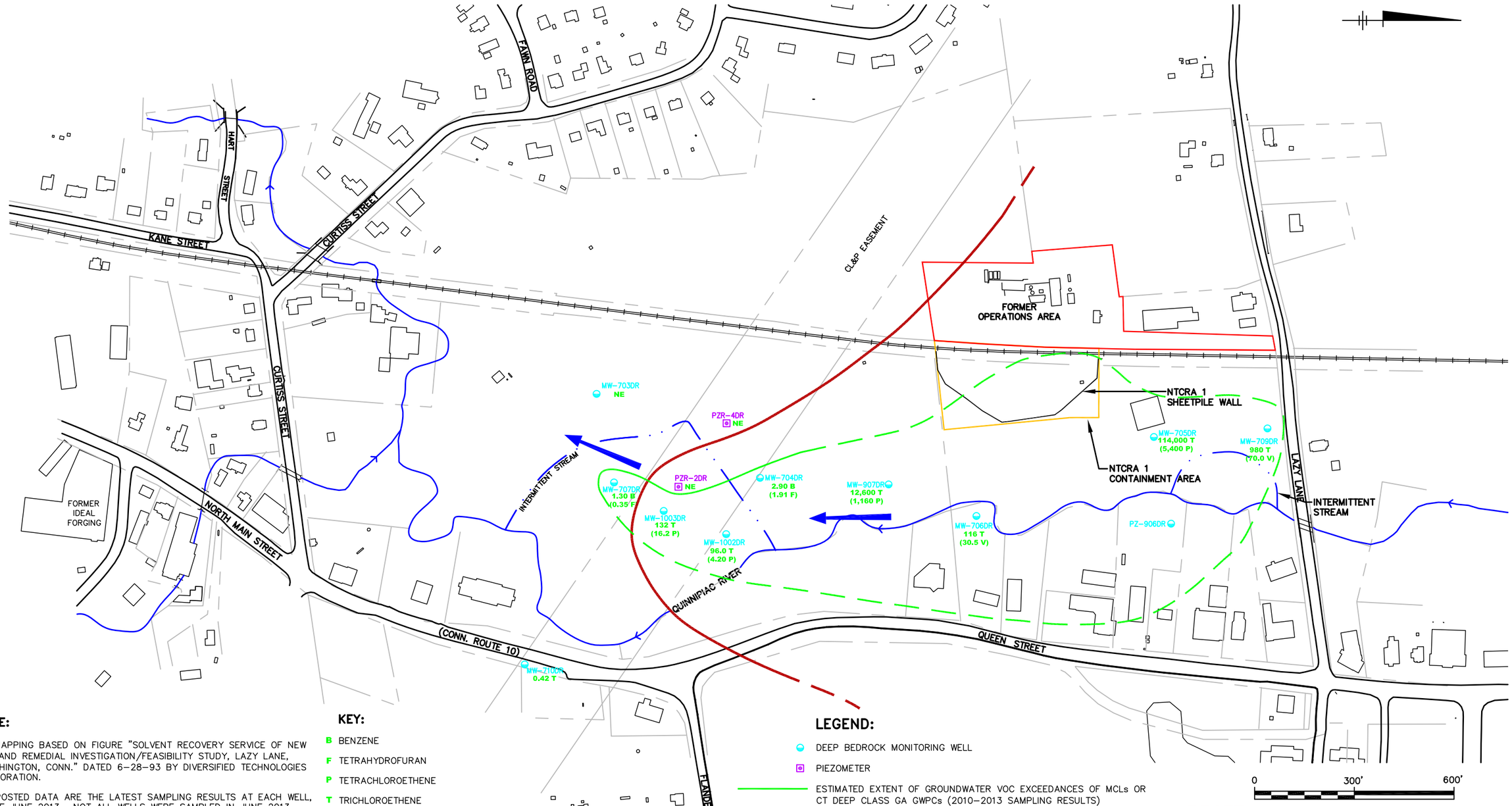
SOUTHINGTON, CONNECTICUT
MONITORED NATURAL ATTENUATION REPORT

VOC EXCEEDANCE PLUME SHALLOW BEDROCK

ARCADIS

FIGURE 10



NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.

2. POSTED DATA ARE THE LATEST SAMPLING RESULTS AT EACH WELL, AS OF JUNE 2013. NOT ALL WELLS WERE SAMPLED IN JUNE 2013.

KEY:

- **B** BENZENE
- **F** TETRAHYDROFURAN
- **P** TETRACHLOROETHENE
- **T** TRICHLOROETHENE
- **V** VINYL CHLORIDE
- **NE** EXCEEDANCE RATIO LESS THAN 0.10

LEGEND:

- DEEP BEDROCK MONITORING WELL
- PIEZOMETER
- ESTIMATED EXTENT OF GROUNDWATER VOC EXCEEDANCES OF MCLs OR CT DEEP CLASS GA GWPCs (2010-2013 SAMPLING RESULTS) (DASHED WHERE INFERRED)
- ESTIMATED NTCRA 2 CAPTURE ZONE BOUNDARY
- GENERALIZED GROUNDWATER FLOW DIRECTION
- MW-907DR 12,600 T (1,160 P) — WELL WITH REGULATORY EXCEEDANCE RATIO. NUMBERS >1.0 INDICATE GROUNDWATER REGULATORY LIMIT EXCEEDED. NUMBERS <1.0 INDICATE EXCEEDANCE RATIO FOR COMPOUNDS DETECTED BELOW REGULATORY LIMIT. FIRST NUMBER INDICATES MAXIMUM MULTIPLE OF A DETECTED VOC OVER REGULATORY LIMIT (e.g., 130 INDICATES 130 x LIMIT). LETTER INDICATES COMPOUND WITH INDICATED EXCEEDANCE RATIO (e.g., P = TETRACHLOROETHENE). NUMBERS IN PARENTHESES INDICATE OTHER EXCEEDANCE RATIOS FOR SELECT COMPOUNDS AND WELLS. COMPOUNDS DETECTED IN BLANK(S) ARE NOT INCLUDED IN THIS EVALUATION.

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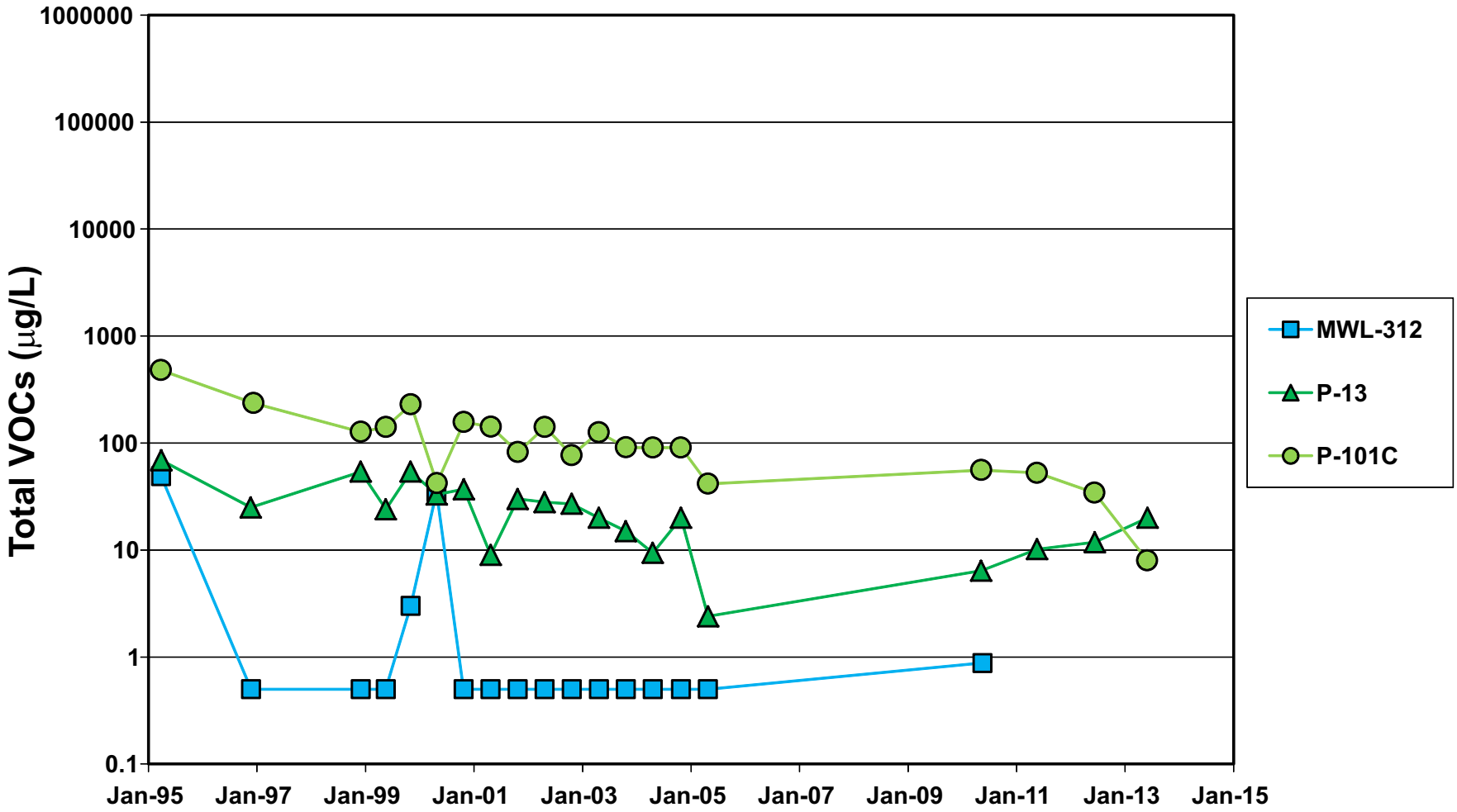
MONITORED NATURAL ATTENUATION REPORT

VOC EXCEEDANCE PLUME DEEP BEDROCK

ARCADIS

FIGURE **11**

CITY: SYRACUSE, NY DIV/GROUP: ENV/IM-DV DB: P. LISTER PM: J. HOLDEN TM/TR: R. STEVENSON LYR: ON=*;OFF=REF; (FRZ)
G:\ENVCAD\Manchester\ACTIB\0054634\0000\002200\MNA 2013\546340C06.DWG LAYOUT: 11 SAVED: 9/9/2013 11:21 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---
XREFS: IMAGES: PROJECTNAME: ---
54634X01



SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT

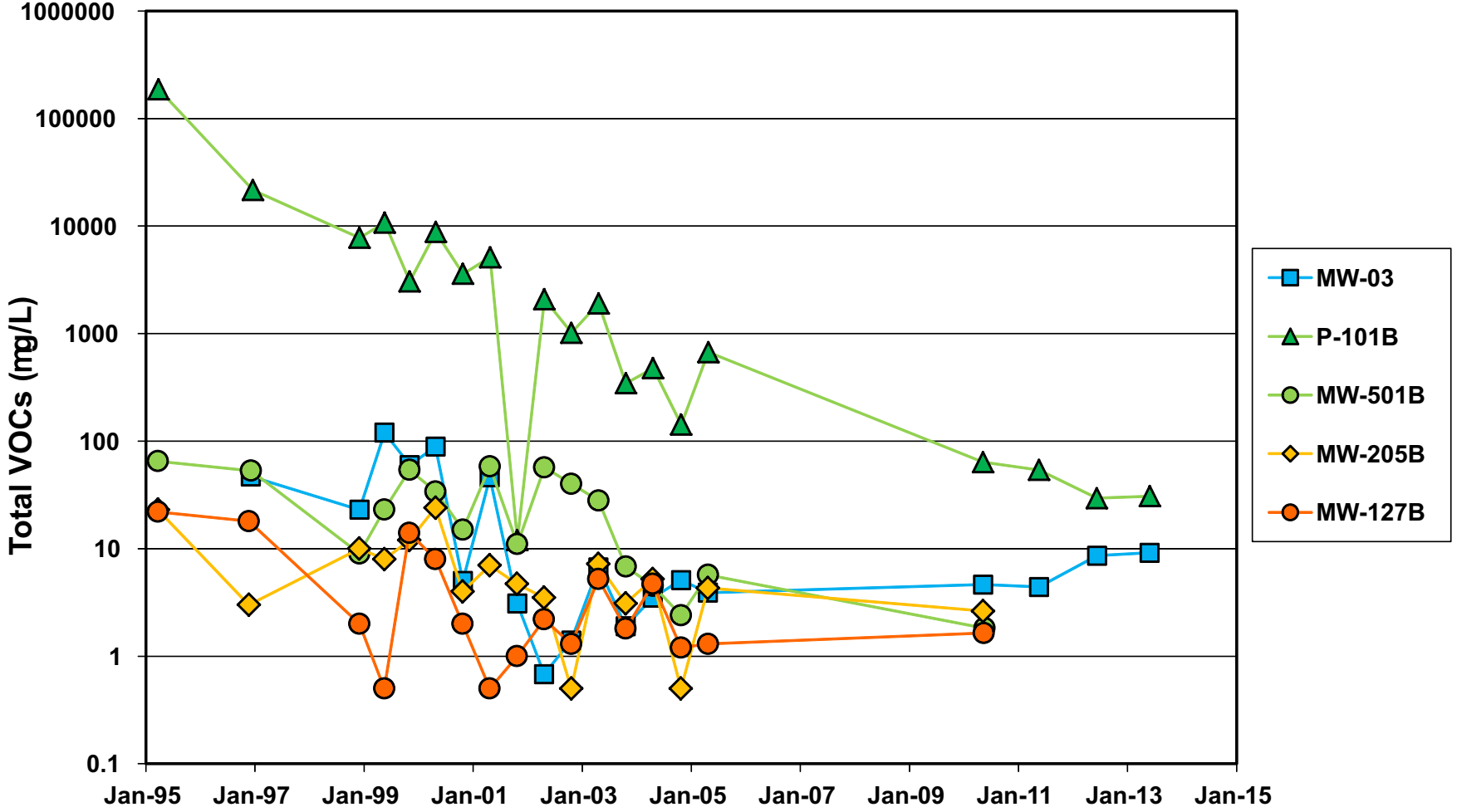
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER TOTAL VOC CONCENTRATIONS WITH TIME SHALLOW OVERBURDEN

ARCADIS

FIGURE
12

Middle Overburden Wells



SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT

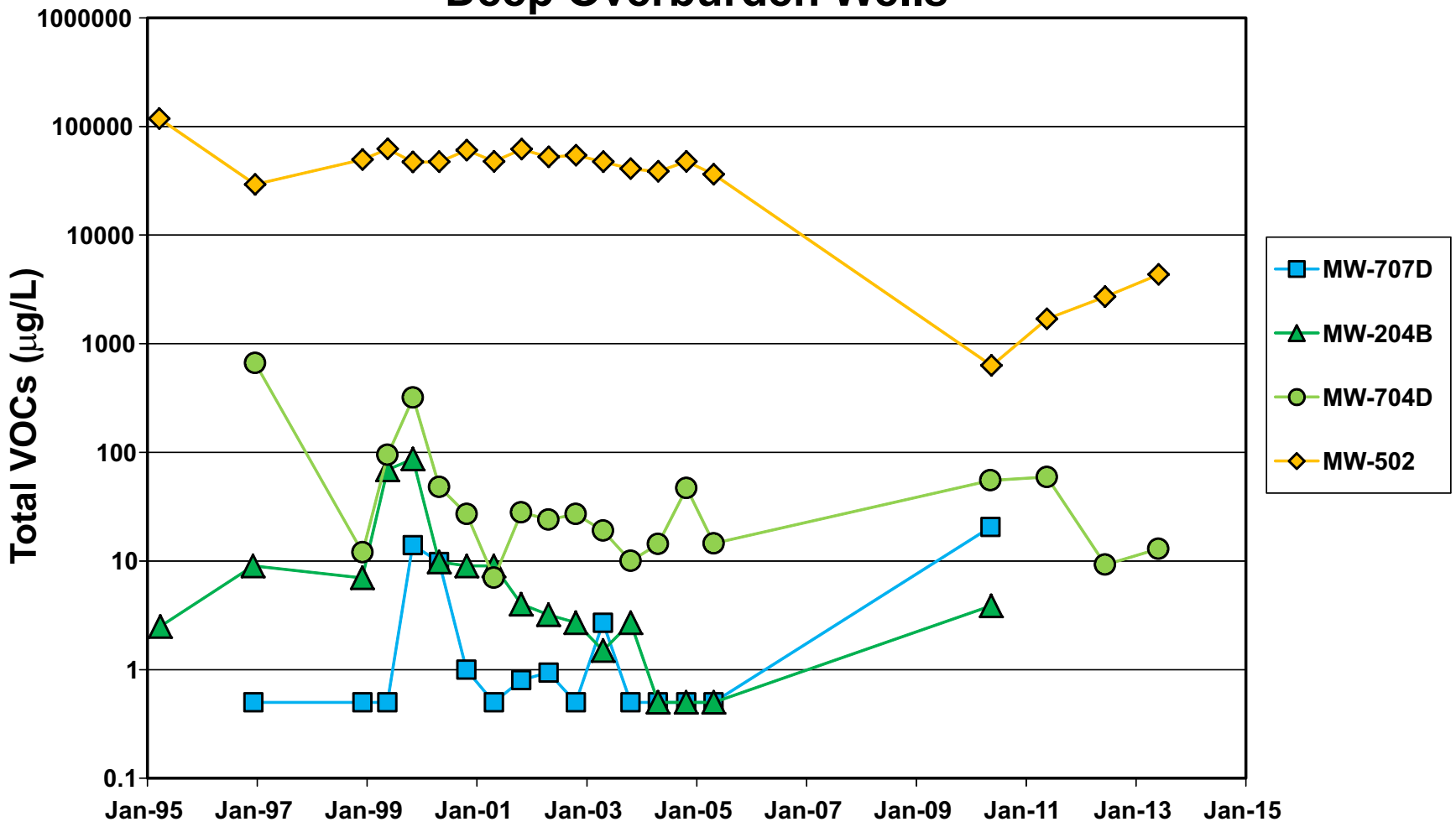
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER TOTAL VOC CONCENTRATIONS WITH TIME MIDDLE OVERBURDEN

ARCADIS

FIGURE
13

Deep Overburden Wells



SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT

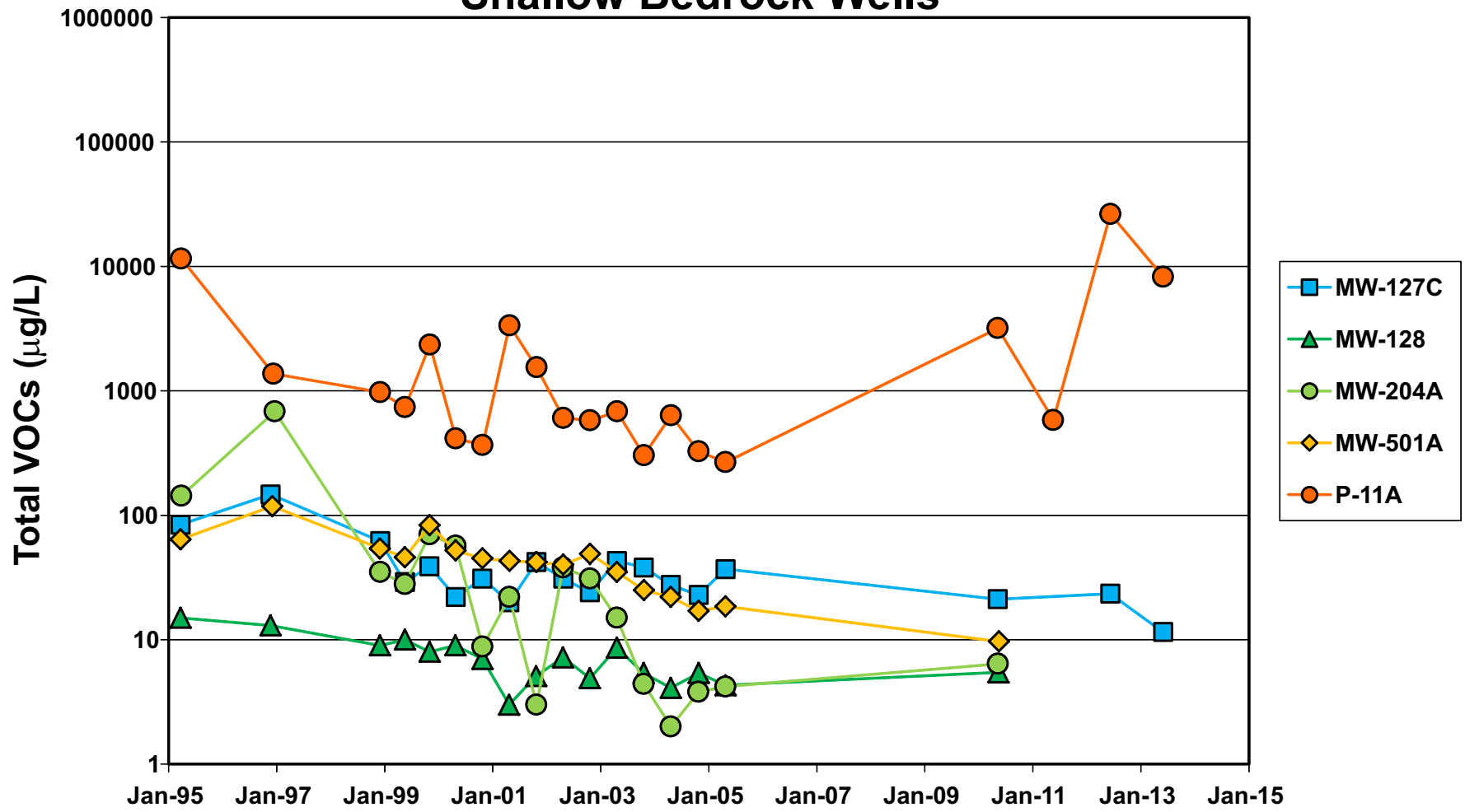
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER TOTAL VOC CONCENTRATIONS WITH TIME DEEP OVERBURDEN

ARCADIS

FIGURE
14

Shallow Bedrock Wells



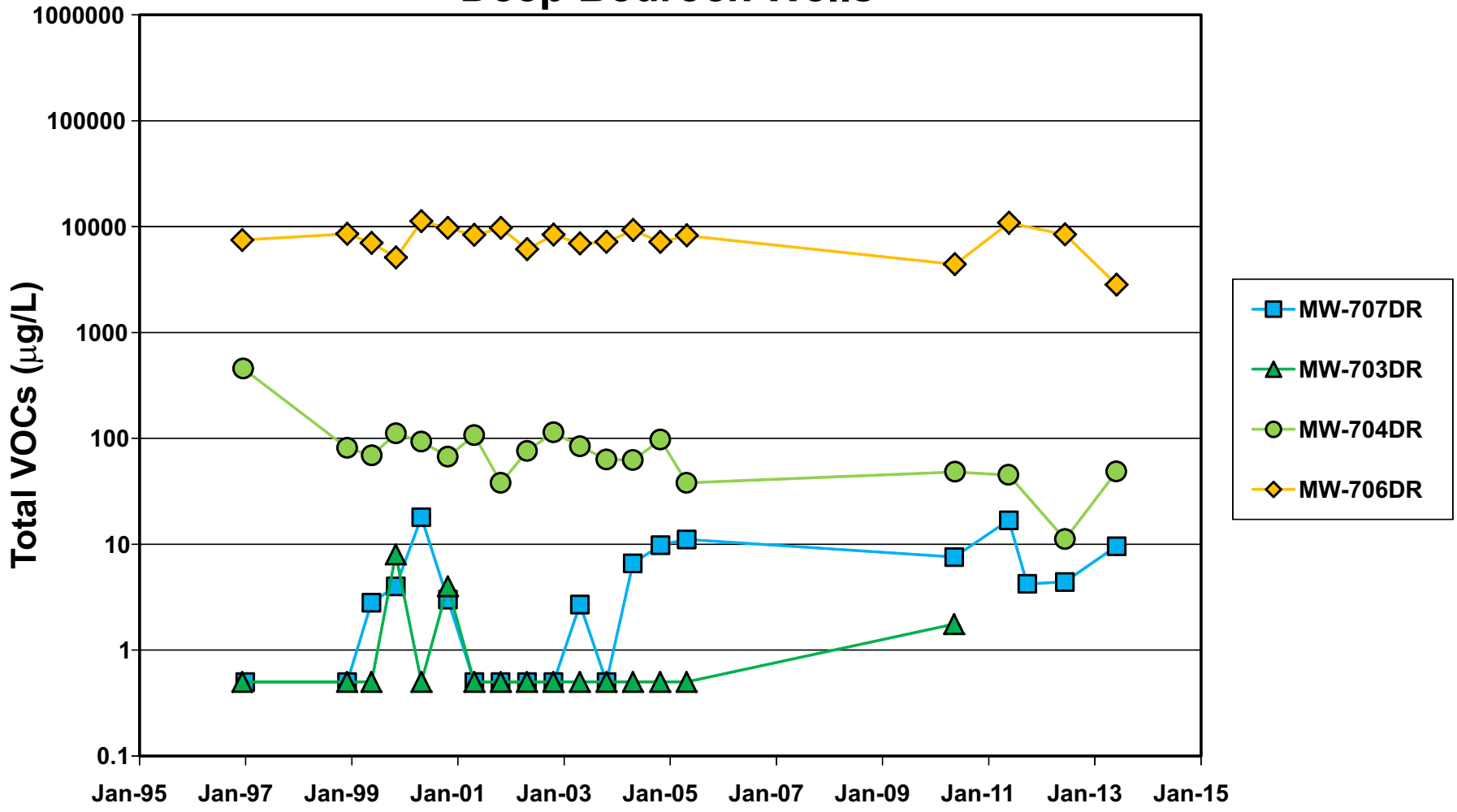
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT

MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER TOTAL VOC CONCENTRATIONS WITH TIME SHALLOW BEDROCK

ARCADIS

FIGURE
15



SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT

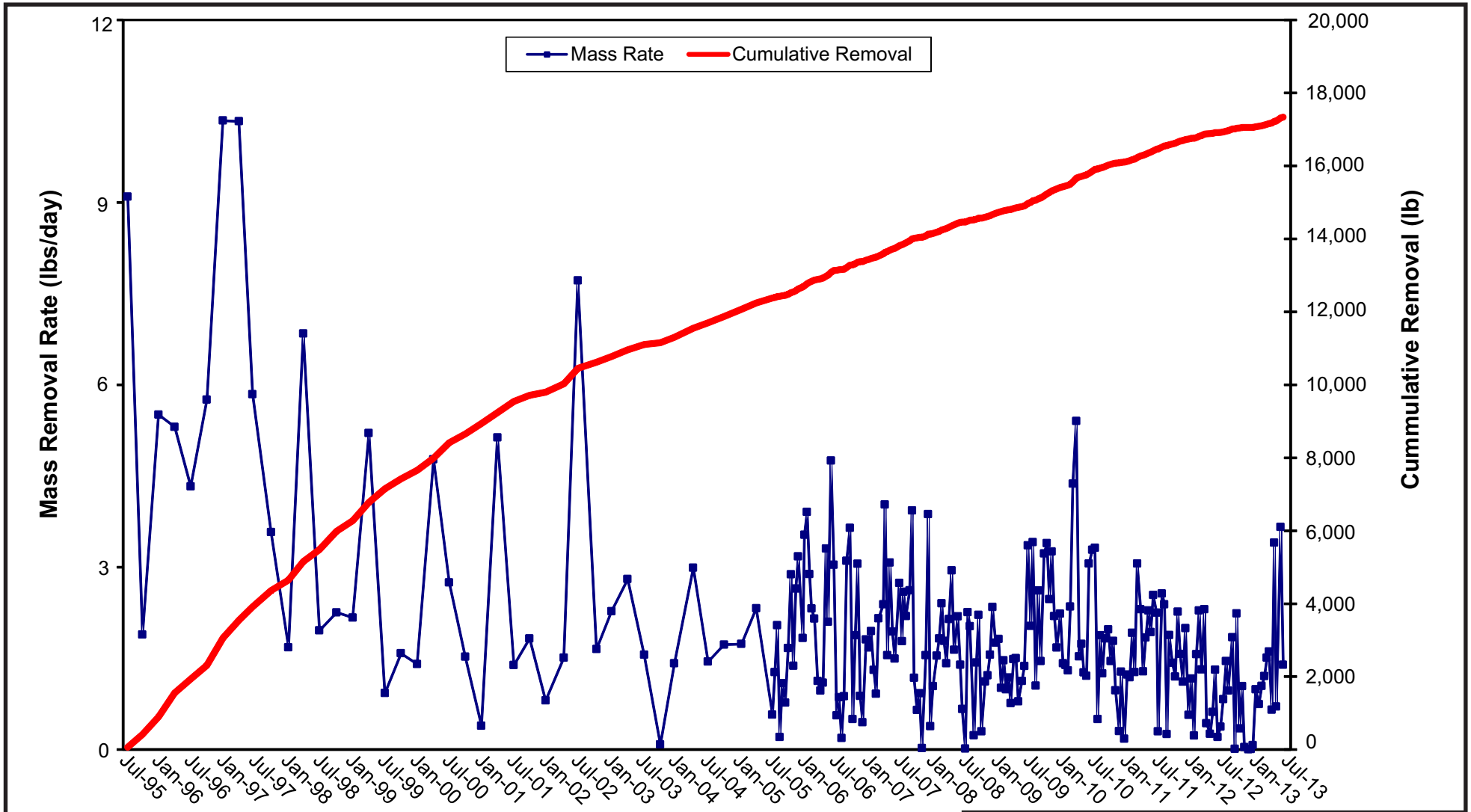
MONITORED NATURAL ATTENUATION REPORT

GROUNDWATER TOTAL VOC CONCENTRATIONS WITH TIME DEEP BEDROCK

ARCADIS

FIGURE
16

07/26/2013 SYRACUSE, NY-ENV/CAD-K.SARTORI
B0054634/0000/02200/CDR/54634G06.CDR



SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT

MONITORED NATURAL ATTENUATION REPORT

TOTAL MASS OF VOCs REMOVED BY NTCRA 1 AND NTCRA 2 GROUNDWATER EXTRACTION WELLS

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FIGURE
17

ARCADIS

Appendices

ARCADIS

Appendix A

Field Sampling Forms

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	CPZ-4A
Sample ID:	CPZ-4A-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 1:38:25 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	159.44 ft amsl
Total Depth as Constructed:	26.7 ft bmp	Screened Interval:	11.51 to 25.51 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 12:05:00 PM	Weather Conditions:	Cloudy, Hot, Humid
Depth to groundwater at deployment:	10.15 ft bmp	Total well depth at deployment:	26.05 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 1:30:06 PM	Total # of days deployed:	354.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	N/A
PID:	1.6 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	18.44 C	ORP:	-84 mV	SCond:	0.292 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	6.45 SU	DO:	18.21 mg/L	Turb:	28.2 NTU	Serial #:	01K0643	018829

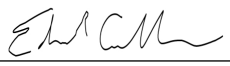
Collected Sample Condition **Color:** light reddish-brown **Odor:** Yes **Appearance:** turbid

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-1002DR
Sample ID:	MW-1002DR-HS-06042013	Duplicate ID:	DUP-GW-06042013-#2
Sample Date:	6/4/2013 11:20:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	_____Stick-up__X__Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	153.91 ft amsl
Total Depth as Constructed:	199.5 ft bmp	Screened Interval:	170.2 to 185.2 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/3/2013 11:00:00 AM	Weather Conditions:	N/A
Depth to groundwater at deployment:	N/A	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	N/A		

Retrieval

Date/Time of Retrieval:	6/4/2013 11:20:00 AM	Total # of days deployed:	1.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	56.98 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	14.20 C	ORP:	33.9 mV	SCond:	0.056 mS/cm	Water quality meters:	YSI	YSI
pH:	8.97 SU	DO:	2.18 mg/L	Turb:	70.5 NTU	Serial #:	06G2302 AE	01F0657 AC

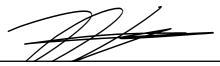
Collected Sample Condition **Color:** brown **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	6	HCL

Remarks:	TETHER AND WEIGHT PULLED

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
F	degrees Fahrenheit									ppm	parts per million
										PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-1002R
Sample ID:	MW-1002R-HS-06062013	Duplicate ID:	N/A
Sample Date:	6/6/2013 9:20:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	152.37 ft amsl
Total Depth as Constructed:	127.17 ft bmp	Screened Interval:	107.17 to 122.17 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/4/2013 11:55:00 AM	Weather Conditions:	Sunny 71 F
Depth to groundwater at deployment:	7.23 ft bmp	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	112 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/6/2013 9:18:35 AM	Total # of days deployed:	1.9
Weather Conditions:	N/A	Depth to groundwater at retrieval:	N/A
PID:	0.02 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	13.89 C	ORP:	67.2 mV	SCond:	0.054 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	5.96 SU	DO:	23.32 mg/L	Turb:	16 NTU	Serial #:	01F0657	N/A

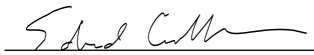
Collected Sample Condition **Color:** clear **Odor:** No **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
F	degrees Fahrenheit									ppm	parts per million
										PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-1003DR
Sample ID:	MW-1003DR-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 3:15:06 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.77 ft amsl
Total Depth as Constructed:	195.02 ft bmp	Screened Interval:	179.62 to 194.62 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/4/2013 10:15:00 AM	Weather Conditions:	Sunny 69 F
Depth to groundwater at deployment:	13.46 ft bmp	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	185 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 3:15:16 PM	Total # of days deployed:	1.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	16.22 ft bmp
PID:	N/A	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	15.14 C	ORP:	47.2 mV	SCond:	3.238 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	10.45 SU	DO:	7.83 mg/L	Turb:	76 NTU	Serial #:	N/A	N/A

Collected Sample Condition **Color:** N/A **Odor:** N/A **Appearance:** N/A

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	mg/L	milligrams per liter	MW	monitoring well	ppm	parts per million	SU	standard units
C	degrees Celsius	HCL	hydrochloric acid	mS/cm	millisiemens per centimeter	N/A	not available	PVC	polyvinyl chloride	TOC	top of casing
F	degrees Fahrenheit	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SCH 80	polyvinyl chloride schedule 80		
ft amsl	ft above mean sea level										

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-1003DR
Sample ID:	MW-1003DR-HS-06192013	Duplicate ID:	N/A
Sample Date:	6/19/2013 12:45:00 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.77 ft amsl
Total Depth as Constructed:	195.02 ft bmp	Screened Interval:	179.62 to 194.62 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/15/2013 12:35:00 PM	Weather Conditions:	Sunny 80 F
Depth to groundwater at deployment:	12.45 ft bmp	Total well depth at deployment:	194.57 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	189 ft bmp
PID:	N/A		

Retrieval

Date/Time of Retrieval:	6/19/2013 12:45:00 PM	Total # of days deployed:	4.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	11.94 ft bmp
PID:	N/A	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	14.06 C	ORP:	53.3 mV	SCond:	0.036 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	11.74 SU	DO:	24.97 mg/L	Turb:	28.7 NTU	Serial #:	10439	11734

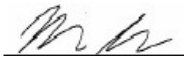
Collected Sample Condition **Color:** N/A **Odor:** N/A **Appearance:** N/A

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Michael Skowronek

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
F	degrees Fahrenheit									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-1003R
Sample ID:	MW-1003R-HS-06062013	Duplicate ID:	N/A
Sample Date:	6/6/2013 8:45:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	155.23 ft amsl
Total Depth as Constructed:	120.87 ft bmp	Screened Interval:	105.47 to 120.47 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/4/2013 10:45:00 AM	Weather Conditions:	Sunny 69 F
Depth to groundwater at deployment:	8.41 ft bmp	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	110 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/6/2013 8:40:19 AM	Total # of days deployed:	1.9
Weather Conditions:	N/A	Depth to groundwater at retrieval:	N/A
PID:	3.2 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	14.73 C	ORP:	414.7 mV	SCond:	54 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	3 SU	DO:	25.76 mg/L	Turb:	9 NTU	Serial #:	01F0657	N/A

Collected Sample Condition **Color:** green **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature:

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well
F	degrees Fahrenheit								

N/A	not available
NTU	nephelometric turbidity units
ppm	parts per million
PVC	polyvinyl chloride
SU	standard units
TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-121B
Sample ID:	MW-121B-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 1:39:25 PM	Other QC:	MS/MSD
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	152.91 ft amsl
Total Depth as Constructed:	54.1 ft bmp	Screened Interval:	44.04 to 54.04 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 9:39:00 AM	Weather Conditions:	Sunny
Depth to groundwater at deployment:	5.69 ft bmp	Total well depth at deployment:	53.8 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 1:38:39 PM	Total # of days deployed:	354.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	5.98 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	10.90 C	ORP:	-117.9 mV	SCond:	0.019 mS/cm	Water quality meters:	YSI	YSI
pH:	7.30 SU	DO:	0.78 mg/L	Turb:	24.0 NTU	Serial #:	06G2302AE	01F0657

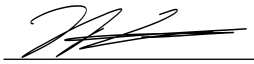
Collected Sample Condition **Color:** clear **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	9	HCL

Remarks:	MS/MSD

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-121C
Sample ID:	MW-121C-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 11:39:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	152.93 ft amsl
Total Depth as Constructed:	70.7 ft bmp	Screened Interval:	60.65 to 70.65 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 8:56:00 AM	Weather Conditions:	Sunny
Depth to groundwater at deployment:	5.68 ft bmp	Total well depth at deployment:	70.04 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 11:39:55 AM	Total # of days deployed:	354.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	5.98 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	10.48 C	ORP:	-70.3 mV	SCond:	0.017 mS/cm	Water quality meters:	YSI	YSI
pH:	7.13 SU	DO:	0.98 mg/L	Turb:	5.72 NTU	Serial #:	06G2302 AE	01F0657 AC

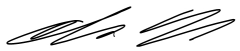
Collected Sample Condition **Color:** clear **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
F	degrees Fahrenheit									ppm	parts per million
										PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-121M
Sample ID:	MW-121M-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 2:00:00 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	153.83 ft amsl
Total Depth as Constructed:	33.82 ft bmp	Screened Interval:	23.82 to 33.82 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/13/2012 8:50:00 AM	Weather Conditions:	Raining
Depth to groundwater at deployment:	6.71 ft bmp	Total well depth at deployment:	30.70 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	.6 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 2:00:00 PM	Total # of days deployed:	355.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	6.26 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	10.53 C	ORP:	-97.2 mV	SCond:	0.011 mS/cm	Water quality meters:	YSI	YSI
pH:	7.08 SU	DO:	0.85 mg/L	Turb:	42.0 NTU	Serial #:	06G2302 AE	01F0657 AC

Collected Sample Condition **Color:** light reddish-brown **Odor:** Yes **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-124C
Sample ID:	MW-124C-HS-06042013	Duplicate ID:	N/A
Sample Date:	6/4/2013 3:00:00 PM	Other QC:	MS/MSD
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	158 ft amsl
Total Depth as Constructed:	48.4 ft bmp	Screened Interval:	37.73 to 47.73 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/12/2012 3:15:00 PM	Weather Conditions:	Cloudy, Raining
Depth to groundwater at deployment:	6.99 ft bmp	Total well depth at deployment:	47.51 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/4/2013 3:00:00 PM	Total # of days deployed:	357.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	6.5 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	16.91 C	ORP:	2.5 mV	SCond:	0.012 mS/cm	Water quality meters:	YSI	YSI
pH:	7.32 SU	DO:	6.67 mg/L	Turb:	24.8 NTU	Serial #:	06G2302 AE	01F0657 AC

Collected Sample Condition **Color:** light reddish-brown **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	9	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-413
Sample ID:	MW-413-HS-06062013	Duplicate ID:	N/A
Sample Date:	6/6/2013 12:15:28 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	160.49 ft amsl
Total Depth as Constructed:	22.5 ft bmp	Screened Interval:	17.25 to 22.25 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/5/2013 11:10:00 AM	Weather Conditions:	Sunny 75 F
Depth to groundwater at deployment:	7.09 ft bmp	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	17 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/6/2013 12:15:14 PM	Total # of days deployed:	1.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.08 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	18.03 C	ORP:	-74.6 mV	SCond:	0.012 mS/cm	Water quality meters:	YSI	YSI
pH:	6.29 SU	DO:	2.67 mg/L	Turb:	13.6 NTU	Serial #:	06G2302AE	01F0657AC

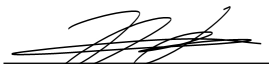
Collected Sample Condition **Color:** clear **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	2	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks:	DTW 7.08

Sampling Personnel: Matthew Pingitor/Vincent Whisker

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene
C	degrees Celsius	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
CG	clear glass	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride
F	degrees Fahrenheit									SU	standard units
										TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-415
Sample ID:	MW-415-HS-06062013	Duplicate ID:	N/A
Sample Date:	6/6/2013 12:40:40 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	160.75 ft amsl
Total Depth as Constructed:	14.5 ft bmp	Screened Interval:	9.34 to 14.34 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/5/2013 11:20:00 AM	Weather Conditions:	Sunny 75 F
Depth to groundwater at deployment:	7.20 ft bmp	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	8 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/6/2013 12:40:23 PM	Total # of days deployed:	1.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.28 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	15.80 C	ORP:	-9.9 mV	SCond:	0.009 mS/cm	Water quality meters:	YSI	YSI
pH:	5.96 SU	DO:	3.89 mg/L	Turb:	18.2 NTU	Serial #:	06G2302AE	01F0657AC

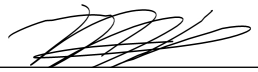
Collected Sample Condition **Color:** clear **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	2	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks:	DTW 7.28

Sampling Personnel: Matthew Pingitor/Vincent Whisker

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene
C	degrees Celsius	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
CG	clear glass	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride
F	degrees Fahrenheit									SU	standard units
										TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-416
Sample ID:	MW-416-HS-06062013	Duplicate ID:	N/A
Sample Date:	6/6/2013 9:30:34 AM	Other QC:	MS/MSD
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	159.98 ft amsl
Total Depth as Constructed:	52 ft bmp	Screened Interval:	32 to 52 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/4/2013 2:20:00 PM	Weather Conditions:	Sunny 75 F
Depth to groundwater at deployment:	9.85 ft bmp	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	39 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/6/2013 9:30:09 AM	Total # of days deployed:	1.8
Weather Conditions:	N/A	Depth to groundwater at retrieval:	9.83 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	16.91 C	ORP:	43.1 mV	SCond:	0.014 mS/cm	Water quality meters:	YSI	YSI
pH:	7.27 SU	DO:	2.59 mg/L	Turb:	9.86 NTU	Serial #:	06G2302AE	01F0567AC

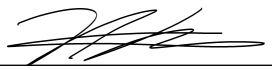
Collected Sample Condition **Color:** clear **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	2	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	3	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks:	COLLECTED MS/MSD FOR ALKALINITY. DTW 9.83

Sampling Personnel: Matthew Pingitor/Vincent Whisker

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene
C	degrees Celsius	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
CG	clear glass	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride
F	degrees Fahrenheit									SU	standard units
										TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-502
Sample ID:	MW-502-HS-06042013	Duplicate ID:	N/A
Sample Date:	6/4/2013 3:25:44 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	155.84 ft amsl
Total Depth as Constructed:	37.6 ft bmp	Screened Interval:	17.54 to 37.54 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/13/2012 12:03:00 PM	Weather Conditions:	Humid, Cloudy
Depth to groundwater at deployment:	7.30 ft bmp	Total well depth at deployment:	35.55 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	.3 ppm		

Retrieval

Date/Time of Retrieval:	6/4/2013 3:25:36 PM	Total # of days deployed:	356.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.16 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	15.25 C	ORP:	-102.2 mV	SCond:	0.027 mS/cm	Water quality meters:	YSI	YSI
pH:	6.70 SU	DO:	1.79 mg/L	Turb:	4.51 NTU	Serial #:	06G2302 AE	0F10657 AC

Collected Sample Condition **Color:** brown **Odor:** Yes **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-704D
Sample ID:	MW-704D-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 11:55:21 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	150.98 ft amsl
Total Depth as Constructed:	65.6 ft bmp	Screened Interval:	55.41 to 65.41 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 6:50:00 AM	Weather Conditions:	Humid, Windy, Sunny
Depth to groundwater at deployment:	7.09 ft bmp	Total well depth at deployment:	64.00 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 11:50:58 AM	Total # of days deployed:	354.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	N/A
PID:	0.3 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	70 C	ORP:	-25.6 mV	SCond:	0.217 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	6.57 SU	DO:	332.9 mg/L	Turb:	0.74 NTU	Serial #:	01K0643	018829

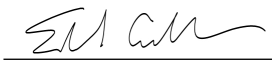
Collected Sample Condition **Color:** clear **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-704DR
Sample ID:	MW-704DR-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 8:49:39 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	152.84 ft amsl
Total Depth as Constructed:	134.5 ft bmp	Screened Interval:	104.27 to 134.27 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 7:14:00 AM	Weather Conditions:	Humid, Windy, Sunny
Depth to groundwater at deployment:	36.72 ft bmp	Total well depth at deployment:	136.51 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	N/A		

Retrieval

Date/Time of Retrieval:	6/3/2013 8:46:20 AM	Total # of days deployed:	354.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	58.4 ft bmp
PID:	N/A	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	10.68 C	ORP:	13.5 mV	SCond:	0.005 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	7.29 SU	DO:	31.69 mg/L	Turb:	17 NTU	Serial #:	01K0643	1356-3711

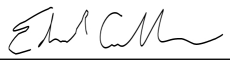
Collected Sample Condition **Color:** brown **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	PVC	polyvinyl chloride
ft amsl	ft above mean sea level									SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-704M
Sample ID:	MW-704M-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 2:00:35 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	152.34 ft amsl
Total Depth as Constructed:	49.1 ft bmp	Screened Interval:	38.66 to 48.66 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/3/2013 11:29:11 AM	Weather Conditions:	Cloudy 68 F
Depth to groundwater at deployment:	7.10 ft bmp	Total well depth at deployment:	47 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	42 ft bmp
PID:	0.2 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 2:00:57 PM	Total # of days deployed:	2.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.25 ft bmp
PID:	N/A	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	15.38 C	ORP:	-53.8 mV	SCond:	.347 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	7.18 SU	DO:	16.26 mg/L	Turb:	11 NTU	Serial #:	N/A	N/A

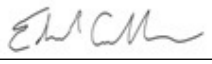
Collected Sample Condition **Color:** clear **Odor:** N/A **Appearance:** N/A

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
F	degrees Fahrenheit									ppm	parts per million
										PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-706DR
Sample ID:	MW-706DR-HS-06042013	Duplicate ID:	N/A
Sample Date:	6/4/2013 9:10:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	149.91 ft amsl
Total Depth as Constructed:	128.6 ft bmp	Screened Interval:	118.23 to 128.23 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 9:45:00 AM	Weather Conditions:	Cloudy, Hot, Humid
Depth to groundwater at deployment:	2.9 ft bmp	Total well depth at deployment:	128.76 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/4/2013 9:10:00 AM	Total # of days deployed:	355.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	1.82 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	13.58 C	ORP:	250.8 mV	SCond:	0.049 mS/cm	Water quality meters:	YSI	YSI
pH:	3.88 SU	DO:	2.71 mg/L	Turb:	8.21 NTU	Serial #:	06G2302 AE	01F0657 AC

Collected Sample Condition **Color:** light reddish-brown **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks: 0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-902D
Sample ID:	MW-902D-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 2:16:30 PM	Other QC:	MS/MSD
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	159.96 ft amsl
Total Depth as Constructed:	27.37 ft bmp	Screened Interval:	21.37 to 26.37 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	SS
Well Screen Outer Diameter:	2 in	Well Screen Material:	SS

Deployment

Date/Time of Deployment:	6/15/2012 12:11:00 PM	Weather Conditions:	Hot, Humid, Sunny
Depth to groundwater at deployment:	8.49 ft bmp	Total well depth at deployment:	21.42 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	10.8 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 2:16:20 PM	Total # of days deployed:	355.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	11.23 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	19.21 C	ORP:	-91.2 mV	SCond:	0.016 mS/cm	Water quality meters:	YSI	YSI
pH:	6.69 SU	DO:	2.65 mg/L	Turb:	20.6 NTU	Serial #:	06G2302AE	01F0657AC

Collected Sample Condition **Color:** brown **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	2	HCL
Dissolved Gases	20 mL AG	6	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks:	DTW 11.23. MS/MS FOR DISSOLVE GAS

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
C	degrees Celsius	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SS	stainless steel
CG	clear glass	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene	SU	standard units
ft amsl	ft above mean sea level									TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-902M
Sample ID:	MW-902M-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 1:50:00 PM	Other QC:	MS/MSD
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	160.39 ft amsl
Total Depth as Constructed:	22 ft bmp	Screened Interval:	15 to 20 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	SS
Well Screen Outer Diameter:	2 in	Well Screen Material:	SS

Deployment

Date/Time of Deployment:	6/15/2012 11:20:00 AM	Weather Conditions:	Hot, Humid, Sunny
Depth to groundwater at deployment:	8.21 ft bmp	Total well depth at deployment:	26.03 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	.2 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 1:53:22 PM	Total # of days deployed:	355.1
Weather Conditions:	N/A	Depth to groundwater at retrieval:	10.59 ft bmp
PID:	N/A	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	20.64 C	ORP:	-80.9 mV	SCond:	0.017 mS/cm	Water quality meters:	YSI	YSI
pH:	6.53 SU	DO:	2.42 mg/L	Turb:	91.2 NTU	Serial #:	06G2302 AE	01F0657 AC

Collected Sample Condition **Color:** light reddish-brown **Odor:** Yes **Appearance:** turbid

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	2	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	3	None
Sulfate (300.0)	100 mL PE	3	None
Nitrate-N (300.0)	100 mL PE	3	None
Nitrite (300.0)	100 mL PE	3	None

Remarks: DTW 10.59 MSMSD ON NITRATE NITRATE CHLORIDE SO4

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature:

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
C	degrees Celsius	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SS	stainless steel
CG	clear glass	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene	SU	standard units
ft amsl	ft above mean sea level									TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-907D
Sample ID:	MW-907D-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 3:00:37 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.75 ft amsl
Total Depth as Constructed:	51.94 ft bmp	Screened Interval:	41.94 to 51.94 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 10:59:00 AM	Weather Conditions:	Sunny
Depth to groundwater at deployment:	7.48 ft bmp	Total well depth at deployment:	52.46 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 3:00:27 PM	Total # of days deployed:	354.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.57 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	9.70 C	ORP:	-183.2 mV	SCond:	0.023 mS/cm	Water quality meters:	YSI	YSI
pH:	7.28 SU	DO:	0.64 mg/L	Turb:	13 NTU	Serial #:	06G2302AE	01F0657

Collected Sample Condition **Color:** clear **Odor:** No **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-907DR
Sample ID:	MW-907DR-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 2:21:34 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.04 ft amsl
Total Depth as Constructed:	177.98 ft bmp	Screened Interval:	162.78 to 177.78 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/15/2012 10:08:00 AM	Weather Conditions:	Hot, Humid, Sunny
Depth to groundwater at deployment:	3.28 ft bmp	Total well depth at deployment:	172.59 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 2:19:42 PM	Total # of days deployed:	353.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	0.05 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	10.55 C	ORP:	-13.6 mV	SCond:	0.086 mS/cm	Water quality meters:	YSI	YSI
pH:	8.47 SU	DO:	0.32 mg/L	Turb:	15.1 NTU	Serial #:	06G2302AE	01F0657

Collected Sample Condition **Color:** clear **Odor:** No **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MW-907M
Sample ID:	MW-907M-HS-06032013	Duplicate ID:	N/A
Sample Date:	6/3/2013 2:48:01 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.47 ft amsl
Total Depth as Constructed:	40.69 ft bmp	Screened Interval:	30.69 to 40.69 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 10:30:00 AM	Weather Conditions:	Sunny
Depth to groundwater at deployment:	8.34 ft bmp	Total well depth at deployment:	26.03 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 2:46:53 PM	Total # of days deployed:	354.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	N/A
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	10.22 C	ORP:	-137.6 mV	SCond:	0.039 mS/cm	Water quality meters:	YSI	YSI
pH:	6.77 SU	DO:	1.13 mg/L	Turb:	47.5 NTU	Serial #:	06G2302AE	01F0657

Collected Sample Condition **Color:** orange **Odor:** Yes **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MWL-304
Sample ID:	MWL-304-HS-06052013	Duplicate ID:	DUP-GW-06052013-#1
Sample Date:	6/5/2013 10:30:07 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	163.12 ft amsl
Total Depth as Constructed:	13.3 ft bmp	Screened Interval:	3.02 to 13.02 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/4/2013 10:00:00 AM	Weather Conditions:	N/A
Depth to groundwater at deployment:	N/A	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	N/A		

Retrieval

Date/Time of Retrieval:	6/5/2013 10:30:55 AM	Total # of days deployed:	1.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	9.37 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	21.65 C	ORP:	-61.2 mV	SCond:	0.011 mS/cm	Water quality meters:	YSI	YSI
pH:	6.59 SU	DO:	2.83 mg/L	Turb:	65.1 NTU	Serial #:	06G2302AE	01F0657AC

Collected Sample Condition **Color:** brown **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL
Dissolved Gases	20 mL AG	4	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	3	H2SO4
Alkalinity (SM2320B)	1 L PE	2	None
Chloride (300.0)	100 mL PE	2	None
Sulfate (300.0)	100 mL PE	2	None
Nitrate-N (300.0)	100 mL PE	2	None
Nitrite (300.0)	100 mL PE	2	None

Remarks:	DTW 9.37

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
C	degrees Celsius	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride
CG	clear glass	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene	SU	standard units
ft amsl	ft above mean sea level									TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MWL-307
Sample ID:	MWL-307-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 2:55:45 PM	Other QC:	MS/MSD
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	159.14 ft amsl
Total Depth as Constructed:	12.6 ft bmp	Screened Interval:	2.51 to 12.51 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/4/2013 2:00:00 PM	Weather Conditions:	Sunny 75 F
Depth to groundwater at deployment:	5.87 ft bmp	Total well depth at deployment:	N/A
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	6 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 2:45:17 PM	Total # of days deployed:	1.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	5.88 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	20.67 C	ORP:	-63.9 mV	SCond:	0.019 mS/cm	Water quality meters:	YSI	YSI
pH:	6.84 SU	DO:	3.66 mg/L	Turb:	10.3 NTU	Serial #:	03G2302AE	0F10657AC

Collected Sample Condition **Color:** clear **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	2	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	6	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks: DTW 5.88. MS/MSD FOR TOC

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene
C	degrees Celsius	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
CG	clear glass	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride
F	degrees Fahrenheit									SU	standard units
										TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	MWL-309
Sample ID:	MWL-309-HS-06062013	Duplicate ID:	N/A
Sample Date:	6/6/2013 9:00:44 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	155.2 ft amsl
Total Depth as Constructed:	13 ft bmp	Screened Interval:	3.51 to 13.51 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/13/2012 12:40:00 PM	Weather Conditions:	Cloudy, Hot, Humid
Depth to groundwater at deployment:	5.10 ft bmp	Total well depth at deployment:	13.11 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/6/2013 9:00:15 AM	Total # of days deployed:	357.8
Weather Conditions:	N/A	Depth to groundwater at retrieval:	4.3 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	14.53 C	ORP:	52.0 mV	SCond:	0.014 mS/cm	Water quality meters:	YSI	YSI
pH:	6.84 SU	DO:	7.54 mg/L	Turb:	113 NTU	Serial #:	06G2302AE	01F0657AC

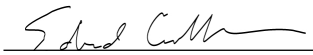
Collected Sample Condition **Color:** brown **Odor:** Yes **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	P-101B
Sample ID:	P-101B-HS-06042013	Duplicate ID:	N/A
Sample Date:	6/4/2013 9:25:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	150.48 ft amsl
Total Depth as Constructed:	46.6 ft bmp	Screened Interval:	35.95 to 45.95 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 9:15:00 AM	Weather Conditions:	Cloudy, Hot, Humid
Depth to groundwater at deployment:	2.30 ft bmp	Total well depth at deployment:	46.65 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/4/2013 9:25:00 AM	Total # of days deployed:	355.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	2.28 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	13.16 C	ORP:	-5.8 mV	SCond:	0.013 mS/cm	Water quality meters:	YSI	YSI
pH:	6.93 SU	DO:	2.18 mg/L	Turb:	11.9 NTU	Serial #:	06G2302 AE	01F0657 AC

Collected Sample Condition **Color:** brown **Odor:** No **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	P-101C
Sample ID:	P-101C-HS-06042013	Duplicate ID:	N/A
Sample Date:	6/4/2013 9:39:13 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	150.61 ft amsl
Total Depth as Constructed:	15.4 ft bmp	Screened Interval:	4.89 to 14.89 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 10:19:00 AM	Weather Conditions:	Cloudy, Hot, Humid
Depth to groundwater at deployment:	4.86 ft bmp	Total well depth at deployment:	15.26 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/4/2013 9:31:16 AM	Total # of days deployed:	355.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	3.33 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	12.47 C	ORP:	-21.9 mV	SCond:	0.007 mS/cm	Water quality meters:	YSI	YSI
pH:	7.15 SU	DO:	2.32 mg/L	Turb:	99.0 NTU	Serial #:	06G2302AE	01F0657AC

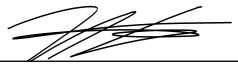
Collected Sample Condition **Color:** brown **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	P-11A
Sample ID:	P-11A-HS-06062013	Duplicate ID:	N/A
Sample Date:	6/6/2013 8:30:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	152.73 ft amsl
Total Depth as Constructed:	70 ft bmp	Screened Interval:	59.59 to 69.59 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/14/2012 12:50:00 PM	Weather Conditions:	Cloudy, Hot, Humid
Depth to groundwater at deployment:	5.64 ft bmp	Total well depth at deployment:	68.38 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/6/2013 8:30:53 AM	Total # of days deployed:	356.8
Weather Conditions:	N/A	Depth to groundwater at retrieval:	5.72 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	13.5 C	ORP:	12.1 mV	SCond:	0.017 mS/cm	Water quality meters:	YSI	YSI
pH:	6.47 SU	DO:	2.56 mg/L	Turb:	11.7 NTU	Serial #:	06G2302 AE	01F0657 AC

Collected Sample Condition **Color:** brown **Odor:** Yes **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Vincent Whisker

Signature:

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	PZO-2D
Sample ID:	PZO-2D-HS-06032013	Duplicate ID:	DUP-GW-06032013-#1
Sample Date:	6/3/2013 11:01:00 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.14 ft amsl
Total Depth as Constructed:	86.8 ft bmp	Screened Interval:	76.76 to 86.76 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/13/2012 2:22:00 PM	Weather Conditions:	Cloudy
Depth to groundwater at deployment:	7.18 ft bmp	Total well depth at deployment:	85.22 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/3/2013 11:01:20 AM	Total # of days deployed:	354.9
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.2 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	9.08 C	ORP:	0.5 mV	SCond:	0.009 mS/cm	Water quality meters:	YSI	YSI
pH:	7.04 SU	DO:	9.89 mg/L	Turb:	21.3 NTU	Serial #:	06G2302 AE	01F0657 AC

Collected Sample Condition **Color:** clear **Odor:** No **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
C	degrees Celsius	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available	ppm	parts per million
ft amsl	ft above mean sea level									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	PZO-2M
Sample ID:	PZO-2M-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 2:30:16 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.77 ft amsl
Total Depth as Constructed:	58.1 ft bmp	Screened Interval:	48.07 to 58.07 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/3/2013 2:05:32 PM	Weather Conditions:	Hot, Humid, Sunny 80 F
Depth to groundwater at deployment:	7.70 ft bmp	Total well depth at deployment:	56 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	51 ft bmp
PID:	2.0 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 2:30:26 PM	Total # of days deployed:	2.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	8.70 ft bmp
PID:	N/A	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	14.69 C	ORP:	28.1 mV	SCond:	.413 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	6.62 SU	DO:	15.71 mg/L	Turb:	36 NTU	Serial #:	N/A	N/A

Collected Sample Condition **Color:** N/A **Odor:** N/A **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
F	degrees Fahrenheit									ppm	parts per million
										PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	PZO-2M
Sample ID:	PZO-2M-HS-06192013	Duplicate ID:	N/A
Sample Date:	6/19/2013 12:30:00 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	154.77 ft amsl
Total Depth as Constructed:	58.1 ft bmp	Screened Interval:	48.07 to 58.07 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/15/2013 12:15:00 PM	Weather Conditions:	Sunny 80 F
Depth to groundwater at deployment:	5.54 ft bmp	Total well depth at deployment:	58.12 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	55.18 ft bmp
PID:	N/A		

Retrieval

Date/Time of Retrieval:	6/19/2013 12:30:00 PM	Total # of days deployed:	4.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	6.32 ft bmp
PID:	N/A	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	16.01 C	ORP:	80.8 mV	SCond:	0.193 mS/cm	Water quality meters:	YSI	Turbidity Meter
pH:	8.01 SU	DO:	26.73 mg/L	Turb:	1.91 NTU	Serial #:	10439	11734

Collected Sample Condition **Color:** N/A **Odor:** N/A **Appearance:** N/A

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Michael Skowronek

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	NTU	nephelometric turbidity units
F	degrees Fahrenheit									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	PZR-2R
Sample ID:	PZR-2R-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 2:45:43 PM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	153.78 ft amsl
Total Depth as Constructed:	139.5 ft bmp	Screened Interval:	122.23 to 142.23 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	PVC
Well Screen Outer Diameter:	2 in	Well Screen Material:	PVC

Deployment

Date/Time of Deployment:	6/4/2013 11:00:00 AM	Weather Conditions:	Sunny 70 F
Depth to groundwater at deployment:	7.23 ft bmp	Total well depth at deployment:	140.5 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	130 ft bmp
PID:	0 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 2:45:03 PM	Total # of days deployed:	1.2
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.85 ft bmp
PID:	0 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	18.24 C	ORP:	109 mV	SCond:	.241 mS/cm	Water quality meters:	YSI	YSI
pH:	6.65 SU	DO:	10.96 mg/L	Turb:	N/A	Serial #:	06G2302 AE	01F0657 AC

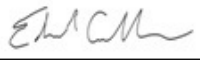
Collected Sample Condition **Color:** N/A **Odor:** N/A **Appearance:** N/A

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Remarks:	0

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

AG	amber glass	ft amsl	ft above mean sea level	HCL	hydrochloric acid	mg/L	milligrams per liter	mV	millivolts	N/A	not available
C	degrees Celsius	ft bmp	feet below measuring point	in	inches	mS/cm	millisiemens per centimeter	MW	monitoring well	ppm	parts per million
F	degrees Fahrenheit									PVC	polyvinyl chloride
										SU	standard units
										TOC	top of casing

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	TW-08A
Sample ID:	TW-08A-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 9:20:28 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	161.97 ft amsl
Total Depth as Constructed:	17.53 ft bmp	Screened Interval:	6.53 to 16.53 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	SS
Well Screen Outer Diameter:	2 in	Well Screen Material:	SS

Deployment

Date/Time of Deployment:	6/14/2012 2:53:00 PM	Weather Conditions:	Cloudy
Depth to groundwater at deployment:	6.12 ft bmp	Total well depth at deployment:	14.50 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	2.7 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 9:20:45 AM	Total # of days deployed:	355.8
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.87 ft bmp
PID:	3.7 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	18.99 C	ORP:	-44.1 mV	SCond:	0.017 mS/cm	Water quality meters:	YSI	YSI
pH:	6.30 SU	DO:	3.26 mg/L	Turb:	871 NTU	Serial #:	06G2302AE	01F065AC

Collected Sample Condition **Color:** brown **Odor:** Yes **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	3	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks:	DTW 7.87

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
C	degrees Celsius	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SS	stainless steel
CG	clear glass	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene	SU	standard units
ft amsl	ft above mean sea level									TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	TW-08B
Sample ID:	TW-08B-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 8:50:11 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	162.01 ft amsl
Total Depth as Constructed:	35.09 ft bmp	Screened Interval:	24.09 to 34.09 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	SS
Well Screen Outer Diameter:	2 in	Well Screen Material:	SS

Deployment

Date/Time of Deployment:	6/15/2012 10:41:00 AM	Weather Conditions:	Sunny, Humid
Depth to groundwater at deployment:	6.63 ft bmp	Total well depth at deployment:	28.82 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	56.8 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 8:50:48 AM	Total # of days deployed:	354.9
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.87 ft bmp
PID:	2.2 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	16.49 C	ORP:	31.9 mV	SCond:	0.033 mS/cm	Water quality meters:	YSI	YSI
pH:	6.30 SU	DO:	3.15 mg/L	Turb:	80.6 NTU	Serial #:	06G2302AE	01F0657AC

Collected Sample Condition **Color:** brown **Odor:** Yes **Appearance:** cloudy

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks:	DTW 7.87

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature:

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
C	degrees Celsius	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SS	stainless steel
CG	clear glass	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene	SU	standard units
ft amsl	ft above mean sea level									TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

HydraSleeve™ Field Form

Project:	SRSNE	Site Location:	Southington, CT
Project No:	B0054634.0000.01900	Well ID:	TW-08D
Sample ID:	TW-08D-HS-06052013	Duplicate ID:	N/A
Sample Date:	6/5/2013 8:15:30 AM	Other QC:	N/A
Well Type:	MW	Well Finish:	__X__Stick-up_____Flush Mount
Measuring Point:	TOC	Top of Casing Elevation:	161.48 ft amsl
Total Depth as Constructed:	26.58 ft bmp	Screened Interval:	19.58 to 24.58 ft bmp
Well Casing Outer Diameter:	2 in	Well Casing Material:	SS
Well Screen Outer Diameter:	2 in	Well Screen Material:	SS

Deployment

Date/Time of Deployment:	6/15/2012 9:20:00 AM	Weather Conditions:	Sunny, Humid
Depth to groundwater at deployment:	5.69 ft bmp	Total well depth at deployment:	25.87 ft bmp
HydraSleeveTM Dimensions Length:	38 in	Diameter:	1.75 in
Measurement Method:	Calibrated tether	Deployment depth (Top of HS):	N/A
PID:	2.3 ppm		

Retrieval

Date/Time of Retrieval:	6/5/2013 8:15:51 AM	Total # of days deployed:	355.0
Weather Conditions:	N/A	Depth to groundwater at retrieval:	7.39 ft bmp
PID:	2.9 ppm	Total well depth at retrieval:	N/A

Downhole Field Parameters Upon Retrieval:

Temp:	13.64 C	ORP:	446.4 mV	SCond:	0.053 mS/cm	Water quality meters:	YSI	YSI
pH:	2.13 SU	DO:	3.95 mg/L	Turb:	11.30 NTU	Serial #:	06G2302AE	01F0657AC

Collected Sample Condition **Color:** clear **Odor:** Yes **Appearance:** clear

Analysis

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL CG	3	HCL
Dissolved Gases	20 mL AG	2	TSP
Total Fe/Mn	75 mL PE	1	HNO3
Dissolved Fe/Mn	75 mL PE	1	HNO3
TOC	40 mL CG	2	H2SO4
Alkalinity (SM2320B)	1 L PE	1	None
Chloride (300.0)	100 mL PE	1	None
Sulfate (300.0)	100 mL PE	1	None
Nitrate-N (300.0)	100 mL PE	1	None
Nitrite (300.0)	100 mL PE	1	None

Remarks:	DTW 7.39

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature: 

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million
C	degrees Celsius	H2SO4	sulfuric acid	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SS	stainless steel
CG	clear glass	HCL	hydrochloric acid	mg/L	milligrams per liter	MW	monitoring well	PE	polyethylene	SU	standard units
ft amsl	ft above mean sea level									TOC	top of casing
										TSP	trisodium phosphate dodecahydrate

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-03	**Sample ID:**	MW-03-06032013
Sample Date:	6/3/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	11:50 AM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	55.51 to 85.51 ft bmp
Casing Diameter:	1.5 in	**Pump Intake Depth:**	Initial: 67.75 ft bmp Final: 67.75 ft bmp
Measured Well Depth:	N/A	**Purge Time:**	11:15 AM to 11:50 AM
Depth to Water:	6.96 ft bmp	**PID Reading:**	N/A

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
11:15 AM	0	50	0	13.47	6.93	0.010	42.3	0.73	0.70	6.96
11:20 AM	5	50	0.07	13.14	7.01	0.010	62.1	0.43	0.43	6.96
11:25 AM	10	50	0.13	13.32	7.16	0.010	61.6	0.37	0.42	6.96
11:30 AM	15	50	0.20	13.24	7.28	0.010	62.1	0.33	0.43	6.96
11:35 AM	20	50	0.26	13.28	7.35	0.010	67.4	0.33	0.43	6.96
11:40 AM	25	50	0.33	13.29	7.41	0.010	69.4	0.34	0.42	6.96
11:45 AM	30	50	0.40	13.49	7.47	0.010	72.6	0.35	0.42	6.96
11:50 AM	35	50	0.46	13.64	7.54	0.010	74.1	0.37	0.42	6.96

Collected Sample Condition

Color: clear **Odor:** No **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Comments

Sampling Personnel: Matthew Pingitor/Christopher Trowbridge

Signature:

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	mg/L	milligrams per liter	mV	millivolts	NTU	nephelometric turbidity units	SU	standard units
C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	ppm	parts per million	TOC	top of casing
ft	feet	HCL	hydrochloric acid	mS/cm	millisiemens per centimeter	N/A	not available	PVC	polyvinyl chloride		
ft amsl	ft above mean sea level	in	inches								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-126B	**Sample ID:**	MW-126B-06042013
Sample Date:	6/4/2013	**Duplicate:**	DUP-GW-06042013-#1	**Other QC:**	N/A
Sample Time:	10:35 AM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	6.9 to 11.9 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 9 ft bmp Final: 9 ft bmp
Measured Well Depth:	N/A	**Purge Time:**	9:41 AM to 10:25 AM
Depth to Water:	N/A	**PID Reading:**	0.4 ppm

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
9:41 AM	0	125	0.16	13.19	5.44	0.459	165.1	19.16	56	2.80
9:50 AM	9	125	0.32	13.10	5.63	0.471	166.0	16.98	45	2.80
9:55 AM	14	125	0.48	13.07	5.71	0.481	169.9	16.66	17	2.80
10:00 AM	19	125	0.64	12.06	5.79	0.483	171.1	16.56	15	2.80
10:05 AM	24	125	0.80	13.04	5.87	0.484	175.4	16.48	10	2.80
10:10 AM	29	125	0.96	12.81	5.88	0.482	177.3	16.53	8	2.80
10:15 AM	34	125	1.12	12.84	5.92	0.482	180.0	16.42	9	2.80
10:20 AM	39	125	1.28	12.00	5.97	0.483	180.0	16.42	9	2.80
10:25 AM	44	125	1.44	13.05	5.98	0.483	178.7	16.04	9	2.80

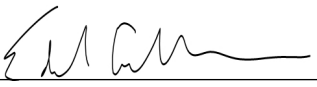
Collected Sample Condition

Color: clear **Odor:** Yes **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
Dissolved TAL Metals	250 mL PE	1	HNO3
Total TAL Metals	250 mL PE	1	HNO3

Comments

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	PE	polyethylene	SU	standard units
ft	feet	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million	TOC	top of casing
ft amsl	ft above mean sea level	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride		
ft bmp	feet below measuring point	mg/L	milligrams per liter								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-126C	**Sample ID:**	MW-126C-06042013
Sample Date:	6/4/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	12:10 PM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	23.41 to 33.41 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 29 ft bmp Final: N/A
Measured Well Depth:	N/A	**Purge Time:**	11:25 AM to 12:05 PM
Depth to Water:	N/A	**PID Reading:**	0.2 ppm

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
11:25 AM	0	150	0.19	14.68	6.72	0.373	170.1	38.10	26	2.70
11:30 AM	4	150	0.38	14.87	6.61	0.380	175.9	19.02	22	2.70
11:35 AM	9	150	0.57	14.99	6.61	0.383	178.6	17.15	19	2.80
11:40 AM	15	150	0.76	15.17	6.62	0.385	179.2	16.77	10	2.70
11:45 AM	19	150	0.95	15.26	6.61	0.384	181.5	16.50	11	2.70
11:50 AM	24	150	1.14	15.24	6.60	0.382	184.0	16.41	8	2.70
11:55 AM	29	150	1.33	15.21	6.59	0.379	187.3	16.32	5	2.70
12:00 PM	34	150	1.52	15.34	6.57	0.379	190.2	16.27	5	2.70
12:05 PM	39	150	1.71	15.53	6.57	0.378	193.7	16.12	5	2.70

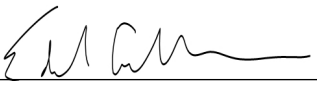
Collected Sample Condition

Color: clear **Odor:** No **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
Dissolved TAL Metals	250 mL PE	1	HNO3
Total TAL Metals	250 mL PE	1	HNO3

Comments

Sampling Personnel: Edward Cimilluca

Signature: 

Abbreviations:

C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	PE	polyethylene	SU	standard units
ft	feet	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million	TOC	top of casing
ft amsl	ft above mean sea level	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride		
ft bmp	feet below measuring point	mg/L	milligrams per liter								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-127C	**Sample ID:**	MW-127C-06052013
Sample Date:	6/5/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	9:05 AM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	93.93 to 103.93 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 96 ft bmp Final: 96 ft bmp
Measured Well Depth:	N/A	**Purge Time:**	8:25 AM to 9:00 AM
Depth to Water:	N/A	**PID Reading:**	0.1 ppm

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
8:25 AM	0	150	0.19	10.40	7.07	0.265	81.6	8.68	8	3.50
8:30 AM	5	150	0.38	10.39	7.15	0.266	82.0	8.25	4	3.50
8:35 AM	10	150	0.57	10.41	7.15	0.266	82.3	8.24	4	3.50
8:40 AM	14	150	0.76	10.46	7.19	0.265	83	8.12	1	3.50
8:40 AM	14	150	0.95	10.56	7.28	0.263	86.1	7.93	1	3.50
8:45 AM	19	150	1.14	10.63	7.30	0.263	86.4	7.78	0	3.50
8:50 AM	24	150	1.33	10.21	7.30	0.263	86.7	7.73	0	3.50
8:55 AM	29	150	1.52	10.35	7.30	0.263	86.9	7.73	0	3.50
9:00 AM	35	150	1.71	10.22	7.30	0.263	87.2	7.73	0	3.50

Collected Sample Condition

Color: clear **Odor:** No **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Comments

Sampling Personnel: Edward Cimilluca

Signature:

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	mg/L	milligrams per liter	mV	millivolts	NTU	nephelometric turbidity units	SU	standard units
C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	ppm	parts per million	TOC	top of casing
ft	feet	HCL	hydrochloric acid	mS/cm	millisiemens per centimeter	N/A	not available	PVC	polyvinyl chloride		
ft amsl	ft above mean sea level	in	inches								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-209A	**Sample ID:**	MW-209A-06042013
Sample Date:	6/4/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	3:05 PM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	20.12 to 40.12 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: N/A Final: N/A
Measured Well Depth:	N/A	**Purge Time:**	2:32 PM to 3:05 PM
Depth to Water:	21.79 ft bmp	**PID Reading:**	N/A

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
2:32 PM	0	100	0	12.29	6.28	0.006	164.8	7.06	2.34	21.80
2:35 PM	2	100	0.05	12.42	6.27	0.006	165.8	6.96	1.82	21.80
2:40 PM	7	100	0.18	12.38	6.27	0.006	166.0	6.92	1.50	21.80
2:45 PM	13	100	0.34	12.39	6.26	0.006	165.3	6.90	1.16	21.80
2:50 PM	18	100	0.48	12.31	6.26	0.006	165.3	6.89	0.91	21.80
2:56 PM	24	100	0.63	12.20	6.25	0.006	164.9	6.86	0.44	21.80
3:02 PM	30	100	0.79	12.36	6.25	0.006	166.4	6.86	0.44	21.80
3:05 PM	32	100	0.85	12.44	6.25	0.006	166.7	6.84	0.44	21.80

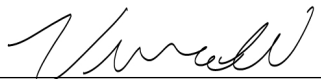
Collected Sample Condition

Color: clear **Odor:** No **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
Dissolved TAL Metals	250 mL PE	1	HNO3
Total TAL Metals	250 mL PE	1	HNO3

Comments

Sampling Personnel: Vince Whisker

Signature: 

Abbreviations:

C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	PE	polyethylene	SU	standard units
ft	feet	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million	TOC	top of casing
ft amsl	ft above mean sea level	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride		
ft bmp	feet below measuring point	mg/L	milligrams per liter								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-209B	**Sample ID:**	MW-209B-06042013
Sample Date:	6/4/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	12:40 PM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bailer
Casing Material:	PVC	**Screen Interval:**	14.25 to 17.25 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: N/A Final: N/A
Measured Well Depth:	17.19 ft bmp	**Purge Time:**	12:40 PM to 12:40 PM
Depth to Water:	15.68 ft bmp	**PID Reading:**	N/A

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
12:40 PM	0	50	0	10.94	7.47	0.003	141.8	5.35	10.51	15.68

Collected Sample Condition

Color: clear **Odor:** No **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
Dissolved TAL Metals	250 mL PE	1	HNO3
Total TAL Metals	250 mL PE	1	HNO3

Comments

HAD TO USE BAILER

Sampling Personnel: Vincent Whisker

Signature:

Abbreviations:

C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	PE	polyethylene	TOC	top of casing
ft	feet	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	PVC	polyvinyl chloride		
ft amsl	ft above mean sea level	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SU	standard units		
ft bmp	feet below measuring point	mg/L	milligrams per liter								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-701DR	**Sample ID:**	MW-701DR-06042013
Sample Date:	6/4/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	11:45 AM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	95.76 to 110.26 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 100 ft bmp Final: 100 ft bmp
Measured Well Depth:	107.43 ft bmp	**Purge Time:**	10:35 AM to 11:45 AM
Depth to Water:	17.24 ft bmp	**PID Reading:**	N/A

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
10:35 AM	0	120	0	11.34	6.8	0.008	62.8	5.44	11.31	18.60
10:50 AM	15	120	0.48	11.34	7.06	0.008	63.5	5.43	7.85	18.75
10:55 AM	20	120	0.63	11.52	7.15	0.008	70.0	5.42	6.06	18.35
11:00 AM	25	120	0.79	12.10	7.33	0.008	67.0	5.41	5.36	18.35
11:05 AM	30	120	0.95	12.35	7.44	0.008	69.6	5.39	4.77	18.35
11:10 AM	35	120	1.11	12.58	7.52	0.008	76.7	5.37	4.85	18.35
11:20 AM	45	120	1.43	12.55	7.69	0.008	84.3	5.18	2.36	18.35
11:25 AM	50	120	1.59	12.50	7.70	0.008	87.0	5.16	1.89	18.35
11:30 AM	55	120	1.74	12.43	7.70	0.008	90.4	5.12	2.30	18.35
11:40 AM	65	120	2.06	12.41	7.71	0.008	93.5	5.07	2.45	18.35
11:45 AM	70	120	2.22	12.31	7.70	0.008	98.6	5.0	2.43	18.35

Collected Sample Condition

Color: clear **Odor:** No **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
Dissolved TAL Metals	250 mL PE	1	HNO3
Total TAL Metals	250 mL PE	1	HNO3

Comments

Sampling Personnel: Vincent Whisker

Signature:

Abbreviations:

C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	PE	polyethylene	TOC	top of casing
ft	feet	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	PVC	polyvinyl chloride		
ft amsl	ft above mean sea level	in	inches	mV	millivolts	NTU	nephelometric turbidity units	SU	standard units		
ft bmp	feet below measuring point	mg/L	milligrams per liter								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-707DR	**Sample ID:**	MW-707DR-06042013
Sample Date:	6/4/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	3:40 PM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	162.92 to 192.92 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 177 ft bmp Final: 177 ft bmp
Measured Well Depth:	N/A	**Purge Time:**	2:50 PM to 3:40 PM
Depth to Water:	N/A	**PID Reading:**	1.7 ppm

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
2:50 PM	0	250	0.33	12.35	6.85	0.497	-233.3	21.95	41	10.25
2:55 PM	4	250	0.66	11.81	6.29	0.516	-248.6	5.25	8	10.30
3:00 PM	9	250	0.99	11.84	6.26	0.516	-255.4	5.30	4	10.35
3:05 PM	14	250	1.32	11.80	6.29	0.516	-248.9	5.20	4	10.40
3:11 PM	20	250	1.65	11.72	6.35	0.514	-255.4	5.20	3	10.45
3:15 PM	24	250	1.98	11.61	6.37	0.514	-256.8	5.20	5	10.50
3:20 PM	29	250	2.31	11.65	6.53	0.513	-259.0	5.19	2	10.55
3:25 PM	34	250	2.64	10.40	6.55	0.500	-271.8	5.20	4	10.60
3:30 PM	40	250	2.97	11.0	6.55	0.512	-271.9	5.2	4	10.65
3:35 PM	44	250	3.30	11.10	6.55	0.512	-272.3	5.21	5	10.70
3:40 PM	50	250	3.63	11.05	6.55	0.512	-272.8	5.22	6	10.77

Collected Sample Condition

Color: clear **Odor:** Yes **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Comments

Sampling Personnel: Edward Cimilluca

Signature:

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	mg/L	milligrams per liter	mV	millivolts	NTU	nephelometric turbidity units	SU	standard units
C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	ppm	parts per million	TOC	top of casing
ft	feet	HCL	hydrochloric acid	mS/cm	millisiemens per centimeter	N/A	not available	PVC	polyvinyl chloride		
ft amsl	ft above mean sea level	in	inches								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	MW-901R	**Sample ID:**	MW-901R-06052013
Sample Date:	6/5/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	10:30 AM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	27.44 to 42.44 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 32.5 ft bmp Final: 32.5 ft bmp
Measured Well Depth:	42.40 ft bmp	**Purge Time:**	9:31 AM to 10:30 AM
Depth to Water:	17.89 ft bmp	**PID Reading:**	N/A

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
9:31 AM	0	120	0	11.19	5.73	4	158.7	30.45	32.4	17.90
9:35 AM	4	120	0.13	11.23	5.81	4	161.1	30.57	19.7	17.89
9:40 AM	9	120	0.29	11.29	5.86	4	160.4	30.56	18.3	17.89
9:45 AM	14	120	0.44	11.29	5.89	4	163.2	30.58	17.8	17.90
9:50 AM	19	120	0.60	11.24	5.88	4	164.2	30.49	16.7	17.89
9:55 AM	24	120	0.76	11.31	5.90	4	165.6	30.53	11.4	17.90
10:00 AM	29	120	0.92	11.33	5.92	4	166.1	30.47	12.9	17.90
10:05 AM	34	120	1.08	11.32	5.95	4	167.1	30.39	12.4	17.89
10:11 AM	41	120	1.30	11.39	5.96	4	167.7	30.33	11.6	17.89
10:15 AM	44	120	1.39	11.30	5.98	4	168.5	30.33	11.48	17.89
10:20 AM	49	120	1.55	11.29	6.00	4	170.1	30.29	10.91	17.89
10:25 AM	54	120	1.71	11.32	6.01	4	170.9	30.28	9.89	17.89
10:28 AM	57	120	1.81	11.23	6.03	4	172.2	30.22	9.69	17.89
10:30 AM	59	120	1.87	11.32	6.05	4	173.4	30.14	9.65	17.89

Collected Sample Condition

Color: clear **Odor:** No **Appearance:** cloudy

Parameter	Container	Number of Containers	Preservative
Dissolved TAL Metals	250 mL PE	1	HNO3
Total TAL Metals	250 mL PE	1	HNO3

Comments

DO meter calibrated prior to sampling; readings questionable.

Sampling Personnel: Vincent Whisker

Signature:

Abbreviations:

C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	PE	polyethylene	SU	standard units
ft	feet	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million	TOC	top of casing
ft amsl	ft above mean sea level	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride		
ft bmp	feet below measuring point	mg/L	milligrams per liter								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	P-12	**Sample ID:**	P-12-06032013
Sample Date:	6/3/2013	**Duplicate:**	N/A	**Other QC:**	MS/MSD
Sample Time:	3:50 PM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI	**Water Quality Meter 2:**	Turbidity Meter
Measuring Point:	TOC	**Purge Method:**	Bladder Pump
Casing Material:	PVC	**Screen Interval:**	11.55 to 16.55 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 11.5 ft bmp Final: N/A
Measured Well Depth:	N/A	**Purge Time:**	3:05 PM to 3:50 PM
Depth to Water:	6.73 ft bmp	**PID Reading:**	N/A

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
3:05 PM	0	120	0	14.35	6.32	0.011	84.4	1.00	59.6	6.93
3:10 PM	5	120	0.16	13.94	6.19	0.011	141.4	0.68	43.2	6.93
3:15 PM	10	120	0.32	13.98	6.16	0.011	154	0.64	35.4	6.93
3:20 PM	15	120	0.48	14.45	6.15	0.011	167.8	0.60	52.9	6.93
3:25 PM	20	120	0.63	14.69	6.19	0.011	171.6	0.58	39.8	6.93
3:30 PM	25	120	0.79	14.71	6.20	0.011	173	0.57	38.2	6.93
3:35 PM	30	120	0.95	14.59	6.20	0.011	173.7	0.57	37.8	6.93
3:40 PM	35	120	1.11	15.58	6.20	0.011	169.4	0.57	38.5	6.93
3:50 PM	45	120	1.27	15.91	6.20	0.011	169	0.56	40.0	6.93

Collected Sample Condition

Color: clear **Odor:** No **Appearance:** clear

Parameter	Container	Number of Containers	Preservative
Dissolved TAL Metals	250 mL PE	1	HNO3
Total TAL Metals	250 mL PE	1	HNO3

Comments

Sampling Personnel: Vincent Whisker

Signature:

Abbreviations:

C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	PE	polyethylene	SU	standard units
ft	feet	HNO3	nitric acid	mS/cm	millisiemens per centimeter	N/A	not available	ppm	parts per million	TOC	top of casing
ft amsl	ft above mean sea level	in	inches	mV	millivolts	NTU	nephelometric turbidity units	PVC	polyvinyl chloride		
ft bmp	feet below measuring point	mg/L	milligrams per liter								

Low-Flow Groundwater Sampling Log

Project:	SRSNE	**Site Location:**	Southington, CT		
Project No:	B0054634.0000.01900	**Well ID:**	P-13	**Sample ID:**	P-13-06052013
Sample Date:	6/5/2013	**Duplicate:**	N/A	**Other QC:**	N/A
Sample Time:	12:00 PM	**Weather:**	N/A		

Instrument Identification

Water Quality Meter 1:	YSI 01K0643	**Water Quality Meter 2:**	Turbidity Meter 1356-3711
Measuring Point:	TOC	**Purge Method:**	N/A
Casing Material:	PVC	**Screen Interval:**	6.74 to 16.74 ft bmp
Casing Diameter:	2 in	**Pump Intake Depth:**	Initial: 10 ft bmp Final: 10 ft bmp
Measured Well Depth:	N/A	**Purge Time:**	11:20 AM to 11:50 AM
Depth to Water:	N/A	**PID Reading:**	1.3 ppm

Field Parameter Measurements During Purging

Time	Cuml Time (min)	Flow Rate (mL/min)	Cuml Vol Purged (gal)	Temp (C)	pH (SU)	Spec Cond (mS/cm)	ORP (mV)	DO (mg/L)	Turb (NTU)	DTW (ft)
11:20 AM	0	100	0.13	15.01	7.20	0.217	71.2	15.28	856	10.20
11:24 AM	4	100	0.26	15.53	7.30	0.219	96.4	8.32	265	10.22
11:30 AM	10	100	0.39	15.57	7.43	0.220	102.5	7.51	198	10.24
11:35 AM	15	100	0.52	15.30	7.43	0.220	110.1	7.41	75	10.26
11:40 AM	20	100	0.65	15.30	7.46	0.220	120.2	7.33	77	10.30
11:45 AM	25	100	0.78	15.01	7.40	0.219	121.9	7.30	75	10.32
11:50 AM	30	100	0.91	15.03	7.40	0.219	122.5	7.22	76	10.37

Collected Sample Condition

Color: brown **Odor:** Yes **Appearance:** cloudy

Parameter	Container	Number of Containers	Preservative
VOC (8260)	40 mL AG	3	HCL

Comments

Sampling Personnel: Edward Cimilluca

Signature:

Abbreviations:

AG	amber glass	ft bmp	feet below measuring point	mg/L	milligrams per liter	mV	millivolts	NTU	nephelometric turbidity units	SU	standard units
C	degrees Celsius	gal	gallons	mL/min	milliliters per minute	MW	monitoring well	ppm	parts per million	TOC	top of casing
ft	feet	HCL	hydrochloric acid	mS/cm	millisiemens per centimeter	N/A	not available	PVC	polyvinyl chloride		
ft amsl	ft above mean sea level	in	inches								

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Appendix B

Equipment Calibration Logs

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YSI & Turbidity Meter Calibration Log

DATE: 6/3/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 650 MDS	Serial Number: 01K0643 (Sonde)
Brand:	Model:	Serial Number:

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.00	4.00		4.00	4.08
7.00	7.00	7.00		7.00	7.11
10.00	10.01	10.00		10.00	9.95
Turbidity (NTUs)					
0	0	0		0	1.2
10	9.8	10		10	11.6
100					
Conductivity (µmhos/cm)					
~~1.413~~	Imiss 1 → 10 um/cm	1.413		10 um/cm 1.413	~~9.1~~ ~~10~~ 8.1
~~10 um/cm~~				10 ms/cm	
~~12 ms/cm~~					
Dissolved Oxygen (mg/L)					
Barametric Pressure 760.7		Not Applicable		Not Applicable	
in.H_2O*25.4=_____mmHg					
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 262.7/240				Zobel 271/240	
Temperature (°C) 19.61					
Lights - 427.6				Lights - 438.1	

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

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YSI & Turbidity Meter Calibration Log

DATE: 06/03/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 600XL / 650 MDS	Serial Number: 01F0657/06D1751AA
Brand: LaMotte	Model: 2020we	Serial Number: 1859-0412

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.10	4.00	~~4.03~~	4.00	4.03
7.00	6.97	7.00	~~7.00~~	7.00	7.00
10.00	10.06	10.00	~~9.94~~	10.00	9.94
Turbidity (NTUs)					
0	0.00	0		0	0.04
10	10.05	10		10	10.01
1	1.06			1	1.01
Conductivity (µmhos/cm)					
~~1.413~~	10	1.413		10 ~~1.413~~	10
10 µS/cm	9.6				9.7
Dissolved Oxygen (mg/L)					
Barametric Pressure 754.9		Not Applicable		Not Applicable	
in.H_2O*25.4= 99.7 ~~mmHg~~ %					
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 230.4/240				238.1/240	
Temperature (°C) 21.80				21.76	
Light's Solution 434.1				432.4	

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 6/3/17

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 650 MDS	Serial Number: 06G2302 AE
Brand: YSI	Model: 600XL	Serial Number: 0110657 AC
LaMotte	2020we	984-21111

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.39 → 4.00	4.00		4.00	4.12
7.00	6.99 → 7.00	7.00		7.00	7.21
10.00	9.18 → 10.00	10.00		10.00	10.04
Turbidity (NTUs)					
0	0.00	0		0	0
10	10.00	10		10	10
100					
Conductivity (µmhos/cm)					
~~1413~~	10.0 → 10.0	1.413		~~10.0~~ ~~1.412~~	10.0
Dissolved Oxygen (mg/L)					
Barametric Pressure 756.2		**Not Applicable**		**Not Applicable**	
in.H_2O*25.4=_____mmHg					
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 240.1					240.1
Temperature (°C) 22.01					22.10
Light Solution 409.0 → 475.0				Light - 409.0	

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 06/04/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 650 MDS/ 600 XLM	Serial Number: 17698/ 05K2340
Brand: Hach	Model: 2100Q	Serial Number: 12050C017682

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.10	4.00		4.00	4.11
7.00	6.96	7.00		7.00	7.00
10.00	10.11	10.00		10.00	9.98
Turbidity (NTUs)					
10	9.94	0		10	9.99
20	20.06	10		20	20.00
100	100.4			100	99.91
Conductivity (µmhos/cm)					
~~1.413~~ 10 µS/cm	10	1.413		~~1.413~~ 10 µS/cm	10
	8.4				9.1
Dissolved Oxygen (mg/L)					
Barametric Pressure [redacted] in.H_2O*25.4= 756.2 mmHg	99.9%	Not Applicable		Not Applicable	
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 255.6/240				249.1 /240	
Temperature (°C) 18.87				18.94	
Lights Solution 429.1				Lights Solution 439.4	

The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 6-4-13

INSTRUMENT IDENTIFICATION

Brand: YSI 650 MDS	Model: 650 MDS	Serial Number: 06D1751AA
Brand: LAMOTTE	Model: 2020WE	Serial Number: 984-2111

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.14	4.00		4.00	4.05
7.00	6.98	7.00		7.00	7.07
10.00	10.0	10.00		10.00	10.31
Turbidity (NTUs)					
0	0.09	0		0	0.07
10	9.80	10		10	9.87
100 1	0.73			1.	0.94
Conductivity (µmhos/cm)					
~~1.413~~ 10 mS/cm	19	1.413		~~1.413~~ 10 mS/cm	7
Dissolved Oxygen (mg/L)					
Barametric Pressure 757.2		Not Applicable		Not Applicable	
in.H_2O*25.4= 46.7 mmHg					
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 266.3				Zobel	266.7
Temperature (°C) 18.81					19.30

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 6/4/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 650 MDS	Serial Number: 06G2302 AE
Brand: YSI	Model: 600 XL	Serial Number: 01F0657 AC

LaMotte

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.01 → 4.00	4.00		4.00	4.25
7.00	6.79 → 7.00	7.00		7.00	7.69
10.00	9.93 → 10.0	10.00		10.00	10.28
Turbidity (NTUs)					
0	-0.07 → 0.00	0		0	0.35
10	0.98 → 1.0	10		10	1.23
100	9.93 → 10.0				10.56
Conductivity (µmhos/cm)					
~~1.413~~	~~1.413~~	1.413		1.413	
	14 → 10 µmhos/cm				11
Dissolved Oxygen (mg/L)					
Barametric Pressure 101.9 → 100		Not Applicable		Not Applicable	
in.H_2O*25.4= 759.5 mmHg					
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 224.7 → 239.9					232.6
Temperature (°C) 18.48					19.46
Light Solution 356.5					349.3

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 06/05/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 650MDS/600XL	Serial Number: 06G2302AE/01F0657AC
Brand: Hach	Model: 2100Q	Serial Number: 12050C017682

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.01	4.00		4.00	4.06
7.00	7.00	7.00		7.00	7.09
10.00	9.96	10.00		10.00	9.98
Turbidity (NTUs)					
10	10.10	0		10	9.99
20	20.04	10		20	20.06
100	100.0			100	100.14
Conductivity (µmhos/cm)					
~~1.413~~ 10 µS/cm	11	1.413		10 µS/cm	~~1.413~~ 10.4
	10.4				10.1
Dissolved Oxygen (mg/L)					
Barametric Pressure 102.1		Not Applicable		Not Applicable	
in.H_2O*25.4= 764.9 mmHg					
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 227.4/240				Zobel	236.1/240
Temperature (°C) 16.60					17.19
Lights Solution 439.4				Lights Solution	440.6

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 6/5/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 650 MDS	Serial Number: 09D1751AA
Brand: LaMotte	Model: 2020we	Serial Number: 1859-0112

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.01	4.00		4.00	4.07
7.00	6.95	7.00		7.00	7.12
10.00	9.98	10.00		10.00	9.97
Turbidity (NTUs)					
0	0.02	0		0	0.0
10	10.63	10		10	10.23
~~100~~ 1.	1.20				
Conductivity (µmhos/cm)					
~~1413~~		1.413		~~1.413~~	
10 mS/cm	10			10 mS/cm	10
Dissolved Oxygen (mg/L)		**Not Applicable**		**Not Applicable**	
Barametric Pressure in.H_2O*25.4=	762.2 mmHg				
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution)	230			Zobel	230
Temperature (°C)	16.28			T(°C)	17.34
Light Sol'n:	402.7			Light:	401.4

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 6/3/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 650 MDS	Serial Number: 01K0643
Brand:	Model:	Serial Number:

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.00	4.00		4.00	4.01
7.00	7.00	7.00		7.00	6.92
10.00	9.94	10.00		10.00	9.84
Turbidity (NTUs)					
0	0	0		0	1.2
10	10	10		10	9.81
100					
Conductivity (µmhos/cm)					
~~1.413~~ 10 mS/cm	10	1.413		10 mS/cm ~~1.413~~	9.3
10 mS/cm	8.6			10 mS/cm	9.8
Dissolved Oxygen (mg/L)					
Barametric Pressure 760.8		Not Applicable		Not Applicable	
in.H_2O*25.4=_____mmHg					
REDOX (mV) 236.2/240		Chart [1]		Chart [1]	
(Zobel Solution) ~~426.2~~ EC				Light	429.7
Temperature (°C)					
Light solution = 426.2				Zobel - 235.1	

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

DO = 98.6 %

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 05/06/13

INSTRUMENT IDENTIFICATION

Brand: YSI Brand: Hach	Model: 650 MDS / 600XL [redacted] Model: 2100Q	Serial Number: 06G2302AE/01F0657AC Serial Number: 12050C017682

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.22	4.00		4.00	
7.00	6.89	7.00		7.00	
10.00	9.94	10.00		10.00	
Turbidity (NTUs)					
10	10.09	0		0	
20	20.11	10		10	
100	100.41				
Conductivity (µmhos/cm)					
~~1.413~~	10	1.413		1.413	
10 µS/cm	9.1				
Dissolved Oxygen (mg/L) Barametric Pressure _____ in.H_2O*25.4=_____mmHg		**Not Applicable**		**Not Applicable**	
REDOX (mV) (Zobel Solution) 241.3/240 **Temperature** (°C) 17.28 Lights Solution 432.6		Chart [1]		Chart [1]	

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 6/6/13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 06D1751 AA	Serial Number: 650 MDS
Brand: YSI	Model: 01F0657 AB	Serial Number: 600 XL

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	3.94 → 4.00	4.00		4.00	4.03
7.00	6.89 → 7.00	7.00		7.00	6.85
10.00	10.19 → 10.0	10.00		10.00	10.00
Turbidity (NTUs)					
0	0.03	0		0	-0.01
10	1.0	10		10	10.41
100	10.62			1:	1.06
Conductivity (µmhos/cm)					
1.413	9 → 10.0	1.413		.010 X 13	
					.011
Dissolved Oxygen (mg/L)					
Barametric Pressure 762.1		Not Applicable		Not Applicable	
in.H_2O*25.4= 100.3 mmHg					
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution) 240.0				Zobel	240.1
Temperature (°C) 18.09				T(°C)	23.35
382.9				Light:	485.4

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

7332 S. Alton Way, Bldg. 13, Suite E.
Centennial, CO 80112
Toll-free: (866) 960-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 12301
Description Solinst IP
Calibrated 5/30/2013 5:59:06PM

Manufacturer Solinst
Model Number IP
Serial Number/ Lot Number 122009157-1
Location Colorado
Department

State Certified
Status Fail
Temp °C 23
Humidity % 22

Calibration Specifications

Group # 1
Group Name
Test Performed: Yes **As Found Result: Pass** **As Left Result: Pass**

Test Instruments Used During the Calibration

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	(As Of Cal Entry Date) Last Cal Date/ Opened Date	Next Cal Date / Expiration Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Wilson Burton III

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
3470 Gardner Court
Burnaby, BC V5G 3K4
Toll-free: (877) 678-8383

Pine Environmental Services, Inc.

Instrument ID 2538
Description MiniRae 2000
Calibrated 5/30/2013 3:26:39PM

Manufacturer Rae Systems
Model Number PGM7600
Serial Number/ Lot Number 110-005880
Location British Columbia
Department

State Certified
Status Pass
Temp °C 20
Humidity % 52

Calibration Specifications

Group # 1
Group Name Isobutylene
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	PPM	100.00	PPM	99.50	99.50	-0.50%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
BC - ISO 100 PPM	BC - ISO - 100 ppm	Calgaz	GP11015	1397421 Cylinder 50		11/30/2015

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Jason Murray

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
3470 Gardner Court
Burnaby, BC V5G 3K4
Toll-free: (877) 678-8383

Pine Environmental Services, Inc.

Instrument ID 6085
Description MiniRae 2000
Calibrated 5/29/2013 4:20:55PM

Manufacturer Rae Systems
Model Number PGM7600
Serial Number/ Lot Number 110-011362
Location British Columbia
Department

State Certified
Status Pass
Temp °C 20
Humidity % 52

Calibration Specifications

Group # 1
Group Name Isobutylene
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	PPM	100.00	PPM	98.50	98.50	-1.50%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
BC - ISO 100 PPM	BC - ISO - 100 ppm	Calgaz	GP11015	1397421 Cylinder 50		11/30/2015

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Jason Murray

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

3470 Gardner Court
Burnaby, BC V5G 3K4
Toll-free: (877) 678-8383

Pine Environmental Services, Inc.

Instrument ID 17109
Description MiniRae 2000
Calibrated 5/29/2013 4:21:22PM

Manufacturer Rae Systems
Model Number PGM7600
Serial Number/ Lot Number 110-902837
Location British Columbia
Department

State Certified
Status Pass
Temp °C 20
Humidity % 52

Calibration Specifications

Group # 1
Group Name Isobutylene
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	PPM	100.00	PPM	99.10	99.10	-0.90%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
BC - ISO 100 PPM	BC - ISO - 100 ppm	Calgaz	GP11015	1397421 Cylinder 50		11/30/2015

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Jason Murray

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 18829
Description LaMotte 2020WE
Calibrated 5/30/2013 5:14:09PM

Manufacturer LaMotte
Model Number 2020WE
Serial Number/ Lot Number 1356-3711
Location Massachusetts
Department

State Certified
Status Pass
Temp °C 22
Humidity % 52

Calibration Specifications

Group # 1
Group Name Turbidity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.00 / 1.00	NTU	1.00	NTU	1.00	1.00	0.00%	Pass
10.00 / 10.00	NTU	10.00	NTU	10.00	10.00	0.00%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
MA 0 NTU AUTOCAL PH 4.49	MA 0 NTU Autocal C54820	GFS		C359243		2/1/2014
MA 1 NTU LAMOTTE	Ma 1 NTU Lot C254964	GFS	8577	C254964	10/11/2012	8/1/2013
MA 10 NTU GFS	Ma 10 NTU Lot C254965	GFS	8578	C254965	10/11/2012	8/1/2013

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Sheila Blouin

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 19378
Description LaMotte 2020WE
Calibrated 5/30/2013 5:14:57PM

Manufacturer LaMotte
Model Number 2020WE
Serial Number/ Lot Number 1859-0412
Location Massachusetts
Department

State Certified
Status Pass
Temp °C 22
Humidity % 52

Calibration Specifications

Group # 1
Group Name Turbidity
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.00 / 1.00	NTU	1.00	NTU	1.00	1.00	0.00%	Pass
10.00 / 10.00	NTU	10.00	NTU	10.00	10.00	0.00%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
MA 0 NTU AUTOCAL PH 4.49	MA 0 NTU Autocal C54820	GFS		C359243		2/1/2014
MA 1 NTU LAMOTTE	Ma 1 NTU Lot C254964	GFS	8577	C254964	10/11/2012	8/1/2013
MA 10 NTU GFS	Ma 10 NTU Lot C254965	GFS	8578	C254965	10/11/2012	8/1/2013

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Sheila Blouin

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 18082
Description LaMotte 2020WE
Calibrated 5/30/2013 4:59:33PM

Manufacturer LaMotte
Model Number 2020WE
Serial Number/ Lot Number 984-2111
Location Massachusetts
Department

State Certified
Status Pass
Temp °C 22
Humidity % 52

Calibration Specifications

Group # 1
Group Name Turbidity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.00 / 1.00	NTU	1.00	NTU	1.00	1.00	0.00%	Pass
10.00 / 10.00	NTU	10.00	NTU	10.00	10.00	0.00%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
MA 0 NTU AUTOCAL PH 4.49	MA 0 NTU Autocal C54820	GFS		C359243		2/1/2014
MA 1 NTU LAMOTTE	Ma 1 NTU Lot C254964	GFS	8577	C254964	10/11/2012	8/1/2013
MA 10 NTU GFS	Ma 10 NTU Lot C254965	GFS	8578	C254965	10/11/2012	8/1/2013

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Sheila Blouin

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2635
Description YSI 600 XL
Calibrated 5/30/2013 4:07:14PM

Manufacturer YSI
Model Number 600 XL
Serial Number/ Lot Number 01K0643AE
Location Massachusetts
Department

State Certified
Status Pass
Temp °C 22
Humidity % 52

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.00	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.00	10.00	0.00%	Pass

Group # 2
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.413	1.413	0.00%	Pass

Group # 3
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	240.00	240.00	0.00%	Pass

Group # 4
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	%	100.00	%	100.00	100.00	0.00%	Pass

Group # 5
Group Name Disolved Oxygen Zero
Test Performed: N/A
As Found Result:
As Left Result:

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2635
Description YSI 600 XL
Calibrated 5/30/2013 4:07:14PM

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
MA 1413 COND.	MA 1.413 MS/CM	Pine Environmental Services, Inc.		2AC129		3/1/2014
MA ORP 240MV 5245	MA ORP SOLUTION 240 mV	Hanna	240 mV	5245		11/1/2017
MA PH10 3AC002	MA PH10 SOLUTION	AquaPhoenix Scientific	PH10	3AC002		3/1/2015
MA PH4 3AB480	MA PH4 SOLUTION	AquaPhoenix Scientific	MA PH4	3AB480		3/1/2015
MA PH7 3AB462	Ma pH 7.00	AquaPhoenix Scientific		3AB462		3/1/2015

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Sheila Blouin

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2159
Description YSI 600 XL
Calibrated 5/30/2013 4:19:53PM

Manufacturer YSI
Model Number 600 XL
Serial Number/ Lot Number 01F0657
Location Massachusetts
Department

State Certified
Status Pass
Temp °C 22
Humidity % 52

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.00	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.00	10.00	0.00%	Pass

Group # 2
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.413	1.413	0.00%	Pass

Group # 3
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	240.00	240.00	0.00%	Pass

Group # 4
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	%	100.00	%	100.00	100.00	0.00%	Pass

Group # 5
Group Name Disolved Oxygen Zero
Test Performed: N/A **As Found Result:** **As Left Result:**

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2159
Description YSI 600 XL
Calibrated 5/30/2013 4:19:53PM

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
MA 1413 COND.	MA 1.413 MS/CM	Pine Environmental Services, Inc.		2AC129		3/1/2014
MA ORP 240MV 5245	MA ORP SOLUTION 240 mV	Hanna	240 mV	5245		11/1/2017
MA PH10 3AC002	MA PH10 SOLUTION	AquaPhoenix Scientific	PH10	3AC002		3/1/2015
MA PH4 3AB480	MA PH4 SOLUTION	AquaPhoenix Scientific	MA PH4	3AB480		3/1/2015
MA PH7 3AB462	Ma pH 7.00	AquaPhoenix Scientific		3AB462		3/1/2015

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Sheila Blouin

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INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2132
Description YSI 600 XL
Calibrated 5/28/2013 4:52:52PM

Manufacturer YSI
Model Number 600 XL
Serial Number/ Lot Number 01F0657AC
Location Massachusetts
Department

State Certified
Status Pass
Temp °C 20
Humidity % 34

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.00	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	10.00	10.00	0.00%	Pass

Group # 2
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.413	1.413	0.00%	Pass

Group # 3
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	240.00	240.00	0.00%	Pass

Group # 4
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	%	100.00	%	100.00	100.00	0.00%	Pass

Group # 5
Group Name Disolved Oxygen Zero
Test Performed: N/A
As Found Result:
As Left Result:

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.

24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2132
Description YSI 600 XL
Calibrated 5/28/2013 4:52:52PM

Test Instruments Used During the Calibration **(As Of Cal Entry Date)**

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
MA 1413 COND.	MA 1.413 MS/CM	Pine Environmental Services, Inc.		2AC129		3/1/2014
MA ORP 240MV 5245	MA ORP SOLUTION 240 mV	Hanna	240 mV	5245		11/1/2017
MA PH10 3AC002	MA PH10 SOLUTION	AquaPhoenix Scientific	PH10	3AC002		3/1/2015
MA PH4 3AB480	MA PH4 SOLUTION	AquaPhoenix Scientific	MA PH4	3AB480		3/1/2015
MA PH7 3AB462	Ma pH 7.00	AquaPhoenix Scientific		3AB462		3/1/2015

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Sheila Blouin

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ARCADIS
Infrastructure, environment, facilities

YSI & Turbidity Meter Calibration Log

DATE: 6-19-13

INSTRUMENT IDENTIFICATION

Brand: YSI	Model: 600 XLM	Serial Number: 10459
Brand: LaMotte	Model: 2020e	Serial Number: 11754

CALIBRATION RECORD

Morning Calibration		Afternoon Check		Evening Check	
Standard	Calibration Successful	Standard	Reading	Standard	Reading
pH (S.I. units)					
4.00	4.09	4.00	4.10	4.00	
7.00	7.04	7.00	7.00	7.00	
10.00	9.92	10.00	10.02	10.00	
Turbidity (NTUs)					
~~0~~ 1	0.98	1	1.03	0	
10	10.51	10	9.78	10	
~~100~~					
Conductivity (µmhos/cm)					
1.413	1.413	1.413	—	1.413	
10 µS/cm	10		10		
Dissolved Oxygen (mg/L)					
Barametric Pressure in.H_2O*25.4=8.18 mmHg		Not Applicable		Not Applicable	
REDOX (mV)		Chart [1]		Chart [1]	
(Zobel Solution)	235.0	230.9			
Temperature (°C)	21°		25.08°		
Lights Solution:	431	Lights Solution:	431.5		

[1] The REDOX of the Zobel solution is temperature dependent, a chart is provided with the meter to check the reading for the appropriate temperature. REDOX must be calibrated by the manufacturer.

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
24 Tower Office Park
Woburn, MA 01801
Toll-free: (800) 519-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 11764
Description LaMotte 2020E
Calibrated 6/17/2013 3:53:13PM

Manufacturer LaMotte
Model Number 2020E
Serial Number/ Lot Number ME 11734
Location Massachusetts
Department

State Certified
Status Pass
Temp °C 24.7
Humidity % 39

Calibration Specifications

Group # 1
Group Name Turbidity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.00 / 1.00	NTU	1.00	NTU	1.00	1.00	0.00%	Pass
10.00 / 10.00	NTU	10.00	NTU	10.00	9.98	-0.20%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
MA 0 NTU AUTOCAL PH 4.49	MA 0 NTU Autocal C54820	GFS		C359243		2/1/2014
MA 1 NTU LAMOTTE	Ma 1 NTU Lot C254964	GFS	8577	C254964	10/11/2012	8/1/2013
MA 10 NTU GFS	Ma 10 NTU Lot C254965	GFS	8578	C254965	10/11/2012	8/1/2013

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Amy Adams

All instruments are calibrated by Pine Environmental Services, LLC. according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services, LLC. of any defect within 24 hours of receipt of equipment
Please call 866-960-7463 for Technical Assistance

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
3902 Corporex Park Drive, Suite 450
Tampa, FL 33619
Toll-free: (877) 259-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2176
Description YSI 600 XLM
Calibrated 6/17/2013 5:24:31PM

Manufacturer YSI
Model Number 600 XLM
Serial Number/ Lot Number 01G0853AA
Location Florida
Department

State Certified
Status Pass
Temp °C 28
Humidity % 41

Calibration Specifications

Group # 1
Group Name PH
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
7.00 / 7.00	PH	7.00	PH	7.00	7.00	0.00%	Pass
4.00 / 4.00	PH	4.00	PH	4.00	4.00	0.00%	Pass
10.00 / 10.00	PH	10.00	PH	9.97	9.97	-0.30%	Pass

Group # 2
Group Name Conductivity
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.000

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
1.413 / 1.413	ms/cm	1.413	ms/cm	1.414	1.414	0.07%	Pass

Group # 3
Group Name Redox (ORP)
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
240.00 / 240.00	mv	240.00	mv	240.20	240.20	0.08%	Pass

Group # 4
Group Name Disolved Oxygen Span
Stated Accy Pct of Reading
Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	%	100.00	%	100.10	100.10	0.10%	Pass

Group # 5
Group Name Disolved Oxygen Zero
Test Performed: N/A **As Found Result:** **As Left Result:**

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services, LLC.
3902 Corporex Park Drive, Suite 450
Tampa, FL 33619
Toll-free: (877) 259-PINE (7463)

Pine Environmental Services, Inc.

Instrument ID 2176
Description YSI 600 XLM
Calibrated 6/17/2013 5:24:31PM

Test Instruments Used During the Calibration (As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date
FL 1.413 COND 10115		Aurical		10115		1/14/2014
FL ORP 240MV 4769	FL ORP 240MV HANNA	Hanna	SL50005-500	4769		7/31/2017
FL PH10 2211639	FL pH 10 2211639	VWR		2211639		5/31/2014
FL PH4 2210176	FL pH 4 2210176	VWR		2210176		9/30/2014
FL PH7 2208038		VWR		2208038		7/31/2014

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Patrick Bingaman

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Please call 866-960-7463 for Technical Assistance

ARCADIS U.S., Inc.
160 Chapel Road
Suite 201
Manchester
Connecticut 06042-1625
Tel 860 645 1084
Fax 860 645 1090

MEMO

To:
Bruce Thompson
de maximis, inc.
200 Day Hill Road, Suite 200
Windsor, CT 06095

Copies:
Jessie McCusker, ***de maximis, inc.***
John Hunt, ***de maximis, inc.***
Mike Gefell, ARCADIS

From:
Jeffrey S. Holden, P.E., LEP
Principal Engineer

Date:
October 7, 2013

ARCADIS Project No.:
B0054634.0000.01900

Subject:
Supplemental HydraSleeve™ Groundwater Sampling Results
SRSNE Superfund Site, Southington, CT

As described in the Draft *2013 Groundwater Sampling and Monitored Natural Attenuation Report*, ARCADIS performed additional groundwater sampling at a subset of monitoring wells to assess concentration trends in the vicinity of wells PZO-2M and MW-1003DR. Samples collected from these well in June 2013 contained benzene, tetrachloroethene (PCE) and/or trichloroethene (TCE) at concentrations above their respective Action Levels (the lower of the United States Environmental Protection Agency [USEPA] Maximum Contaminant Level [MCL] and the Connecticut Class GA Groundwater Protection Criteria [GWPC]), with concentrations up to three orders of magnitude higher than prior results. Each well was resampled later in June 2013, with results similar to those in the initial June sample (see Table 1). To further assess concentration trends in these and other nearby wells, two additional rounds of groundwater sampling were performed: one in July 2013 and the second in September 2013. The scope and findings of these supplemental sampling events are summarized below.

July 2013 HydraSleeve™ Sampling

The first of the two supplemental HydraSleeve™ sampling events took place on July 12-17, 2013. Samples from 41 monitoring wells representing all five hydrostratigraphic zones were collected and submitted to Alpha Analytical (Alpha) of Westborough, Massachusetts for analysis of volatile organic compounds (VOCs). Groundwater analytical data are summarized in Table 1. Monitoring wells locations are shown on Figure 1.

September 2013 HydraSleeve™ Sampling

Based on the results from the July sampling event, another round of sampling was performed on September 17-19, 2013. Ten monitoring wells were sampled during this event, including nine of the wells sampled in July 2013, plus MW-903M. Consistent with the July 2013 event, samples were collected using HydraSleeve™ and submitted to Alpha for analysis of VOCs. Groundwater analytical data from this event are summarized in Table 1 and well locations are shown on Figure 1.

Results and Discussion

The July 2013 sampling indicated PCE and TCE concentrations in PZO-2M and MW-1003DR remained above Action Levels at concentrations generally consistent with the June 2013 data; concentrations were slightly higher at PZO-2M and slightly lower at MW-1003DR.

In September, PCE and TCE concentrations remained above Action Levels at monitoring wells PZO-2M and MW-1003DR, although concentrations were lower than during the June and July events.

Based on the results of the July and September sampling events, Table 2 summarizes concentrations of key VOCs for key wells, as well as recent prior data from these wells to facilitate review of recent trends at these locations. In addition to the VOC concentration trends for wells PZO-2M and MW-1003DR discussed above, the table also presents data for MW-707DR and MW-1002DR. MW-707DR, which is located outside of the inferred hydraulic capture zone, has contained benzene at a concentration at, near or slightly above the Action Level of 1 microgram per liter (ug/L). The September 2013 sample indicated no VOCs above Action Levels. MW-1002DR is a deep bedrock well upgradient of MW-1003 and has also contained PCE and TCE at concentrations above the Action Levels.

Apart from the wells and specific VOCs discussed above, the supplemental sampling of 41 wells in July 2013 and 10 wells in September 2013 did not indicate any additional noteworthy results. In general, other data were consistent with prior results, and indicate hydraulic containment of wells with concentrations exceeding Action Levels.

Recommendation

Based on the results of the July and September 2013 groundwater sampling events and the recent declining concentrations at wells MW-1003DR and PZO-2M, it is recommended that interim HydraSleeve™ sampling events continue on a focused basis. Pending your concurrence, we propose additional HydraSleeve™ sampling at the four wells indicated in Table 2 (PZO-2M, MW-707DR, MW-1002DR and MW-1003DR) in November 2013.

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					CPZ-4A		CW-1-78		CW-B-77		MW-03		MW-03		MW-03		MW-1002DR		MW-1002DR	
Sample Date					6/3/2013		7/17/2013		7/17/2013		6/3/2013		7/17/2013		9/22/2013		6/4/2013		6/4/2013	
Field Sample ID					CPZ-4A-HS-06032013		CW-1-78-HS-07172013		CW-B-77-HS-07172013		MW-03-06032013		MW-03-HS-07172013		MW-03-HS-09192013		DUP-GW-06042013#2		MW-1002DR-HS-06042013	
Well Group					R		W		W		R		R		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																
VOCs (8260C)																				
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	2.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	**1.8**	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	**0.84**	J
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	7.5	U	3.8	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**4.8**	--	**0.2**	J	0.75	U	**0.44**	J	0.75	U	**0.182**	J	7.5	U	3.8	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	**0.88**	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**3.1**	J	**3.1**	--
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	12	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	12	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	2.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	12	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	5	U	5	U	5	U	5	U	50	U	25	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	5	U	5	U	5	U	5	U	50	U	25	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	5	U	5	U	5	U	5	U	50	U	25	UJ
Acetone	67-64-1	ug/L	700	5	5	UJ	5	U	5	U	5	UJ	5	U	**1.79**	J	50	UJ	25	UJ
Benzene	71-43-2	ug/L	1	0.5	**1.9**	--	0.5	U	0.5	U	**0.16**	J	0.5	U	**0.175**	J	5	U	2.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5	1	UJ	1	U	1	U	1	UJ	1	U	1	U	10	UJ	5	UJ
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	5	U	5	U	5	U	5	U	5	U	50	U	25	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	2.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	**0.92**	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	2.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	**24**	J	1	U	1	U	1	UJ	1	U	1	U	10	U	5	U
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	7.5	U	3.8	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	25	U	12	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**2.5**	J	0.5	U	0.5	U	**0.26**	J	**0.19**	J	0.5	U	**26**	--	**26**	--
Ethylbenzene	100-41-4	ug/L	700	0.5	**0.81**	--	0.5	U	0.5	U	**0.71**	--	0.5	U	0.5	U	5	U	2.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	6	U	3	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	5	U	5	U	5	U	5	U	**4**	J	**3.5**	J
Naphthalene	91-20-3	ug/L	280	0.5	**0.23**	J	2.5	U	2.5	U	**0.38**	J	2.5	U	2.5	U	25	U	12	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	1	U	1	U	1	U	1	U	10	U	5	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**21**	--	**21**	--
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	**35**	--	5	U	5	U	5	U	5	U	5	U	50	U	25	U
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	0.75	U	0.75	U	**2.5**	--	0.75	U	**1.34**	--	7.5	U	3.8	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	7.5	U	3.8	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	5	U	2.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	**1.7**	--	0.5	U	0.5	U	**0.52**	--	**0.51**	--	**0.256**	J	**480**	--	**460**	--
Vinyl chloride	75-01-4	ug/L	2	0.5	**2.6**	--	1	U	1	U	1	U	1	U	1	U	10	U	5	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	**4.1**	--	1	U	1	U	**4.2**	--	1	U	**0.474**	J	10	U	5	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWPC)
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					MW-1002DR		MW-1002DR		MW-1002R		MW-1002R		MW-1003DR		MW-1003DR		MW-1003DR		MW-1003DR	
Sample Date					7/16/2013		9/22/2013		6/6/2013		7/16/2013		6/5/2013		6/19/2013		7/16/2013		9/23/2013	
Field Sample ID					MW-1002DR-HS-07162013		MW-1002DR-HS-09192013		MW-1002R-HS-06062013		MW-1002R-HS-07162013		MW-1003DR-HS-06052013		MW-1003DR-HS-06192013		MW-1003DR-HS-07162013		MW-1003DR-HS-09192013	
Well Group					R		R		R		R		R		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																
VOCs (8260C)																				
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	2.5	U	5	U	2.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	2.5	U	2.5	U	0.5	U	0.5	U	**27**	--	**20**	--	**12**	--	**9.1**	--
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	3.8	U	3.75	U	0.75	U	0.75	U	0.75	U	3.8	U	7.5	U	3.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	3.8	U	3.75	U	0.75	U	0.75	U	**0.5**	J	3.8	U	7.5	U	3.75	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	**3.5**	--	**3.12**	--	0.5	U	0.5	U	**1.6**	--	**1.3**	J	5	U	**0.732**	J
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	12	U	12.5	U	2.5	U	2.5	U	2.5	U	12	U	25	U	12.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	12	U	12.5	U	2.5	U	2.5	U	2.5	U	12	U	25	U	12.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	2.5	U	5	U	2.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	12	U	12.5	U	2.5	U	2.5	U	2.5	U	12	U	25	U	12.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	25	U	25	U	5	U	5	U	**2**	J	25	U	50	U	25	U
2-Hexanone	591-78-6	ug/L	140	5	25	U	25	U	5	U	5	U	5	U	25	U	50	U	25	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	25	U	25	U	5	U	5	U	**1.7**	J	25	U	50	U	25	U
Acetone	67-64-1	ug/L	700	5	25	U	25	U	5	U	5	U	**14**	--	25	U	50	U	**22**	J
Benzene	71-43-2	ug/L	1	0.5	2.5	U	2.5	U	**1.1**	--	**1.2**	--	**2.6**	--	**2.3**	J	**2.4**	J	**1.72**	J
Bromomethane	74-83-9	ug/L	9.8	0.5	5	U	5	U	1	UJ	1	U	**0.4**	J	5	U	10	U	5	U
Carbon disulfide	75-15-0	ug/L	700	0.5	25	U	25	U	**16**	--	**7.1**	--	5	U	25	U	50	U	25	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	2.5	U	5	U	2.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	2.5	U	5	U	2.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	5	U	5	U	1	U	1	U	**0.19**	J	5	U	10	U	5	U
Chloroform	67-66-3	ug/L	6	0.5	3.8	U	3.75	U	**0.23**	J	**0.38**	J	0.75	U	3.8	U	7.5	U	3.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	12	U	12.5	U	**0.19**	J	2.5	U	2.5	U	12	U	25	U	12.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**30**	--	**26.8**	--	0.5	U	0.5	U	**5.5**	--	**5.3**	--	**4.1**	J	**5.59**	--
Ethylbenzene	100-41-4	ug/L	700	0.5	2.5	U	2.5	U	0.5	U	**0.23**	J	**11**	--	**8.3**	--	**4.9**	J	**3.4**	--
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	3	U	3	U	0.6	U	0.6	U	0.6	U	3	U	6	U	3	U
Methylene chloride	75-09-2	ug/L	5	0.5	**4**	J	**1.68**	J	5	U	5	U	5	U	25	U	**5.7**	J	**1.7**	J
Naphthalene	91-20-3	ug/L	280	0.5	12	U	12.5	U	2.5	U	2.5	U	2.5	U	12	U	25	U	12.5	U
Styrene	100-42-5	ug/L	100	0.5	5	U	5	U	1	U	1	U	**1.9**	--	**1.8**	J	10	U	5	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	**18**	--	**16.7**	--	0.5	U	0.5	U	**90**	--	**81**	--	**43**	--	**29.7**	--
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	25	U	25	U	5	U	5	U	5	UJ	25	U	50	U	25	U
Toluene	108-88-3	ug/L	1000	0.5	**1.2**	J	3.75	U	0.75	U	**1.8**	--	**86**	--	**78**	--	**49**	--	**32.1**	--
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	3.8	U	3.75	U	0.75	U	0.75	U	0.75	U	3.8	U	7.5	U	3.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	2.5	U	2.5	U	0.5	U	0.5	U	0.5	U	2.5	U	5	U	2.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	**440**	--	**438**	--	0.5	U	0.5	U	**740**	--	**660**	--	**440**	--	**294**	--
Vinyl chloride	75-01-4	ug/L	2	0.5	5	U	5	U	1	U	1	U	1	U	5	U	10	U	**1.82**	J
Xylenes, Total	1330-20-7	ug/L	530	0.5	5	U	5	U	1	U	**1.4**	J	**34**	--	**26**	--	**15**	J	**10.6**	J

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					MW-1003R		MW-1003R		MW-121B		MW-121B		MW-121C		MW-121C		MW-121M		MW-121M	
Sample Date					6/6/2013		7/16/2013		6/3/2013		7/17/2013		6/3/2013		7/16/2013		6/3/2013		7/16/2013	
Field Sample ID					MW-1003R-HS-06062013		MW-1003R-HS-07162013		MW-121B-HS-06032013		MW-121B-HS-07172013		MW-121C-HS-06032013		MW-121C-HS-07162013		MW-121M-HS-06032013		MW-121M-HS-07162013	
Well Group					R		R		R		R		R		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																
VOCs (8260C)																				
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	1.5	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	0.75	U	0.75	U	1.5	U	0.75	U	0.75	U	0.75	U	0.75	U	**0.2**	J
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	5	U	**0.18**	J	**0.18**	J	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	1	U	0.5	U	**0.46**	J	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	5	U	**0.21**	J	**0.2**	J	2.5	U	2.5	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	10	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	10	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	10	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/L	700	5	5	U	**4.3**	J	10	UJ	5	U	5	UJ	5	U	5	UJ	5	U
Benzene	71-43-2	ug/L	1	0.5	**0.17**	J	**0.58**	--	**16**	--	**15**	--	**13**	--	**2**	--	**0.95**	--	**0.91**	--
Bromomethane	74-83-9	ug/L	9.8	0.5	1	UJ	1	U	2	UJ	1	U	1	UJ	1	U	1	UJ	1	U
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	**0.31**	J	10	U	5	U	5	U	**0.42**	J	5	U	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	0.5	U	**9**	--	**7.3**	--	**7.4**	--	**1.1**	--	**0.87**	--	**0.52**	--
Chloroethane	75-00-3	ug/L	12.1	0.5	**0.16**	J	1	U	**40**	J	**34**	--	**34**	J	**5.2**	--	**15**	J	**8.7**	--
Chloroform	67-66-3	ug/L	6	0.5	**0.52**	J	**0.46**	J	1.5	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	**0.24**	J	**0.19**	J	5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**0.32**	J	0.5	U	1	UJ	0.5	U	0.5	UJ	0.5	U	0.5	UJ	0.5	U
Ethylbenzene	100-41-4	ug/L	700	0.5	0.5	U	**0.21**	J	**2.5**	--	0.5	U	**0.17**	J	**0.26**	J	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	1.2	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	10	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	2	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	U	5	U	**210**	--	**170**	--	**110**	--	**33**	--	**8.8**	--	**6.2**	--
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	**0.8**	--	1.5	U	**0.21**	J	**0.35**	J	**0.22**	J	0.75	U	0.75	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	1.5	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	**0.42**	J	**0.22**	J	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	1	U	2	U	1	U	1	U	**0.15**	J	1	U	**0.19**	J
Xylenes, Total	1330-20-7	ug/L	530	0.5	1	U	**0.69**	J	**3**	--	**2.2**	--	**1.6**	--	1	U	1	U	1	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

					Sample Location	MW-124C		MW-127B		MW-127C		MW-127C		MW-127C		MW-128		MW-204A		MW-204B	
					Sample Date	6/4/2013		7/16/2013		6/5/2013		7/16/2013		9/22/2013		7/17/2013		7/16/2013		7/16/2013	
					Field Sample ID	MW-124C-HS-06042013		MW-127B-HS-07162013		MW-127C-06052013		MW-127C-HS-07162013		MW-127C-HS-09192013		MW-128-HS-07172013		MW-204A-HS-07162013		MW-204B-HS-07162013	
					Well Group	R		C		R		R		R		C		C		C	
Analyte	**CAS No.**	**Unit**	**Action**	**ICL**																	
VOCs (8260C)			**Level**																		
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	**7.7**	--	**0.37**	J	**2.4**	--	**2**	--	**0.813**	--	**0.24**	J	**0.34**	J	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**2.4**	--	**0.24**	J	**4.3**	--	**5**	--	**2.83**	--	**0.24**	J	**0.27**	J	0.75	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	**4.6**	--	0.5	U	**1.1**	--	**1.7**	--	**0.549**	--	**0.45**	J	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/L	700	5	5	UJ	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5	1	UJ	1	U	1	UJ	1	U	1	U	1	U	1	U	1	U
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	67-66-3	ug/L	6	0.5	**0.25**	J	**0.23**	J	0.75	U	**0.3**	J	0.75	U	0.75	U	0.75	U	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**5.9**	--	0.5	U	**1.4**	--	**1.8**	--	**0.81**	--	**0.2**	J	**0.68**	--	**0.49**	J
Ethylbenzene	100-41-4	ug/L	700	0.5	0.5	U	0.5	U	**0.28**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	**0.28**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	**0.44**	J	**0.24**	J
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	0.75	U	1.2	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	**1.6**	--	0.5	U	**0.43**	J	**0.44**	J	**0.296**	J	0.5	U	**1.9**	--	**1**	--
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	1	U	1	U	**1.6**	J	1	U	1	U	1	U	1	U	1	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					MW-205A		MW-205B		MW-413		MW-415		MW-416		MW-502		MW-703D		MW-703DR	
Sample Date					7/16/2013		7/16/2013		6/6/2013		6/6/2013		6/6/2013		6/4/2013		7/17/2013		7/17/2013	
Field Sample ID					MW-205A-HS-07162013		MW-205B-HS-07162013		MW-413-HS-06062013		MW-415-HS-06062013		MW-416-HS-06062013		MW-502-HS-06042013		MW-703D-HS-07172013		MW-703DR-HS-07172013	
Well Group					W		C		N		N		N		R		C		C	
Analyte	**CAS No.**	**Unit**	**Action**	**ICL**																
VOCs (8260C)			**Level**																	
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	5	U	10	U	2.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	0.5	U	0.5	U	**23**	--	**38**	--	**110**	--	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	7.5	U	15	U	3.8	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**0.45**	J	0.75	U	**170**	--	**500**	--	**22**	--	0.75	U	0.75	U	0.75	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	0.5	U	0.5	U	**1.8**	J	**5.3**	J	**39**	--	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	25	U	50	U	12	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	25	U	50	U	12	U	**0.34**	J	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	**10**	--	**4.2**	J	2.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	25	U	50	U	12	U	**0.29**	J	2.5	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	50	U	**620**	--	25	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	50	U	100	U	25	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	**95**	--	**180**	--	25	U	**4**	J	5	U	5	U
Acetone	67-64-1	ug/L	700	5	5	U	5	U	50	U	**230**	--	25	U	5	UJ	5	U	5	U
Benzene	71-43-2	ug/L	1	0.5	0.5	U	0.5	U	**6.1**	--	10	U	2.5	U	**64**	--	0.5	U	0.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5	1	U	1	U	10	UJ	20	UJ	5	UJ	1	UJ	1	U	1	U
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	5	U	50	U	100	U	25	U	5	U	5	U	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	5	U	10	U	2.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	0.5	U	5	U	**7.5**	J	2.5	U	**27**	--	0.5	U	0.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	1	U	1	U	**110**	--	**900**	--	**1.1**	J	**61**	--	1	U	1	U
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	0.75	U	7.5	U	15	U	3.8	U	0.75	U	**0.16**	J	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	25	U	**19**	J	12	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	0.5	U	0.5	U	**840**	--	**1400**	--	**300**	--	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/L	700	0.5	0.5	U	0.5	U	**57**	--	**270**	--	2.5	U	**99**	--	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	6	U	12	U	3	U	0.6	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	**3.2**	J	**120**	--	25	U	5	U	5	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	25	U	50	U	12	U	**1.5**	J	2.5	U	2.5	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	10	U	20	U	5	U	1	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	0.5	U	**23**	--	10	U	**17**	--	0.5	U	0.5	U	0.5	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	U	5	U	**79**	--	**39**	J	**7**	J	**3800**	--	5	U	5	U
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	0.75	U	**210**	--	**1300**	--	3.8	U	**5.3**	--	0.75	U	**0.2**	J
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	**3.8**	J	**8.2**	J	**0.89**	J	0.75	U	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	5	U	10	U	2.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	**0.35**	J	**0.22**	J	**59**	--	10	U	**280**	--	0.5	U	0.5	U	0.5	U
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	1	U	**1600**	--	**710**	--	**35**	--	1	U	1	U	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	1	U	1	U	**65**	--	**660**	--	5	U	**270**	--	1	U	1	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Analyte / VOCs (8260C)	CAS No.	Unit	Action Level	ICL	Sample Location		MW-704D		MW-704D		MW-704DR		MW-704DR		MW-704M		MW-704M		MW-704R		MW-704S	
					Sample Date		6/3/2013		7/17/2013		6/3/2013		7/17/2013		6/5/2013		7/17/2013		7/17/2013		7/17/2013	
					Field Sample ID		MW-704D-HS-06032013		MW-704D-HS-07172013		MW-704DR-HS-06032013		MW-704DR-HS-07172013		MW-704M-HS-06052013		MW-704M-HS-07172013		MW-704R-HS-07172013		MW-704S-HS-07172013	
					Well Group		R		R		R		R		R		R		C		C	
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5		0.5	U	**0.16**	J	0.5	U	**0.64**	--	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5		0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5		**0.57**	J	**1.8**	--	**2.8**	--	**3.5**	--	**0.16**	J	**0.16**	J	0.75	U	0.75	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5		0.5	U	0.5	U	0.5	U	**0.61**	--	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5		0.5	U	0.5	U	**0.25**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5		5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/L	700	5		5	UJ	5	U	5	UJ	5	U	5	U	5	U	**34**	--	5	U
Benzene	71-43-2	ug/L	1	0.5		**0.19**	J	0.5	U	**2.9**	--	**1.2**	--	**0.17**	J	0.5	U	**0.28**	J	0.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5		1	UJ	1	U	1	UJ	1	U	1	UJ	1	U	1	U	1	U
Carbon disulfide	75-15-0	ug/L	700	0.5		5	U	**0.4**	J	**0.61**	J	**0.33**	J	5	U	5	U	**22**	--	**0.31**	J
Carbon tetrachloride	56-23-5	ug/L	5	0.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5		**1.3**	--	**0.33**	J	**1.7**	--	**0.62**	--	**1.6**	--	**1.2**	--	0.5	U	0.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5		**7.5**	J	**1.4**	--	**22**	J	**8.5**	--	**0.66**	J	**0.43**	J	1	U	1	U
Chloroform	67-66-3	ug/L	6	0.5		0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	**5.5**	--	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5		0.5	UJ	**0.24**	J	**2.9**	J	**6.2**	--	**0.46**	J	**0.37**	J	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/L	700	0.5		0.5	U	0.5	U	**1**	--	**1.3**	--	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45		0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5		5	U	5	U	5	U	5	U	5	U	5	U	**0.7**	J	5	U
Naphthalene	91-20-3	ug/L	280	0.5		2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Styrene	100-42-5	ug/L	100	0.5		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5		0.5	U	0.5	U	0.5	U	**0.3**	J	0.5	U	0.5	U	0.5	U	0.5	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5		**3.4**	J	**1.4**	J	**8.8**	--	**7**	--	**2.2**	J	**3**	J	5	U	5	U
Toluene	108-88-3	ug/L	1000	0.5		0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	**0.44**	J	0.75	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5		0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5		0.5	U	0.5	U	**3.6**	--	**9.7**	--	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	75-01-4	ug/L	2	0.5		1	U	1	U	**0.24**	J	1	U	**0.16**	J	1	U	1	U	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5		1	U	1	U	**1.8**	J	**1.7**	J	1	U	1	U	1	U	1	U

Notes:
U = Analyte not detected above the laboratory reporting limit
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ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
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Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					MW-706DR		MW-707D		MW-707D		MW-707DR		MW-707DR		MW-707DR		MW-707M		MW-707M	
Sample Date					6/4/2013		7/16/2013		9/22/2013		6/4/2013		7/16/2013		9/22/2013		7/16/2013		9/22/2013	
Field Sample ID					MW-706DR-HS-06042013		MW-707D-HS-07162013		MW-707D-HS-09192013		MW-707DR-06042013		MW-707DR-HS-07162013		MW-707DR-HS-09192013		MW-707M-HS-07162013		MW-707M-HS-09192013	
Well Group					R		C		C		R		R		R		C		C	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																
VOCs (8260C)																				
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	25	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	25	U	0.5	U	0.5	U	**0.4**	J	**0.24**	J	**0.173**	J	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	38	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**7.7**	J	0.75	U	0.75	U	**1.3**	--	**1.5**	--	**1.22**	--	0.75	U	0.75	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	**20**	J	0.5	U	0.5	U	**0.16**	J	**0.16**	J	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	120	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	120	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	25	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	120	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	250	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5	250	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	250	UJ	5	U	5	U	5	UJ	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/L	700	5	250	UJ	5	U	5	U	5	UJ	5	U	**5.94**	--	5	U	5	U
Benzene	71-43-2	ug/L	1	0.5	25	U	0.5	U	0.5	U	**1.3**	--	**1**	--	**0.804**	--	0.5	U	0.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5	50	UJ	1	U	1	U	1	UJ	1	U	1	U	1	U	1	U
Carbon disulfide	75-15-0	ug/L	700	0.5	250	U	5	U	5	U	5	U	**0.36**	J	**0.462**	J	5	U	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	25	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	25	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	50	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	67-66-3	ug/L	6	0.5	38	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	120	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**2100**	--	0.5	U	0.5	U	**0.59**	--	**0.63**	--	**0.517**	--	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/L	700	0.5	25	U	0.5	U	0.5	U	**0.59**	--	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	30	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5	**17**	J	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5	120	U	2.5	U	2.5	U	**0.24**	J	2.5	U	2.5	U	2.5	U	2.5	U
Styrene	100-42-5	ug/L	100	0.5	50	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	**31**	--	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	250	U	5	U	5	U	**1.6**	J	5	U	5	U	5	U	5	U
Toluene	108-88-3	ug/L	1000	0.5	**18**	J	0.75	U	0.75	U	1.9	U	**0.28**	J	0.75	U	**0.36**	J	**0.871**	--
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	38	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	25	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	**580**	--	**0.38**	J	**0.216**	J	**0.21**	J	0.5	U	0.5	U	**0.43**	J	0.5	U
Vinyl chloride	75-01-4	ug/L	2	0.5	**61**	--	1	U	1	U	1	U	1	U	**0.143**	J	1	U	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	50	U	1	U	1	U	**3.2**	J	1	U	1	U	1	U	**0.352**	J

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

				Sample Location	MW-707R		MW-707R		MW-707S		MW-902D		MW-902M		MW-903M		MW-907D		MW-907DR	
				Sample Date	7/16/2013		9/24/2013		7/16/2013		6/5/2013		6/5/2013		9/22/2013		6/3/2013		6/3/2013	
				Field Sample ID	MW-707R-HS-07162013		MW-707R-HS-09192013		MW-707S-HS-07162013		MW-902D-HS-06052013		MW-902M-HS-06052013		MW-903M-HS-09192013		MW-907D-HS-06032013		MW-907DR-HS-06032013	
				Well Group	C		C		C		N		N		C		R		R	
Analyte	**CAS No.**	**Unit**	**Action**	**ICL**																
VOCs (8260C)			**Level**																	
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	5	U	5	U	0.5	U	5	U	500	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	0.5	U	0.5	U	0.5	U	**10**	--	**20**	--	0.5	U	5	U	**1200**	--
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	0.75	U	7.5	U	7.5	U	0.75	U	7.5	U	750	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	0.75	U	0.75	U	0.75	U	**82**	--	**230**	--	**0.698**	J	7.5	U	750	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	0.5	U	0.5	U	0.5	U	**3.1**	J	**4.6**	J	0.5	U	5	U	**220**	J
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	2.5	U	25	U	**2.7**	J	2.5	U	25	U	2500	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	2.5	U	25	U	**3**	J	2.5	U	25	U	2500	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	**2**	J	**8.6**	--	0.5	U	5	U	500	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	2.5	U	25	U	25	U	2.5	U	25	U	2500	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	5	U	**21**	J	**160**	--	5	U	50	U	5000	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	5	U	50	U	50	U	5	U	50	U	5000	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	5	U	**5.4**	J	**44**	J	5	U	50	U	5000	U
Acetone	67-64-1	ug/L	700	5	5	U	5	U	5	U	50	U	**130**	--	5	U	50	UJ	5000	UJ
Benzene	71-43-2	ug/L	1	0.5	0.5	U	**0.906**	--	0.5	U	**1.6**	J	**9.2**	--	**0.177**	J	**29**	--	500	U
Bromomethane	74-83-9	ug/L	9.8	0.5	1	U	1	U	1	U	10	UJ	10	UJ	1	U	10	UJ	1000	UJ
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	**0.467**	J	5	U	50	U	50	U	5	U	50	U	5000	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	5	U	5	U	0.5	U	5	U	500	U
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	0.5	U	0.5	U	5	U	5	U	0.5	U	**14**	--	500	U
Chloroethane	75-00-3	ug/L	12.1	0.5	1	U	1	U	1	U	**140**	--	**2100**	--	1	U	**64**	J	1000	UJ
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	0.75	U	0.75	U	7.5	U	7.5	U	0.75	U	7.5	U	750	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	2.5	U	25	U	25	U	2.5	U	25	U	2500	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**0.39**	J	0.5	U	0.5	U	**300**	--	**540**	--	**1.17**	--	5	UJ	**620**	J
Ethylbenzene	100-41-4	ug/L	700	0.5	0.5	U	0.5	U	0.5	U	**94**	--	**540**	--	**0.245**	J	5	U	**460**	J
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	0.6	U	6	U	6	U	0.6	U	6	U	600	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	5	U	**9.7**	J	**48**	J	5	U	50	U	5000	U
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	2.5	U	25	U	**10**	J	2.5	U	25	U	2500	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	1	U	10	U	10	U	1	U	10	U	1000	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	5	U	5	U	**0.187**	J	5	U	**5800**	--
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	U	5	U	5	U	**13**	J	**150**	J	5	U	**640**	--	5000	U
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	0.75	U	**0.26**	J	**510**	--	**2200**	--	**2.04**	--	7.5	U	**3800**	--
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	0.75	U	7.5	U	**3.5**	J	0.75	U	7.5	U	750	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	0.5	U	5	U	5	U	0.5	U	5	U	500	U
Trichloroethene	79-01-6	ug/L	5	0.5	**0.65**	--	**0.299**	J	**0.66**	--	5	U	5	U	**3.88**	--	5	U	**63000**	--
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	1	U	1	U	**250**	--	**430**	--	1	U	10	U	1000	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	1	U	1	U	1	U	**140**	--	**850**	--	**0.55**	J	10	U	**1300**	J

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					MW-907M		MWL-304		MWL-307		MWL-309		P-101B		P-101C		P-11A		P-13	
Sample Date					6/3/2013		6/5/2013		6/5/2013		6/6/2013		6/4/2013		6/4/2013		6/6/2013		6/5/2013	
Field Sample ID					MW-907M-HS-06032013		MWL-304-HS-06052013		MWL-307-HS-06052013		MWL-309-HS-06062013		P-101B-HS-06042013		P-101C-HS-06042013		P-11A-HS-06062013		P-13-06052013	
Well Group					R		N		N		R		R		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																
VOCs (8260C)																				
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	20	U	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	20	U	**1.2**	--	**110**	--	0.5	U	0.5	U	0.5	U	**45**	--	**5.6**	--
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	30	U	0.75	U	75	U	0.75	U	0.75	U	0.75	U	7.5	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	30	U	**8.9**	--	**760**	--	**1**	--	**1**	--	**3**	--	**8.6**	--	**1.6**	--
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	20	U	0.5	U	**72**	--	0.5	U	0.5	U	0.5	U	**37**	--	**0.66**	--
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	100	U	2.5	U	250	U	2.5	U	2.5	U	2.5	U	**2.6**	J	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	100	U	2.5	U	250	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	20	U	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	100	U	2.5	U	250	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	200	U	5	U	**1200**	--	5	U	5	U	5	U	50	U	5	U
2-Hexanone	591-78-6	ug/L	140	5	200	U	5	U	500	U	5	U	5	U	5	U	50	UJ	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	200	U	5	U	**820**	--	5	U	5	UJ	5	U	50	U	5	U
Acetone	67-64-1	ug/L	700	5	200	UJ	5	U	**260**	J	5	U	5	UJ	5	UJ	50	U	5	U
Benzene	71-43-2	ug/L	1	0.5	**58**	--	**0.54**	--	**39**	J	0.5	U	**4.9**	--	**0.72**	--	**20**	--	**0.22**	J
Bromomethane	74-83-9	ug/L	9.8	0.5	40	UJ	1	UJ	100	UJ	1	UJ	1	UJ	1	UJ	10	UJ	1	UJ
Carbon disulfide	75-15-0	ug/L	700	0.5	200	U	**0.57**	J	500	U	5	U	5	U	5	U	**3.2**	J	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	20	U	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	**27**	--	0.5	U	50	U	0.5	U	**1.9**	--	**0.43**	J	5	U	0.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	**130**	J	**1.7**	--	**3000**	--	1	U	**15**	--	1	U	**11**	--	1	U
Chloroform	67-66-3	ug/L	6	0.5	30	U	0.75	U	75	U	0.75	U	0.75	U	0.75	U	7.5	U	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	100	U	2.5	U	250	U	2.5	U	2.5	U	2.5	U	25	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	20	UJ	**21**	--	**3800**	--	0.5	U	**0.72**	--	**0.65**	--	**4000**	--	**2.1**	--
Ethylbenzene	100-41-4	ug/L	700	0.5	20	U	**8.7**	--	**1800**	--	0.5	U	0.5	U	0.5	U	**420**	--	**0.76**	--
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	24	U	0.6	U	60	U	0.6	U	0.6	U	0.6	U	6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5	200	U	5	U	**110**	J	5	U	5	U	5	U	50	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5	100	U	2.5	U	250	U	2.5	U	2.5	U	2.5	U	**4.6**	J	2.5	U
Styrene	100-42-5	ug/L	100	0.5	40	U	1	U	100	U	1	U	1	U	1	U	**19**	--	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	20	U	0.5	U	50	U	0.5	U	0.5	U	0.5	U	**410**	--	**0.51**	--
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	**3600**	--	5	UJ	**120**	J	5	U	**4.9**	J	**1.9**	J	**54**	J	5	U
Toluene	108-88-3	ug/L	1000	0.5	30	U	0.75	U	**16000**	--	0.75	U	0.75	U	0.75	U	**660**	--	**3.6**	--
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	30	U	0.75	U	**24**	J	0.75	U	0.75	U	0.75	U	**2.7**	J	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	20	U	0.5	U	50	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	20	U	0.5	U	50	U	0.5	U	0.5	U	0.5	U	**1100**	--	**0.63**	--
Vinyl chloride	75-01-4	ug/L	2	0.5	40	U	**73**	--	**2000**	--	1	U	**1.9**	--	**1.3**	--	**600**	--	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	40	U	**1.6**	--	**3000**	--	1	U	**0.46**	J	1	U	**840**	--	**4.3**	--

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					PZO-204M		PZO-2D		PZO-2D		PZO-2D		PZO-2M		PZO-2M		PZO-2M		PZO-2M	
Sample Date					7/16/2013		6/3/2013		6/3/2013		7/17/2013		6/5/2013		6/19/2013		7/17/2013		9/23/2013	
Field Sample ID					PZO-204M-HS-07162013		DUP-GW-06032013-#1		PZO-2D-HS-06032013		PZO-2D-HS-07172013		PZO-2M-HS-06052013		PZO-2M-HS-06192013		PZO-2M-HS-07172013		PZO-2M-HS-09192013	
Well Group					C		R		R		R		R		R		R		R	
Analyte	**CAS No.**	**Unit**	**Action Level**	**ICL**																
VOCs (8260C)																				
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U	2.5	U	2.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	0.5	U	0.5	U	0.5	U	0.5	U	**5.8**	--	**4.8**	--	**9**	--	**7.56**	--
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	1.9	U	3.8	U	3.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**0.54**	J	**0.2**	J	**0.17**	J	**0.38**	J	0.75	U	1.9	U	3.8	U	3.75	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	0.5	U	0.5	U	0.5	U	0.5	U	**0.14**	J	1.2	U	2.5	U	2.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	6.2	U	12	U	12.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	6.2	U	12	U	12.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U	2.5	U	2.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	6.2	U	12	U	12.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	5	U	5	U	5	U	12	U	25	U	25	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	5	U	5	U	5	U	12	U	25	U	25	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	5	U	5	U	5	U	12	U	25	U	25	U
Acetone	67-64-1	ug/L	700	5	5	U	5	UJ	5	UJ	5	U	5	U	12	U	25	U	**8.14**	J
Benzene	71-43-2	ug/L	1	0.5	**0.39**	J	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U	2.5	U	2.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5	1	U	1	UJ	1	UJ	1	U	1	UJ	2.5	U	5	U	5	U
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	5	U	5	U	5	U	5	U	12	U	25	U	25	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U	2.5	U	2.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	**3.8**	--	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U	2.5	U	2.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	**0.36**	J	1	UJ	1	UJ	1	U	1	U	2.5	U	5	U	5	U
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	1.9	U	3.8	U	3.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	6.2	U	12	U	12.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**1**	--	**0.36**	J	**0.26**	J	**0.55**	--	**0.48**	J	1.2	U	2.5	U	**1.65**	J
Ethylbenzene	100-41-4	ug/L	700	0.5	0.5	U	0.5	U	0.5	U	0.5	U	**0.35**	J	**0.71**	J	2.5	U	2.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	1.5	U	3	U	3	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	5	U	5	U	5	U	12	U	25	U	**1.92**	J
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	6.2	U	12	U	12.5	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	1	U	1	U	1	U	2.5	U	5	U	5	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	**0.25**	J	**0.22**	J	**0.22**	J	**79**	--	**72**	--	**90**	--	**56**	--
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	**7**	--	5	U	5	U	5	U	5	UJ	12	U	25	U	25	U
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	0.75	U	0.75	U	0.75	U	1.6	U	**3.5**	--	3.8	U	3.75	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	1.9	U	3.8	U	3.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	1.2	U	2.5	U	2.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	0.5	U	**1.3**	--	**1.2**	--	**1.5**	--	**250**	--	**230**	--	**360**	--	**179**	--
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	1	U	1	U	1	U	1	U	2.5	U	5	U	5	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	1	U	1	U	1	U	1	U	**0.81**	J	**2.3**	J	5	U	5	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Sample Location					PZO-3D		PZO-3M		PZO-4D		PZO-4M		PZR-2DR		PZR-2R		PZR-2R		PZR-3R	
Sample Date					7/17/2013		7/17/2013		7/17/2013		7/17/2013		7/17/2013		6/5/2013		7/17/2013		7/17/2013	
Field Sample ID					PZO-3D-HS-07172013		PZO-3M-HS-07172013		PZO-4D-HS-07172013		PZO-4M-HS-07172013		PZR-2DR-HS-07172013		PZR-2R-HS-06052013		PZR-2R-HS-07172013		PZR-3R-HS-07172013	
Well Group					C		C		C		C		C		R		R		C	
Analyte	**CAS No.**	**Unit**	**Action**	**ICL**																
VOCs (8260C)			**Level**																	
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	0.5	U	0.5	U	**0.3**	J	**0.2**	J	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	67-64-1	ug/L	700	5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Benzene	71-43-2	ug/L	1	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromomethane	74-83-9	ug/L	9.8	0.5	1	U	1	U	1	U	1	U	1	U	1	UJ	1	U	1	U
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroethane	75-00-3	ug/L	12.1	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	67-66-3	ug/L	6	0.5	0.75	U	0.75	U	**0.16**	J	**0.17**	J	0.75	U	0.75	U	0.75	U	0.75	U
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	100-41-4	ug/L	700	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	108-88-3	ug/L	1000	0.5	**0.19**	J	**0.23**	J	0.75	U	0.75	U	**0.18**	J	0.75	U	**0.18**	J	0.75	U
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U	0.75	U
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	79-01-6	ug/L	5	0.5	**0.17**	J	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylenes, Total	1330-20-7	ug/L	530	0.5	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 1 – VOCs - Groundwater Sample Results – June-September 2013
Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site
Southington, Connecticut

Analyte	CAS No.	Unit	Action Level	ICL	Sample Location		PZR-4R		PZR-5R		TW-08A		TW-08B		TW-08D	
					Sample Date		7/17/2013		7/16/2013		6/5/2013		6/5/2013		6/5/2013	
					Field Sample ID		PZR-4R-HS-07172013		PZR-5R-HS-07162013		TW-08A-HS-06052013		TW-08B-HS-06052013		TW-08D-HS-06052013	
					Well Group		C		C		N		N		N	
VOCs (8260C)																
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	1	0.5	0.5	U	0.5	U	100	U	250	U	10	U		
1,1,1-Trichloroethane	71-55-6	ug/L	200	0.5	**2.4**	--	**2.6**	--	**310**	--	**8600**	--	**240**	--		
1,1,2-Trichloroethane	79-00-5	ug/L	5	0.5	0.75	U	0.75	U	150	U	**72**	J	15	U		
1,1-Dichloroethane	75-34-3	ug/L	70	0.5	**2**	--	**7.8**	--	**670**	--	**2100**	--	**420**	--		
1,1-Dichloroethene	75-35-4	ug/L	7	0.5	**0.76**	--	**5.8**	--	**70**	J	**2000**	--	**110**	--		
1,2,4-Trichlorobenzene	120-82-1	ug/L	70	2	2.5	U	2.5	U	500	U	1200	U	50	U		
1,2-Dichlorobenzene	95-50-1	ug/L	600	0.5	2.5	U	2.5	U	500	U	1200	U	**6.4**	J		
1,2-Dichloroethane	107-06-2	ug/L	1	0.5	0.5	U	0.5	U	**28**	J	**170**	J	**110**	--		
1,4-Dichlorobenzene	106-46-7	ug/L	75	0.5	2.5	U	2.5	U	500	U	1200	U	50	U		
2-Butanone (MEK)	78-93-3	ug/L	400	5	5	U	5	U	1000	U	2500	U	100	U		
2-Hexanone	591-78-6	ug/L	140	5	5	U	5	U	1000	U	2500	U	100	U		
4-Methyl-2-pentanone (MIBK)	108-10-1	ug/L	350	5	5	U	5	U	1000	U	**2000**	J	100	U		
Acetone	67-64-1	ug/L	700	5	5	U	5	U	1000	U	**870**	J	**89**	J		
Benzene	71-43-2	ug/L	1	0.5	0.5	U	0.5	U	**36**	J	**370**	--	**86**	--		
Bromomethane	74-83-9	ug/L	9.8	0.5	1	U	1	U	200	UJ	500	UJ	20	UJ		
Carbon disulfide	75-15-0	ug/L	700	0.5	5	U	5	U	1000	U	2500	U	**9.2**	J		
Carbon tetrachloride	56-23-5	ug/L	5	0.5	0.5	U	0.5	U	100	U	250	U	10	U		
Chlorobenzene	108-90-7	ug/L	100	0.5	0.5	U	0.5	U	100	U	250	U	10	U		
Chloroethane	75-00-3	ug/L	12.1	0.5	1	U	1	U	**120**	J	**980**	--	**520**	--		
Chloroform	67-66-3	ug/L	6	0.5	**0.16**	J	0.75	U	150	U	**110**	J	15	U		
Chloromethane	74-87-3	ug/L	2.7	0.5	2.5	U	2.5	U	500	U	1200	U	50	U		
cis-1,2-Dichloroethene	156-59-2	ug/L	70	0.5	**1.1**	--	**4.2**	--	**13000**	--	**330000**	--	**7000**	--		
Ethylbenzene	100-41-4	ug/L	700	0.5	0.5	U	0.5	U	**1200**	--	**3400**	--	**1200**	--		
Hexachlorobutadiene	87-68-3	ug/L	0.45	0.45	0.6	U	0.6	U	120	U	300	U	12	U		
Methylene chloride	75-09-2	ug/L	5	0.5	5	U	5	U	**120**	J	**660**	J	**39**	J		
Naphthalene	91-20-3	ug/L	280	0.5	2.5	U	2.5	U	500	U	1200	U	**13**	J		
Styrene	100-42-5	ug/L	100	0.5	1	U	1	U	200	U	**380**	J	20	U		
Tetrachloroethene	127-18-4	ug/L	5	0.5	0.5	U	**0.21**	J	100	U	**7200**	--	10	U		
Tetrahydrofuran	109-99-9	ug/L	4.6	0.5	5	U	**1.5**	J	1000	U	**610**	J	**420**	J		
Toluene	108-88-3	ug/L	1000	0.5	0.75	U	0.75	U	**2200**	--	**29000**	--	**5100**	--		
trans-1,2-Dichloroethene	156-60-5	ug/L	100	0.5	0.75	U	0.75	U	150	U	**140**	J	**28**	--		
trans-1,3-Dichloropropene	10061-02-6	ug/L	0.5	0.5	0.5	U	0.5	U	100	U	250	U	10	U		
Trichloroethene	79-01-6	ug/L	5	0.5	0.5	U	**0.99**	--	100	U	**24000**	--	**6**	J		
Vinyl chloride	75-01-4	ug/L	2	0.5	1	U	1	U	**14000**	--	**14000**	--	**15000**	--		
Xylenes, Total	1330-20-7	ug/L	530	0.5	1	U	1	U	**1800**	--	**9200**	--	**3900**	--		

Notes:
U = Analyte not detected above the laboratory reporting limit
J = Analyte result is estimated
ug/L = micrograms per liter
VOCs = volatile organic compounds
Action Level = the lower of the USEPA Maximum Contaminant Level (MCL) and the Connecticut Class GA Groundwater Protection Criteria (GWP
ICL = Interim Cleanup Level based on Table L-1 from Record of Decision Summary, September 2005
Bold = Analyte detected above the laboratory reporting limit
Shaded Cell = Analyte detected above the Action Level

Table 2 – Comparison of June 2013 Sampling Results Versus Previous Results at Select Wells

Solvents Recovery Service of New England, Inc. (SRSNE) Superfund Site

Southington, Connecticut

	MW-707DR				PZO-2M					
	June 2012	June 2013	July 2013	Sept 2013	June 2012	August 2012	June 2013	June 2013	July 2013	Sept 2013
	a	b					a	b		
PCE	-	-	-	-	.4J	-	79	72	90	56
TCE	-	0.21	-	-	9.9J	.5J	250	230	360	179
Benzene	1.1	1.3	1.0	0.804	-	-	-	-	-	-

	MW-1003DR					MW-1002DR			
	Oct 2012	June 2013	June 2013	July 2013	Sept 2013	June 2012	June 2013	July 2013	Sept 2013
		a	b			a	b		
PCE	-	90	81	43	29.7	13	21	18	16.7
TCE	-	740	660	440	294	380	460	440	438
Benzene	0.88	2.6	2.3	2.4	1.72	-	-	-	-

Notes:

- = not detected

PCE = tetrachloroethene

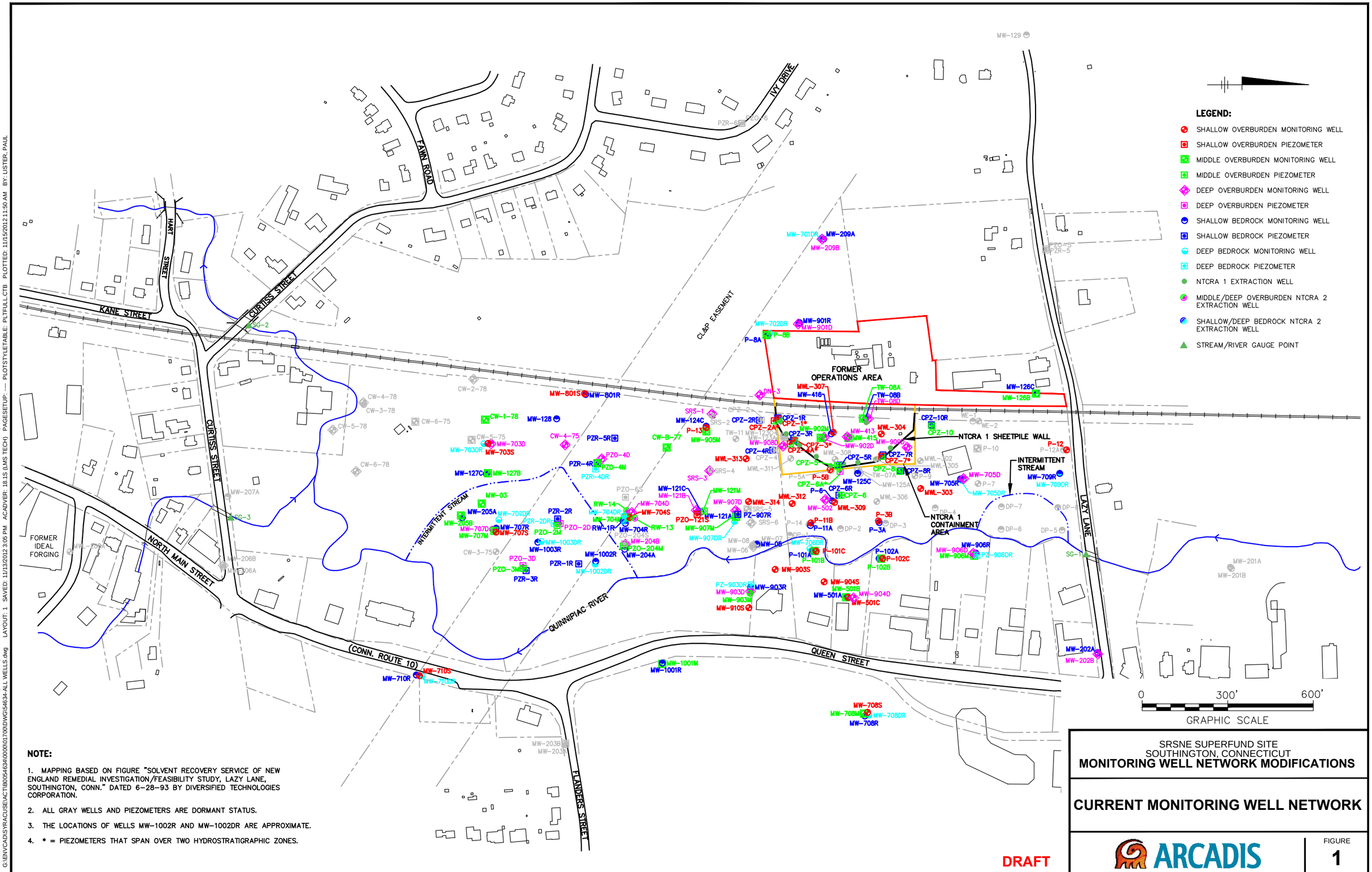
TCE = trichloroethene

J = indicates an estimated value

a = initial sample

b = resample

All results reported in micrograms per liter (ug/L)



NOTE:

1. MAPPING BASED ON FIGURE "SOLVENT RECOVERY SERVICE OF NEW ENGLAND REMEDIAL INVESTIGATION/FEASIBILITY STUDY, LAZY LANE, SOUTHINGTON, CONN." DATED 6-28-93 BY DIVERSIFIED TECHNOLOGIES CORPORATION.
2. ALL GRAY WELLS AND PIEZOMETERS ARE DORMANT STATUS.
3. THE LOCATIONS OF WELLS MW-1002R AND MW-1002DR ARE APPROXIMATE.
4. * = PIEZOMETERS THAT SPAN OVER TWO HYDROSTRATIGRAPHIC ZONES.

DRAFT

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
MONITORING WELL NETWORK MODIFICATIONS

CURRENT MONITORING WELL NETWORK

ARCADIS

FIGURE
1