de maximis, inc.

200 Day Hill Road
Suite 200
Windsor, CT 06095
(860) 298-0541
(860) 298-0561 FAX

Solvents Recovery Service of New England, Inc. Superfund Site

Southington, CT

Annual State of Compliance Report #2

October 30, 2009 through October 31, 2010

December 2011

Table of Contents

Tables:

Figures:

Figure 11- Geologic Cross Section A-A' with Hydraulic Head Values
Figure 12- Area Purchased for RDRA Activities

Attachments:

Attachment 1 - Project Schedule
Attachment 2 - Hydraulic Containment and Treatment System, Annual Demonstration of Compliance Report No. 2, October 30, 2009 through October 31, 2010

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 Environmental Protection (CTDEP). 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 #2*** (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 30, 2009 through October 31, 2010 (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 (Figure 3B).

- **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 2010, the combined NTCRA 1 and NTCRA 2 groundwater extraction systems generally pumped between 20 and 35 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 14,751,000 gallons of groundwater were extracted, treated and discharged during the 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 16,043 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	1994

northeast corner of the Cianci Property, implementation of a full-scale phytoremediation study within the NTCRA 1 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
USEPA and SRSNE Site Group sign CD to implement the RD/RA activities.	2008
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

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.

The only monitoring to evaluate compliance with Performance Standards during this reporting period was that conducted for the HCTS, as discussed below in section I and in Attachment 2 to this report.

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, and estimated long-term average 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 groundwater modeling results and stagnation point calculations presented in the FS Report (BBL and USEPA, May 2005; Appendix A), and VOC concentration data at monitoring wells. 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 is approximately 20 to 25 gpm. During the May 2010 water level measurement event, the NTCRA 2 extraction wells were running at a relatively low rate, between 10 and 15 gpm total, indicating that the wells needed to be re-developed.

Following an evaluation of redevelopment options, NTCRA 2 overburden extraction wells RW-13 and RW-14 were redeveloped in August 2010, and pumping rates as of December 2010 were approximately 25 to 30 gpm. The average combined NTCRA 2 extraction rates in 2008 and 2009 were approximately 27 gpm and 20 gpm, respectively.

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 provide the strongest assessments of statistical concentration trends. VOC concentration trends at these wells were presented in the Draft MNA Report (ARCADIS, September 2010) and are summarized on Figures 5 through 9 (confidence interval of 90%). Middle overburden MW-3 (Figure 6) and shallow bedrock well MW-127C (Figure 8) 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 5 through 9, 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.

The only groundwater monitoring location outside of the interpreted capture zone that was not below the ICLs for VOCs in May 2010 was shallow bedrock piezometer PZR-5R (Figure 8), which reported a detection of 7.1 parts per billion (ppb) of 1,1-dichloroethene, versus an ICL of 7.0 ppb. The May 2010 event was the first sampling event at this monitoring location. Piezometer PZR-5R was re-sampled on December 3, 2010, and reported a preliminary value of 5.8 ppb of 1,1-DCE (pending validation), with all VOCs below ICLs. Thus, based on the most recent data, all of the wells south of the estimated NTCRA 2 capture zone boundary meet the ICLs for VOCs.

Figure 10 shows a cross section location map and Figure 11 presents a north-south cross section drawn approximately parallel to the regional groundwater flow direction.

Hydraulic head values and the estimated NTCRA 2 capture zone boundary are also shown on Figure 11.

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, 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 will be developed as required by SOW Section V.B.7.

Access agreements 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 are complete.

Following completion of the Overburden NAPL Delineation in the Northwest corner of the Operations area, the SRSNE Site Group purchased approximately 0.50 acres of property from Raymond and Yolanda Yorski. The property purchase was required to implement the ISTR portion of the remedy. The area purchased is shown on Figure 12.

K. Construction, Operation and Maintenance Activities

The following construction, Operation and Maintenance activities were completed during this reporting period:

- Construction of new monitoring wells and abandonment of existing wells identified in RDWP Appendix N.

- In August of 2010, Pre-ISTR Preparation Plan construction (PIPP) commenced. With the exception of the abandonment of the existing 24” culvert, installation of the new 30” culvert, and excavation of soils on the East side of the RR-ROW, all construction activities identified in the PIPP RWAP and PIPP Design Plans will be completed by December 2010. All remaining work will be completed in the spring of 2011.

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 USEPA review on September 16, 2009 and resubmitted based upon EPA comments on June 23, 2010. The revision is currently under review.

N. Groundwater Monitoring Program

A comprehensive groundwater monitoring program was scoped in RDWP Attachment N. The first comprehensive groundwater sampling event occurred during May/June 2010. A summary of the planned sampling frequency is provided in the attached Table N-1 from the RDWP.

The first comprehensive ground sampling event 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. The scope of this report is provided in RDWP Attachment L (Monitored Natural Attenuation Plan).

O. Recommendations of Changes to any Monitoring Program

The following changes to the groundwater monitoring program were recommended within the Draft 1st Monitored Natural Attenuation Report submitted in September 2010:

- PCBs were not detected at concentrations greater than MCLs, GWPC, or ICLs. Therefore, PCBs should be considered for removal from the COC list and monitoring for PCBs should be discontinued.

- Antimony, cadmium, copper, beryllium, nickel, silver, and zinc were not detected or were detected at concentrations that were below MCLs and GWPC. In addition, aluminum does not have an MCL or GWPC. These select metals should be considered for removal from the COC list and monitoring for these metals should be discontinued.

- Sulfide was not detected at concentrations above the laboratory reporting limit of 0.04 mg/L. Based on the highly reactive nature of sulfide and the lack of detectable concentrations of sulfide in site groundwater, along with the adequate characterization of site groundwater redox conditions using other MNA parameter data, sulfide should be considered for removal from the MNA parameter analyte list and monitoring for sulfide should be discontinued.

- Alcohols were minimally detected in Site groundwater at locations within the VOC exceedance plume boundary. Given the limited detection of alcohols, ethanol, isopropanol, methanol, and sec-butanol should be considered for removal from the COC list and monitoring for these constituents should be discontinued.

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 September 2010 was $5,540,286.79. 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	$1,900,643	$285,096	None billed.	$200,806
Annual Report #2	$3,488,595	$523,289	$84,290	$523,289
Totals:	**$5,389,238**	**$808,386**	**$84,290**	**$724,095**

The total Rolling Oversight Cap amount available is: **$724,095**

The first oversight cost bill, dated February 10, 2010, was received on February 22, 2010, covering the period October 30, 2008 through October 31, 2009. This bill was paid on March 12, 2010. The total Rolling Costs Cap amount equals the available

amount remaining from the Annual Report #1 period and the total amount available from the Annual Report #2 period.

R. References

BBL. 1998. *Remedial Investigation Report*. June 1998.

BBL. 2005. Interim Monitoring and Sampling Report No. 13. January 6, 2005.

BBL and USEPA. 2005. *Feasibility Study Report*. Solvents Recovery Service of New England, Inc. Superfund Site, Southington, Connecticut. May 2005.

Halliburton NUS (HNUS) Environmental Corporation. 1994. Final *Remedial Investigation Report: Remedial Investigation/Feasibility Study, SRSNE Site, Southington, Connecticut*. May 1994.

Hubert, J.F., Reed, A.A., Dowdall, W.L., and Gilchrist, M.J. 1978. Guide to the Mesozoic Redbeds of Central Connecticut. State Geological and Natural History Survey of Connecticut, Department of Environmental Protection. Guidebook No. 4.

La Sala, Jr. A. M. 1961. Surficial Geology of the Southington Quadrangle, Connecticut. United States Geological Survey Map GQ-146.

Mazzaferro, D.L. 1975. Contour Map of the Bedrock Surface, Southington Quadrangle, Connecticut. United States Geological Survey (USGS) Map MF-660A.

Rogers, J. 1985. Bedrock Geological Map of Connecticut. Connecticut Geological and Natural History Survey in Cooperation with the U.S. Geological Survey.

Southington Water Department. Town of Southington Water Works Map. January 1997.

United States District Court for the District of Connecticut. 2008. Consent Decree Regarding Solvents Recovery Service of New England, Inc. Superfund Site. August 29, 2008.

USEPA. 1986. *Superfund Remedial Design and Remedial Action Guidance*, OSWER Directive 9355.0-4A. June 1986.

USEPA. 1989. Inspection Report: Solvents Recovery Service of New England. February 1-2, 1989.

USEPA. 1995a. *Remedial Design/Remedial Action Handbook.* OSWER Directive 9355.0-04B. June 1995.

USEPA. 1995b. *Guidance for Scoping the Remedial Design.* OSWER Directive 9355.0-43. March 1995.

USEPA. 1998. Approach for Addressing Dioxin in Soil at CERCLA and RCRA Sites. OSWER Directive 9200.4-26. April 1998.

USEPA. 2003. Draft *Preliminary Reuse Assessment*. September 2003.

USEPA. 2005a. Record of Decision Summary, Solvents Recovery Service of New England, Inc. (SRSNE) Site, Southington, Connecticut. September 2005.

USEPA. 2005b. Solvents Recovery Service of New England, Inc. Superfund Site, Southington, CT. Proposed Plan Fact Sheet, May 2005. Available at: http://www.epa.gov/region01/superfund/sites/srs/229296.pdf.

USEPA. 2009. USEPA's project website for the Solvents Recovery Service of New England, Inc. Superfund Site. Accessed February 24, 2009. http://www.epa.gov/region01/superfund/sites/srs.

ARCADIS, 2009. Draft Project Operations Plans for the Solvents Recovery Service of New England, Inc. Superfund Site. April 2009.

Tables

TABLE 1.0
Summary of Activities Completed
October 30, 2009 through October 31, 2010

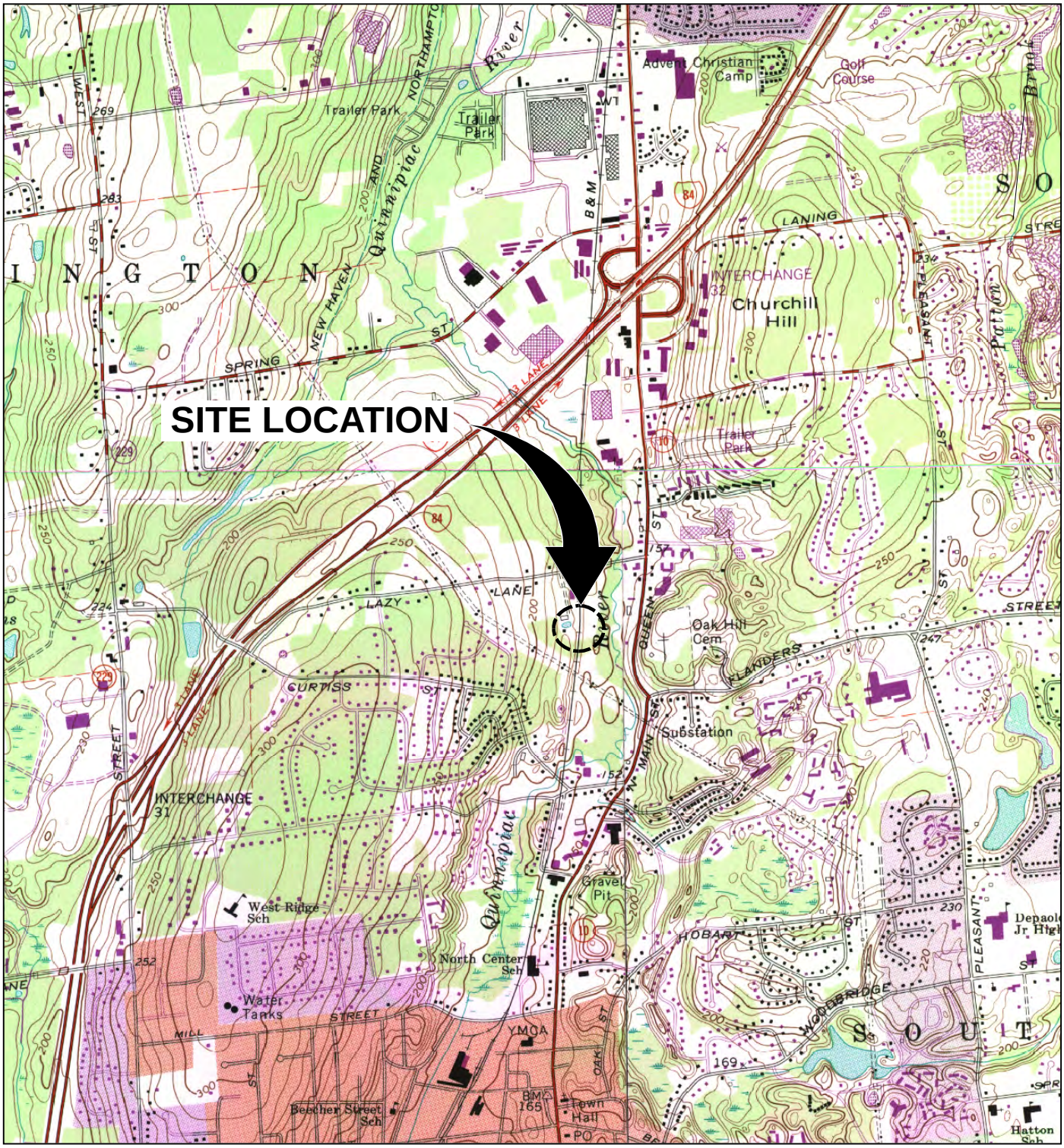
Document Name / Activity	Author(s)	Date Submitted	Date Approved	Type
Draft MOA to EPA	SRSNE Site Group	9/16/2009	pending	Deliverable under SOW
NTCRA-1, Demonstration of Compliance Plan (DCP) Modifications	Weston Solutions	12/18/2009	NA	Notification
Monitoring Well Evaluation Summary Memorandum	de maximis/ARCADIS	10/21/2009	12/17/2009	Pre-Design Study
Overburden NAPL Delineation Investigation Summary	de maximis/ARCADIS	11/20/2009	4/16/2010	Memorandum
Annual State of Compliance Report #1	de maximis	12/4/2009	NA	Report
NTCRA-1, Demonstration of Compliance Plan (DCP) Modifications Solvents Recovery Service of New England (SRSNE)	Weston Solutions	12/18/2009	NA	Notification
PIPP RAWP and Design	de maximis/ARCADIS	4/16/2010	9/17/2010	Design Document
Conceptual ISTR Design	TerraTherm	4/16/2010	Pending	Design Document
IQAT Plan	de maximis	4/16/2010	10/8/2010	Design Document
EPA Approval of RDWP and POP	EPA	4/16/2010	10/8/2010	Approval
Re-use of Excavated Material from Railroad Right of Way for ISTR Area Fill	ARCADIS	4/29/2010	NA	Memorandum
Monitoring Well Installation	ARCADIS	11/2/09 - 6/10/10	NA	Field Work
Initial Comprehensive Sampling Event	de maximis/ARCADIS	5/10/10 - 6/5/10	NA	Field Work
Public Meeting	de maximis/Agencies	7/10/2010	NA	Public Meeting
PIPP Construction Commenced	de maximis/ARCADIS/ABSCOPE	8/2/2010	NA	Construction
Air Permit Approval	TerraTherm	7/22/2010	10/15/2010	Permit Equivalency Approval by CT DEP
Monitoring Natural Attenuation Report	de maximis/Arcadis	9/24/2010	Pending	Report
Vapor Intrusion Memorandum	de maximis/Arcadis	10/27/2010	Pending	Memorandum

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.

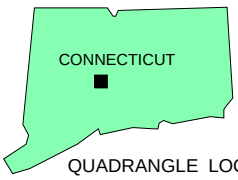
Figures



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

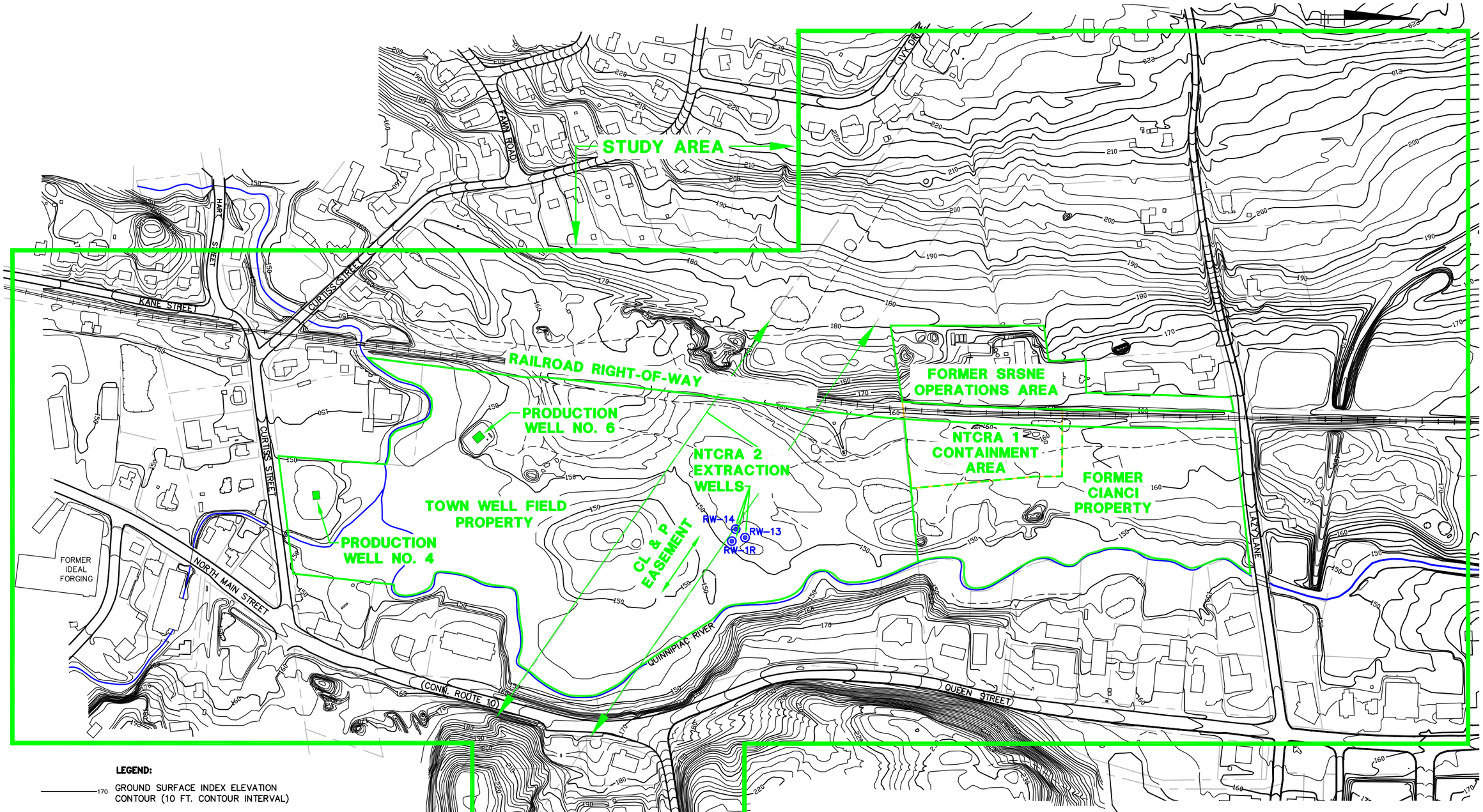
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
REMEDIAL DESIGN WORK PLAN

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.

DRAFT

0 300' 600'

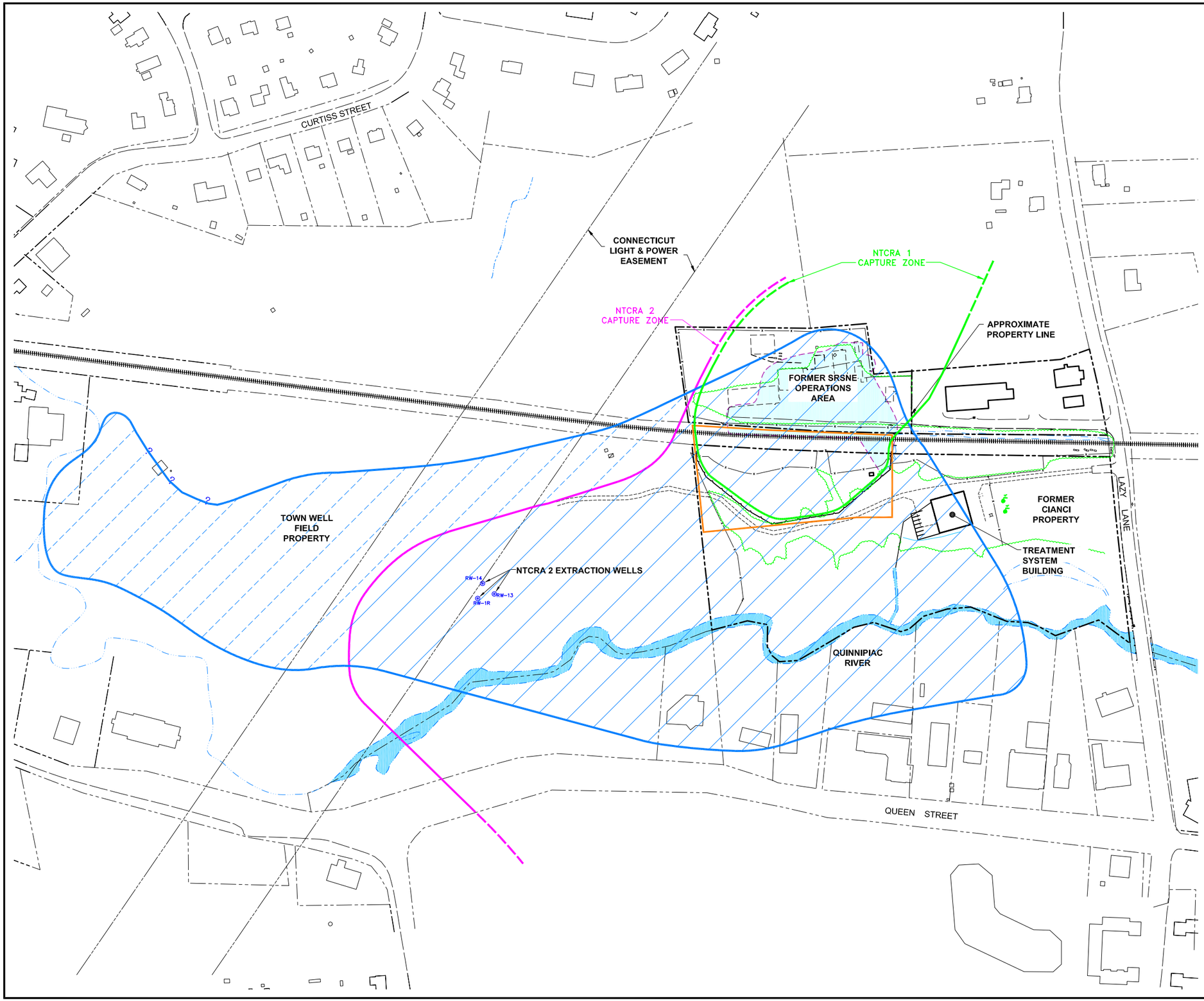
GRAPHIC SCALE

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
REMEDIAL DESIGN WORK PLAN

STUDY AREA

ARCADIS

FIGURE **2**



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).

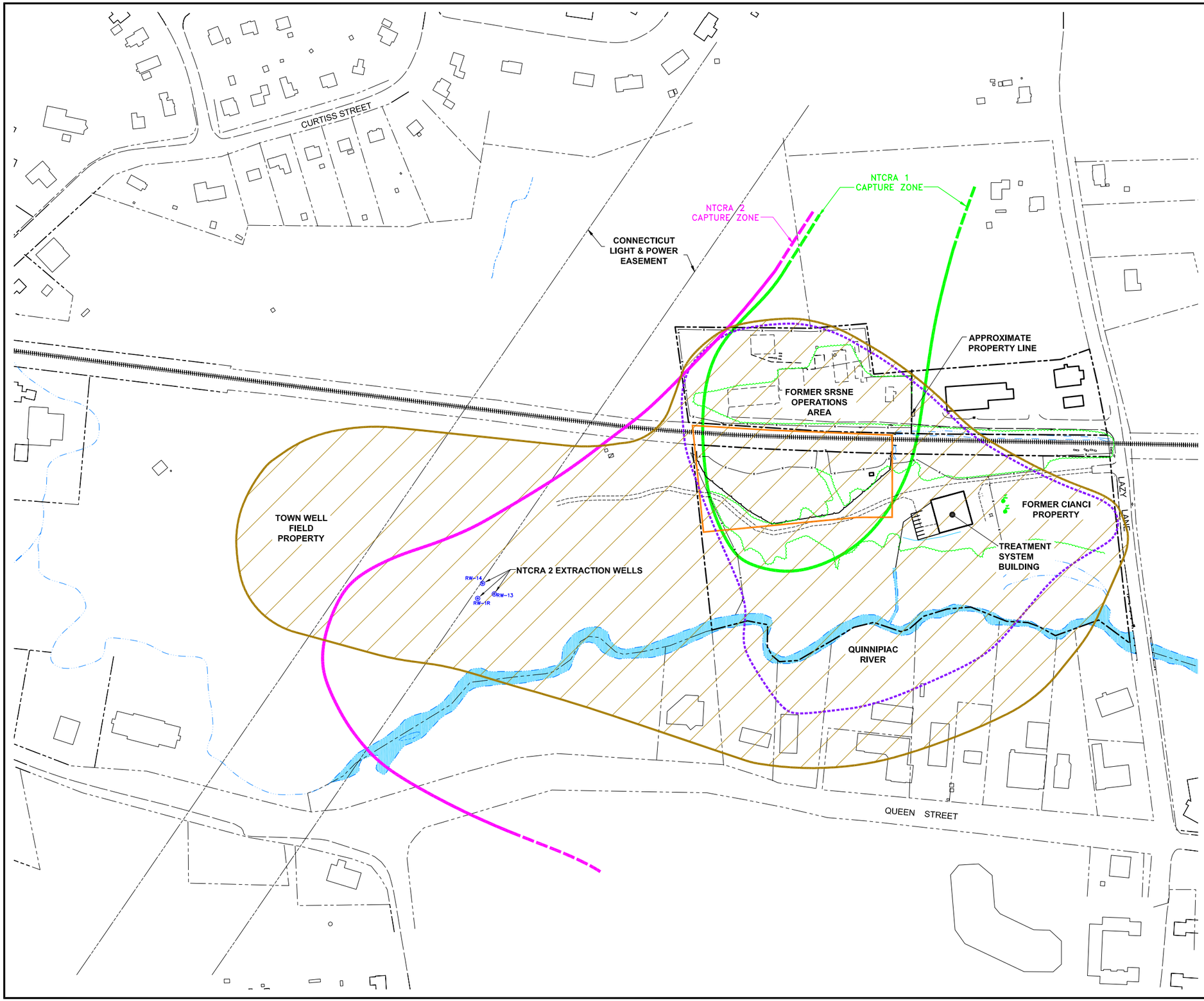
0 120' 240'
GRAPHIC SCALE

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).

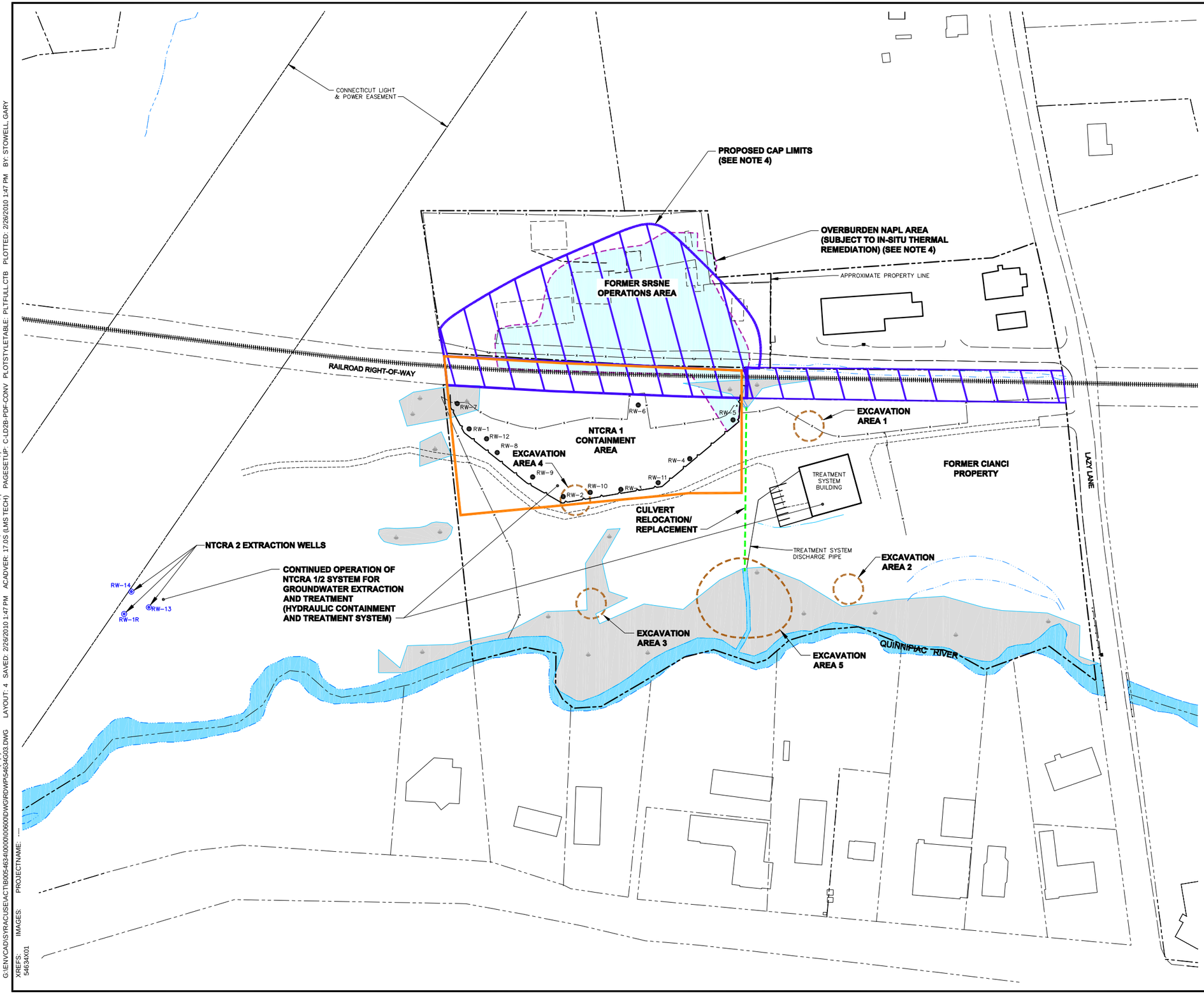
0 120' 240'
GRAPHIC SCALE

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

ESTIMATED NTCRA 2
CAPTURE ZONE
BOUNDARY
(LONG-TERM AVERAGE)

FORMER
OPERATIONS AREA

NTCRA 1
SHEETPILE WALL

NTCRA 1
CONTAINMENT AREA

INTERMITTENT
STREAM

QUINNIPIAC RIVER

CL&P EASEMENT

KANE STREET

HART
STREET

CURTISS STREET

FAWN ROAD

LAZY LANE

NORTH MAIN STREET

(CONN. ROUTE 10)

QUEEN STREET

FLANDERS STREET

FORMER
IDEAL
FORGING

SG-2
145.11

SG-3
146.58

SG-1
147.44

148.19
MW-801S

147.00
MW-703S

P-13
147.89

MW-707S
147.25

MW-707S

MW-704S
146.78

MW-710S
150.00

MW-708S
150.29

MW-201B
(148.50 –
SEE NOTE 2)

MW-903S
147.49

MW-904S
147.50

MW-501C
147.64

MW-910S
147.29

P-101C
146.96

P-102C
147.53

P-11B
146.92

P-3B
149.03

P-5B
152.30

P-12
158.38

MW-307
154.29

MW-304
156.67

MW-313
149.04

MW-314
148.30

MW-312
149.01

MW-309
150.29

MW-303
149.90

P20-121S
148.22

ND

153.18
153.01
144.12
142.91
143.96
139.45
150.34
138.42
144.41
140.71
141.91
138.07
156.15

148
150
152
154
156
158
147

0 300' 600'

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.

DRAFT

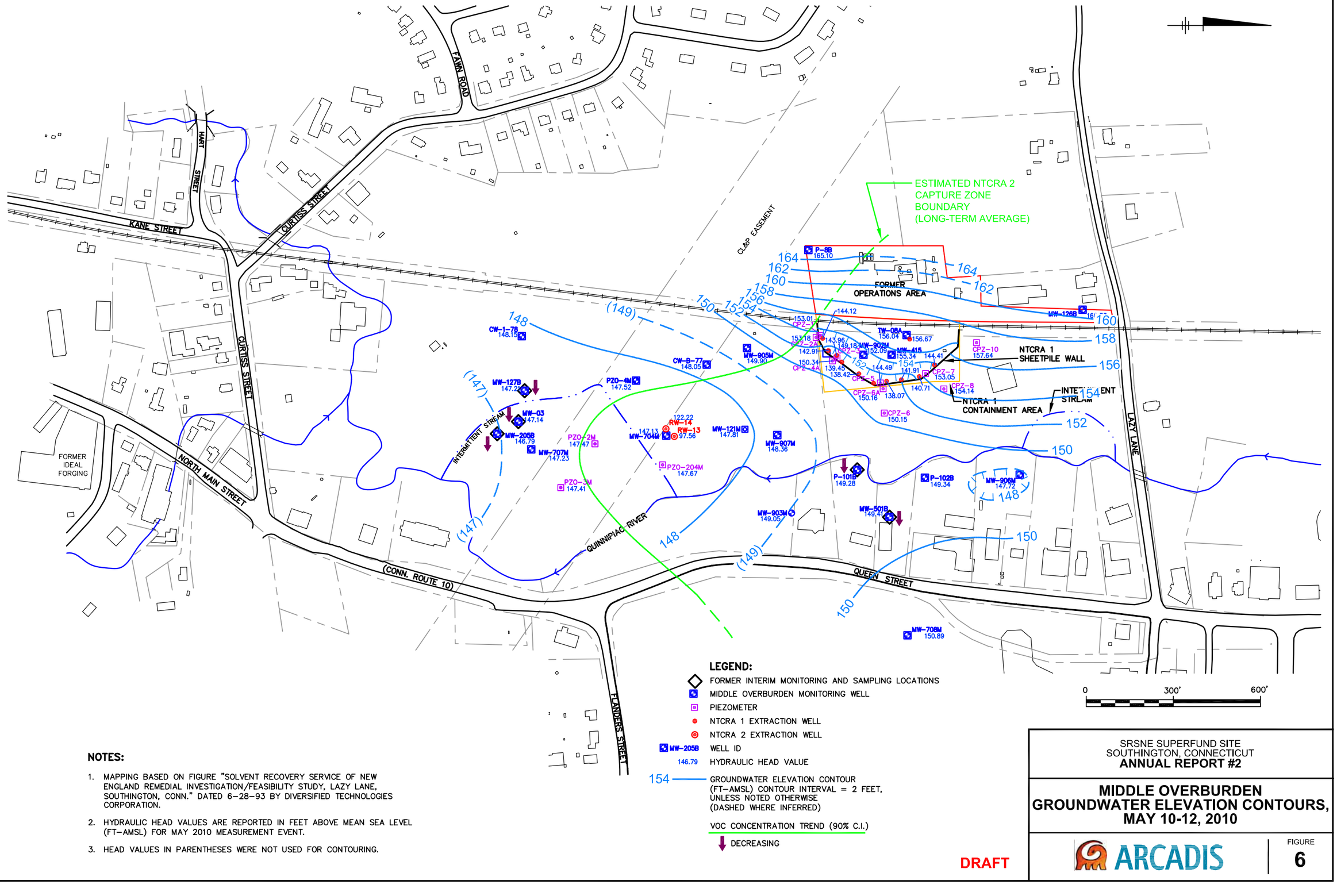
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

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

ARCADIS

FIGURE
5

CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER PM: J. HOLDEN TM/TR: M. GEFELL LYR: ON=*;OFF=REF; (FR2)
G:\ENVCAD\SYRACUSE\ACTIB00546340100002600\DWG\546634W01.DWG LAYOUT: 5 SAVED: 12/10/2010 8:54 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/10/2010 8:54 AM BY: LISTER, PAUL
XREFS: IMAGES: PROJECTNAME: ----
546634X01



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.

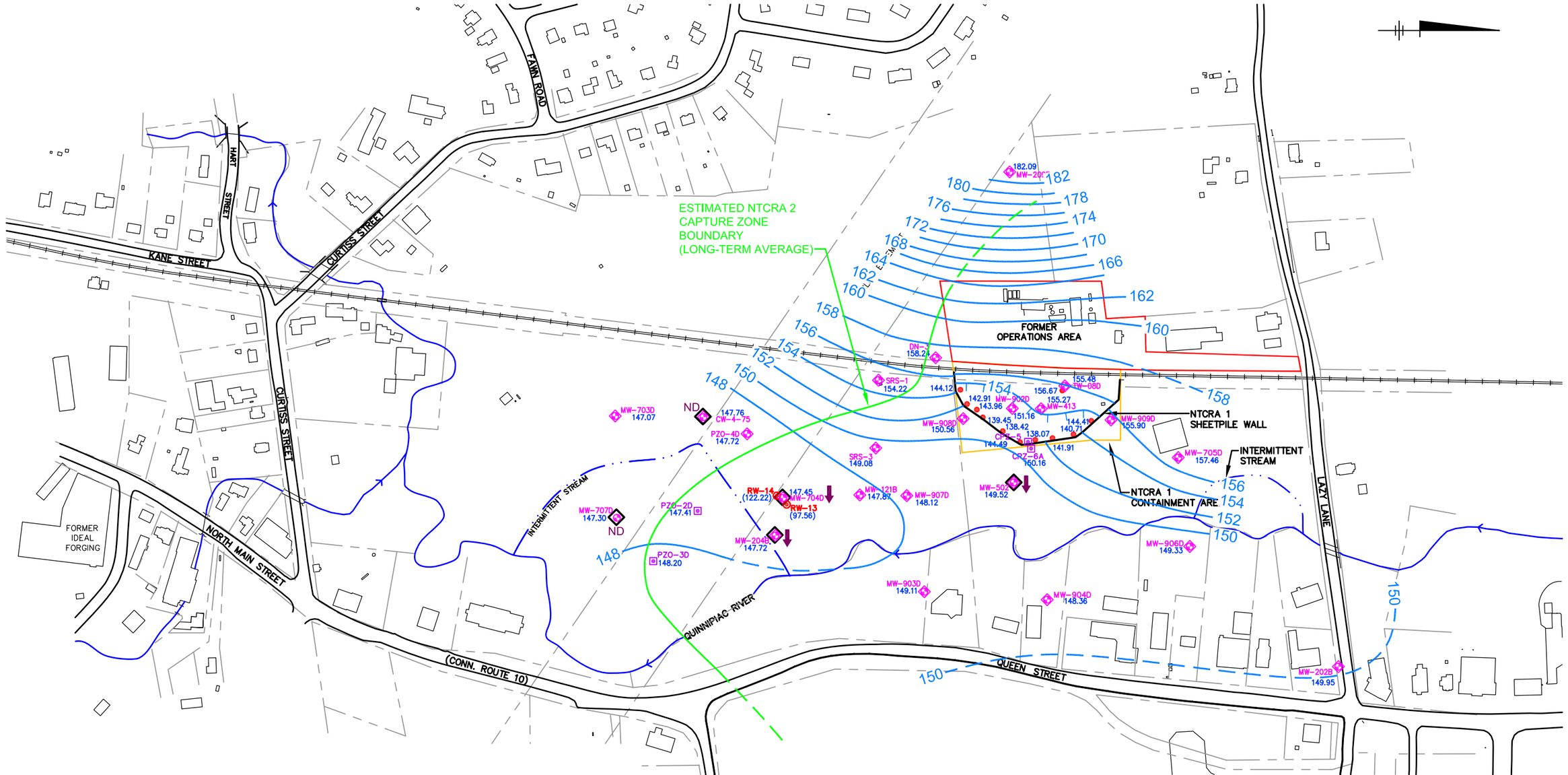
DRAFT

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

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

ARCADIS

FIGURE 6



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 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

DRAFT

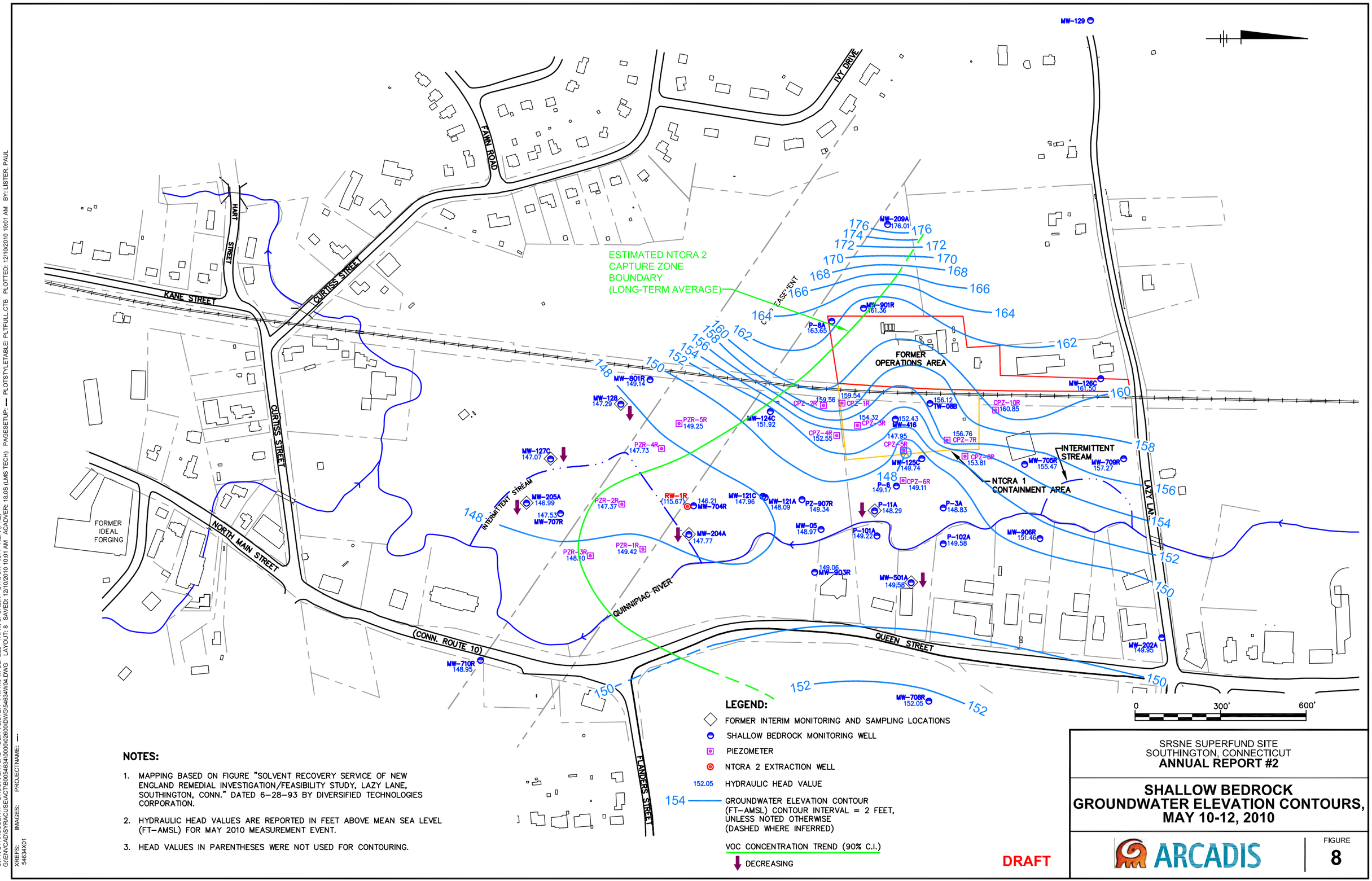
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

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

ARCADIS

FIGURE 7

CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER PM/TM: M. GEFELL TR: M. SPURLIN LYR: ON=*;OFF=REF, (FRZ)
G:\ENV\CAD\SYRACUSE\ACTIB\00546340\0002600\DWG\546344W03.DWG LAYOUT: 7 SAVED: 12/10/2010 9:39 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/10/2010 9:39 AM BY: LISTER, PAUL
XREFS: IMAGES: PROJECTNAME: ---
546344X01



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

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.

DRAFT

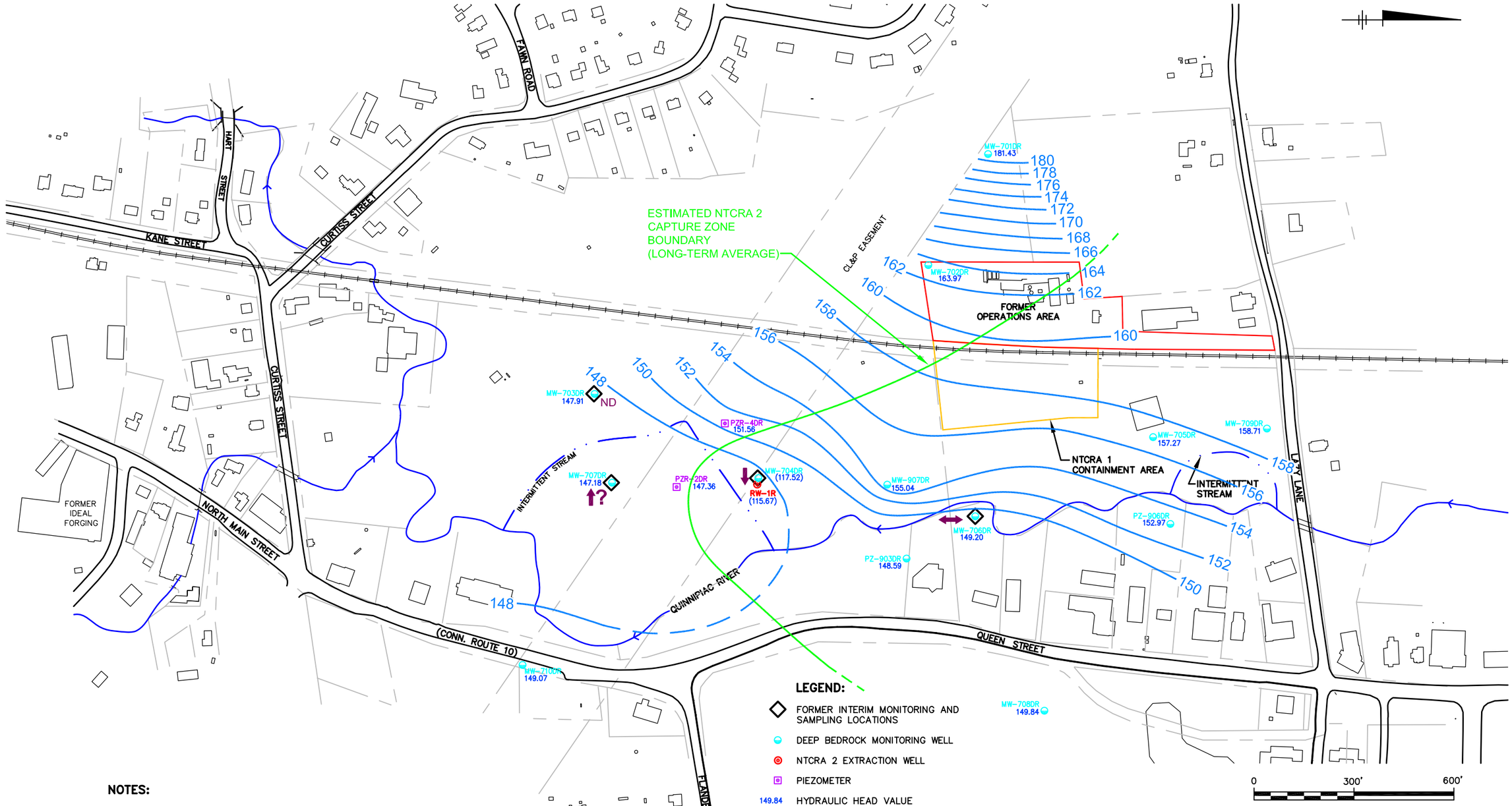
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

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

ARCADIS

FIGURE
8

CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER PM/TM: M. GEFELL TR: M. SPURLIN LYR: ON=*;OFF=*REF; (FRZ)
G:\ENV\CAD\SYRACUSE\ACTIB\00546340\0002600\DWG\546344W04.DWG LAYOUT: 8 SAVED: 12/10/2010 10:01 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/10/2010 10:01 AM BY: LISTER, PAUL
XREFS: IMAGES: PROJECTNAME: ---
546344X01



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

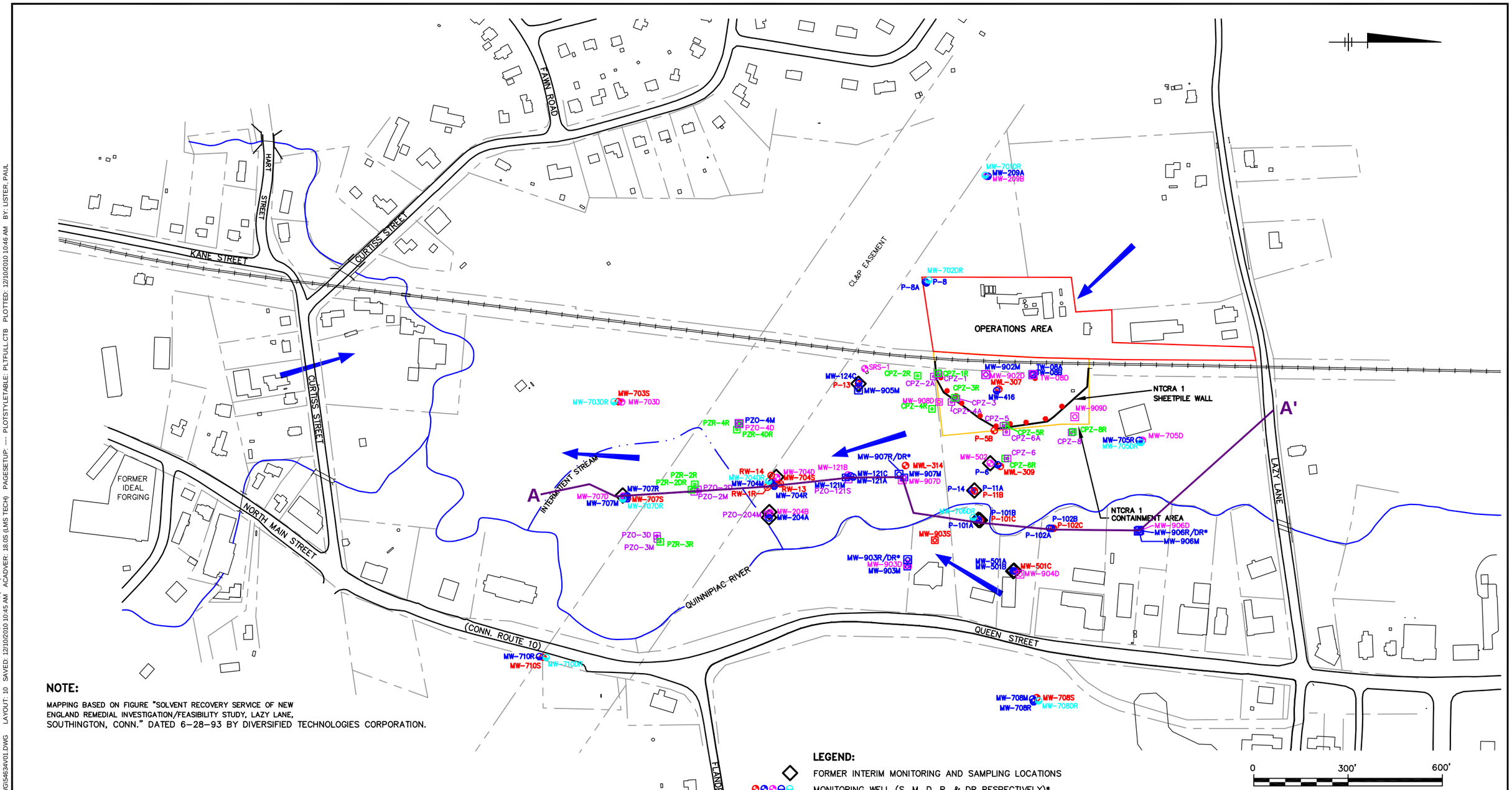
SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

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\SYRACUSE\ACTIVE\00546340000\02600\DWG\546340W05.DWG LAYOUT: 9 SAVED: 12/10/2010 10:25 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---
XREFS: IMAGES: PROJECTNAME: ---
546340X01



NOTE:

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.

LEGEND:

- FORMER INTERIM MONITORING AND SAMPLING LOCATIONS
- MONITORING WELL (S, M, D, R, & DR RESPECTIVELY)*
- NTCRA 1 EXTRACTION WELL
- NTCRA 2 EXTRACTION WELL
- PROPOSED MONITORING WELL
- PIEZOMETER (S, M, D, R, & DR RESPECTIVELY)*
- GENERALIZED GROUNDWATER FLOW DIRECTION
- * S=SHALLOW OVERBURDEN, M=MIDDLE OVERBURDEN, D=DEEP OVERBURDEN, R=SHALLOW BEDROCK, DR=DEEP BEDROCK
- A——A' CROSS SECTION LOCATION

DRAFT

SRSNE SITE GROUP
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

CROSS SECTION LOCATION MAP

ARCADIS

FIGURE
10

CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER PM: J. HOLDEN TM/TR: M. GEFELL LYR: ON=*;OFF=REF, (FRZ)
G:\ENVCAD\SYRACUSE\ACT\B0054634000010014\DWG\54634V01.DWG LAYOUT: 10 SAVED: 12/10/2010 10:45 AM ACADVER: 18.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/10/2010 10:46 AM BY: LISTER, PAUL
XREFS: IMAGES: PROJECTNAME: ----
54634X01

CROSS SECTION A-A'

SOUTH A — NORTH A'

ELEVATION IN FEET

MW-205A, MW-205B | MW-707DR, MW-707R, MW-707D, MW-707M, MW-707S | PZO-2DR, PZO-2R, PZR-2D, PZR-2M | MW-704DR, RW-1R, MW-704R, RW-14, MW-704M, MW-704S, MW-704D, RW-13 | MW-121A, MW-121C, MW-121B, MW-121M, PZO-121S | MW-907DR, MW-907R, MW-907D, MW-907M | MW-05 | QUINNIPIAC RIVER (146.9) | MW-706DR, P-101A, P-101B, P-101C | QUINNIPIAC RIVER (146.9) | QUINNIPIAC RIVER (147.0) | PZ-102A, PZ-102B, PZ-102C | MW-906DR, MW-906R, MW-906D, PZ-906M | QUINNIPIAC RIVER | INTERMITTENT STREAM | MW-709DR, MW-709R | P-12

GROUND

OUTWASH

TOP OF TILL

TILL (GRAVELLY DRIFT)

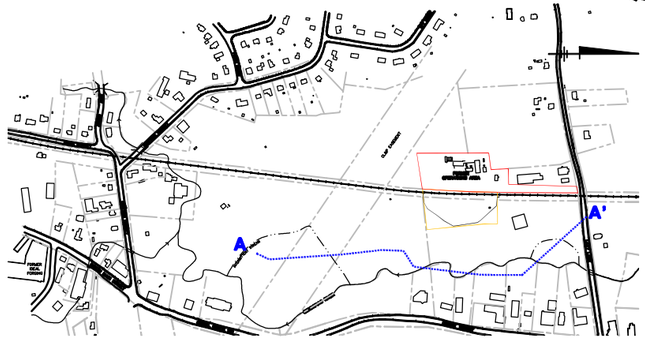
TOP OF BEDROCK

TILL

BEDROCK (NEW HAVEN ARKOSE)

ESTIMATED NTCRA 2 CAPTURE ZONE BOUNDARY (LONG-TERM AVERAGE)

HORIZONTAL SCALE: 0, 200', 400'



LOCATION MAP

1000' 0 1000'

NOTES:

1. MONITORING WELLS AND HYDRAULIC HEAD DATA WITHIN 50 FEET OF THE CROSS SECTION LOCATION ARE INCLUDED.
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:

- MW-205A — WELL NUMBER
- MONITORING WELL
- WATER TABLE
- GEOLOGIC SURFACES
- 148 — HYDRAULIC HEAD CONTOURS (INTERVAL = 2 FEET)
- 146.8 — HYDRAULIC HEAD VALUE
- SCREENED INTERVAL
- BOTTOM OF BORING

DRAFT

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

GEOLOGIC CROSS SECTION A-A' WITH HYDRAULIC HEAD VALUES

ARCADIS

FIGURE 11

CITY: SYRACUSE, NY GROUP: ENVCAD DB: P. LISTER PM: J. HOLDEN TWTR: M. GEFELL LYR: ON=*;OFF=REF*,(FR2)
G:\ENVCAD\SYRACUSE\ACTIVITIES\054634\0000\0026\00\DWG\54634V0A.DWG LAYOUT: 11 SAVED: 12/10/2010 10:58 AM ACADVER: 18.0S (LMS TECH)
XREFS: IMAGES: PROJECTNAME: ---- PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/10/2010 10:59 AM BY: LISTER, PAUL

CONNECTICUT LIGHT & POWER EASEMENT

0.50-ACRE PARCEL RECENTLY ACQUIRED FROM YORSKI

APPROXIMATE PROPERTY LINE

FORMER SRSNE OPERATIONS AREA

FORMER CIANCI PROPERTY

12" pine

12" pine

TREATMENT SYSTEM BUILDING

LEGEND:

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

0 50' 100'
GRAPHIC SCALE

SRSNE SUPERFUND SITE
SOUTHINGTON, CONNECTICUT
ANNUAL REPORT #2

AREA PURCHASED FOR RD/RA ACTIVITIES

ARCADIS

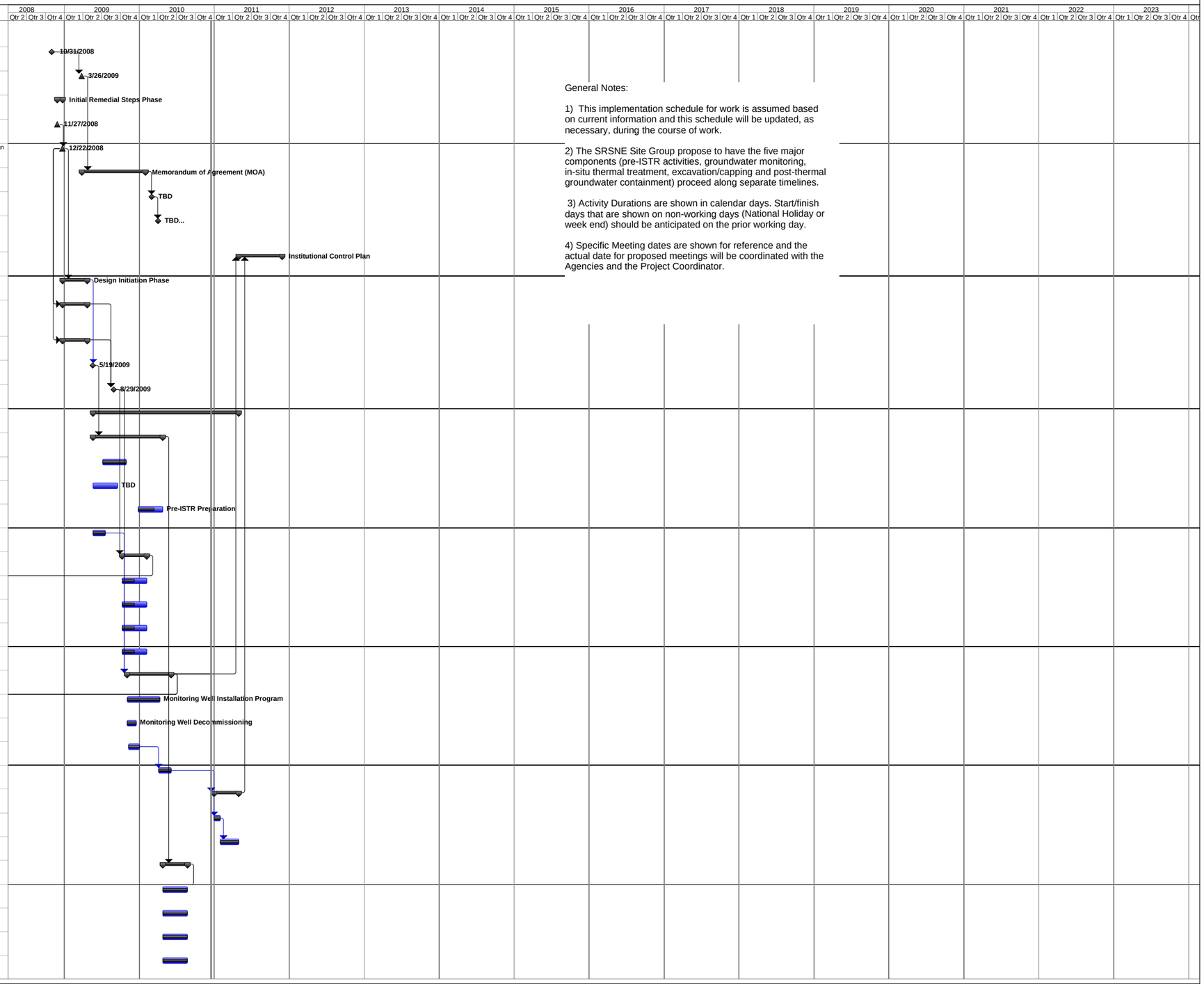
FIGURE
12

Attachments

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 Intrusion Study
19	**Design Initiation Phase**		
20	**Remedial Design Work Plan (RD WP)**	EPA approval of RD Contractor.	Within one hundred twenty (120) days of receipt of EPA's written notice of authorization to proceed
37	**Remedial Design Project Operations Plan (POP)**	EPA approval of RD Contractor.	Within 120 days of EPA approval.
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**		
46	**Accelerated Pre-Design Studies**		
47	Overburden NAPL Delineation Study		
48	Habitat Restoration Study		
49	Pre-ISTR Preparation		
50	Groundwater Monitoring Well Network Evaluation		
51	**Non Accelerated Pre-Design Studies**		
52	Thermal Treatment Monitoring Study		
53	Vapor Treatment Bench Scale Study Design		
54	System Design Evaluation Study		
55	Soils Delineation Study		
56	**Groundwater Pre-design Studies**		
57	Monitoring Well Installation Program		
58	Monitoring Well Decommissioning		
59	Monitoring Well Development		
60	Initial Comprehensive Sampling Event		
61	**Vapor Intrusion Study**		
62	Follow-up Groundwater Sampling Round	6 Months Following Initial Sampling Event	
63	Vapor Intrusion Study		
64	**Pre-ISTR Final Design Package (100 % Design)**	EPA approval or modification of Conceptual Design.	Within 90 days of notice by EPA.
65	NAPL Delineation Investigation Report		
66	Culvert Relocation Design		
67	ISTR Area Surface Grading Design		
68	HCTS Modifications Plan and Final Design Report		



General Notes:

1) This implementation schedule for work is assumed based on current information and this schedule will be updated, as necessary, during the course of work.

2) The SRSNE Site Group propose to have the five major components (pre-ISTR activities, groundwater monitoring, in-situ thermal treatment, excavation/capping and post-thermal groundwater containment) proceed along separate timelines.

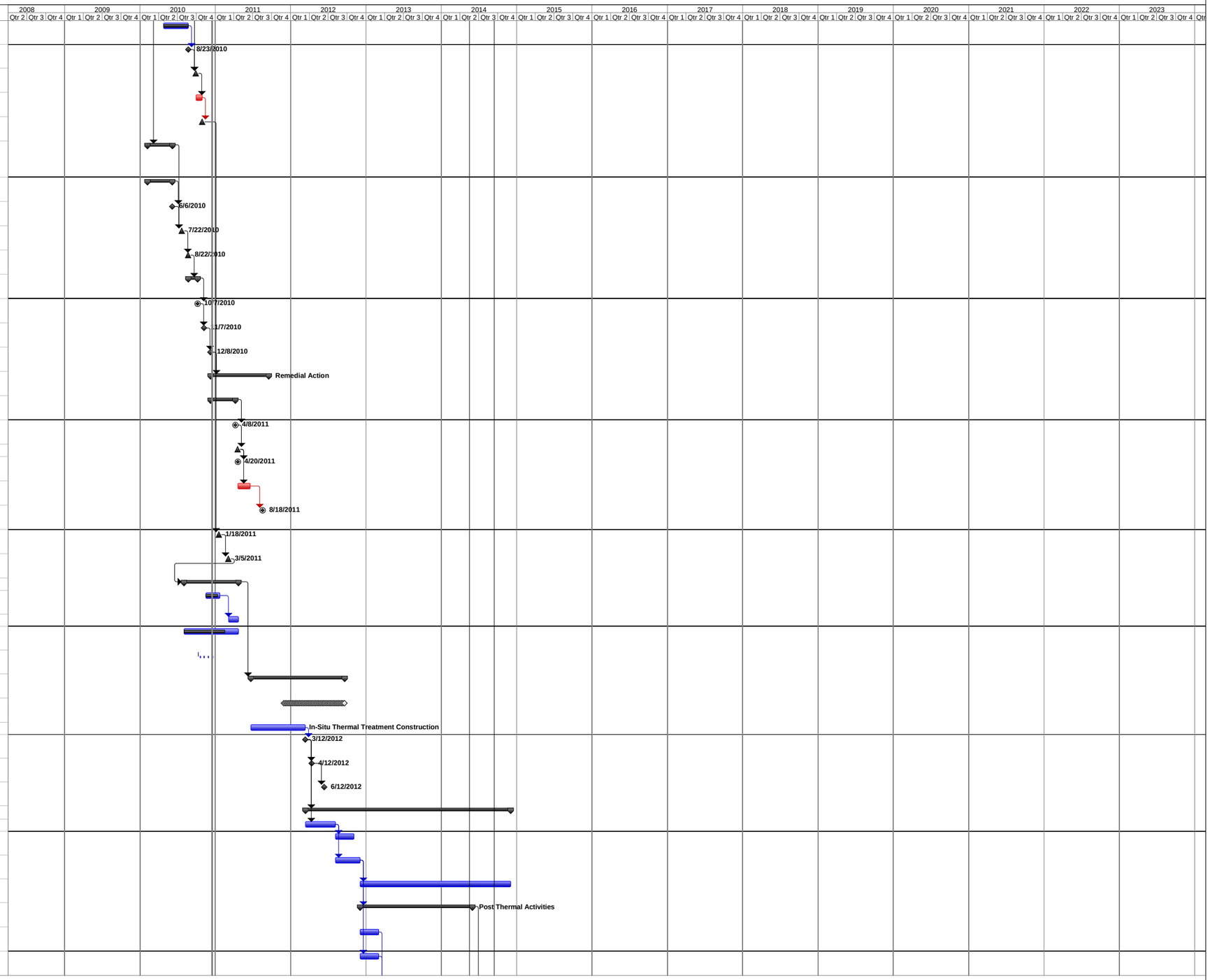
3) Activity Durations are shown in calendar days. Start/finish days that are shown on non-working days (National Holiday or week end) should be anticipated on the prior working day.

4) Specific Meeting dates are shown for reference and the actual date for proposed meetings will be coordinated with the Agencies and the Project Coordinator.

de maximis, inc.

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

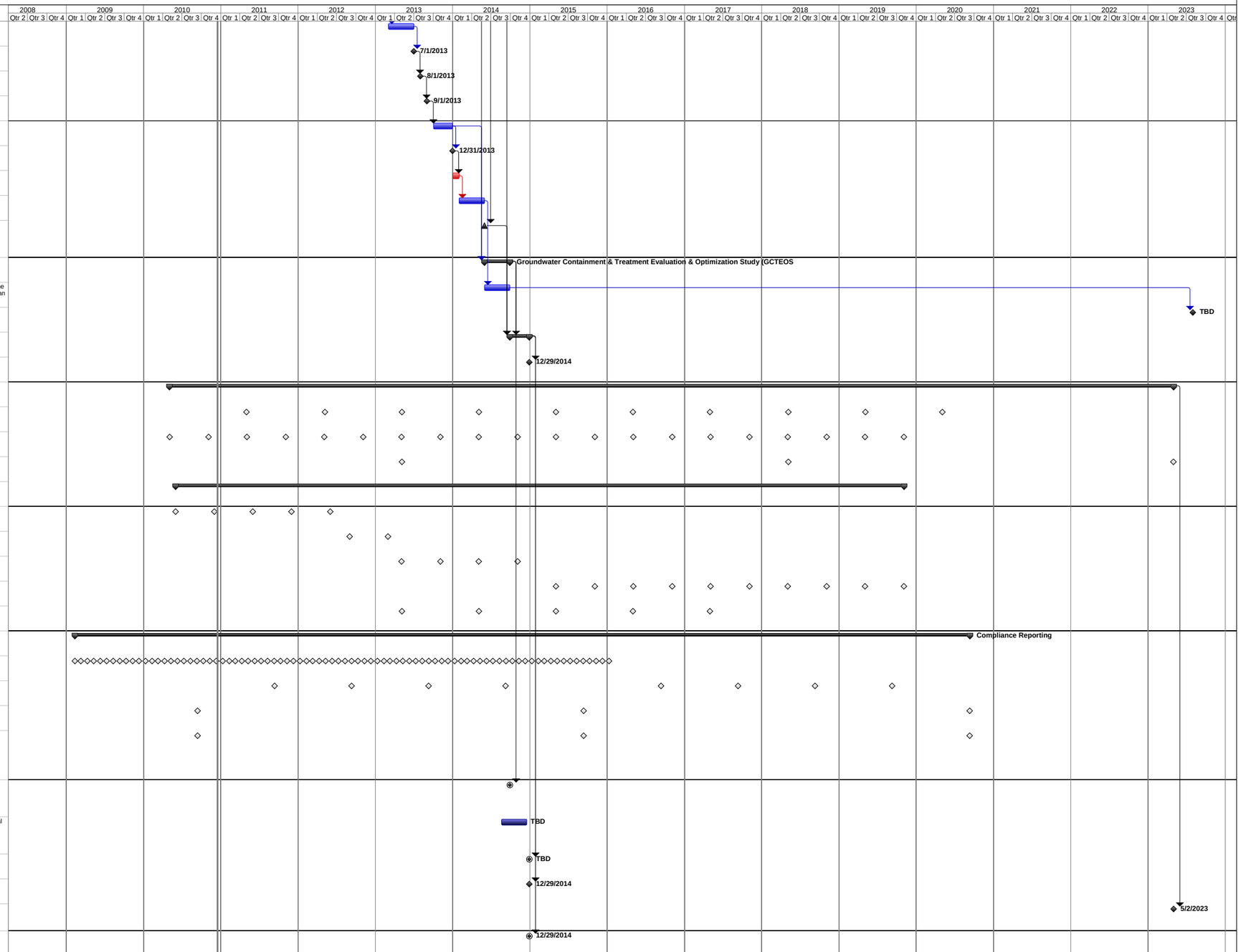
ID	Deliverable/Activity	Trigger	Time Frame
69	Utility Plan		
70	Submit 100% Design Package		
71	**Technical Information Meeting**	Submittal of 100% Design.	
72	**Agency Review/Comment**		
73	**Agency Approval of Pre-ISTR Package (100% Design) with Comments**		
74	**ISTR Conceptual Design Package (75% 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	**Remedial Action**	EPA approval or modification of the Final Remedial Design.	Within 120 days of notice by EPA.
90	**Draft RA Work Plan and Revised POP**		
94	**Submit Final Draft RA Work Plan and Revised POP**		
95	**Technical Information Meeting**		
96	**RA Implementation Schedule**	EPA approval or modification of Final Design.	Within 30 days of notice by EPA.
97	**Agency Review and Comment on Draft RA Work Plan and POP**		
98	**Submit Final Remedial Action Work Plan (s) and Revised POP(s)**		Within sixty (60) days of receiving EPA's approval or modification of the draft RA Work Plan(s)) and Revised POP(s).
99	**Pre-construction Conference(s)**	EPA approval or modification of Final Design.	Within 30 days of notice by EPA.
100	**Pre-construction Public Meeting(s)**	EPA approval or modification of Final Design.	Within 45 days of notice by EPA.
101	**Accelerated ISTR Construction Activities**		
102	AT&T Fiber Optic Relocation		
103	Partial CP-2 (culvert relocation) Construction		
104	OAR-2 Surface Preparation for ISTR Work		
105	Thermal Infrastructure Installation (gas, sewer, power)		
106	**Initiation of Remedial Action Construction Activities (ISTR and Soils)**	**EPA approval or modification of Final Design.**	**Within 60 days of notice by EPA.**
107	**Meetings During Construction**	**Start of Construction**	**Weekly during construction**
151	In-Situ Thermal Treatment Construction		
152	Thermal Final Construction Inspection	Within 60 days of notice by Settling Defendants.	
153	Submit Construction Completion Report	Within 30 days of Final Construction Inspection.	Within 30 Days
154	Agency Approval of Completion Report		
155	**Thermal Treatment**		
156	Implementation of Thermal Treatment		
157	Thermal Treatment Verification Sampling, Analysis, and Reporting		
158	Additional Operation of Thermal Treatment System (if required)		
159	Time to Achieve Equilibrium		
160	**Post Thermal Activities**		
161	**Soil Investigation**	After In-Situ Thermal to re-assess the size of the area to be capped	
162	**Vapor Control System Evaluation**	After In-Situ Thermal to determine whether (or not) a vapor control system is needed below the cap.	



de maximis, inc.

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

ID	Deliverable/Activity	Trigger	Time Frame
163	**Final Soil & RCRA C Cap Conceptual Design**		
164	**Final Soil & Multi Layer Cap Submit 75% Design Package**		
165	**Technical Information Meeting**		
166	**Agency Approval of 75% Final Soil & Multi Layer Cap Design Package with Comments**		
167	**Final Soil & Multi Layer Cap 100% Design Submittal**		
168	**Technical Information Meeting**		
169	**Agency Approval of Final Soil & Multi Layer Cap 100% Design**		
170	**Final Soil & Multi Layer Cap Construction**		
171	**Final Construction Inspection**	Settling Defendants conclude construction complete.	Within 60 days of notice by Settling Defendants.
172	**Groundwater Containment & Treatment Evaluation & Optimization Study (GCTEOS**		
173	**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
174	**Additional Optimization Study(s) (TBD)**		
175	**Completion Report**	Final construction inspection.	Within 30 days of inspection.
191	**Commencement of Operation and Maintenance**	EPA approval or modification of Construction Completion Report.	Immediately upon notice by EPA.
192	**Compliance Monitoring (CM)**		
193	**Annual Groundwater Sampling Event**		
205	**Biennial Groundwater Sampling Event**		
226	**Five-Year Review Sampling Event**		
230	**Sampling between Railroad Tracks and NTCRA 1 Sheet Pile Wall**		
231	**Pre ISTR Sampling**		
237	**ISTR Sampling**		
240	**Post ISTR Sampling (During Time to Achieve Equilibrium)**		
245	**Post ISTR Equilibrium Sampling**		
256	**Background Sampling Event (Metals Only)**		
262	**Compliance Reporting**		
263	**Monthly Progress Reports**	**Lodging of the CD.**	**On the 10th day following lodging and monthly thereafter.**
348	**Annual State of Compliance Reports**	**One Year After the Lodging of the Consent Decree**	**Annually**
360	**Five Year Review Reports**	**Five Years after the date of the Record of Decision**	**Every Five years**
364	**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.**
368	**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.
369	**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.
370	**Demonstration of Compliance Report (TBD)**	Compliance with cleanup levels.	As demonstrated by Settling Defendants.
371	**Risk Assessment**		
372	**Site Closure (TBD)**		
373	**Summary of Cost Information (TBD)**	Compliance with cleanup levels.	As demonstrated by Settling Defendants.



Hydraulic Containment and Treatment System Annual Demonstration of Compliance Report No. 2

31 October 2009 Through 30 October 2010

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

12 April 2011

HYDRAULIC CONTAINMENT AND TREATMENT SYSTEM
ANNUAL DEMONSTRATION OF COMPLIANCE REPORT - NO. 2
31 OCTOBER 2009 THROUGH 30 OCTOBER 2010

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

TABLE OF CONTENTS

Tables

Figures

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 2009 through 30 October 2010. 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 second 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 subsequently 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 monitoring network remained as originally constructed until the following wells and piezometers were abandoned in November and December 2009 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 following abandoned wells and piezometers would be removed from the NTCRA-1 monitoring program and DCP on 1 November 2009 (WESTON, December 2009)

The rationale for abandonment of each well is indicated in the Monitoring Well Network Evaluation and was based on one or more of the following considerations:

- The location of the monitoring point is within or in close proximity to the area where the overburden will be treated by In-Situ thermal Remediation (ISTR), and not suitable for the high exposure temperatures.

- The existing monitoring wells are located inside (west of) the NTCRA-1 sheet pile wall and within the NTCRA-1 containment area, and are not proposed "N" wells as described in the Pre-ISTR Preparation Plan (PIPP); Attachment M to the Remedial Design Work Plan (RDWP).

- The monitoring point is screened across the overburden/bedrock interface.

Monitoring and Extraction Wells Removed from NTCRA-1 DCP Program

No.	Well ID	Date of Abandonment
1.	CPZ-9	1 December 2009
2.	CPZ-9R	1 December 2009
3.	MW-408	11 November 2009
4.	MW-409	18 November 2009
5.	MW-414	24 November 2009
6.	MWL-301	7 December 2009
7.	MWL-310	24 November 2009
8.	P-16	4 November 2009
9.	P-2B	4 December 2009
10.	PZO-1	25 November 2009
11.	PZO-2	12 November 2009
12.	PZO-3	30 November 2009
13.	PZR-1	25 November 2009
14.	PZR-2	13 November 2009
15.	PZR-4	16 November 2009
16.	RW-5	Scheduled for future abandonment concurrently with ISTR site preparation activities.
17.	RW-6	Scheduled for future abandonment concurrently with other ISTR site preparation activities.

Included in the above list of abandoned monitoring points are RW-5, RW-6 and CPZ-9. Piezometer CPZ-9 is one of the ten NTCRA-1 overburden compliance piezometers that is used to confirm an inward hydraulic gradient across the NTCRA-1 sheet pile wall. Prior to abandonment, both recovery wells RW-5 and RW-6 were intentionally turned off on 2 February 2009 to confirm that NTCRA-1 compliance can be maintained between compliance pair CPZ-9 and CPZ-10 with both of these recovery wells off. Following shutdown of these recovery wells in February 2009, compliance was maintained in all weekly compliance monitoring at the site between February and October 2009. This test demonstrated that an inward hydraulic gradient can be maintained without recovery wells RW-5 and RW-6 in operation. Recovery wells RW-5 and RW-6

were permanently taken off-line and removed from the NTCRA-1 monitoring program on 1 November 2009. However, abandonment of the two recovery wells will be performed concurrently with the other In-Situ Thermal Remediation (ISTR) site preparation activities at the site.

As a result of the well abandonment activities discussed above, NTCRA-1 extraction wells RW-5 and RW-6 were also taken off line permanently in November 2009. 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 on-line 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 new overburden recovery well has been on-line 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 has been reversed. 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 between 31 October 2009 throughout 30 October 2010 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 as discussed in Section 1.1. 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) between 31 October 2009 and 21 July 2010. Between 21 July 2010 and the remainder of the monitoring period (30 October 2010), the required 0.3 foot head differential was not achieved in two (CPZ-1/2A and CPZ-3/4A) of the four pairs. The cause of the loss of hydraulic gradient reversal at these two compliance pairs is likely due to the excessively dry site conditions and a substantial localized elevation decrease in the overburden water table outside of the sheet pile wall.

In response to the decreasing and eventual loss of hydraulic gradient reversal, extraction well pumps RW-7 and RW-12 were lowered to the lowest practical operating level within the wells, but this adjustment was not effective in attaining hydraulic gradient reversal.

In August 2010, all ten NTCRA-1 recovery wells (RW-1through RW-4 and RW-7 through RW-12) were redeveloped via a three step program consisting of mechanical surging, chemical treatment and post chemical treatment mechanical surging. This redevelopment approach is consistent with previous practices at the site. These standard redevelopment practices were not able to improve hydraulic gradient reversal at either compliance pair (CPZ-1/2A or CPZ-3/4A). Following standard chemical redevelopment, an alternate extraction well redevelopment technique employing carbon dioxide (Aqua Freed®) at both recovery wells RW-7 and RW-12 was used to determine if this redevelopment technology would offer improved recovery well yields and achieve hydraulic gradient reversal. Between 27 August and 1 September 2010, these two recovery wells were redeveloped for a second time employing the Aqua Freed® technology. Slightly improved recovery well yields were observed, but little improvement in the hydraulic gradient reversal at piezometer pairs CPZ-1/2A and CPZ-3/4A were realized. Down gradient water levels at both compliance points CPZ-2A and CPZ-4A remained 1 to 2 feet below historic lows between July and October 2010.

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 four periods of non-compliance encompassing a total of ten 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 experienced between 31 October 2009 and 30 October 2010 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 2009 to 30 October 2010		
Date	**Cause**	**Corrective Actions**
12-14 May 2010	The treatment system and all NTCRA-1 and NTCRA-2 recovery wells were shut down to install side access man ways on the clarifier feed tank, flash mix tank and flocculation tank.	No corrective action was warranted. This was a scheduled capital improvement implemented that would enable maintenance to be performed without accessing the inside of these tanks and eliminate the need for fall protection.
1-2 June 2010	Lightning damaged the treatment system control panel. The treatment system and all NTCRA-1 and 2 recovery wells were shut down while repairs were performed.	Repair to the treatment system panel lightning damage required one analog input card replacement and the installation of a new 120-volt power supply to the panel in lieu of replacing the damaged 120 volt transformer.
25-26 August 2010	Recovery well RW-2 was out of service for redevelopment as part of planned recovery well maintenance.	No corrective action was warranted. This brief period of non-compliance was expected during recovery well redevelopment (maintenance) activities
18, 20 and 29 October 2010	NTCRA-1 electrical service was shut down in order to perform pre-ISTR improvements.	No corrective action was warranted. This period of non-compliance was expected in order to relocate the NTCRA-1 electrical service and initiate NTCRA-1 forcemain relocation work.

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 2009 to 30 October 2010 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 five periods of non-compliance outlined herein encompassing a total of 18 days.

Hydrographs of the data logger measurements obtained for shallow and deep bedrock compliance points between 31 October 2009 and 30 October 2010 are included as Figures 14A and 14B, respectively.

A summary of NTCRA-2 non-compliance occurrences experienced 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 2009 to 30 October 2010

Date	Cause	Corrective Actions
25-26 January 2010	Loss of compliance occurred in the shallow bedrock of NTCRA-2 as a result of excessive heavy rains, which caused NTCRA-2 recovery well flooding. Because of the severe flooding, the NTCRA-2 recovery wells were shut down until flood conditions subsided.	Compliance was restored following the rain/flood event and restarting of the NTCRA-2 recovery wells. No corrective action was required.
30 March-1 April 2010	Loss of compliance occurred in the shallow bedrock of NTCRA-2 as a result of excessive heavy rains, which caused NTCRA-2 recovery well flooding. Because of the severe flooding, the NTCRA-2 recovery wells were shut down until flood conditions subsided.	Compliance was restored following the rain/flood event and restarting of the NTCRA-2 recovery wells. No corrective action was required.
12-14 May 2010	The Treatment System and all NTCRA-1 and NTCRA-2 recovery wells were shut down to install side access man ways on the clarifier feed tank, flash mix tank and flocculation tank.	No corrective action was warranted. This was a scheduled capital improvement implemented that would enable maintenance to be performed without accessing the inside of these tanks and eliminate the need for fall protection.
1-2 June 2010	Lightning damaged the treatment system control panel. The treatment system and all NTCRA-1 and 2 recovery wells were shutdown while repairs were performed.	Repair to the treatment system panel lightning damage required one analog input card replacement and the installation of a new 120-volt power supply to the panel in lieu of replacing the damaged 120 volt transformer.

23-30 August 2010	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 are obtained during the monitoring period. These 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. In August and early September 2010, ten NTCRA-1 recovery wells (RW-1, 2, 3, 4, 7, 8, 9, 10, 11 and 12) and two NTCRA-2 recovery wells (RW-13 and 14) were redeveloped to maintain drawdown and groundwater hydraulic control during the monitoring period.

Approximately 14,751,000 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 28.1 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 2010. 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)**
6-Jan-10	18	34
7-Apr-10	24	2.7
7-Jul-10	73	29
6-Oct-10	27	<5

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 2009 and 30 October 2010. 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 important HCTS operations and maintenance activities or capital improvements conducted during the reporting period.

1. **December 2009 - Process Room Heater Replacement:** The heating elements in two process room electric heaters were replaced and a new heater was installed in the electrical room.

2. **January and February 2010 - Exhaust Stack Support Improvements Vapor Phase Carbon Replacement:** A support system was constructed around the vapor phase carbon system to support the discharge stack from the building floor, rather than from the top of the existing vessels. Following support construction, the vapor phase carbon vessel and media were replaced.

3. **April and October 2010 – Liquid Phase Carbon Replacement:** The primary and secondary liquid phase carbon media was replaced with reactivated carbon in April and October 2010, respectively.

4. **May 2010 - Tank Access Man Way Installation:** To enable safer access to the clarifier feed tank, flash mix tank and flocculation tank, new 20-inch square, epoxy painted steel, side mounted access man ways were installed.

5. **May 2010 – Recovery Well RW-13 Control Panel Replacement:** Recovery well RW-13 was experiencing frequent shutdowns and causing alarms during late 2009 and early 2010. The control panel was replaced due to degradation from moisture inside the enclosure, resulting in mitigation of frequent recovery well problems.

6. **May 2010 – Power Failure Equipment Damage:** A power failure caused the failure of three mixer motor starters (equalization tank, flash mix tank and oxidation tank). The same power failure also damaged the variable frequency drive (VFD) for clarifier feed pump (P-100). The motor starters and VFD were replaced to restore system operations to normal.

7. **June 2010 – Lightning Storm Equipment Damage:** Following a lightning storm, the treatment system main control panel was not operational. Damaged components were an analog input card on the plant PLC and the panel's 120-volt power supply transformer. To restore system operations, the analog input card was replaced and a new dedicated 120-volt power supply was installed to the new panel rather than replace the failed transformer.

8. **August and September 2010 – Recovery Well Redevelopment:** All ten NTCRA-1 recovery wells (RW-1 through RW-4, and RW-7 through RW-12) and two NTCRA-2 recovery wells (RW-13 and 14) were redeveloped in August and September 2010.

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. At this time, the only planned modifications are the NTCRA-1 and treatment system modifications being implemented under the ISTR preparation construction currently underway at the site. These modifications consist of relocating both the NTCRA-1 electrical service and NTCRA-1 forcemain away from the ISTR treatment area, and extending both communications and utility water from the existing treatment system building to the ISTR process equipment area for use by the ISTR Contractor during active remediation.

TABLE 1
Hydraulic Head Measurements End of Month Gauging

Measuring Location	Location Elevation Nov-09 to Jul-10	Location Elevation Aug-10 to Oct-10	23-Nov-09		30-Dec-09		27-Jan-10		22-Feb-10	
			Depth to Water	Water Elevation	Depth to Water	Water Elevation	Depth to Water	Water Elevation	Depth to Water	Water Elevation
CPZ-1	159.73	159.64	7.90	151.83	6.22	153.51	7.20	152.53	7.09	152.64
CPZ-1R	161.32	161.12	1.41	159.91	0.08	161.24	0.00	161.32	0.90	160.42
CPZ-2	158.64	158.64	5.99	152.65	3.81	154.83	4.13	154.51	5.41	153.23
CPZ-2A	158.86	158.82	5.83	153.03	3.70	155.16	4.05	154.81	5.30	153.56
CPZ-2R	160.79	160.97	1.21	159.58	0.00	160.79	0.00	160.79	0.71	160.08
CPZ-3	159.49	159.21	9.79	149.70	8.61	150.88	9.33	150.16	9.87	149.62
CPZ-3R	160.83	160.70	6.72	154.11	4.22	156.61	4.91	155.92	6.08	154.75
CPZ-4	158.80	158.80	8.41	150.39	6.46	152.34	6.06	152.74	8.43	150.37
CPZ-4A	159.47	159.44	9.15	150.32	7.59	151.88	7.59	151.88	8.86	150.61
CPZ-4R	158.73	158.76	6.97	151.76	5.15	153.58	5.13	153.60	5.83	152.90
CPZ-5	158.60	158.68	15.26	143.34	15.35	143.25	15.11	143.49	15.02	143.58
CPZ-5R	158.52	158.30	9.70	148.82	10.31	148.21	9.40	149.12	10.22	148.30
CPZ-6	154.47	154.48	4.09	150.38	3.57	150.90	3.36	151.11	4.06	150.41
CPZ-6A	158.17	158.05	7.81	150.36	7.29	150.88	6.84	151.33	7.64	150.53
CPZ-6R	154.49	154.39	5.43	149.06	4.35	150.14	4.05	150.44	5.36	149.13
CPZ-7	159.54	159.40	7.28	152.26	6.21	153.33	6.01	153.53	6.49	153.05
CPZ-7R	158.61	158.58	1.85	156.76	0.00	158.61	0.00	158.61	1.62	156.99
CPZ-8	160.35	160.11	5.50	154.85	5.41	154.94	5.11	155.24	5.60	154.75
CPZ-8R	160.80	160.62	5.90	154.90	5.61	155.19	5.63	155.17	6.38	154.42
CPZ-10	160.97	161.03	3.03	157.94	2.89	158.08	2.80	158.17	3.09	157.88
CPZ-10R	160.97	162.94	0.71	160.26	0.00	160.97	0.00	160.97	0.50	160.47
MW-121A	152.87	152.96	5.19	147.68	4.04	148.83	4.00	148.87	5.07	147.80
MW-125A	157.87	157.87	2.72	155.15	5.81	152.06	1.60	156.27	1.62	156.25
MW-125C	157.99	156.30	7.80	150.19	1.92	156.07	5.35	152.64	6.42	151.57
MW-204A	150.68	150.78	3.76	146.92	2.52	148.16	2.32	148.36	3.23	147.45
MW-415	160.65	160.75	5.09	155.56	4.27	156.38	3.84	156.81	4.98	155.67
MW-416	159.84	159.98	7.97	151.87	6.75	153.09	6.51	153.33	7.62	152.22
MW-704D	153.38	153.43	6.12	147.26	5.27	148.11	5.08	148.30	5.99	147.39
MW-704M	152.71	152.34	5.38	147.33	5.52	147.19	4.32	148.39	6.18	146.53
MW-704R	151.58	151.52	5.57	146.01	4.44	147.14	4.28	147.30	5.23	146.35
MW-704DR	152.99	152.84	34.72	118.27	35.65	117.34	36.17	116.82	35.82	117.17
MW-705DR	160.89	160.99	4.26	156.63	2.84	158.05	3.04	157.85	3.52	157.37
MWL-302	161.60	161.60	6.13	155.47	6.11	155.49	5.78	155.82	6.14	155.46
MWL-304	159.99	159.90	3.61	156.38	2.94	157.05	2.77	157.22	3.46	156.53
MWL-305	159.01	159.01	4.29	154.72	3.87	155.14	3.41	155.60	4.29	154.72
MWL-306	155.39	155.39	4.70	150.69	4.32	151.07	3.42	151.97	4.41	150.98
MWL-307	159.09	159.14	3.78	155.31	2.69	156.40	2.22	156.87	3.66	155.43
MWL-308	158.63	158.63	2.97	155.66	2.42	156.21	2.13	156.50	2.97	155.66
MWL-309	154.61	155.20	2.72	151.89	3.75	150.86	2.95	151.66	3.11	151.50
MWL-311	157.33	157.33	6.40	150.93	5.06	152.27	4.67	152.66	6.99	150.34
P-5A	157.61	157.61	8.92	148.69	5.17	152.44	7.58	150.03	8.69	148.92
P-5B	158.17	158.39	4.67	153.50	4.51	153.66	4.07	154.10	4.56	153.61
P-6	153.77	153.78	4.72	149.05	3.71	150.06	3.49	150.28	4.73	149.04
PZR-2R	153.64	153.78	6.61	147.03	5.58	148.06	5.41	148.23	6.51	147.13
PZR-2DR	154.88	154.67	7.57	147.31	6.70	148.18	6.47	148.41	7.41	147.47
PZR-4R	153.87	153.72	6.10	147.77	4.93	148.94	4.89	148.98	5.90	147.97
PZR-4DR	153.25	152.73	1.92	151.33	0.62	152.63	0.02	153.23	0.80	152.45
RW-1	157.56	157.61	18.02	139.54	13.21	144.35	14.22	143.34	14.15	143.41
RW-2	156.51	156.49	17.56	138.95	16.52	139.99	16.93	139.58	16.03	140.48
RW-3	157.24	157.35	16.80	140.44	16.88	140.36	14.87	142.37	13.72	143.52
RW-4	158.19	158.21	15.99	142.20	12.88	145.31	18.21	139.98	12.21	145.98
RW-5	159.90	159.90	2.49	157.41	2.27	157.63	2.35	157.55	2.69	157.21
RW-6	159.23	159.38	16.51	142.72	2.36	156.87	2.14	157.09	3.15	156.08
RW-7	157.16	157.09	17.51	139.65	19.44	137.72	18.81	138.35	15.60	141.56
RW-8	156.92	156.95	19.46	137.46	19.44	137.48	17.76	139.16	17.14	139.78
RW-9	156.68	156.72	18.27	138.41	16.40	140.28	19.57	137.11	16.58	140.10
RW-10	156.47	156.13	18.30	138.17	18.11	138.36	18.11	138.36	17.24	139.23
RW-11	157.82	157.82	18.06	139.76	13.25	144.57	14.33	143.49	14.81	143.01
RW-12	158.50	158.36	17.90	140.60	17.40	141.10	14.14	144.36	16.66	141.84
RW-13	149.29	149.36	48.18	101.11	49.29	100.00	46.44	102.85	46.58	102.71
RW-14	151.67	151.71	28.65	123.02	29.62	122.05	27.86	123.81	29.80	121.87
RW-1R	151.56	149.77	33.78	117.78	34.63	116.93	34.86	116.70	33.77	117.79
TW-7A	158.72	158.72	6.45	152.27	5.70	153.02	5.30	153.42	6.01	152.71
MW-702DR	181.30	181.38	16.51	164.79	16.04	165.26	11.87	169.43	16.64	164.66
P-8A	181.62	181.26	16.83	164.79	16.26	165.36	11.54	170.08	16.88	164.74
MW-707D	156.04	156.09	9.05	146.99	8.33	147.71	8.09	147.95	9.00	147.04
MW-707R	156.00	156.01	8.70	147.30	7.84	148.16	7.62	148.38	8.60	147.40
MW-707DR	156.72	156.80	9.79	146.93	8.67	148.05	8.62	148.10	9.71	147.01
PZ-02D	154.18	154.14	6.91	147.27	5.98	148.20	5.76	148.42	6.81	147.37
PZ-O2M	154.74	154.77	7.43	147.31	6.53	148.21	6.27	148.47	7.39	147.35
MW-3	153.92	153.79	6.99	146.93	6.08	147.84	5.81	148.11	6.88	147.04
MW-708R	225.60	224.95	75.38	150.22	75.16	150.44	74.99	150.61	74.38	151.22
MW-708DR	224.85	224.19	75.51	149.34	75.29	149.56	74.88	149.97	74.80	150.05

Measuring Location	Location Elevation Nov-09 to Jul-10	Location Elevation Aug-10 to Oct-10	28-Mar-10		27-Apr-10		26-May-10		28-Jun-10	
			Depth to Water	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*
CPZ-1	159.73	159.64	6.30	153.43	6.61	153.12	6.99	152.74	8.79	150.94
CPZ-1R	161.32	161.12	0.00	161.32	0.00	161.32	3.01	158.31	5.04	156.28
CPZ-2	158.64	158.64	3.40	155.24	4.58	154.06	6.40	152.24	7.80	150.84
CPZ-2A	158.86	158.82	3.26	155.60	4.30	154.56	5.49	153.37	7.61	151.25
CPZ-2R	160.79	160.97	0.00	160.79	0.00	160.79	2.90	157.89	4.81	155.98
CPZ-3	159.49	159.21	9.40	150.09	9.83	149.66	10.41	149.08	11.21	148.28
CPZ-3R	160.83	160.70	3.71	157.12	5.32	155.51	7.49	153.34	8.43	152.40
CPZ-4	158.80	158.80	5.82	152.98	7.41	151.39	9.18	149.62	10.57	148.23
CPZ-4A	159.47	159.44	7.10	152.37	8.09	151.38	9.49	149.98	10.40	149.07
CPZ-4R	158.73	158.76	4.28	154.45	5.13	153.60	6.88	151.85	8.02	150.71
CPZ-5	158.60	158.68	12.99	145.61	14.16	144.44	16.61	141.99	15.60	143.00
CPZ-5R	158.52	158.30	8.82	149.70	9.00	149.52	11.69	146.83	11.41	147.11
CPZ-6	154.47	154.48	3.11	151.36	3.50	150.97	4.23	150.24	5.02	149.45
CPZ-6A	158.17	158.05	6.60	151.57	6.96	151.21	8.11	150.06	8.79	149.38
CPZ-6R	154.49	154.39	3.90	150.59	4.51	149.98	5.21	149.28	6.51	147.98
CPZ-7	159.54	159.40	5.78	153.76	6.12	153.42	8.92	150.62	8.27	151.27
CPZ-7R	158.61	158.58	0.00	158.61	0.94	157.67	2.80	155.81	3.76	154.85
CPZ-8	160.35	160.11	5.30	155.05	5.62	154.73	6.02	154.33	6.54	153.81
CPZ-8R	160.80	160.62	5.06	155.74	6.30	154.50	7.03	153.77	7.75	153.05
CPZ-10	160.97	161.03	2.81	158.16	2.92	158.05	3.61	157.36	4.48	156.49
CPZ-10R	160.97	162.94	0.00	160.97	0.00	160.97	0.87	160.10	2.80	158.17
MW-121A	152.87	152.96	3.40	149.47	4.21	148.66	5.24	147.63	6.06	146.81
MW-125A	157.87	157.87	0.81	157.06	1.02	156.85	2.24	155.63	3.50	154.37
MW-125C	157.99	156.30	5.37	152.62	6.03	151.96	7.49	150.50	7.71	150.28
MW-204A	150.68	150.78	2.16	148.52	2.38	148.30	3.18	147.50	3.97	146.71
MW-415	160.65	160.75	4.17	156.48	4.89	155.76	5.74	154.91	6.60	154.05
MW-416	159.84	159.98	6.16	153.68	7.02	152.82	6.47	153.37	9.01	150.83
MW-704D	153.38	153.43	4.95	148.43	5.25	148.13	6.19	147.19	7.04	146.34
MW-704M	152.71	152.34	4.21	148.50	4.48	148.23	5.44	147.27	6.28	146.43
MW-704R	151.58	151.52	4.26	147.32	4.46	147.12	5.43	146.15	6.10	145.48
MW-704DR	152.99	152.84	36.12	116.87	34.93	118.06	34.12	118.87	33.58	119.41
MW-705DR	160.89	160.99	1.88	159.01	3.12	157.77	4.41	156.48	5.34	155.55
MWL-302	161.60	161.60	5.90	155.70	6.13	155.47	6.46	155.14	6.80	154.80
MWL-304	159.99	159.90	2.73	157.26	3.22	156.77	4.09	155.90	4.84	155.15
MWL-305	159.01	159.01	3.40	155.61	3.81	155.20	4.70	154.31	5.20	153.81
MWL-306	155.39	155.39	2.46	152.93	5.06	150.33	6.15	149.24	7.26	148.13
MWL-307	159.09	159.14	2.75	156.34	3.48	155.61	4.42	154.67	5.42	153.67
MWL-308	158.63	158.63	2.40	156.23	2.91	155.72	3.64	154.99	4.43	154.20
MWL-309	154.61	155.20	3.09	151.52	3.97	150.64	4.97	149.64	7.01	147.60
MWL-311	157.33	157.33	4.89	152.44	6.18	151.15	7.51	149.82	8.81	148.52
P-5A	157.61	157.61	7.18	150.43	7.81	149.80	9.19	148.42	9.67	147.94
P-5B	158.17	158.39	4.27	153.90	5.58	152.59	5.89	152.28	6.32	151.85
P-6	153.77	153.78	3.26	150.51	3.91	149.86	4.90	148.87	5.70	148.07
PZR-2R	153.64	153.78	5.32	148.32	5.83	147.81	6.60	147.04	7.35	146.29
PZR-2DR	154.88	154.67	6.42	148.46	6.72	148.16	7.59	147.29	8.36	146.52
PZR-4R	153.87	153.72	4.33	149.54	5.30	148.57	6.26	147.61	7.19	146.68
PZR-4DR	153.25	152.73	0.00	153.25	0.00	153.25	1.67	151.58	2.62	150.63
RW-1	157.56	157.61	13.44	144.12	16.84	140.72	15.16	142.40	16.03	141.53
RW-2	156.51	156.49	16.23	140.28	16.36	140.15	16.10	140.41	16.38	140.13
RW-3	157.24	157.35	14.44	142.80	17.01	140.23	16.13	141.11	16.90	140.34
RW-4	158.19	158.21	13.06	145.13	15.32	142.87	15.04	143.15	14.40	143.79
RW-5	159.90	159.90	1.99	157.91	2.61	157.29	3.03	156.87	3.38	156.52
RW-6	159.23	159.38	2.07	157.16	2.38	156.85	3.01	156.22	3.21	156.02
RW-7	157.16	157.09	14.40	142.76	16.12	141.04	16.28	140.88	17.66	139.50
RW-8	156.92	156.95	17.12	139.80	17.94	138.98	18.22	138.70	17.96	138.96
RW-9	156.68	156.72	17.10	139.58	18.10	138.58	18.26	138.42	17.80	138.88
RW-10	156.47	156.13	15.06	141.41	17.04	139.43	20.20	136.27	18.03	138.44
RW-11	157.82	157.82	14.20	143.62	17.22	140.60	17.74	140.08	16.96	140.86
RW-12	158.50	158.36	13.70	144.80	16.16	142.34	14.97	143.53	17.14	141.36
RW-13	149.29	149.36	46.77	102.52	43.83	105.46	52.55	96.74	45.27	104.02
RW-14	151.67	151.71	30.25	121.42	30.58	121.09	33.16	118.51	37.06	114.61
RW-1R	151.56	149.77	33.46	118.10	33.64	117.92	33.84	117.72	31.66	119.90
TW-7A	158.72	158.72	5.30	153.42	5.59	153.13	6.33	152.39	6.98	151.74
MW-702DR	181.30	181.38	7.60	173.70	14.68	166.62	19.02	162.28	21.38	159.92
P-8A	181.62	181.26	6.94	174.68	14.89	166.73	19.30	162.32	21.49	160.13
MW-707D	156.04	156.09	8.11	147.93	8.36	147.68	9.03	147.01	9.68	146.36
MW-707R	156.00	156.01	7.59	148.41	7.91	148.09	8.77	147.23	9.51	146.49
MW-707DR	156.72	156.80	8.42	148.30	9.09	147.63	9.96	146.76	10.62	146.10
PZ-02D	154.18	154.14	5.82	148.36	6.24	147.94	7.02	147.16	7.75	146.43
PZ-O2M	154.74	154.77	6.40	148.34	6.81	147.93	7.58	147.16	8.31	146.43
MW-3	153.92	153.79	5.92	148.00	6.30	147.62	6.98	146.94	7.52	146.40
MW-708R	225.60	224.95	74.30	151.30	74.51	151.09	73.40	152.20	74.04	151.56
MW-708DR	224.85	224.19	74.96	149.89	75.01	149.84	74.40	150.45	74.56	150.29

TABLE 1
Hydraulic Head Measurements End of Month Gauging

Measuring Location	Location Elevation Nov-09 to Jul-10	Location Elevation Aug-10 to Oct-10	28-Jul-10		31-Aug-10		28-Sep-10		25-Oct-10	
			Depth to Water	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*	*Depth to Water*	*Water Elevation*
CPZ-1	159.73	159.64	8.94	150.79	9.06	150.58	9.90	149.74	8.99	150.65
CPZ-1R	161.32	161.12	5.90	155.42	5.87	155.25	7.31	153.81	5.46	155.66
CPZ-2	158.64	158.64	8.58	150.06	8.75	149.89	9.80	148.84	8.71	149.93
CPZ-2A	158.86	158.82	8.53	150.33	8.70	150.12	9.71	149.11	8.65	150.17
CPZ-2R	160.79	160.97	5.75	155.04	5.72	155.25	7.15	153.82	5.28	155.69
CPZ-3	159.49	159.21	11.11	148.38	10.89	148.32	9.90	149.31	9.96	149.25
CPZ-3R	160.83	160.70	8.78	152.05	8.67	152.03	9.41	151.29	8.42	152.28
CPZ-4	158.80	158.80	10.24	148.56	11.32	147.48	12.72	146.08	11.37	147.43
CPZ-4A	159.47	159.44	11.21	148.26	11.45	147.99	12.41	147.03	11.49	147.95
CPZ-4R	158.73	158.76	8.72	150.01	8.80	149.96	9.68	149.08	8.70	150.06
CPZ-5	158.60	158.68	14.31	144.29	13.75	144.93	13.82	144.86	13.16	145.52
CPZ-5R	158.52	158.30	10.99	147.53	10.67	147.63	11.18	147.12	10.20	148.10
CPZ-6	154.47	154.48	5.06	149.41	5.42	149.06	6.60	147.88	5.35	149.13
CPZ-6A	158.17	158.05	8.82	149.35	8.61	149.44	9.34	148.71	8.58	149.47
CPZ-6R	154.49	154.39	6.88	147.61	7.11	147.28	7.97	146.42	7.26	147.13
CPZ-7	159.54	159.40	8.48	151.06	8.37	151.03	8.27	151.13	7.43	151.97
CPZ-7R	158.61	158.58	3.95	154.66	3.83	154.75	4.55	154.03	3.46	155.12
CPZ-8	160.35	160.11	6.46	153.89	6.44	153.67	6.80	153.31	6.42	153.69
CPZ-8R	160.80	160.62	7.90	152.90	7.89	152.73	8.38	152.24	8.78	151.84
CPZ-10	160.97	161.03	4.47	156.50	4.31	156.72	4.70	156.33	4.24	156.79
CPZ-10R	160.97	162.94	3.19	157.78	4.85	158.09	6.10	156.84	4.77	158.17
MW-121A	152.87	152.96	6.41	146.46	6.79	146.17	7.74	145.22	7.26	145.70
MW-125A	157.87	157.87	4.19	153.68	3.97	153.90	4.61	153.26	3.66	154.21
MW-125C	157.99	156.30	8.02	149.97	7.68	148.62	8.24	148.06	7.47	148.83
MW-204A	150.68	150.78	4.56	146.12	5.31	145.47	5.73	145.05	5.37	145.41
MW-415	160.65	160.75	6.52	154.13	6.48	154.27	6.90	153.85	6.06	154.69
MW-416	159.84	159.98	8.94	150.90	8.48	151.50	8.97	151.01	8.21	151.77
MW-704D	153.38	153.43	7.59	145.79	8.59	144.84	9.34	144.09	8.79	144.64
MW-704M	152.71	152.34	7.20	145.51	7.81	144.53	8.53	143.81	8.97	143.37
MW-704R	151.58	151.52	6.52	145.06	7.99	143.53	7.92	143.60	7.35	144.17
MW-704DR	152.99	152.84	33.46	119.53	32.30	120.54	33.38	119.46	32.91	119.93
MW-705DR	160.89	160.99	5.95	154.94	5.97	155.02	6.57	154.42	5.71	155.28
MWL-302	161.60	161.60	6.72	154.88	6.73	154.87	7.16	154.44	6.83	154.77
MWL-304	159.99	159.90	4.87	155.12	4.86	155.04	5.11	154.79	6.02	153.88
MWL-305	159.01	159.01	5.21	153.80	5.89	153.12	6.23	152.78	5.41	153.60
MWL-306	155.39	155.39	7.57	147.82	6.90	148.49	8.22	147.17	6.50	148.89
MWL-307	159.09	159.14	5.37	153.72	5.71	153.43	5.80	153.34	4.91	154.23
MWL-308	158.63	158.63	4.45	154.18	4.44	154.19	4.89	153.74	3.97	154.66
MWL-309	154.61	155.20	4.85	149.76	4.91	150.29	10.62	144.58	4.49	150.71
MWL-311	157.33	157.33	9.28	148.05	9.06	148.27	10.89	146.44	8.54	148.79
P-5A	157.61	157.61	9.90	147.71	9.68	147.93	10.32	147.29	9.54	148.07
P-5B	158.17	158.39	5.79	152.38	6.00	152.39	6.25	152.14	6.05	152.34
P-6	153.77	153.78	6.03	147.74	6.10	147.68	6.99	146.79	6.31	147.47
PZR-2R	153.64	153.78	8.66	144.98	7.90	145.88	8.65	145.13	8.29	145.49
PZR-2DR	154.88	154.67	8.65	146.23	9.03	145.64	9.51	145.16	9.21	145.46
PZR-4R	153.87	153.72	7.52	146.35	7.71	146.01	8.54	145.18	8.02	145.70
PZR-4DR	153.25	152.73	3.29	149.96	3.51	149.22	4.23	148.50	3.33	149.40
RW-1	157.56	157.61	17.40	140.16	13.73	143.88	16.10	141.51	15.54	142.07
RW-2	156.51	156.49	16.36	140.15	12.53	143.96	16.10	140.39	14.74	141.75
RW-3	157.24	157.35	22.90	134.34	19.02	138.33	17.43	139.92	6.48	150.87
RW-4	158.19	158.21	14.20	143.99	15.70	142.51	15.80	142.41	9.09	149.12
RW-5	159.90	159.90	4.41	155.49	4.12	155.78	4.30	155.60	NA	NA
RW-6	159.23	159.38	4.40	154.83	4.48	154.90	4.68	154.70	NA	NA
RW-7	157.16	157.09	17.60	139.56	13.45	143.64	17.02	140.07	14.88	142.21
RW-8	156.92	156.95	17.57	139.35	21.62	135.33	18.40	138.55	18.38	138.57
RW-9	156.68	156.72	18.55	138.13	22.49	134.23	18.40	138.32	19.39	137.33
RW-10	156.47	156.13	15.92	140.55	15.05	141.08	18.66	137.47	7.11	149.02
RW-11	157.82	157.82	14.11	143.71	20.69	137.13	16.99	140.83	15.22	142.60
RW-12	158.50	158.36	18.80	139.70	17.62	140.74	18.80	139.56	16.28	142.08
RW-13	149.29	149.36	50.18	99.11	46.30	103.06	41.16	108.20	39.62	109.74
RW-14	151.67	151.71	28.87	122.80	14.51	137.20	23.70	128.01	24.77	126.94
RW-1R	151.56	149.77	31.73	119.83	32.80	116.97	32.80	116.97	32.45	117.32
TW-7A	158.72	158.72	7.00	151.72	6.96	151.76	7.52	151.20	6.96	151.76
MW-702DR	181.30	181.38	21.86	159.44	21.91	159.47	23.32	158.06	21.07	160.31
P-8A	181.62	181.26	22.09	159.53	22.16	159.10	23.52	157.74	21.26	160.00
MW-707D	156.04	156.09	9.93	146.11	10.11	145.98	10.01	146.08	10.26	145.83
MW-707R	156.00	156.01	9.79	146.21	10.26	145.75	10.67	145.34	10.44	145.57
MW-707DR	156.72	156.80	10.92	145.80	10.99	145.81	11.49	145.31	11.28	145.52
PZ-02D	154.18	154.14	8.31	145.87	8.29	145.85	8.80	145.34	8.52	145.62
PZ-O2M	154.74	154.77	8.77	145.97	8.81	145.96	9.30	145.47	9.00	145.77
MW-3	153.92	153.79	7.77	146.15	7.95	145.84	7.77	146.02	9.05	144.74
MW-708R	225.60	224.95	75.45	150.15	75.90	149.05	75.84	149.11	76.62	148.33
MW-708DR	224.85	224.19	76.00	148.85	76.20	147.99	76.04	148.15	76.70	147.49

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)*
10/30/2009	185,982,000	891,000	20.6	-0.3	73,851,160	906,100	21.0	193,935,000	943,000	21.8
11/30/2009	187,120,000	1,138,000	25.5	3.8	74,820,660	969,500	21.7	195,151,000	1,216,000	27.2
12/31/2009	188,358,000	1,238,000	27.7	7.0	75,747,860	927,200	20.8	196,474,000	1,323,000	29.6
1/30/2010	189,494,000	1,136,000	26.3	10.8	76,418,160	670,300	15.5	197,709,000	1,235,000	28.6
2/26/2010	190,356,000	862,000	22.2	5.2	77,077,860	659,700	17.0	198,737,000	1,028,000	26.4
3/31/2010	191,918,000	1,562,000	32.9	13.2	78,010,860	933,000	19.6	200,449,000	1,712,000	36.0
4/30/2010	193,154,000	1,236,000	28.6	6.9	78,947,260	936,400	21.7	201,908,000	1,459,000	33.8
5/31/2010	194,037,000	883,000	19.8	1.4	79,768,160	820,900	18.4	202,926,000	1,018,000	22.8
6/30/2010	194,815,000	778,000	18.0	-2.1	80,636,960	868,800	20.1	203,779,000	853,000	19.7
7/30/2010	195,505,000	690,000	16.0	-0.3	81,338,260	701,300	16.2	204,609,000	830,000	19.2
8/31/2010	196,172,000	667,000	14.5	2.3	81,898,060	559,800	12.1	205,418,000	809,000	17.6
9/30/2010	197,608,000	1,436,000	33.2	-1.6	83,404,360	1,506,300	34.9	207,056,000	1,638,000	37.9
10/29/2010	199,056,000	1,448,000	34.7	2.1	84,763,060	1,358,700	32.5	208,686,000	1,630,000	39.0
Yearly Averages (1)			**24.9**	**4.1**			**20.8**			**28.1**
Cumulative Totals:	**199,056,000**	**13,074,000**			**84,763,060**	**10,911,900**		**208,686,000**	**14,751,000**	

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 2009

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	11/6/2009	11/20/2009
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)	3.07	4.36
Ethylbenzene (mg/L)	0.94	1.31
Xylenes, Total (mg/L)	0.66	0.97
Vinyl chloride (mg/L)	0.8	1.04
1,1-Dichloroethene (mg/L)	0.03	0.04
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	2.7	3.61
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.11	0.19
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.08	0.1
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]	**8.39**	**11.62**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	7.61	8.12
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)

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	12/4/2009	12/18/2009
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)	2.33	1.56
Ethylbenzene (mg/L)	0.76	0.34
Xylenes, Total (mg/L)	0.53	0.29
Vinyl chloride (mg/L)	0.92	0.47
1,1-Dichloroethene (mg/L)	0.03	0.02
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	2.17	2.04
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.09	0.06
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.05	0.06
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]	**6.88**	**4.84**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	0.01	<0.01
Iron, Total (mg/L)	5.31	1.81
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

January 2010

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	1/6/2010	1/22/2010
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)	2.26	1.82
Ethylbenzene (mg/L)	0.62	0.54
Xylenes, Total (mg/L)	0.44	0.36
Vinyl chloride (mg/L)	1.1	0.87
1,1-Dichloroethene (mg/L)	0.03	0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	1.53	1
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.09	0.09
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.03	0.06
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]	**6.1**	**4.75**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	0.01	<0.01
Iron, Total (mg/L)	5.51	8.03
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)

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	2/5/2010	2/19/2010
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)	1.68	2.22
Ethylbenzene (mg/L)	0.5	0.55
Xylenes, Total (mg/L)	0.38	0.43
Vinyl chloride (mg/L)	0.52	0.59
1,1-Dichloroethene (mg/L)	0.01	0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	1.01	1.14
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.13	0.11
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.02	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]	**4.25**	**5.1**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	4.23	5.12
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 2010

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	3/4/2010	3/19/2010
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)	2.86	2.89
Ethylbenzene (mg/L)	0.64	0.39
Xylenes, Total (mg/L)	0.46	0.5
Vinyl chloride (mg/L)	1.11	1.49
1,1-Dichloroethene (mg/L)	0.03	0.07
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	1.74	4.44
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.17	0.62
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.06	0.09
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	0.62
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	0.60
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<0.50
Total VOCs[2]	**7.07**	**11.71**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	6.31	9.01
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)

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	4/7/2010	4/23/2010
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)	3.42	1.59
Ethylbenzene (mg/L)	0.59	0.24
Xylenes, Total (mg/L)	0.69	0.29
Vinyl chloride (mg/L)	1.59	0.41
1,1-Dichloroethene (mg/L)	0.06	0.03
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	4.97	1.6
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.59	0.28
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.34	0.2
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]	**12.75**	**4.65**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	6.31	6.4
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)

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	5/7/2010	5/20/2010
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	0.02	<0.01
Tetrachloroethene (mg/L)	<0.01	<0.01
Toluene (mg/L)	2.85	2.41
Ethylbenzene (mg/L)	0.54	0.5
Xylenes, Total (mg/L)	0.44	0.35
Vinyl chloride (mg/L)	1.24	0.87
1,1-Dichloroethene (mg/L)	0.02	0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	1.6	1.22
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.12	0.09
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.04	0.08
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]	**6.87**	**5.53**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	6.79	5.78
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 2010

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	6/4/2010	6/18/2010
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.01	<0.02
Tetrachloroethene (mg/L)	<0.01	<0.02
Toluene (mg/L)	2.47	5.1
Ethylbenzene (mg/L)	0.41	1.69
Xylenes, Total (mg/L)	0.28	1.17
Vinyl chloride (mg/L)	0.94	1.67
1,1-Dichloroethene (mg/L)	0.01	0.04
Tetrahydrofuran (mg/L)	<0.50	<1.0
1,2-Dichloroethene[1] (mg/L)	1.15	3.2
1,2-Dichloroethane (mg/L)	<0.01	<0.02
1,1,1-Trichloroethane (mg/L)	0.09	0.17
1,1,2-Trichloroethane (mg/L)	<0.01	<0.02
Methylene chloride (mg/L)	0.07	<0.02
Styrene (mg/L)	<0.01	<0.02
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	<1.0
2-Butanone (Methyl Ethyl Ketone) (mg/L)	<0.50	<1.0
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	<0.50	<1.0
Total VOCs[2]	**5.42**	**13.04**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	6.15	5.8
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 2010

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	7/7/2010	7/22/2010
A. ORGANIC PARAMETERS		
Volatile Organic Compounds	*(mg/L)*	*(mg/L)*
Trichloroethene (mg/L)	<0.02	<0.02
Tetrachloroethene (mg/L)	<0.02	<0.02
Toluene (mg/L)	5.89	6.82
Ethylbenzene (mg/L)	1.53	1.85
Xylenes, Total (mg/L)	1.01	1.37
Vinyl chloride (mg/L)	1.45	1.74
1,1-Dichloroethene (mg/L)	0.07	0.05
Tetrahydrofuran (mg/L)	<0.50	<1.0
1,2-Dichloroethene[1] (mg/L)	5.77	5.29
1,2-Dichloroethane (mg/L)	<0.02	<0.02
1,1,1-Trichloroethane (mg/L)	0.18	0.22
1,1,2-Trichloroethane (mg/L)	<0.02	<0.02
Methylene chloride (mg/L)	<0.02	0.06
Styrene (mg/L)	<0.02	<0.02
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]	**15.9**	**17.4**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	7.09	3.49
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)

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	8/6/2010	8/20/2010
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)	1.17	3.33
Ethylbenzene (mg/L)	0.33	1.51
Xylenes, Total (mg/L)	0.21	1.24
Vinyl chloride (mg/L)	0.23	1.31
1,1-Dichloroethene (mg/L)	<0.01	0.04
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	0.78	3.76
1,2-Dichloroethane (mg/L)	<0.01	0.01
1,1,1-Trichloroethane (mg/L)	0.03	0.14
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.03	0.1
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]	**2.78**	**11.44**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	6.07	8.62
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)

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	9/2/2010	9/16/2010
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)	2.45	1.92
Ethylbenzene (mg/L)	0.55	0.5
Xylenes, Total (mg/L)	0.43	0.44
Vinyl chloride (mg/L)	0.37	0.33
1,1-Dichloroethene (mg/L)	0.02	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	2.11	1.14
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.14	0.05
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.04	0.03
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]	**6.11**	**4.41**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	0.01	<0.01
Iron, Total (mg/L)	4.21	3.17
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)

SRSNE HCTS - Influent Results

Parameter/ Concentration (mg/L)	Sample Dates	
	10/6/2010	10/19/2010
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)	2.02	1.21
Ethylbenzene (mg/L)	0.48	0.19
Xylenes, Total (mg/L)	0.37	0.33
Vinyl chloride (mg/L)	0.34	0.31
1,1-Dichloroethene (mg/L)	0.01	<0.01
Tetrahydrofuran (mg/L)	<0.50	<0.50
1,2-Dichloroethene[1] (mg/L)	1.45	0.95
1,2-Dichloroethane (mg/L)	<0.01	<0.01
1,1,1-Trichloroethane (mg/L)	0.08	0.39
1,1,2-Trichloroethane (mg/L)	<0.01	<0.01
Methylene chloride (mg/L)	0.08	0.03
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]	**4.83**	**3.41**
B. INORGANIC PARAMETERS		
Metals		
Copper, Total (mg/L)	<0.01	<0.01
Iron, Total (mg/L)	2.06	1.02
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)

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		11/6/2009	11/20/2009
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**	0.002	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.511	0.495
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.041	0.038
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.031	0.026
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.586**	**0.559**
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 2.97 g/day	<0.01 mg/l or <1.48 g/day
Iron, Total (mg/l)	**5.0**	0.2	0.2
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 <7.42 g/day	<0.05 mg/l or <7.42 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.**	7.05	6.84
Total Suspended Solids (mg/L)	**30**	2	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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		12/4/2009	12/18/2009
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**	0.002	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.350	0.263
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.054	0.039
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.018	0.018
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.424**	**0.32**
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**	0.2	<0.05
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 <8.08 g/day	<0.05 mg/l or <8.08 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.**	6.88	6.82
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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		1/6/2010	1/22/2010
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**	0.014	<0.001
1,1-Dichloroethene (mg/L)	**0.058**	0.003	<0.001
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.261	0.231
1,2-Dichloroethane (mg/L)	**0.250**	0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.053	0.045
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.024	0.015
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.356**	**0.291**
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 <1.56 g/day	<0.01 mg/l or <1.56 g/day
Iron, Total (mg/l)	**5.0**	0.1	0.09
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.78 g/day	<0.005 mg/l or <0.78 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 <7.79 g/day	<0.05 mg/l or <7.79 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.**	6.90	6.82
Total Suspended Solids (mg/L)	**30**	2.00	<1
Dioxins (pg/L)	**NL**	<5.0	NS
Furans (pg/L)	**NL**	<5.0	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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		2/5/2010	2/19/2010
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**	0.247	0.247
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.053	0.045
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.31**	**0.296**
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 <1.44 g/day	<0.01 mg/l or <1.44 g/day
Iron, Total (mg/l)	**5.0**	0.1	0.19
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.72 g/day	<0.005 mg/l or <0.72 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 <7.21 g/day	<0.05 mg/l or <7.21 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.**	6.88	6.73
Total Suspended Solids (mg/L)	**30**	3.00	5.00
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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		3/4/2010	3/19/2010
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	0.004
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	0.016
1,1-Dichloroethene (mg/L)	**0.058**	<0.001	0.002
Tetrahydrofuran (mg/L)	**0.500**	<0.050	<0.050
1,2-Dichloroethene[1] (mg/L)	**5.000**	0.202	0.359
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	0.002
1,1,1-Trichloroethane (mg/L)	**4.000**	0.053	0.077
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.024	0.024
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.279**	**0.484**
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 <1.96 g/day	<0.01 mg/l or <1.96 g/day
Iron, Total (mg/l)	**5.0**	0.05	0.15
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.98 g/day	<0.005 mg/l or <0.98 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 <9.82 g/day	<0.05 mg/l or <9.82 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.**	6.69	6.79
Total Suspended Solids (mg/L)	**30**	2.00	<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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		4/7/2010	4/23/2010
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**	0.004	<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**	0.256	0.164
1,2-Dichloroethane (mg/L)	**0.250**	0.002	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.13	0.04
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.392	0.041
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.784**	**0.245**
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 1.84 g/day	<0.01 mg/l or <1.84 g/day
Iron, Total (mg/l)	**5.0**	0.17	0.15
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 <9.2 g/day	<0.05 mg/l or <9.2 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	0.4	0.2
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.57	6.95
Total Suspended Solids (mg/L)	**30**	1.00	1.00
Dioxins (pg/L)	**NL**	<46	NS
Furans (pg/L)	**NL**	<66	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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		5/7/2010	5/20/2010
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**	0.146	0.155
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.028	0.028
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.006	0.015
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.18**	**0.198**
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 1.24 g/day	<0.01 mg/l or 1.24 g/day
Iron, Total (mg/l)	**5.0**	0.19	0.52
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.62 g/day	<0.005 mg/l or <0.62 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 <6.21 g/day	<0.05 mg/l or <6.21 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.**	6.91	6.84
Total Suspended Solids (mg/L)	**30**	<1	1.00
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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		6/4/2010	6/18/2010
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**	0.161	0.182
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.026	0.031
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.003	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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.19**	**0.215**
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 <1.08 g/day	<0.01 mg/l or 1.08 g/day
Iron, Total (mg/l)	**5.0**	0.11	0.37
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.54 g/day	<0.005 mg/l or <0.54 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 <5.38 g/day	<0.05 mg/l or <5.38 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	0.2	0.4
Total PCBs (µg/L)	**NL**	<1	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.69	6.58
Total Suspended Solids (mg/L)	**30**	4.00	6.00
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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		7/7/2010	7/22/2010
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**	0.228	0.1
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.039	0.018
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.005	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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.273**	**0.124**
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 <1.05 g/day	<0.01 mg/l or <1.05 g/day
Iron, Total (mg/l)	**5.0**	0.06	0.05
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.52 g/day	<0.005 mg/l or <0.52 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 <5.24 g/day	<0.05 mg/l or <5.24 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1.0	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.97	7.00
Total Suspended Solids (mg/L)	**30**	1.00	<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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		8/6/2010	8/20/2010
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**	0.082	0.09
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.015	0.017
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.004	0.003
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.101**	**0.11**
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 0.96 g/day	<0.01 mg/l or <0.96 g/day
Iron, Total (mg/l)	**5.0**	0.06	0.09
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <0.48 g/day	<0.005 mg/l or <0.48 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 <4.78 g/day	<0.05 mg/l or <4.78 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	<0.2
Total PCBs (µg/L)	**NL**	<1.0	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.97	6.79
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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		9/2/2010	9/16/2010
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**	0.064	0.064
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.014	0.012
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.005	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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.083**	**0.077**
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 2.07 g/day	<0.01 mg/l or <2.07 g/day
Iron, Total (mg/l)	**5.0**	<0.05	<0.05
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 <10.33 g/day	<0.05 mg/l or <10.33 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	0.2	0.2
Total PCBs (µg/L)	**NL**	<1.0	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	7.08	6.82
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

SRSNE HCTS - Effluent Results

Parameter/ Concentration (mg/L)	Substantive Requirement Discharge Limits	Sample Dates	
		10/6/2010	10/19/2010
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**	0.08	0.047
1,2-Dichloroethane (mg/L)	**0.250**	<0.001	<0.001
1,1,1-Trichloroethane (mg/L)	**4.000**	0.016	0.011
1,1,2-Trichloroethane (mg/L)	**0.250**	<0.001	<0.001
Methylene chloride (mg/L)	**15.000**	0.002	0.005
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**	<0.05	<0.05
2-Butanone (Methyl Ethyl Ketone) (mg/L)	**10.0**	<0.05	<0.05
4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (mg/L)	**2.0**	<0.05	<0.05
Total VOCs[2]		**0.098**	**0.063**
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 <2.13 g/day	<0.01 mg/l or <2.13 g/day
Iron, Total (mg/l)	**5.0**	0.07	0.09
Lead, Total (g/day)[3]	**3.2 g/day**	<0.005 mg/l or <1.06 g/day	<0.005 mg/l or <1.06 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 <10.64 g/day	<0.05 mg/l or <10.64 g/day
OTHER			
Hydrogen Peroxide (mg/L)	**1.0**	<0.2	0.2
Total PCBs (µg/L)	**NL**	<1.0	NS
pH (s.u.)	**6.0 - 9.0 s.u.**	6.74	6.71
Total Suspended Solids (mg/L)	**30**	<1.0	2.00
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

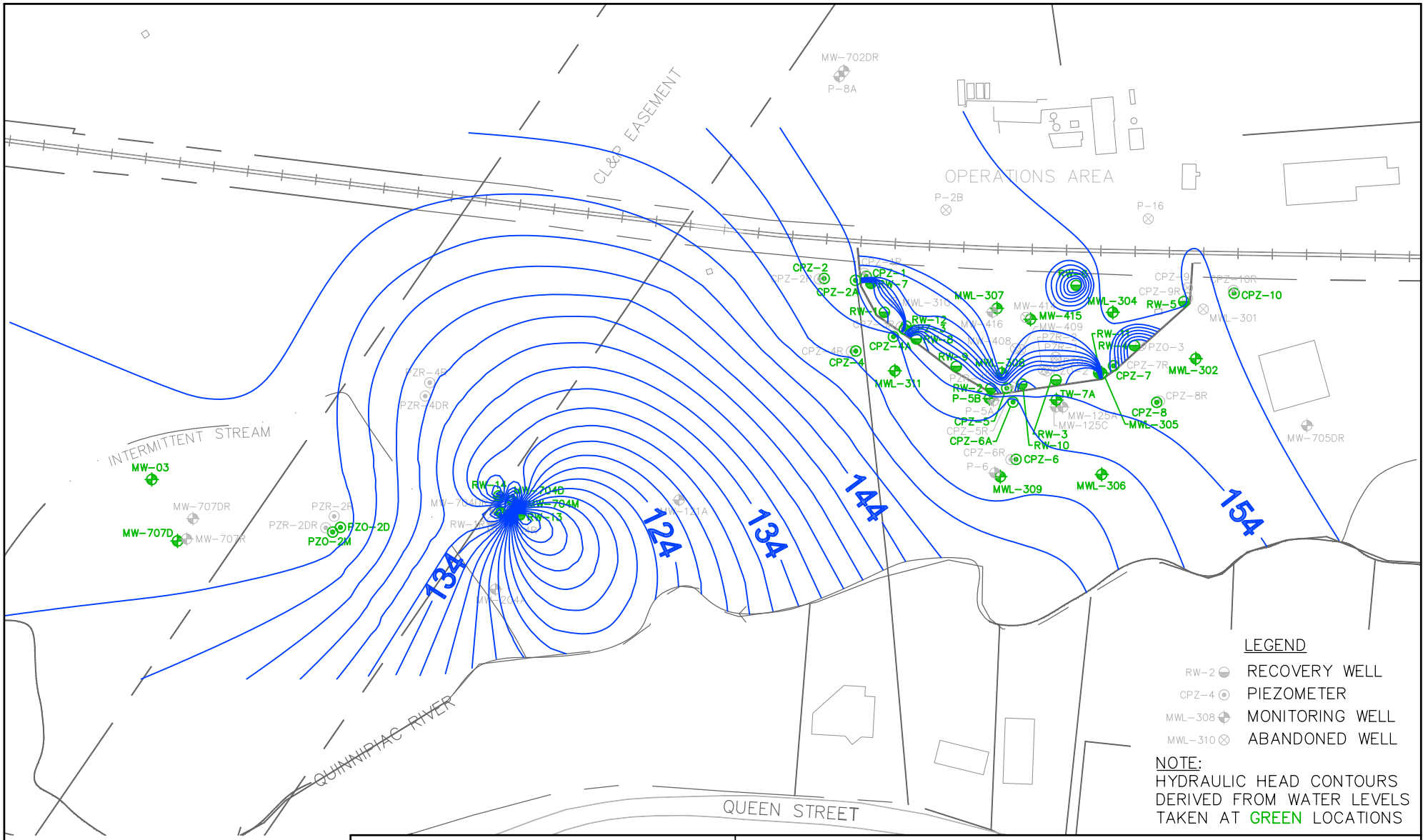
TABLE 5

31 October 2009 through 30 October 2010

Weekly NTCRA-1 Compliance Piezometer Pair Summary

Date	CPZ-1/CPZ-2A	CPZ-3/CPZ-4A	CPZ-5/CPZ-6	CPZ-7/CPZ-8
3-Nov-09	0.70	1.74	7.87	1.83
10-Nov-09	0.78	1.25	6.65	1.50
16-Nov-09	1.68	1.38	6.70	1.58
23-Nov-09	1.20	0.62	7.04	2.59
1-Dec-09	0.96	0.37	6.36	2.45
11-Dec-09	1.70	0.79	7.44	1.98
15-Dec-09	1.00	1.18	6.53	2.21
22-Dec-09	1.68	1.20	6.79	2.53
30-Dec-09	1.65	1.00	7.65	1.61
5-Jan-10	1.02	0.84	7.97	2.26
12-Jan-10	1.66	1.01	6.36	1.14
20-Jan-10	1.43	0.85	6.63	0.99
27-Jan-10	2.28	1.72	7.62	1.71
3-Feb-10	2.00	2.02	6.82	1.34
8-Feb-10	1.69	1.79	6.58	1.42
15-Feb-10	1.16	0.79	5.96	1.11
22-Feb-10	0.92	0.99	6.83	1.70
2-Mar-10	2.24	4.04	8.29	2.03
9-Mar-10	2.20	1.46	7.96	1.06
16-Mar-10	1.56	1.91	11.27	1.71
26-Mar-10	3.45	2.44	9.29	1.38
28-Mar-10	2.17	2.28	5.75	1.29
5-Apr-10	2.21	2.63	7.88	2.83
14-Apr-10	2.11	2.28	6.76	1.79
22-Apr-10	1.59	1.89	6.29	1.14
27-Apr-10	1.44	1.72	6.53	1.31
3-May-10	0.75	1.36	6.68	1.19
10-May-10	0.47	0.90	5.86	1.50
17-May-10	0.74	0.87	6.83	1.16
26-May-10	0.63	0.90	8.25	3.71
4-Jun-10	0.40	0.77	7.07	1.26
9-Jun-10	0.36	0.60	4.87	1.59
15-Jun-10	0.32	0.64	6.28	1.44
22-Jun-10	0.32	0.49	6.11	1.46
28-Jun-10	0.31	0.79	6.45	2.54
5-Jul-10	0.39	0.39	4.61	2.31
14-Jul-10	0.31	0.37	4.87	3.06
21-Jul-10	-0.45	-0.41	4.50	2.69
28-Jul-10	-0.46	-0.12	5.12	2.83
3-Aug-10	-0.49	-0.07	6.69	2.37
10-Aug-10	-0.62	-0.88	5.79	2.55
16-Aug-10	-0.59	-0.65	4.60	1.95
23-Aug-10	-0.55	-0.79	4.12	2.21
31-Aug-10	-0.46	-0.33	4.13	2.64
4-Sep-10	-0.02	-0.68	3.19	1.66
10-Sep-10	-0.12	-0.88	3.33	1.56
16-Sep-10	-0.22	-1.19	3.08	2.38
21-Sep-10	-0.19	-1.20	3.24	2.49
28-Sep-10	-0.63	-2.28	3.02	2.18
4-Oct-10	-0.59	-1.75	3.89	1.98
11-Oct-10	-0.55	-1.39	3.80	2.15
19-Oct-10	-0.56	-1.22	2.86	1.86
25-Oct-10	-0.48	-1.30	3.61	1.72

M:\Design\DWG\SRSNE\Nov 23 2009\overburden.dwg, Layout1, 11/5/2010 10:52:56 AM, GIRARDEB, 1:1



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 NOVEMBER 23, 2009

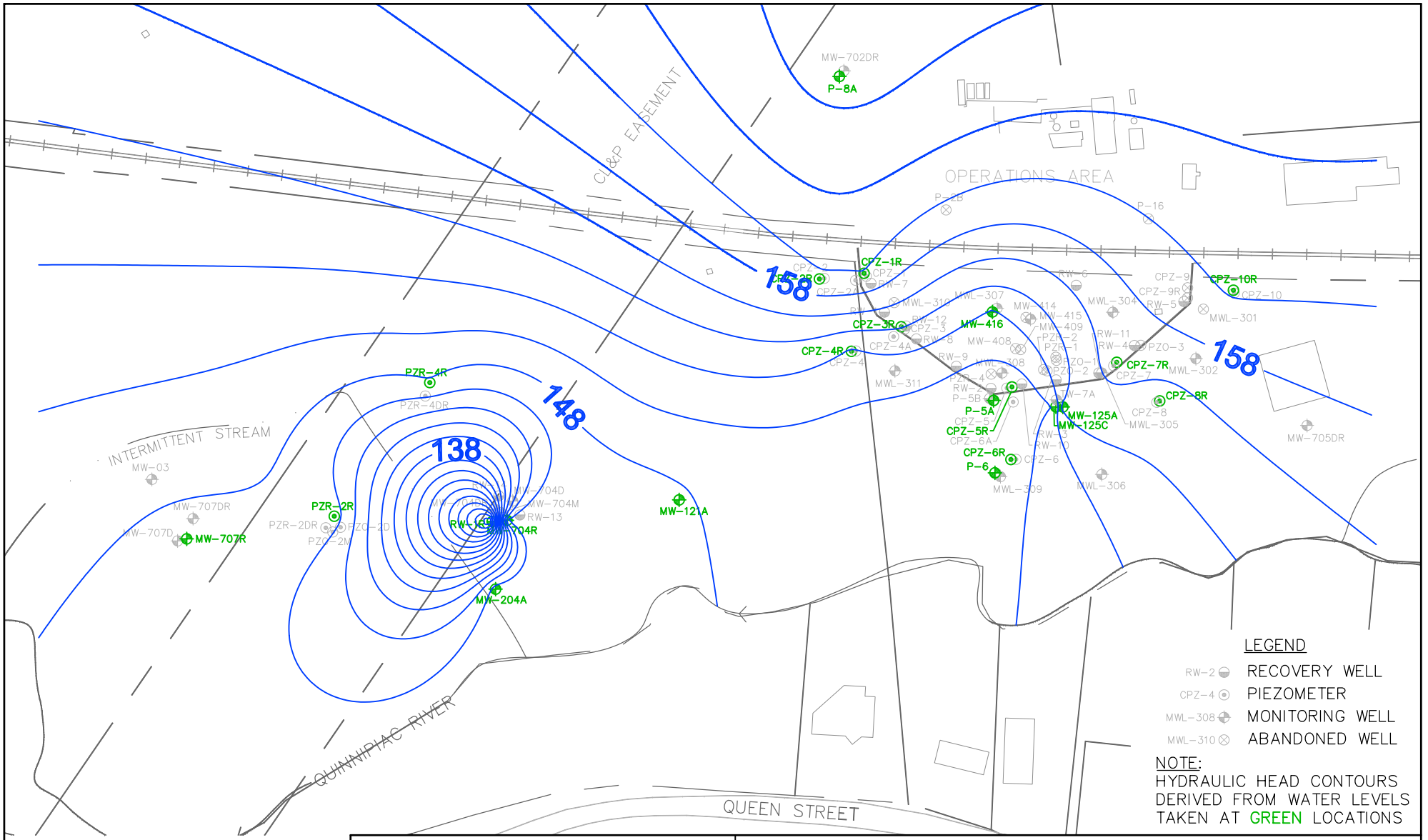
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

MANCHESTER NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	DEC 2009			13056.001.011
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		1A

M:\Design\DWG\SRSNE\Nov 23 2009\shallow bedrock.dwg, Layout1, 11/5/2010 10:52:14 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

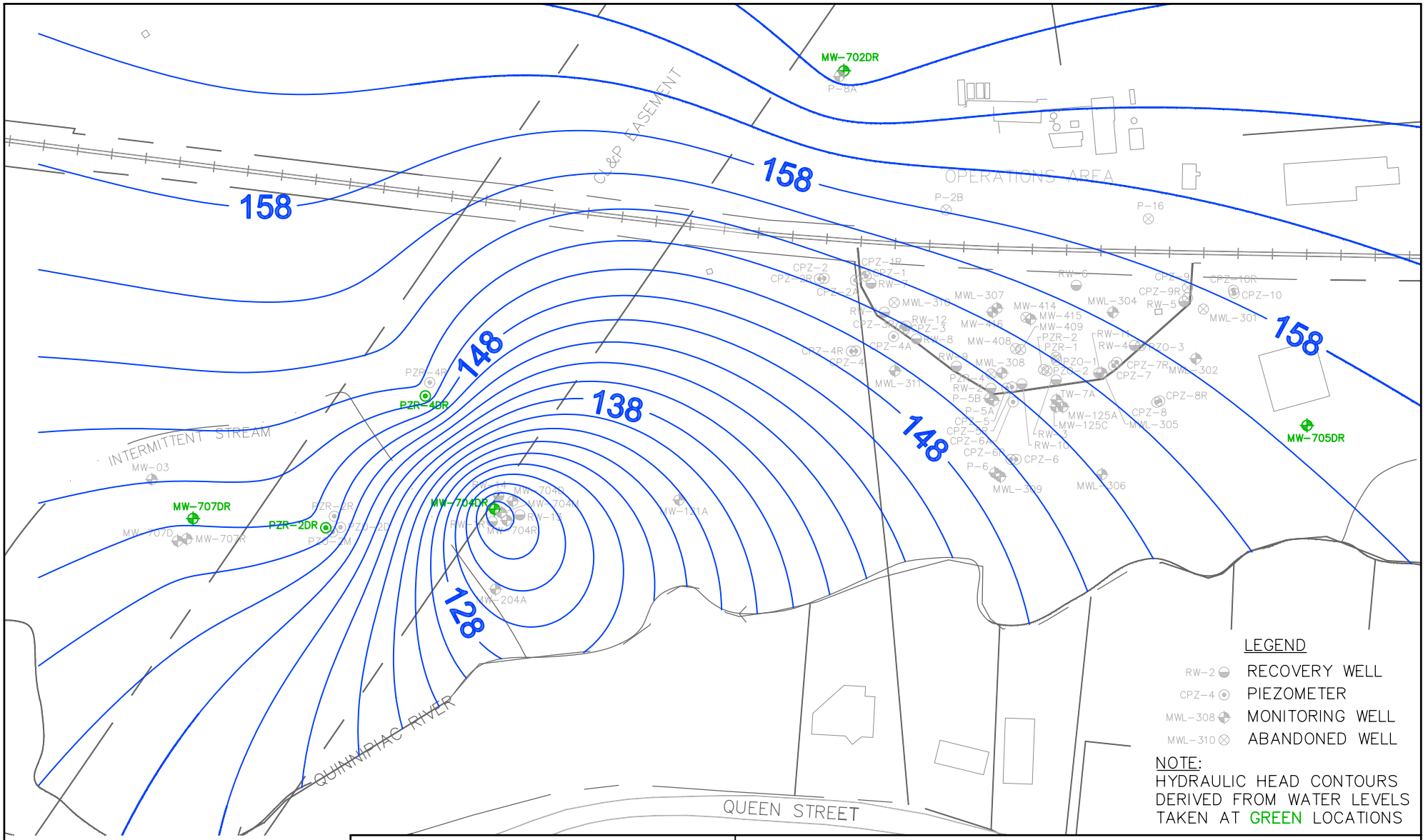
SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS NOVEMBER 23, 2009

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
MANCHESTER NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	DEC 2009			13056.001.011
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		1B

M:\Design\DWG\SRSNE\Nov 23 2009\deep bedrock.dwg, Layout1, 11/5/2010 10:53:34 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS NOVEMBER 23, 2009

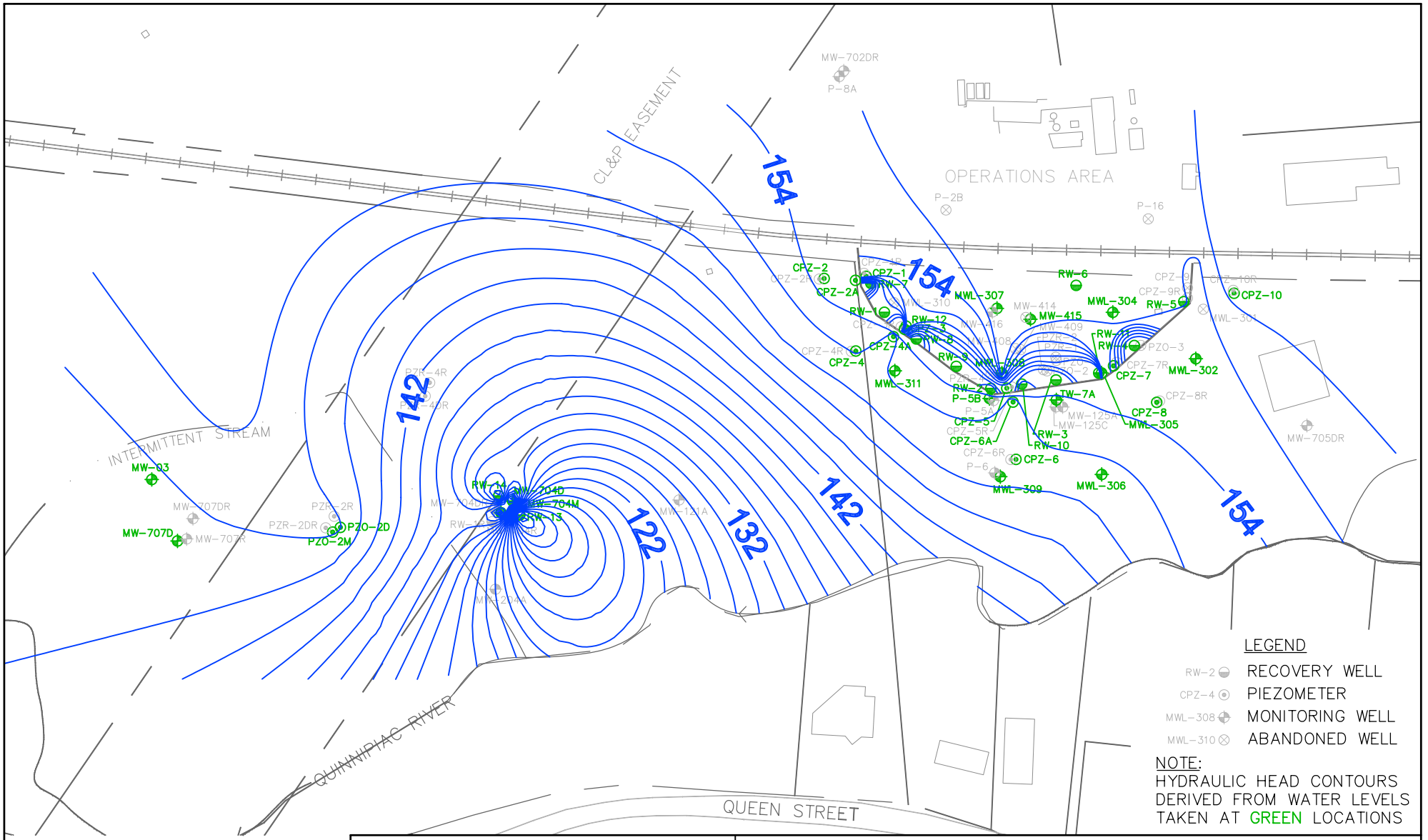
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

MANCHESTER NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	DEC 2009			13056.001.011
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		1C

M:\Design\DWG\SRSNE\Dec 30 2009\overburden.dwg, Layout1, 11/5/2010 10:55:25 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS DECEMBER 30, 2009

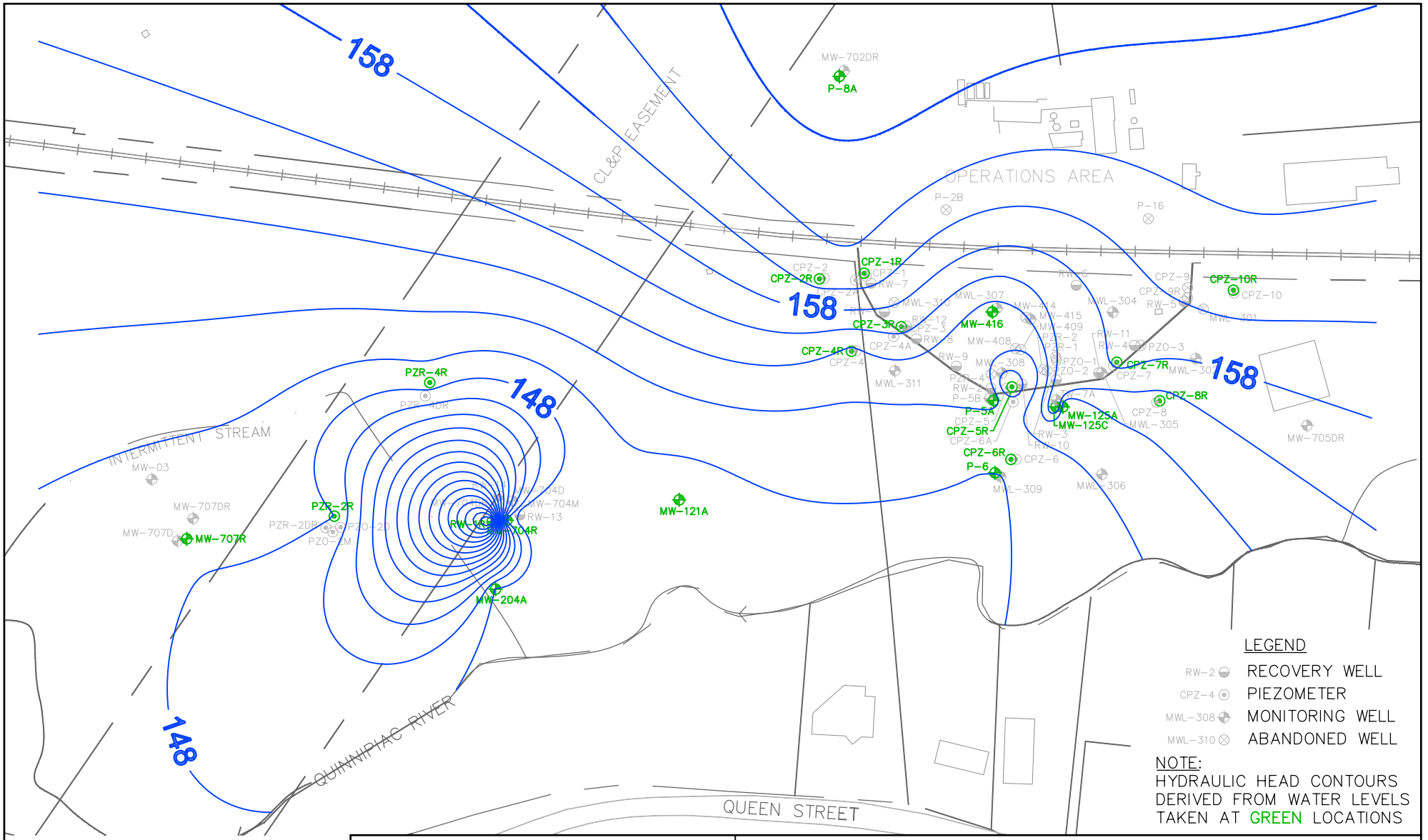
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

MANCHESTER NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JAN 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		2A

M:\Design\DWG\SRSNE\Dec 30 2009\shallow bedrock.dwg, Layout1, 11/5/2010 10:54:38 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS DECEMBER 30, 2009

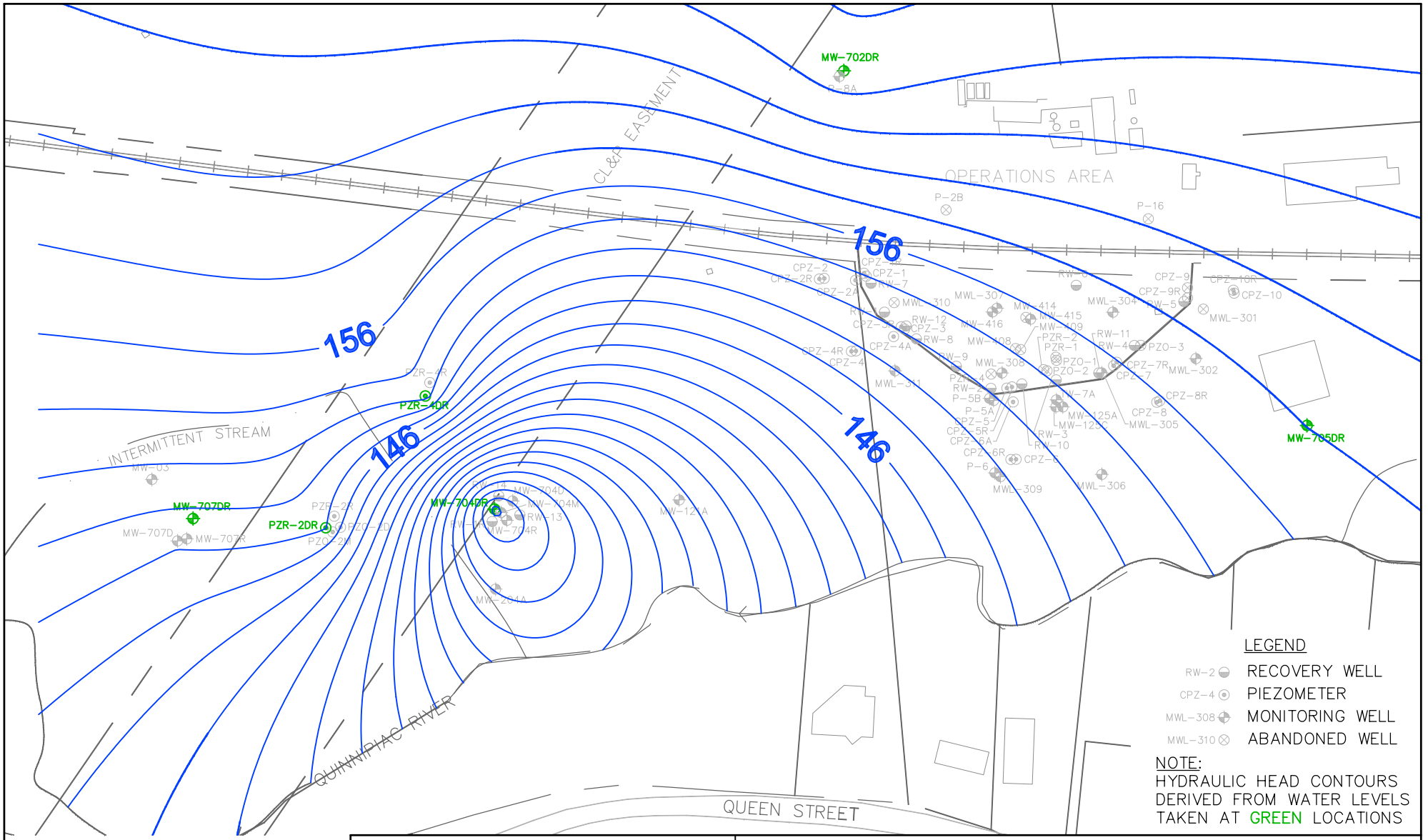
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

MANCHESTER NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JAN 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		2B

M:\Design\DWG\SRSNE\Dec 30 2009\deep bedrock.dwg, Layout1, 11/5/2010 10:56:00 AM, GIRARDEB, 1:1



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 30, 2009

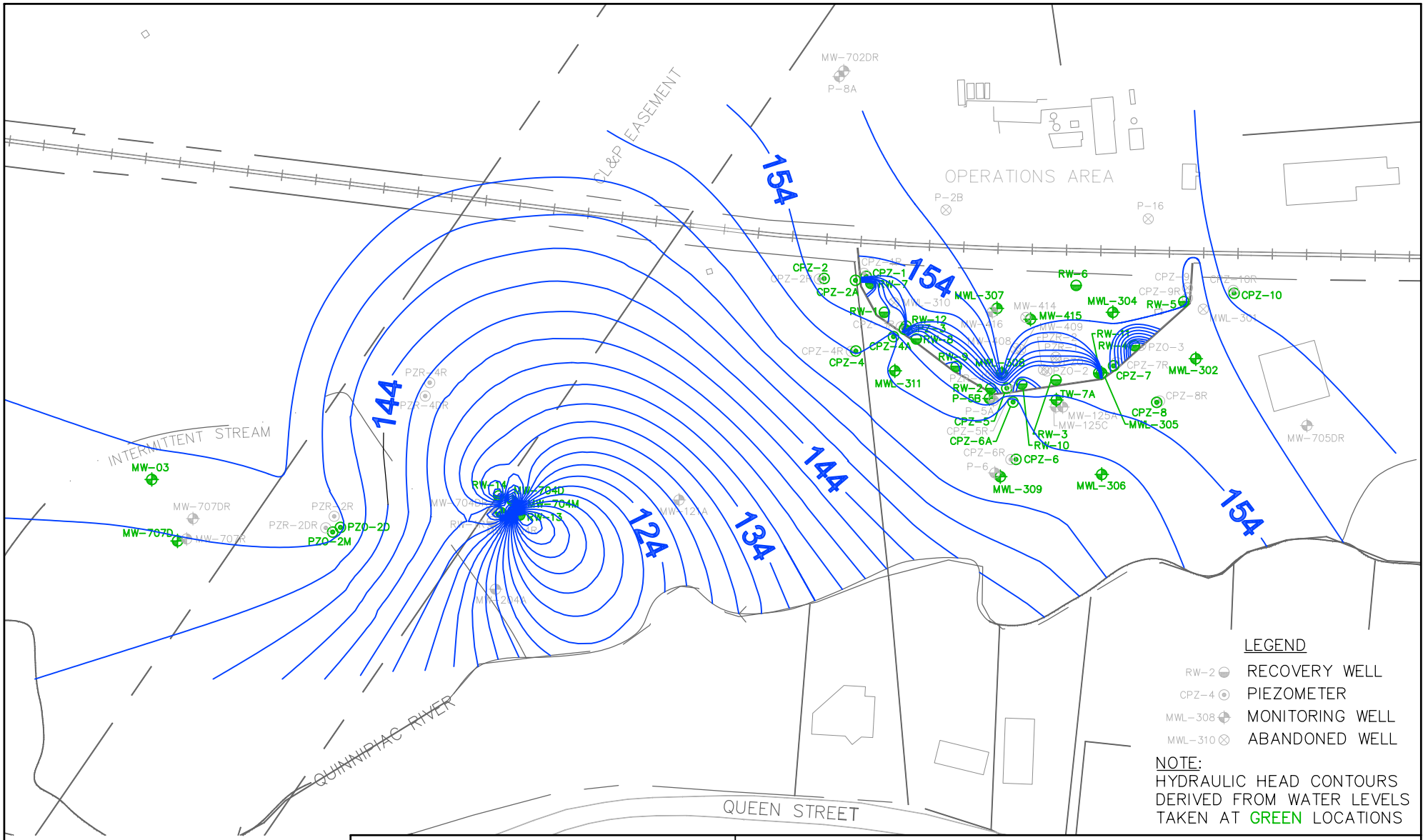
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

MANCHESTER NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JAN 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		2C

M:\Design\DWG\SRSNE\Jan 27 2010\overburden.dwg, Layout1, 11/5/2010 11:07:20 AM, GIRARDEB, 1:1



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 JANUARY 27, 2010

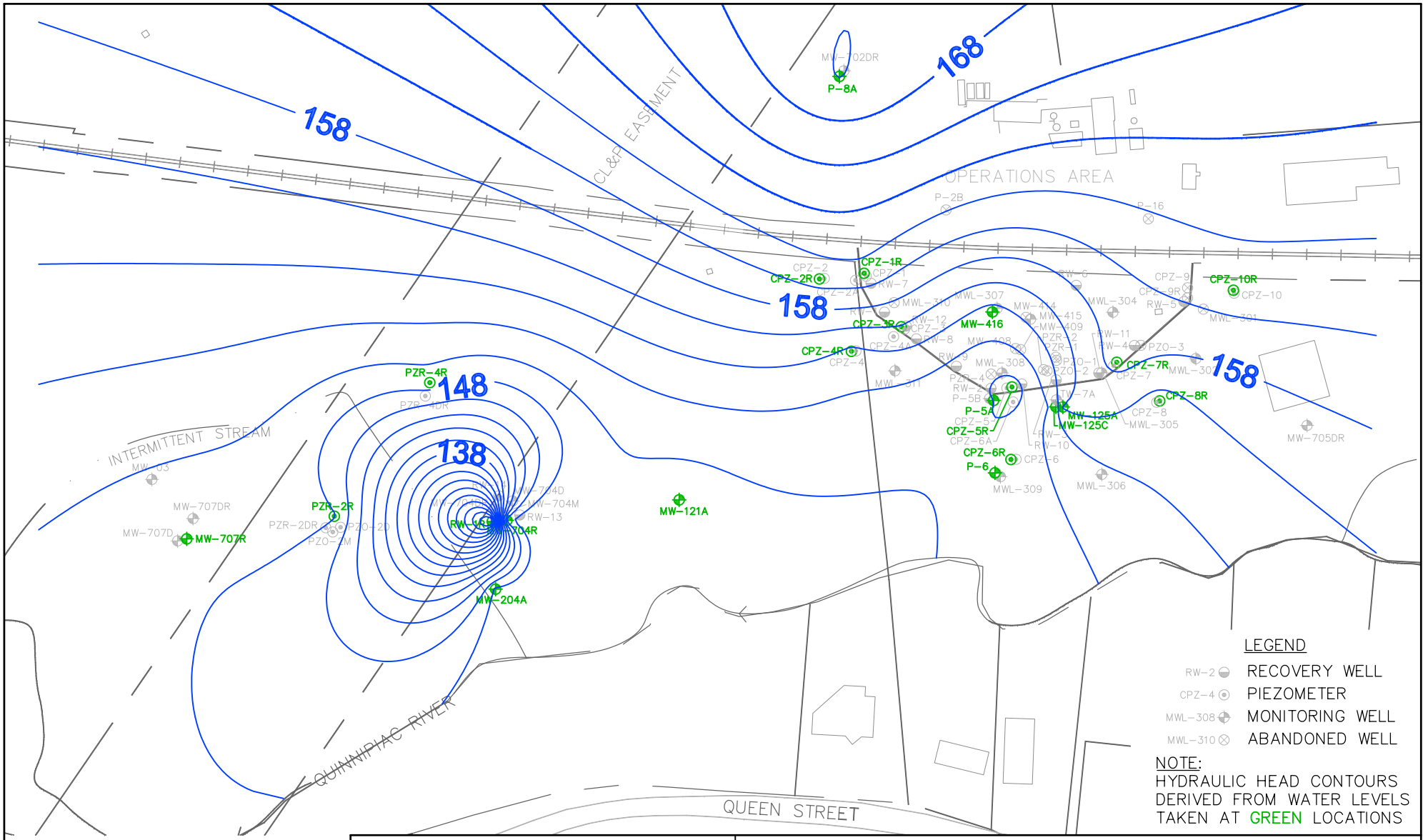
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	FEB 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		3A

M:\Design\DWG\SRSNE\Jan 27 2010\shallow bedrock.dwg, Layout1, 11/5/2010 11:06:21 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS JANUARY 27, 2010

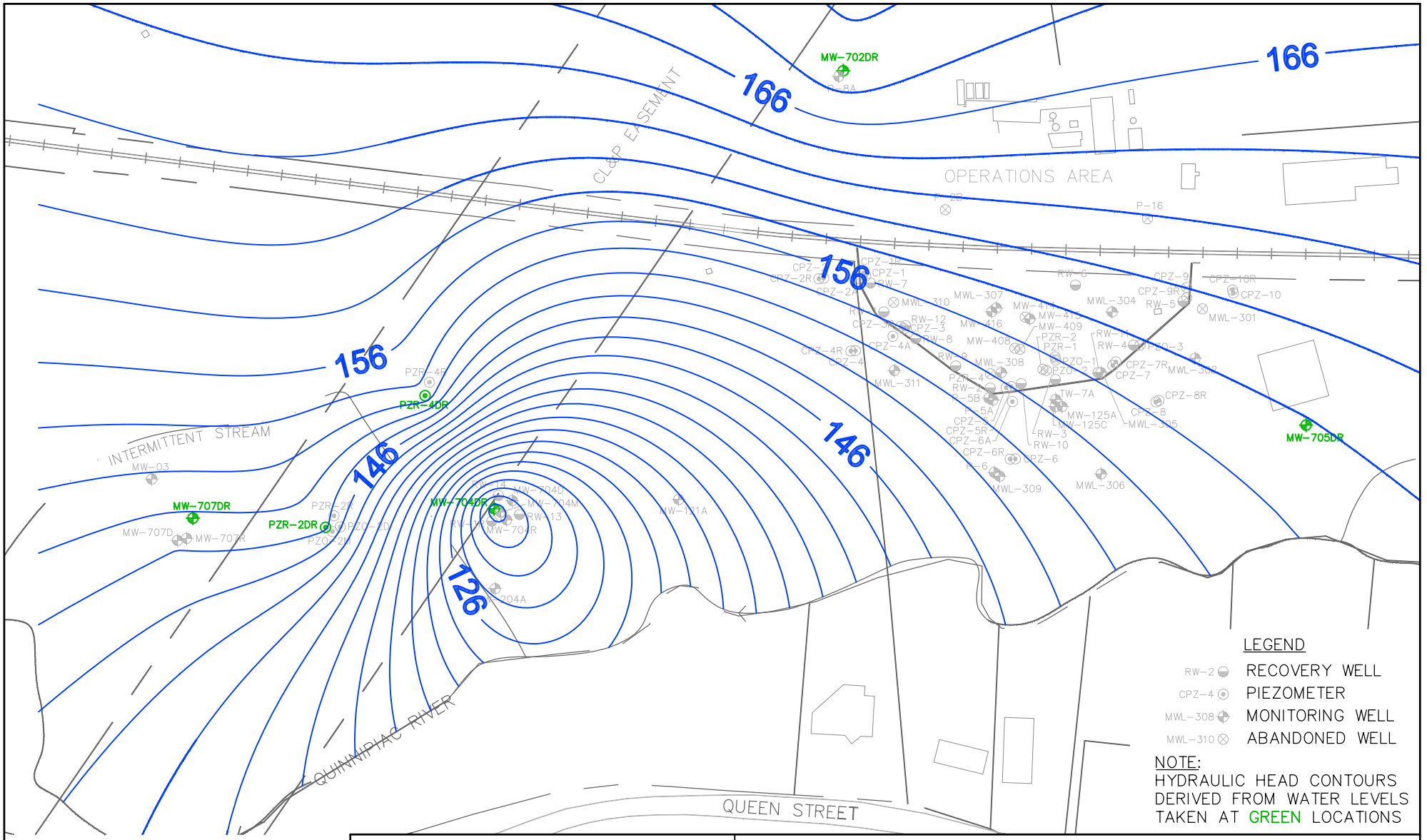
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	FEB 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		3B

M:\Design\DWG\SRSNE\Jan 27 2010\deep bedrock.dwg, Layout1, 11/5/2010 11:07:55 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS JANUARY 27, 2010

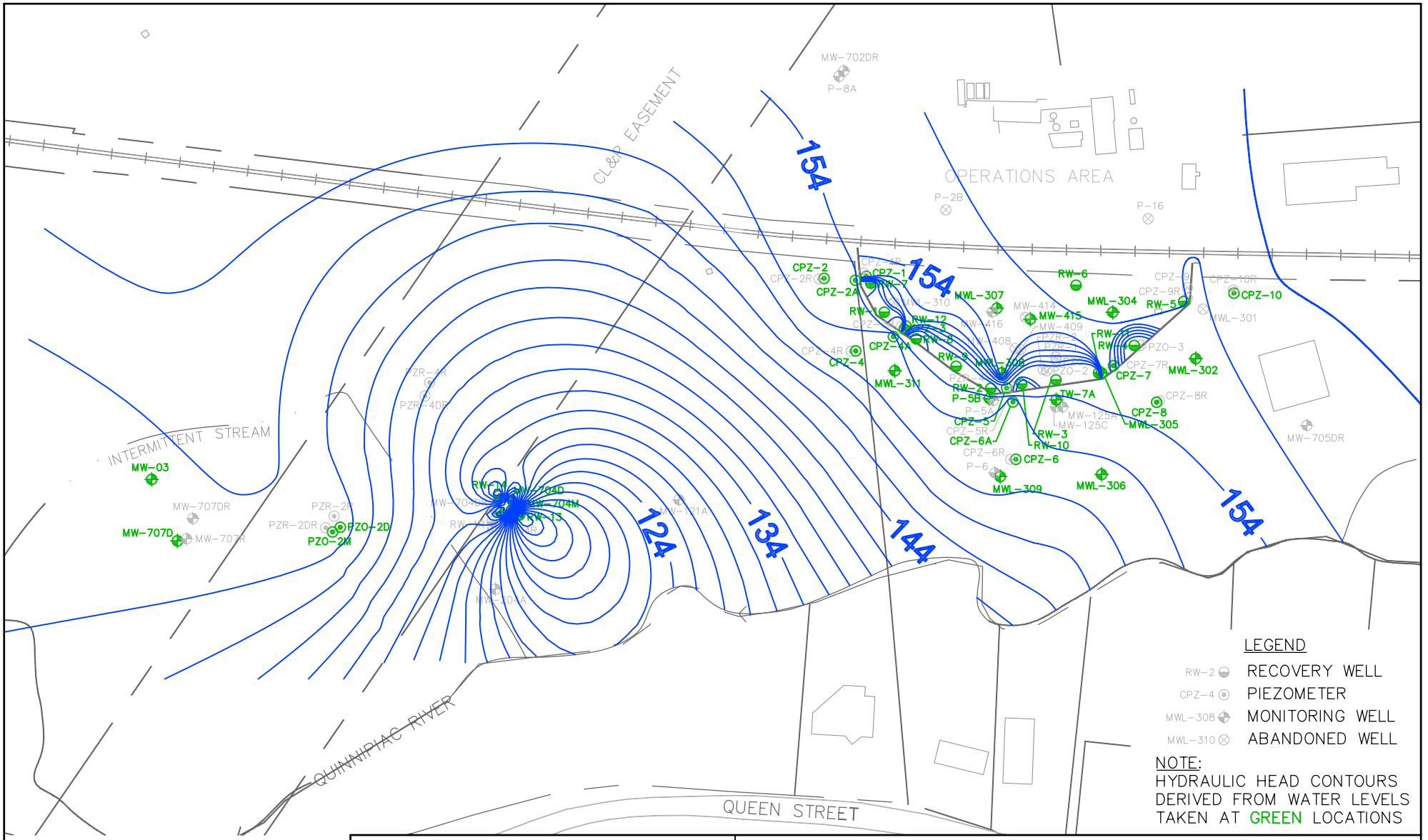
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	FEB 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		3C

M:\Design\DWG\SRSNE\Feb 22 2010\overburden.dwg, Layout1, 11/5/2010 11:11:22 AM, GIRARDEB, 1:1



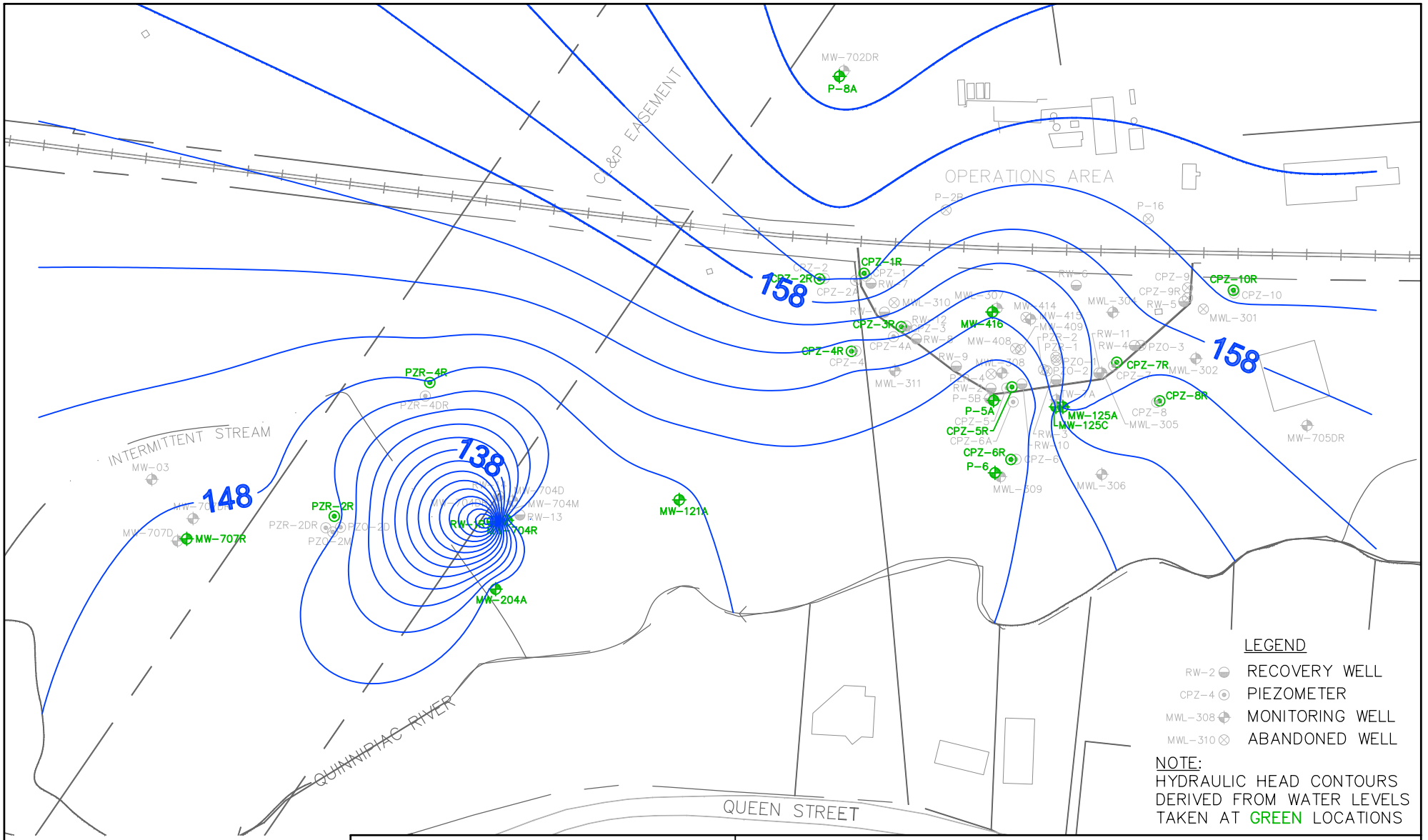
OVERBURDEN HYDRAULIC HEAD CONTOURS FEBRUARY 22, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAR 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		4A

M:\Design\DWG\SRSNE\Feb 22 2010\shallow bedrock.dwg, Layout1, 11/5/2010 11:10:33 AM, GIRARDEB, 1:1



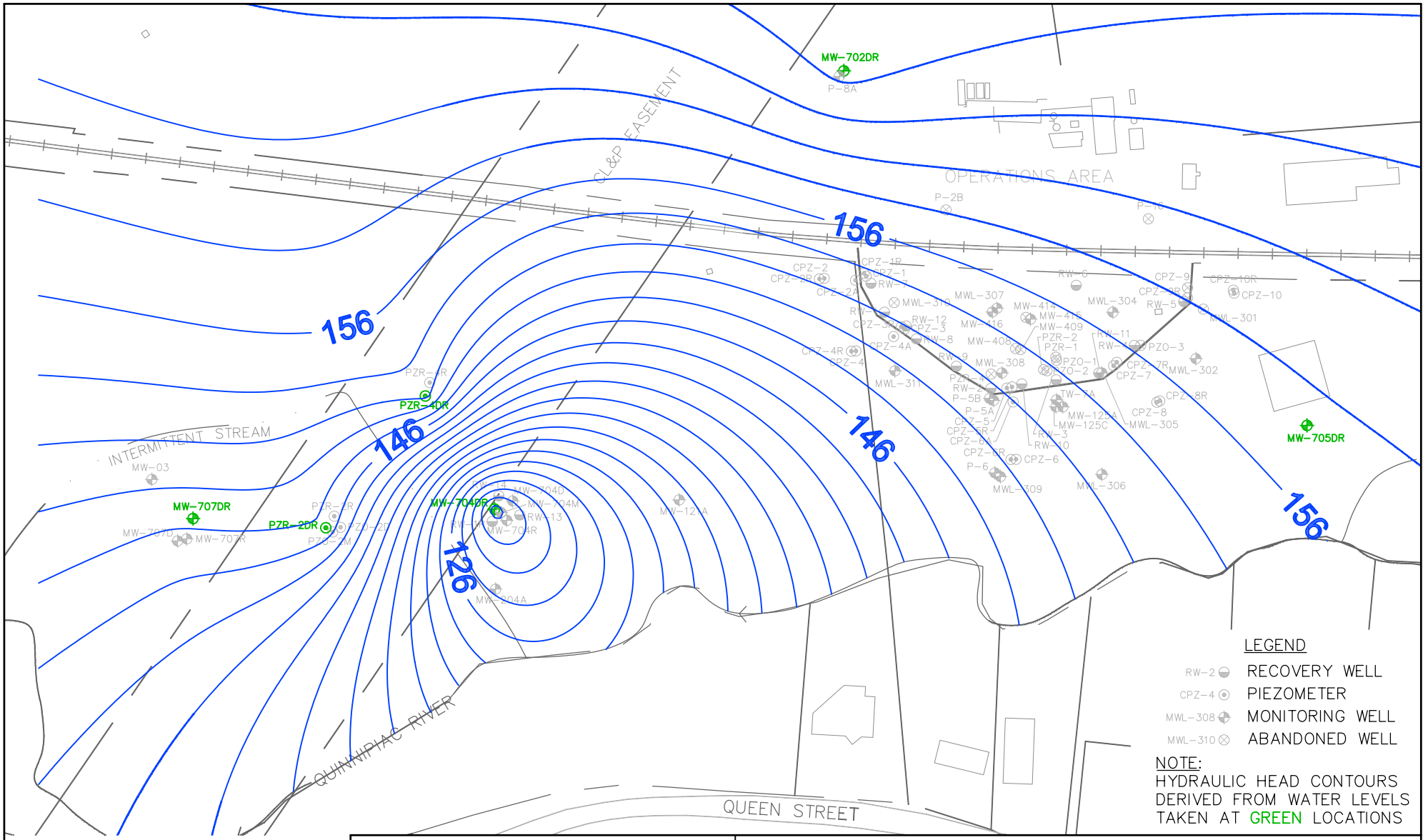
SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS FEBRUARY 22, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAR 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		4B

M:\Design\DWG\SRSNE\Feb 22 2010\deep bedrock.dwg, Layout1, 11/5/2010 11:11:52 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS FEBRUARY 22, 2010

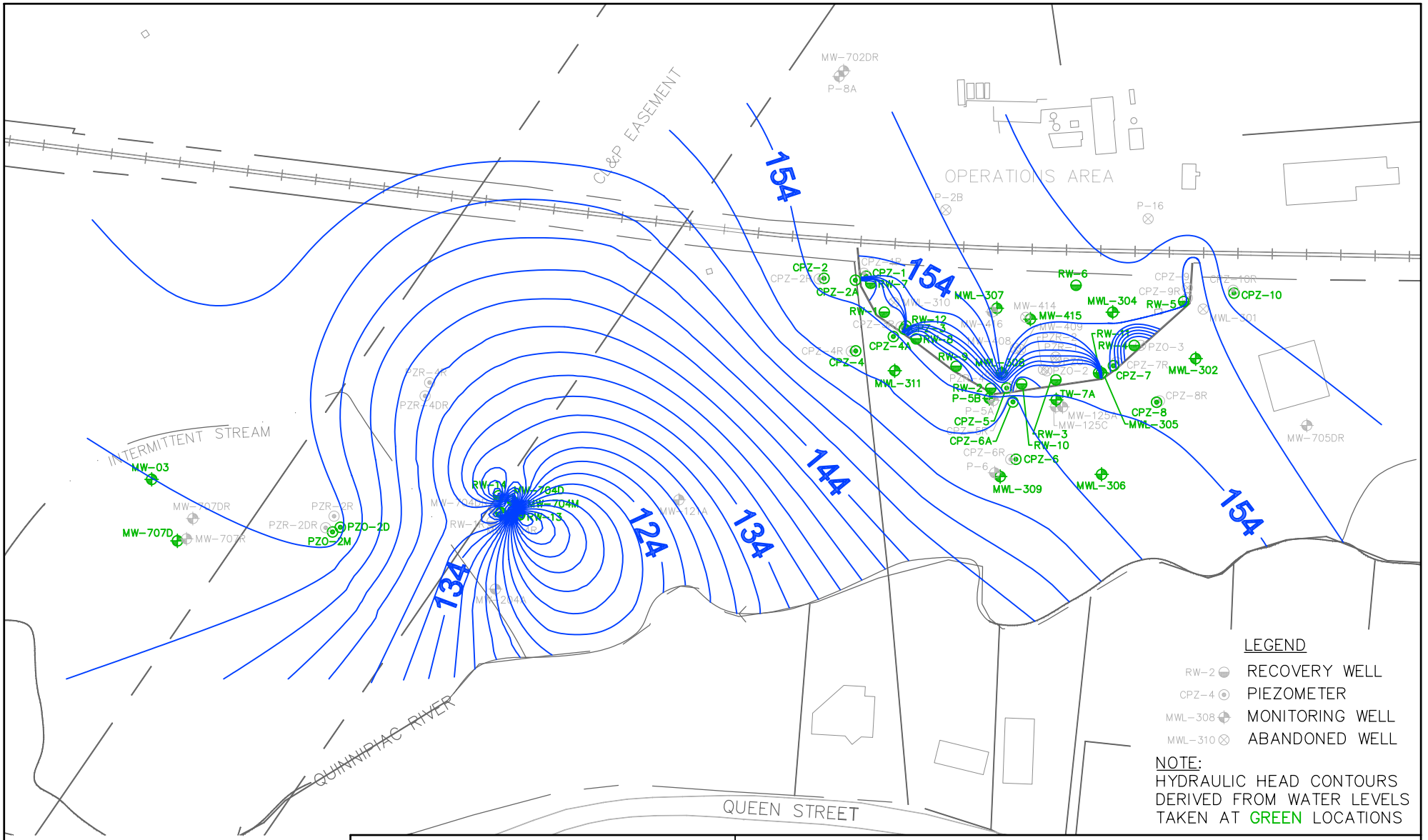
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAR 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		4C

M:\Design\DWG\SRSNE\Mar 28 2010\overburden.dwg, Layout1, 11/5/2010 11:14:36 AM, GIRARDEB, 1:1



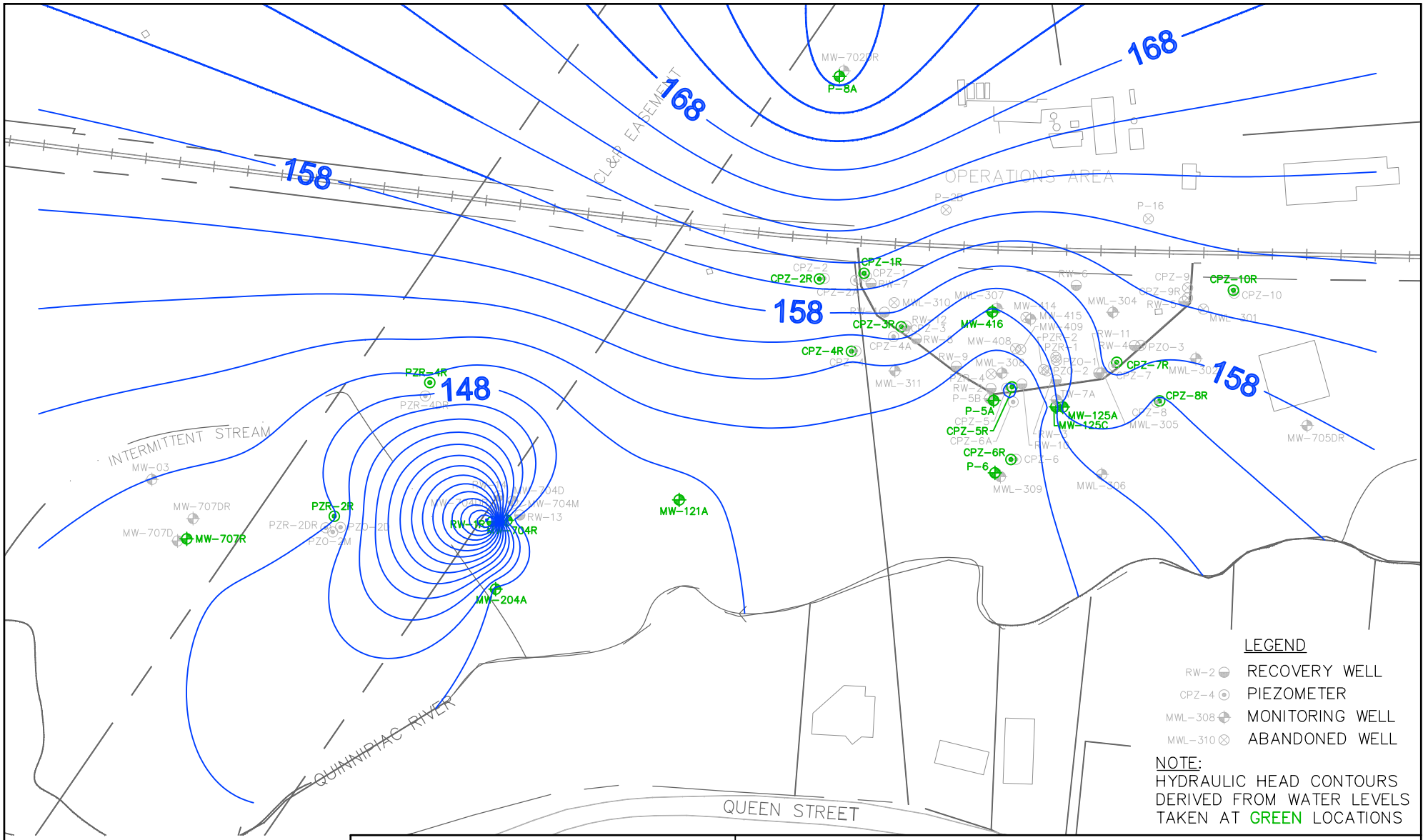
OVERBURDEN HYDRAULIC HEAD CONTOURS MARCH 28, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	APR 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		5A

M:\Design\DWG\SRSNE\Mar 28 2010\shallow bedrock.dwg, Layout1, 11/5/2010 11:13:50 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS MARCH 28, 2010

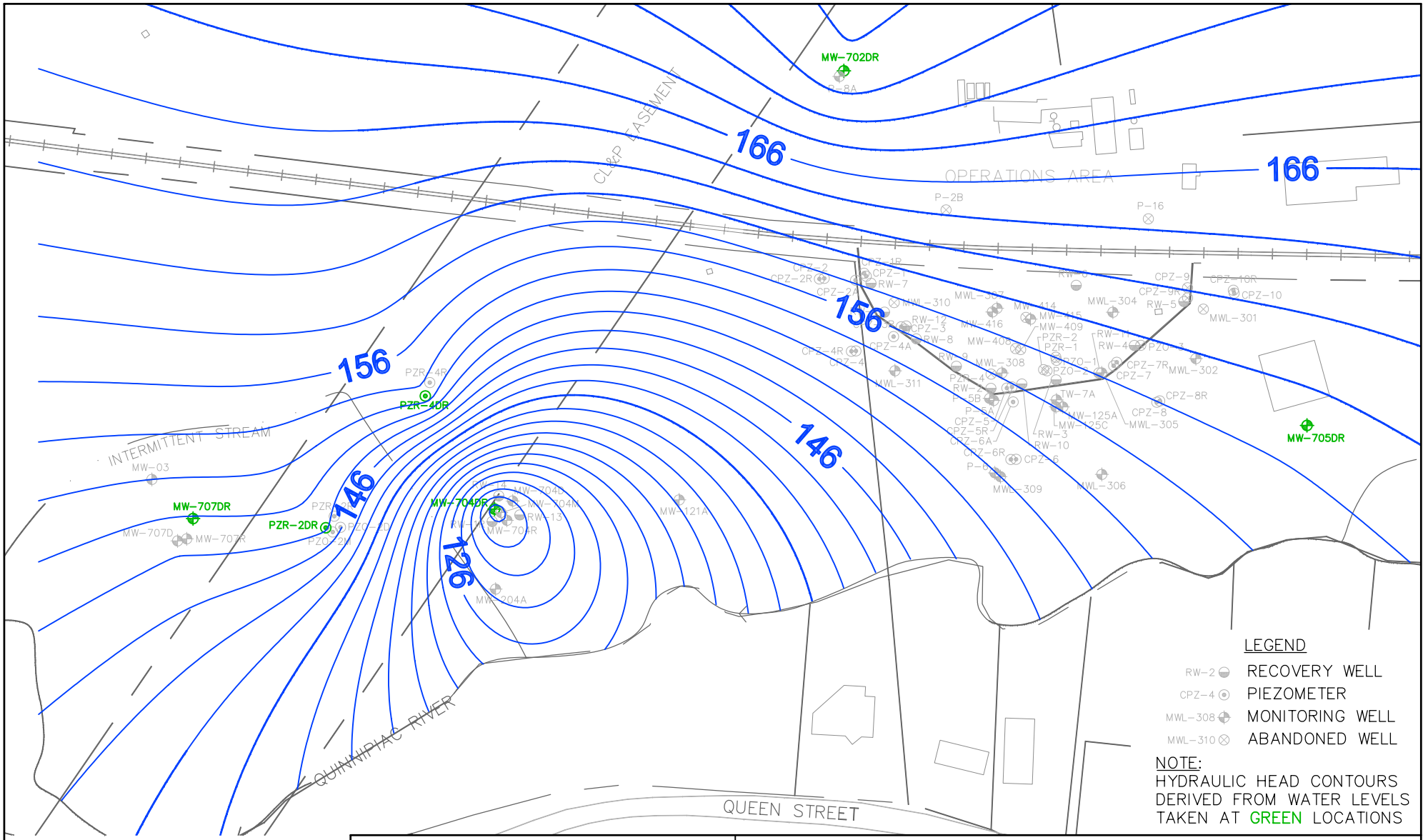
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	APR 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		5B

M:\Design\DWG\SRSNE\Mar 28 2010\deep bedrock.dwg, Layout1, 11/5/2010 11:15:09 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS MARCH 28, 2010

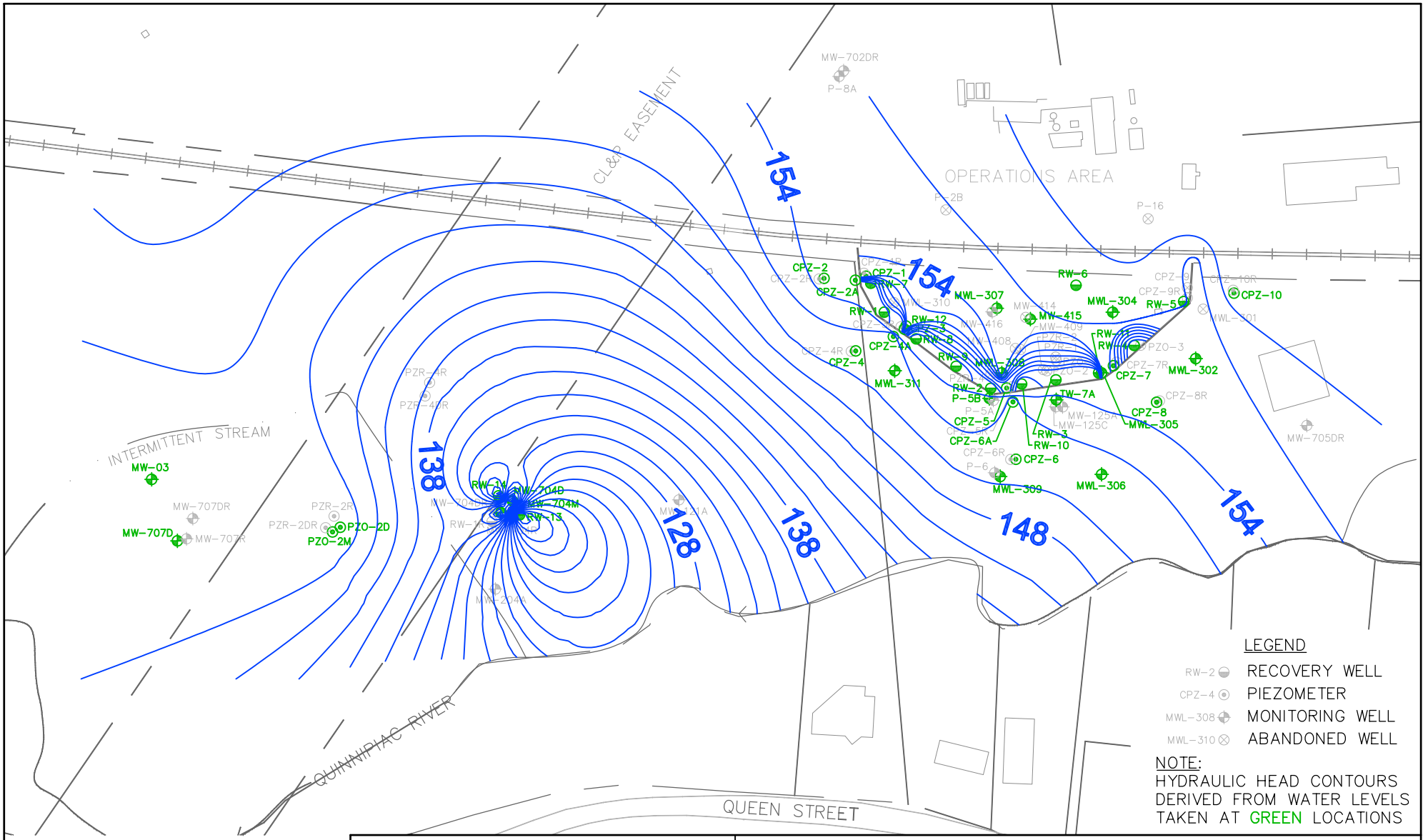
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	APR 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		5C

M:\Design\DWG\SRSNE\Apr 27 2010\overburden.dwg, Layout1, 11/5/2010 11:16:56 AM, GIRARDEB, 1:1



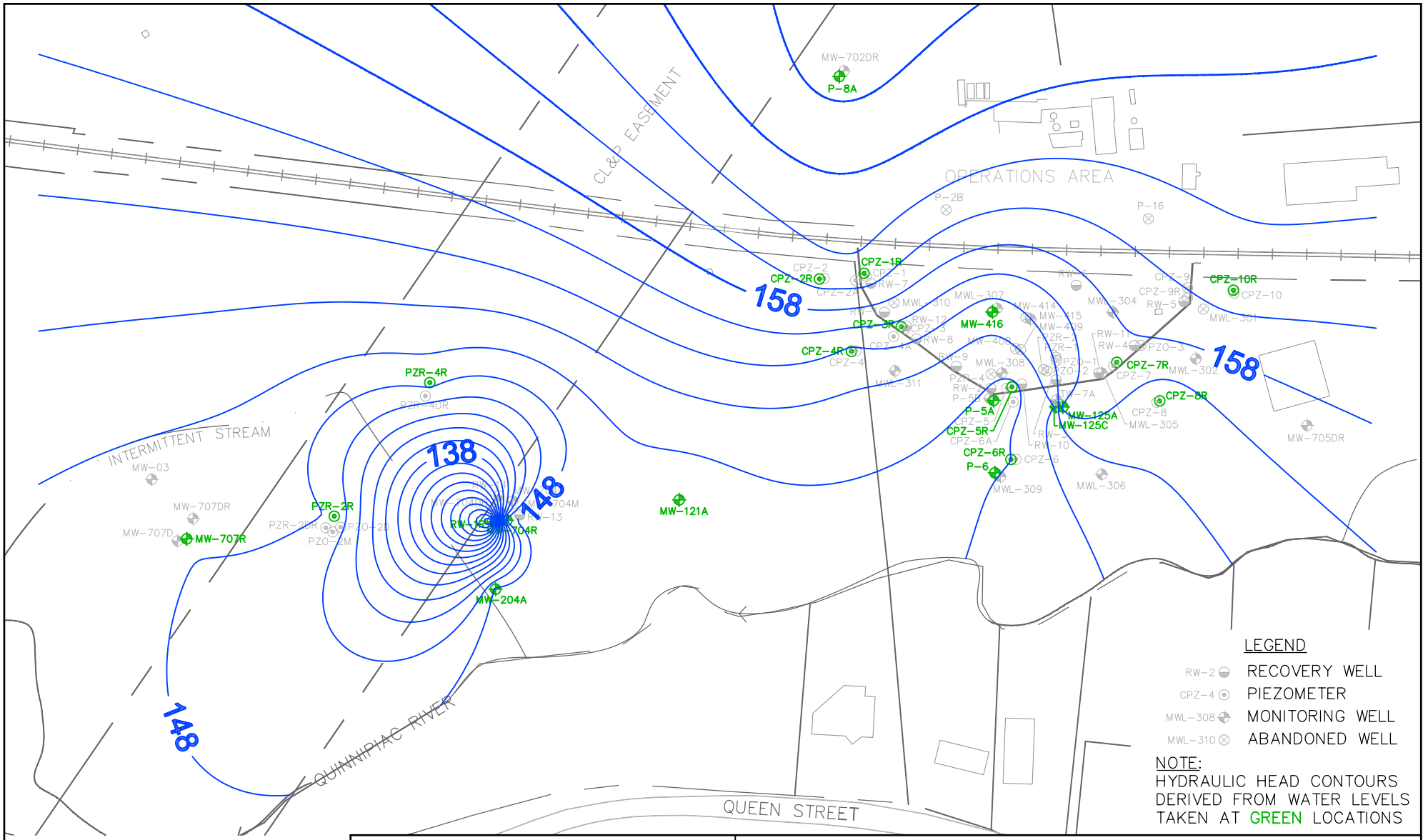
OVERBURDEN HYDRAULIC HEAD CONTOURS APRIL 27, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAY 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		6A

M:\Design\DWG\SRSNE\Apr 27 2010\shallow bedrock.dwg, Layout1, 11/5/2010 11:16:21 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS APRIL 27, 2010

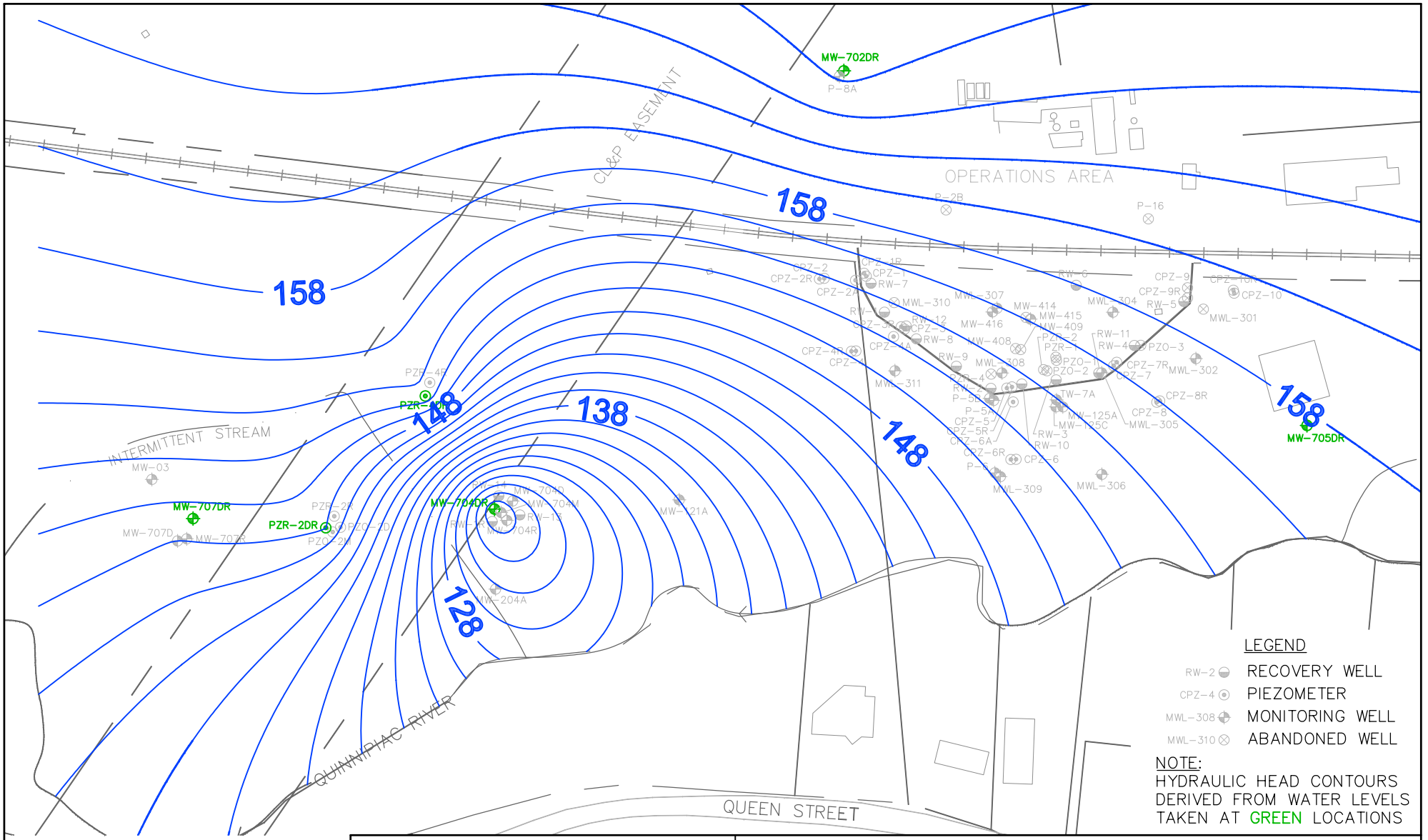
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAY 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		6B

M:\Design\DWG\SRSNE\Apr 27 2010\deep bedrock.dwg, Layout1, 11/5/2010 11:17:33 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS APRIL 27, 2010

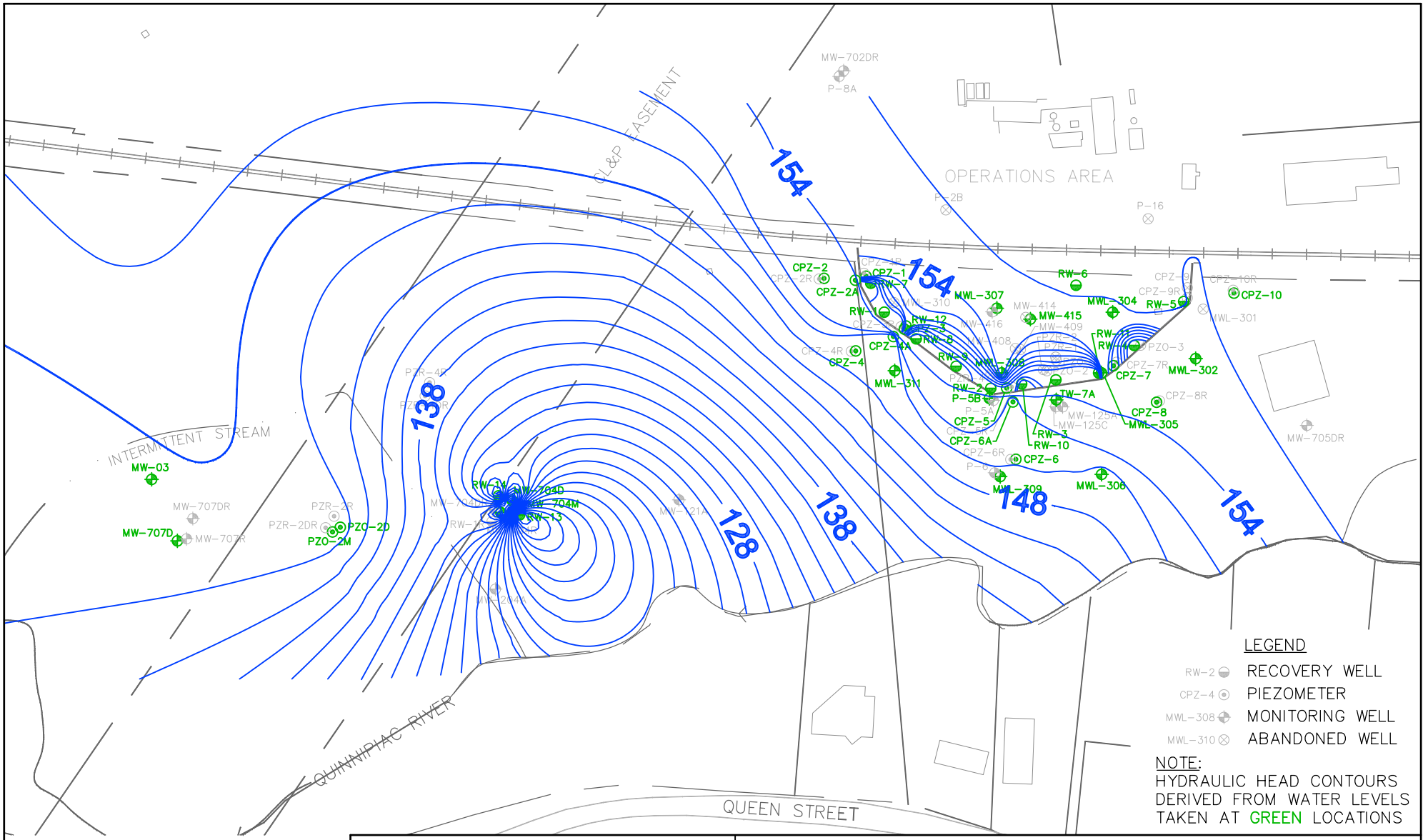
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	MAY 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		6C

M:\Design\DWG\SRSNE\May 26 2010\overburden.dwg, Layout1, 11/5/2010 11:19:39 AM, GIRARDEB, 1:1



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 26, 2010

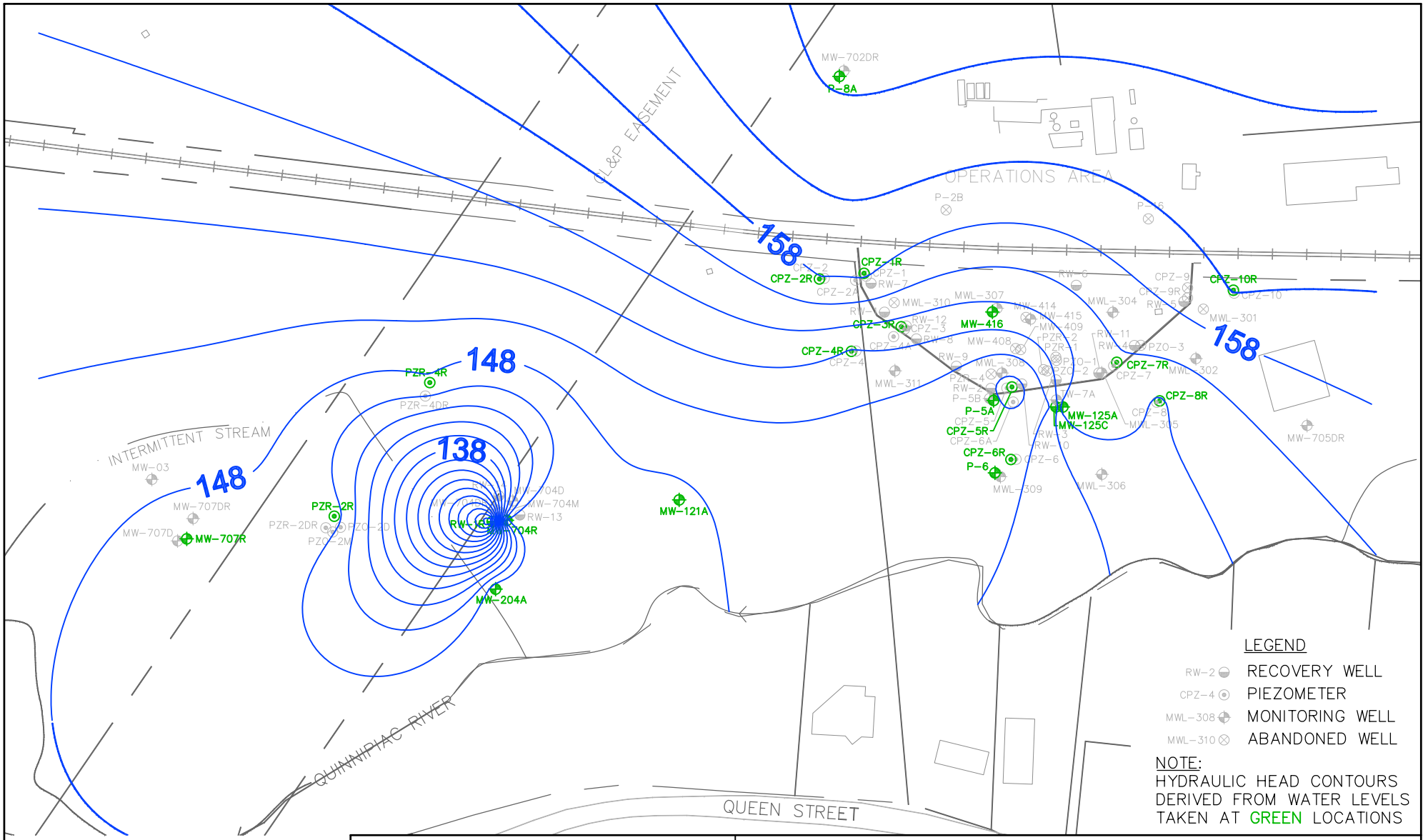
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUN 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		7A

M:\Design\DWG\SRSNE\May 26 2010\shallow bedrock.dwg, Layout1, 11/5/2010 11:19:07 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS MAY 26, 2010

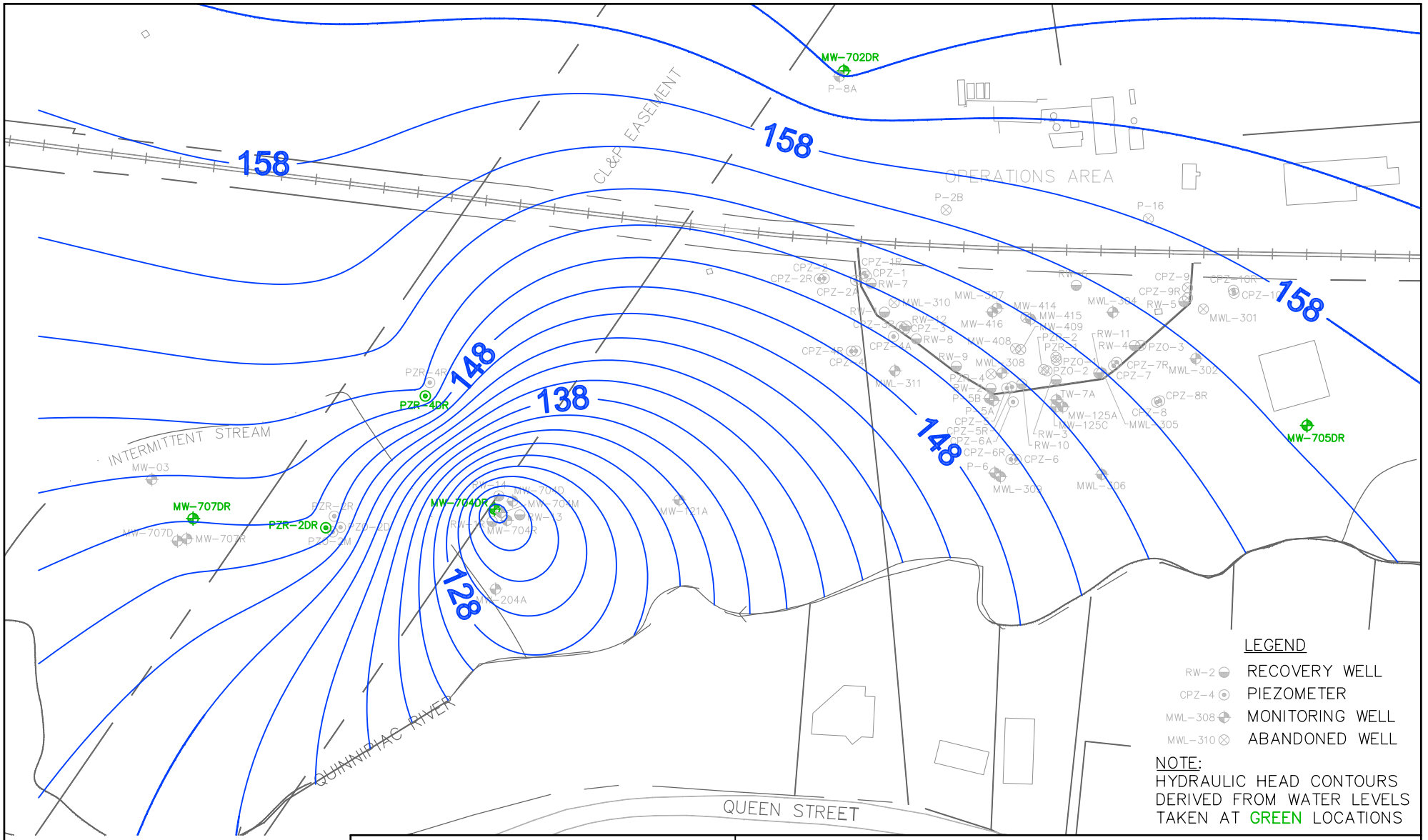
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUN 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		7B

M:\Design\DWG\SRSNE\May 26 2010\deep bedrock.dwg, Layout1, 11/5/2010 11:20:31 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS MAY 26, 2010

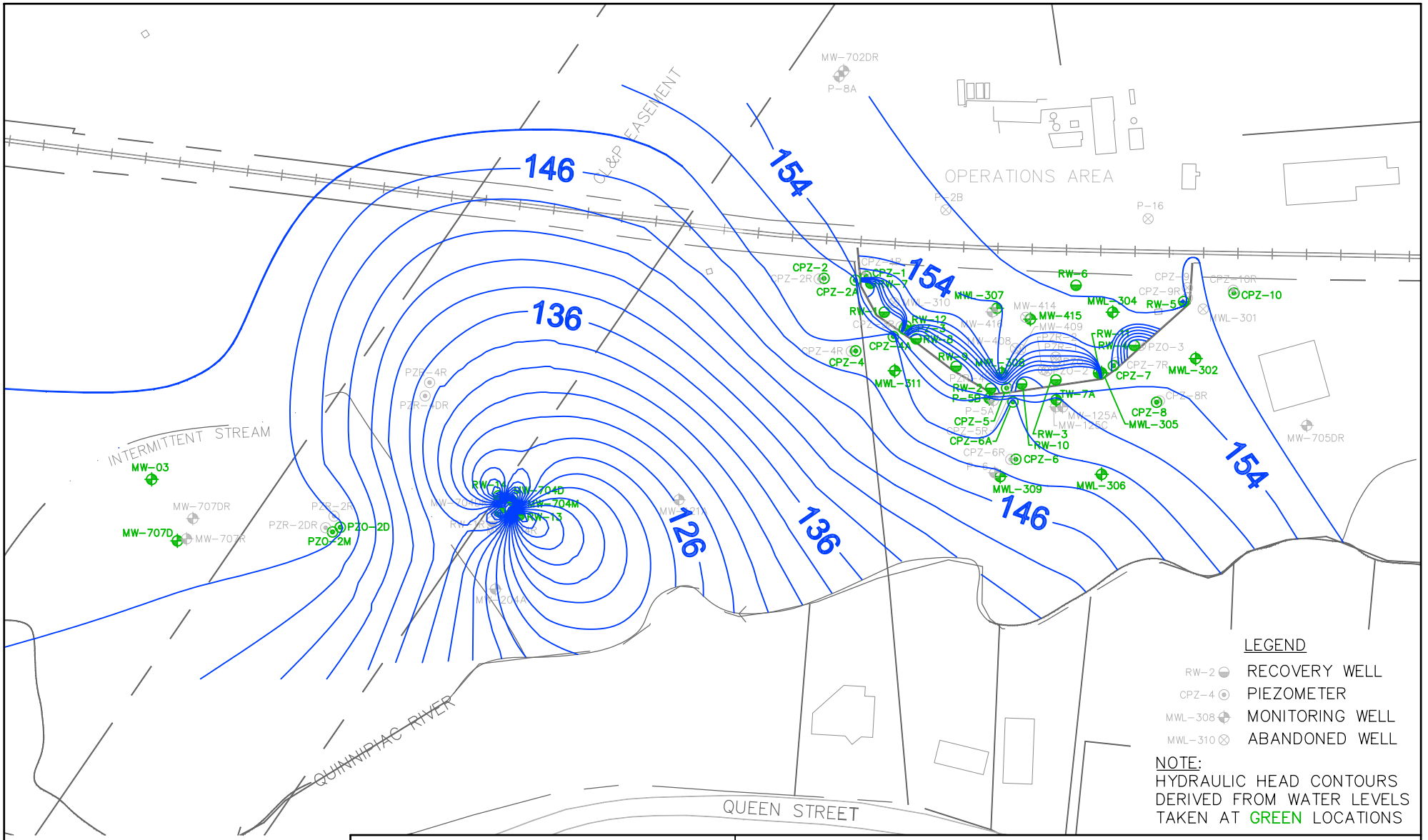
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUN 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		7C

M:\Design\DWG\SRSNE\Jun 28 2010\overburden.dwg, Layout1, 11/5/2010 11:22:15 AM, GIRARDEB, 1:1



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 28, 2010

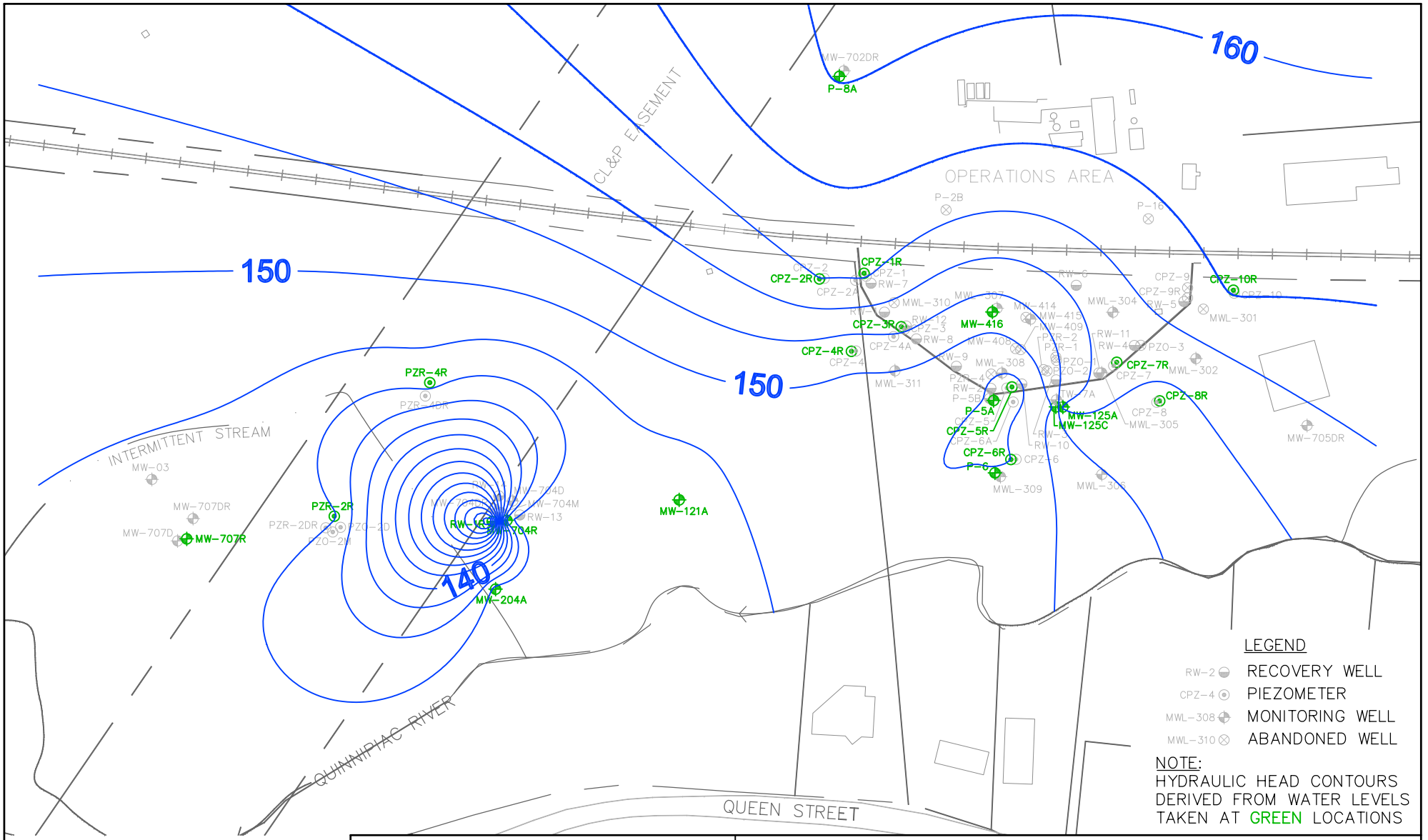
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		8A

M:\Design\DWG\SRSNE\Jun 28 2010\shallow bedrock.dwg, Layout1, 11/5/2010 11:21:41 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS JUNE 28, 2010

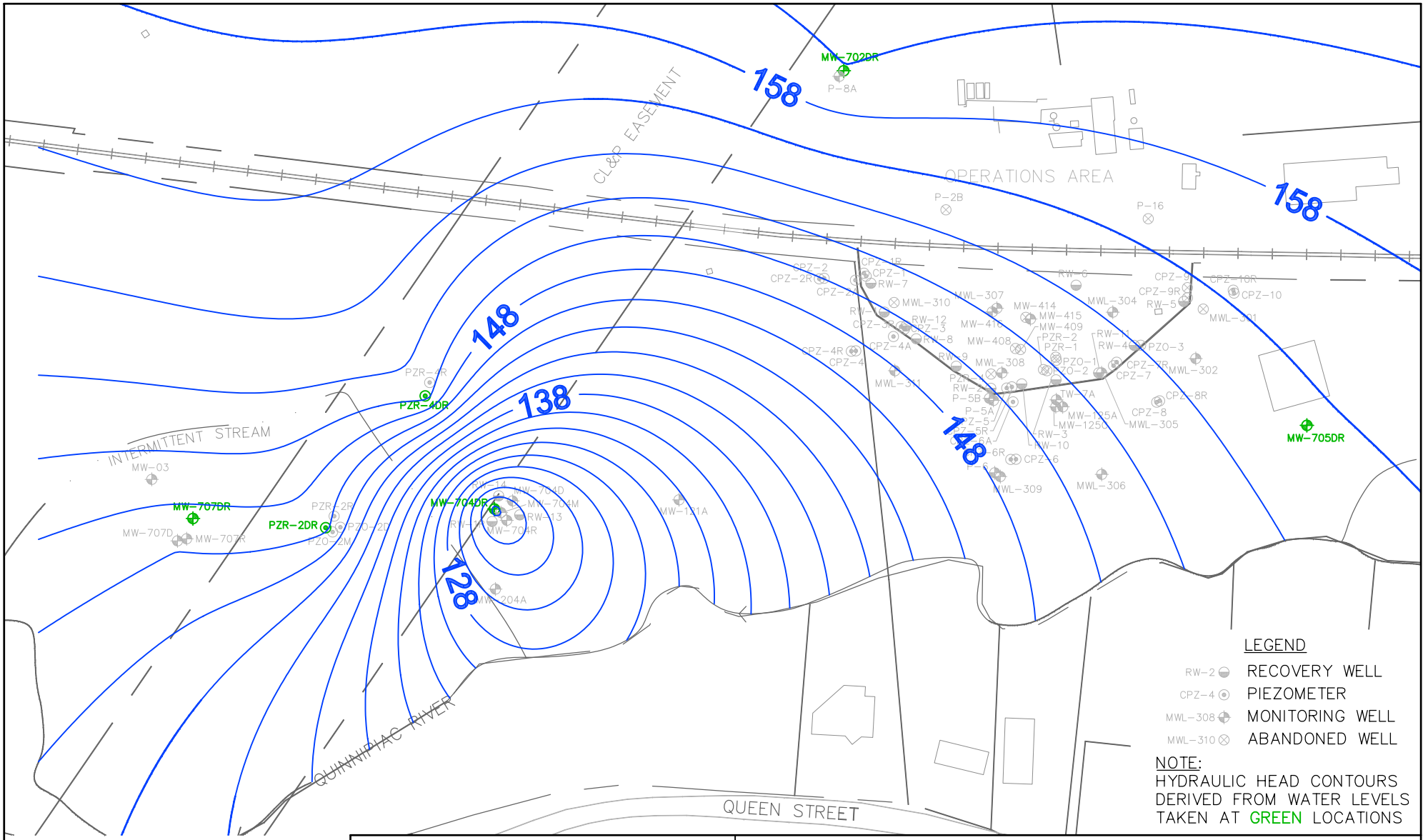
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		8B

M:\Design\DWG\SRSNE\Jun 28 2010\deep bedrock.dwg, Layout1, 11/5/2010 11:22:49 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS JUNE 28, 2010

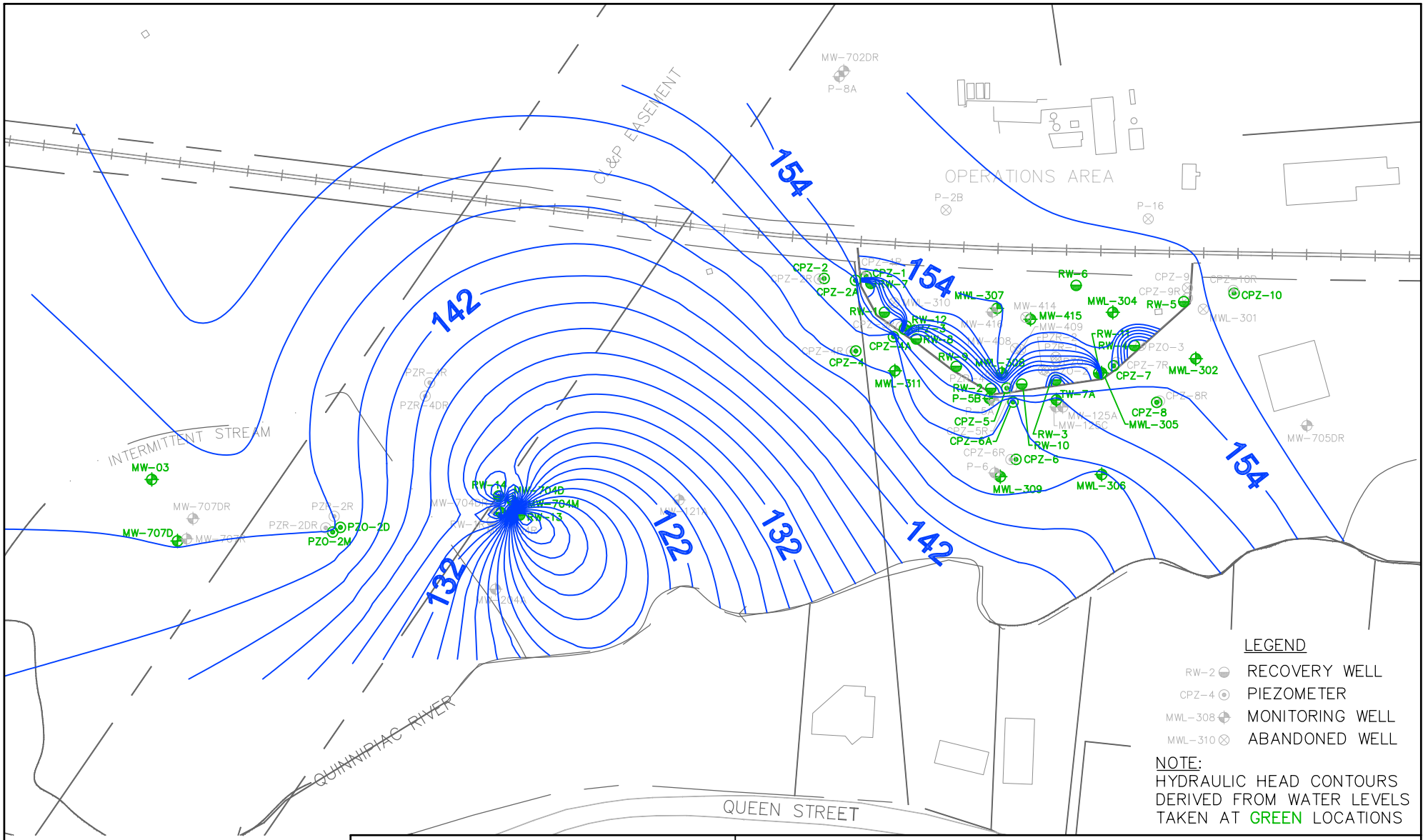
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	JUL 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		8C

M:\Design\DWG\SRSNE\Jul 28 2010\overburden.dwg, Layout1, 11/5/2010 11:24:43 AM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS JULY 28, 2010

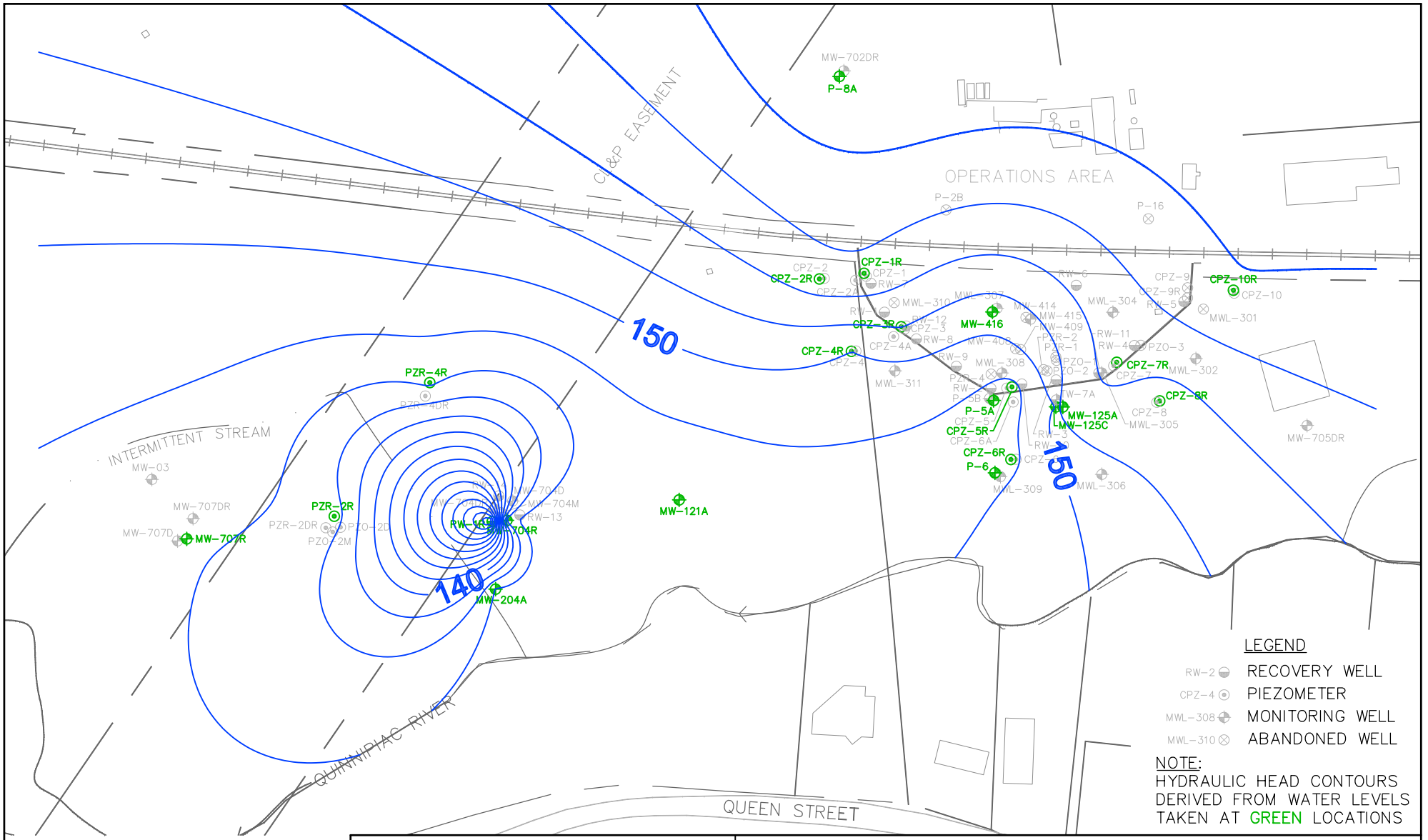
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	AUG 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		9A

M:\Design\DWG\SRSNE\Jul 28 2010\shallow bedrock.dwg, Layout1, 11/5/2010 11:24:10 AM, GIRARDEB, 1:1



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

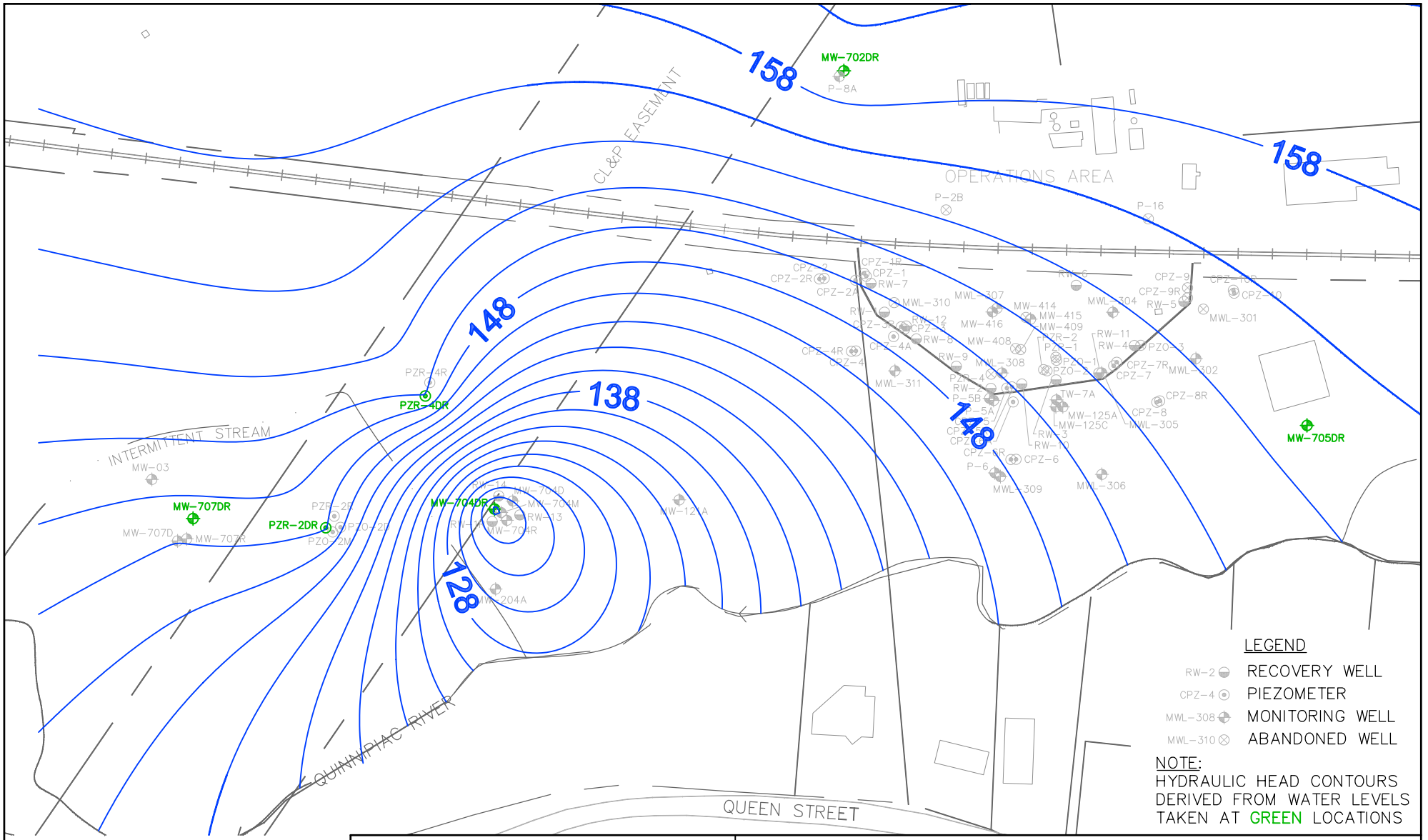
SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS JULY 28, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	AUG 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		9B

M:\Design\DWG\SRSNE\Jul 28 2010\deep bedrock.dwg, Layout1, 11/5/2010 11:25:19 AM, GIRARDEB, 1:1



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

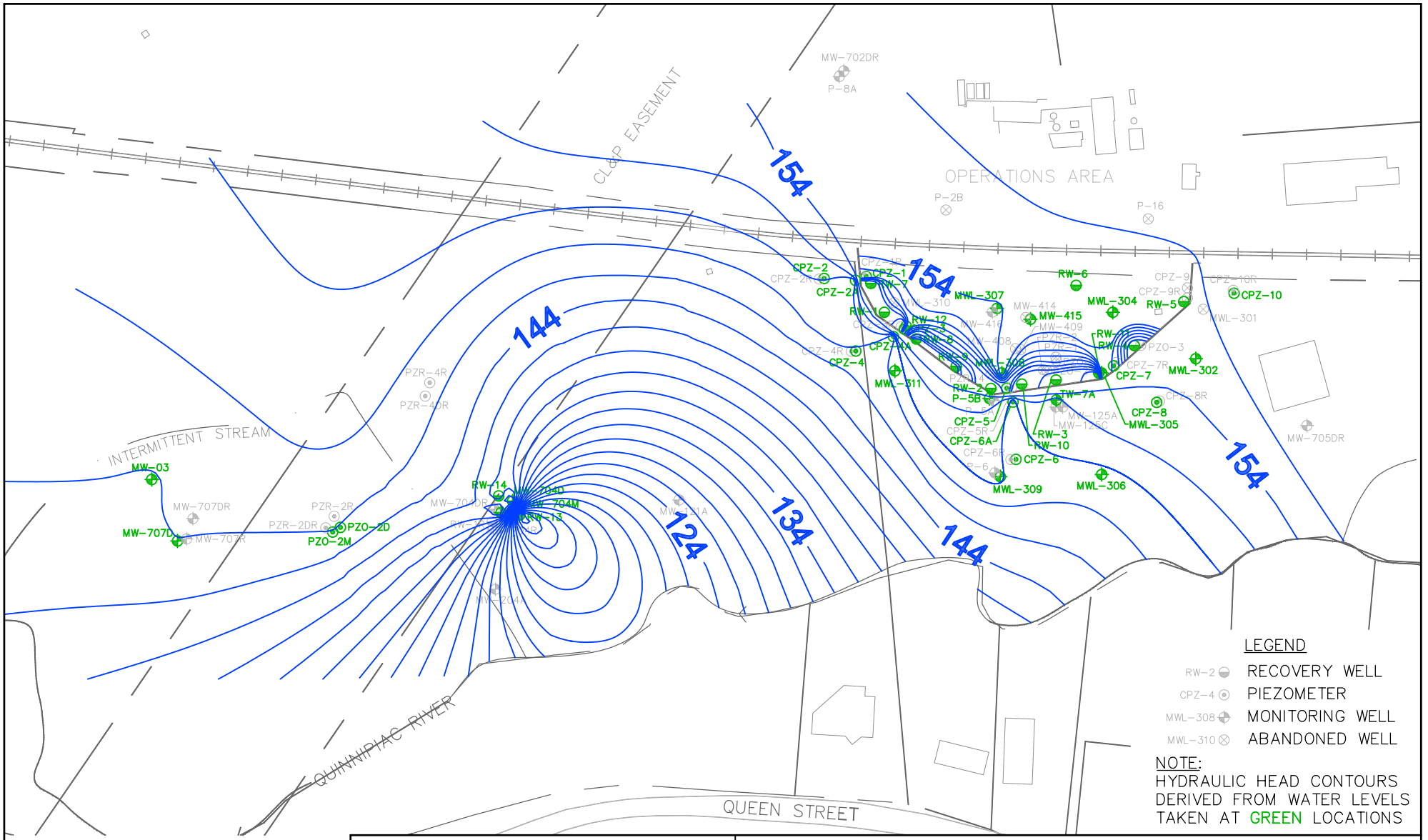
DEEP BEDROCK HYDRAULIC HEAD CONTOURS JULY 28, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	AUG 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		9C

M:\Design\DWG\SRSNE\Aug 31 2010\overburden.dwg, Layout1, 11/5/2010 1:13:58 PM, GIRARDEB, 1:1



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 AUGUST 31, 2010

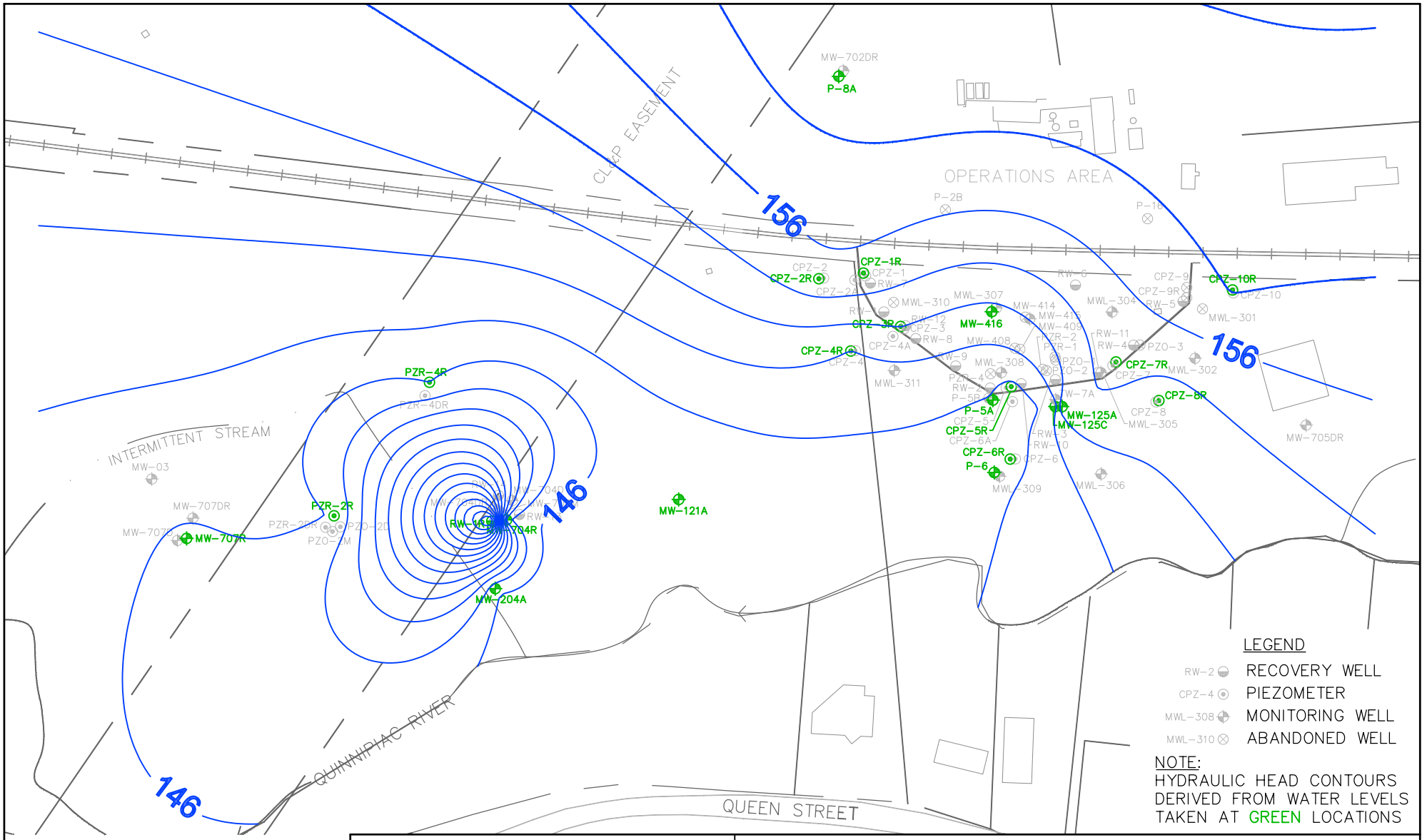
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	SEP 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		10A

M:\Design\DWG\SRSNE\Aug 31 2010\shallow bedrock.dwg, Layout1, 11/5/2010 1:13:12 PM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS AUGUST 31, 2010

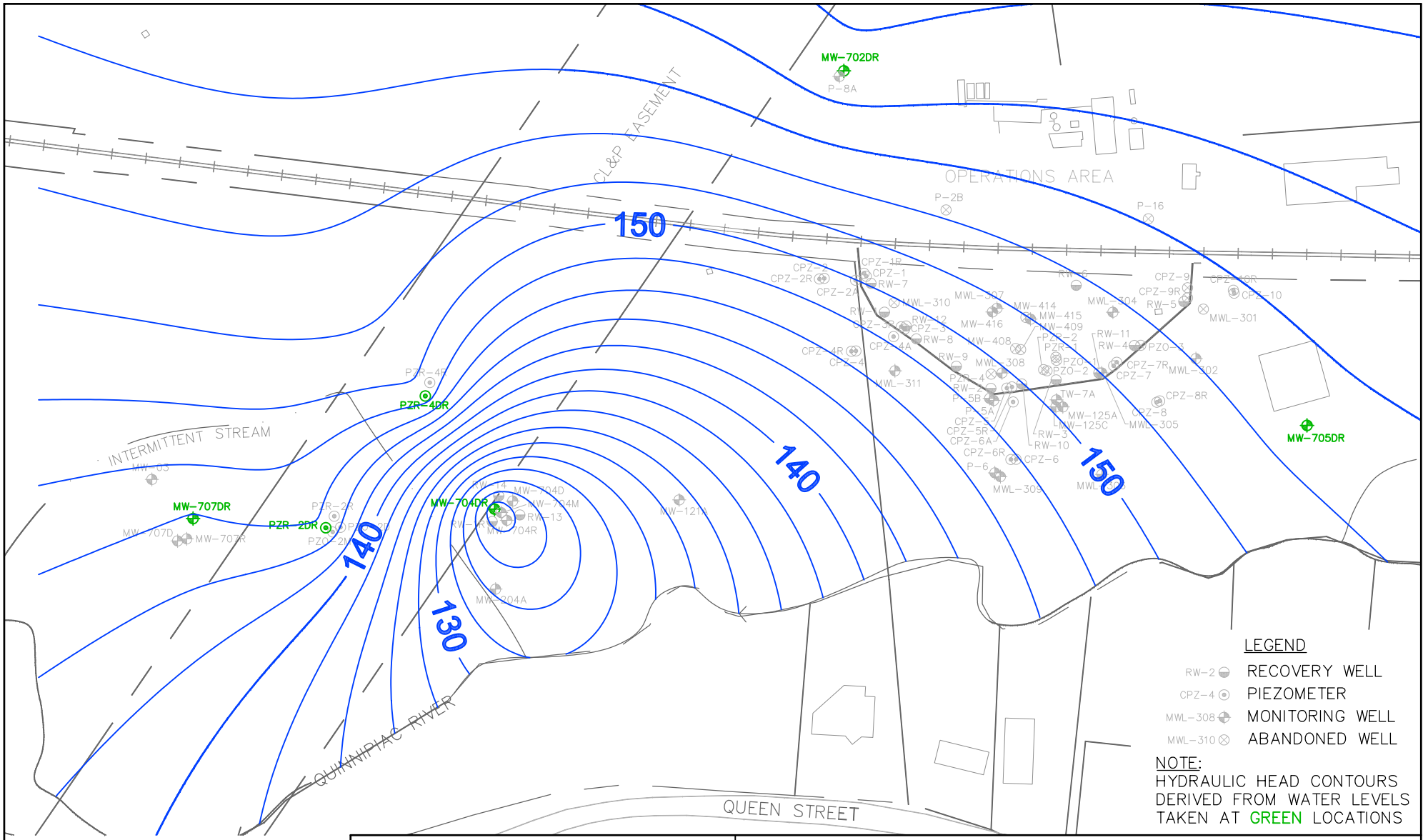
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	SEP 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		10B

M:\Design\DWG\SRSNE\Aug 31 2010\deep bedrock.dwg, Layout1, 11/5/2010 1:15:13 PM, GIRARDEB, 1:1



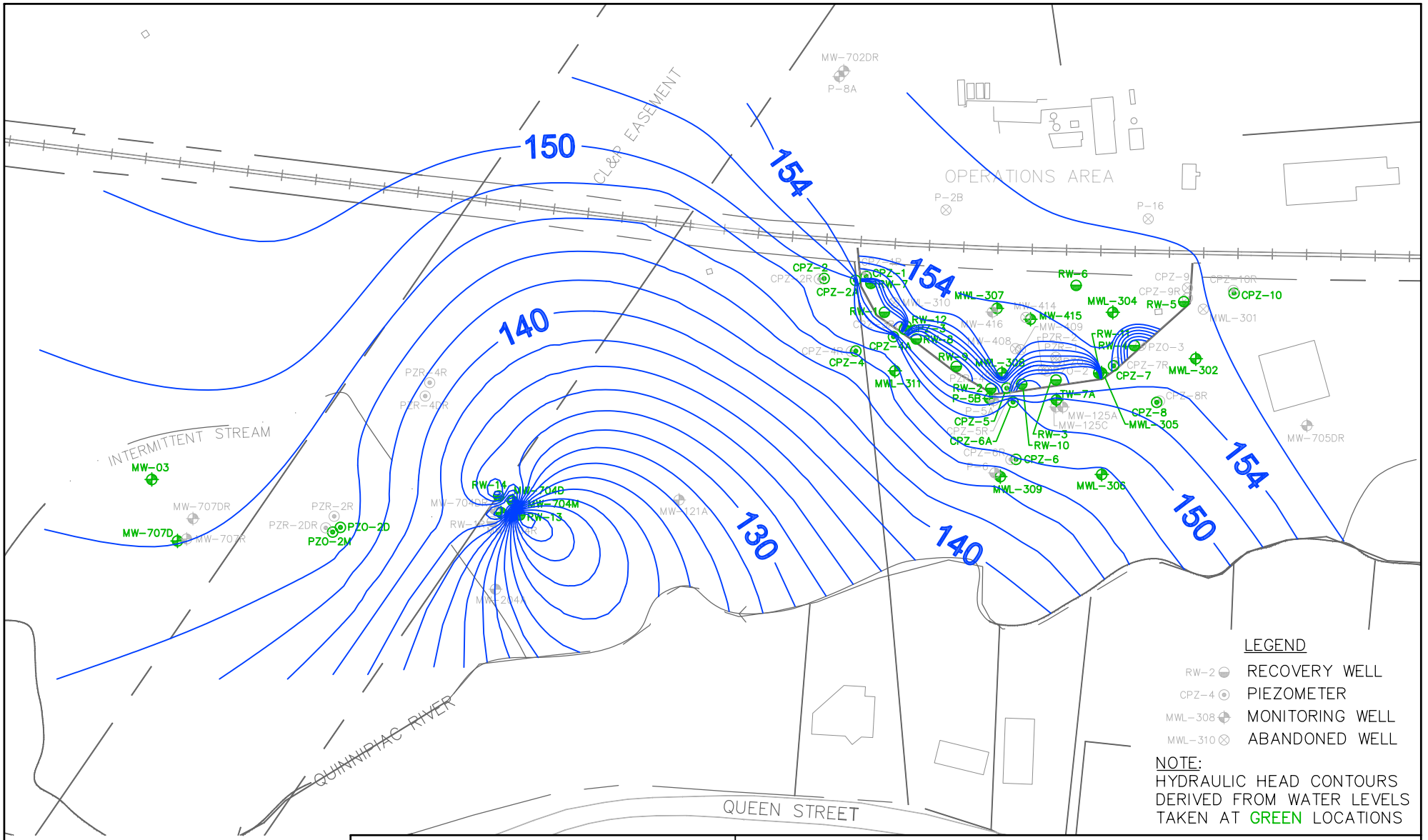
DEEP BEDROCK HYDRAULIC HEAD CONTOURS AUGUST 31, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS
CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	SEP 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		10C

M:\Design\DWG\SRSNE\Sept 28 2010\overburden.dwg, Layout1, 11/5/2010 1:17:17 PM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS SEPTEMBER 28, 2010

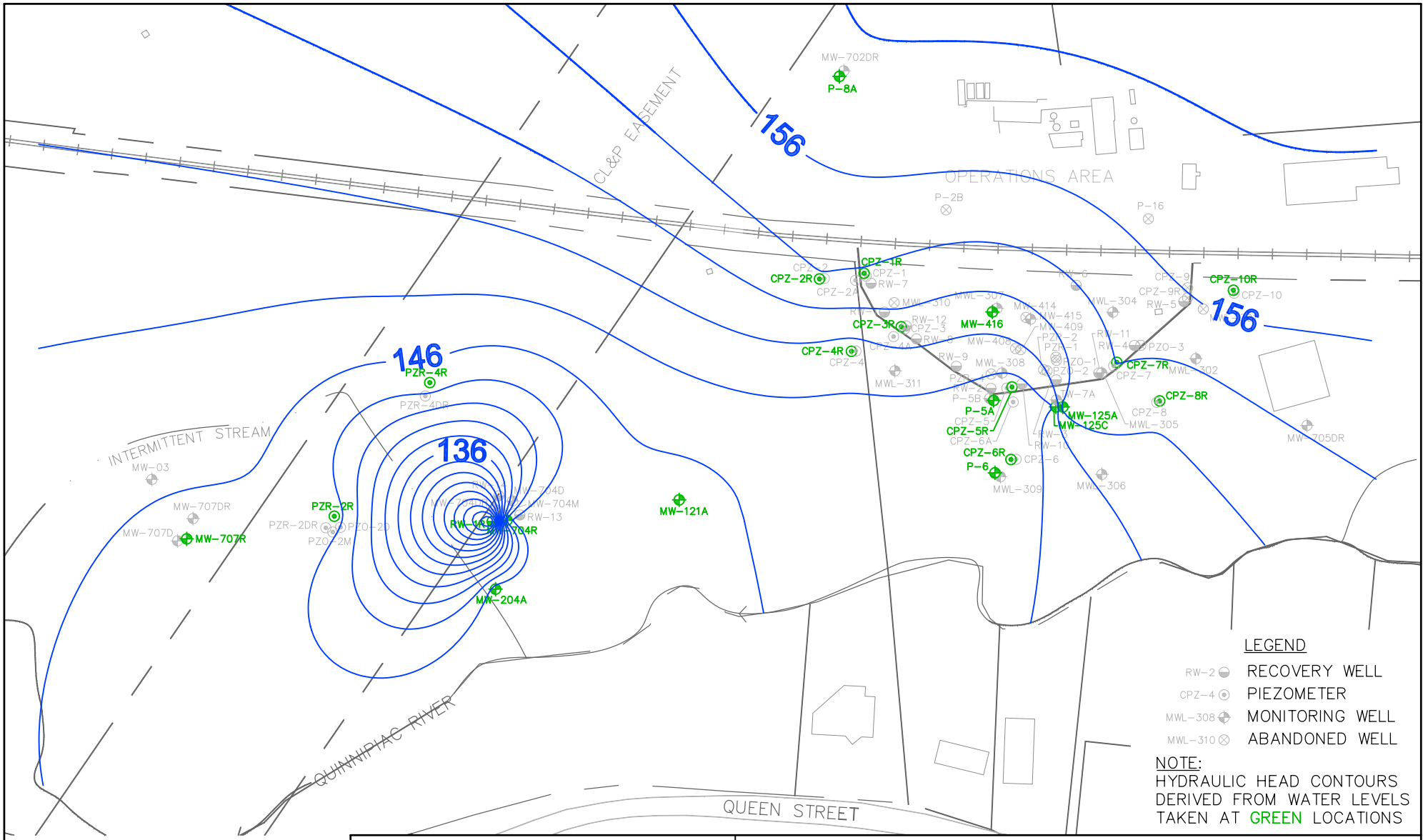
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	OCT 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		11A

M:\Design\DWG\SRSNE\Sept 28 2010\shallow bedrock.dwg, Layout1, 11/5/2010 1:16:42 PM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS SEPTEMBER 28, 2010

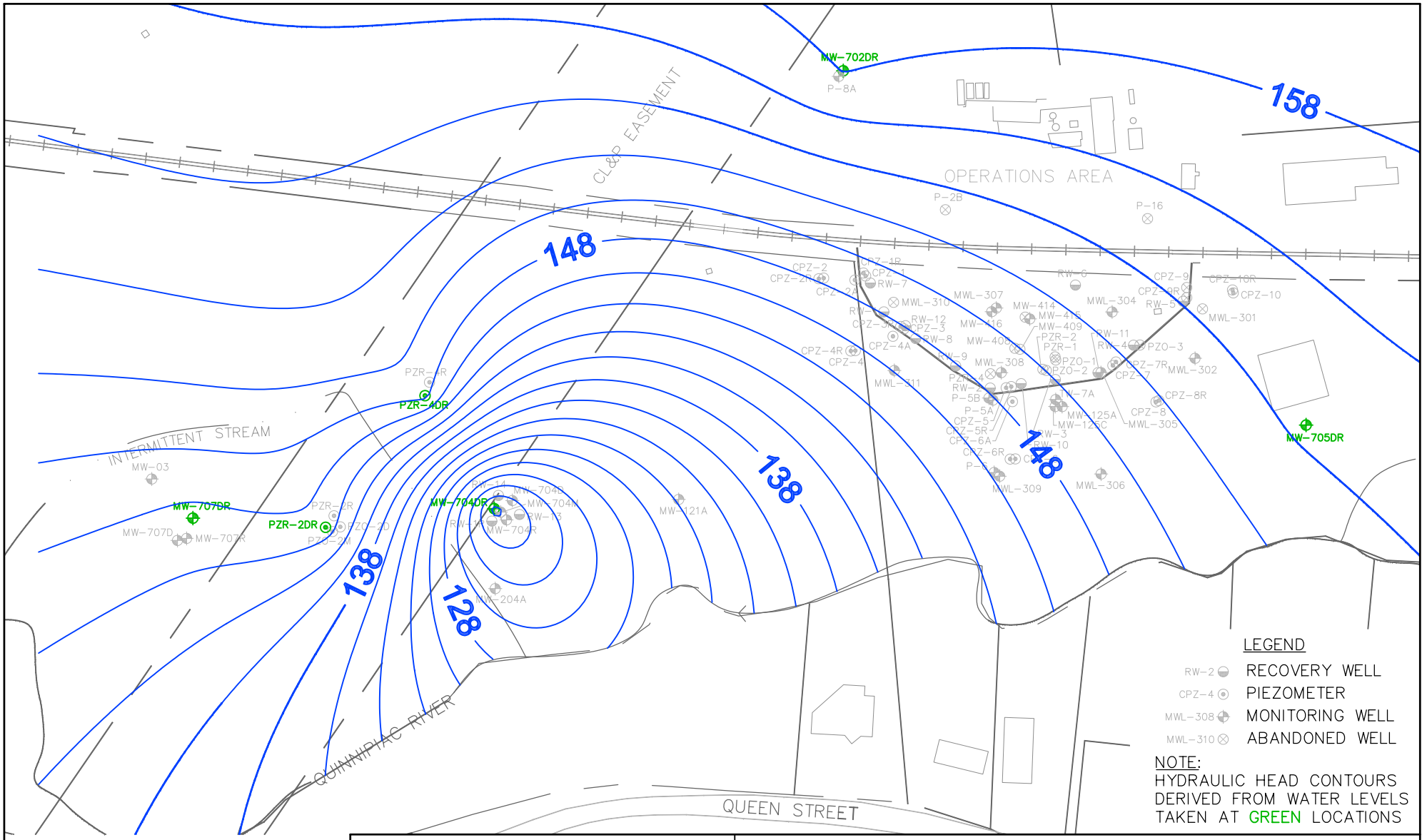
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	OCT 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		11B

M:\Design\DWG\SRSNE\Sept 28 2010\deep bedrock.dwg, Layout1, 11/5/2010 1:18:31 PM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS SEPTEMBER 28, 2010

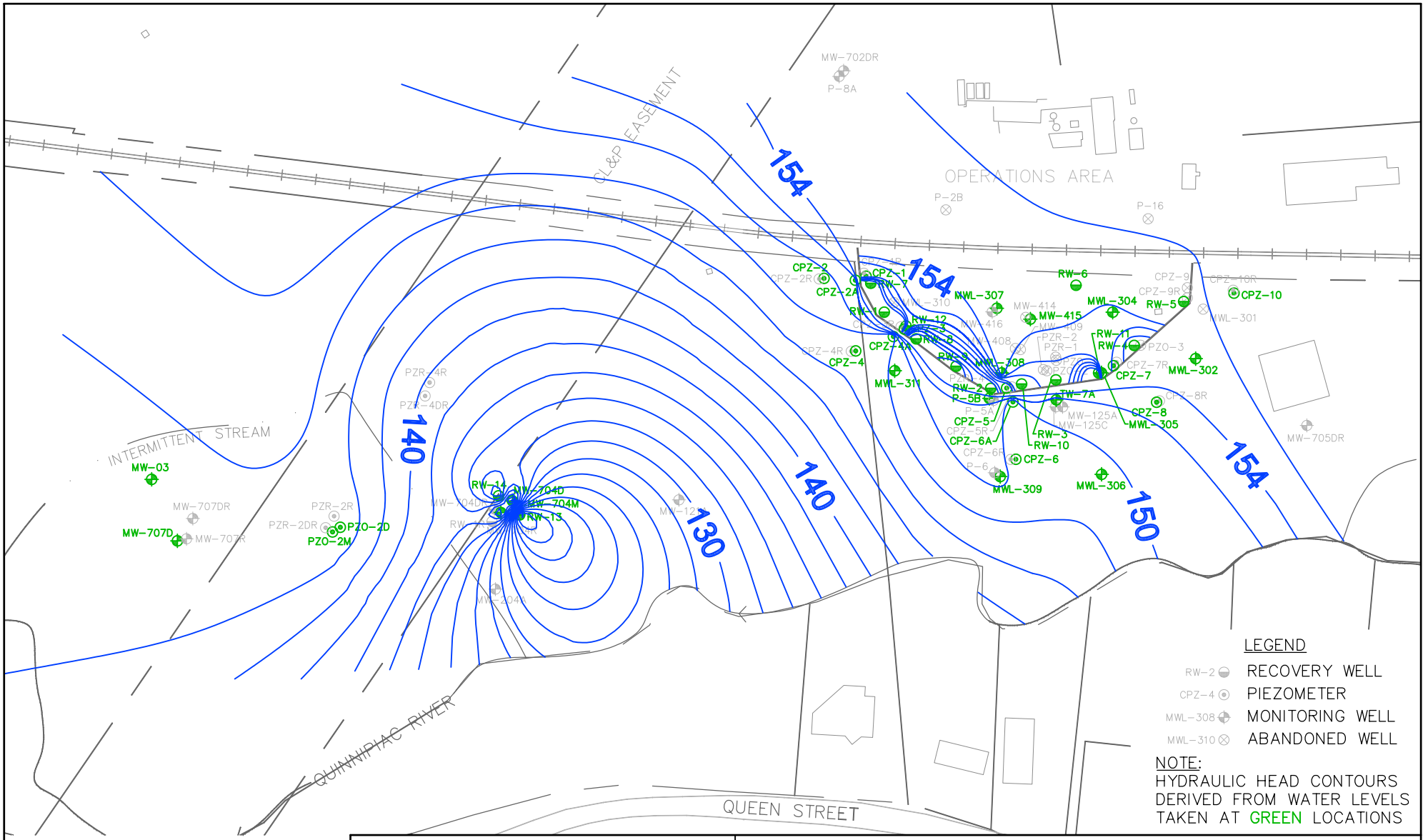
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	OCT 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		11C

M:\Design\DWG\SRSNE\Oct 25 2010\overburden.dwg, Layout1, 11/5/2010 3:39:20 PM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

OVERBURDEN HYDRAULIC HEAD CONTOURS OCTOBER 25, 2010

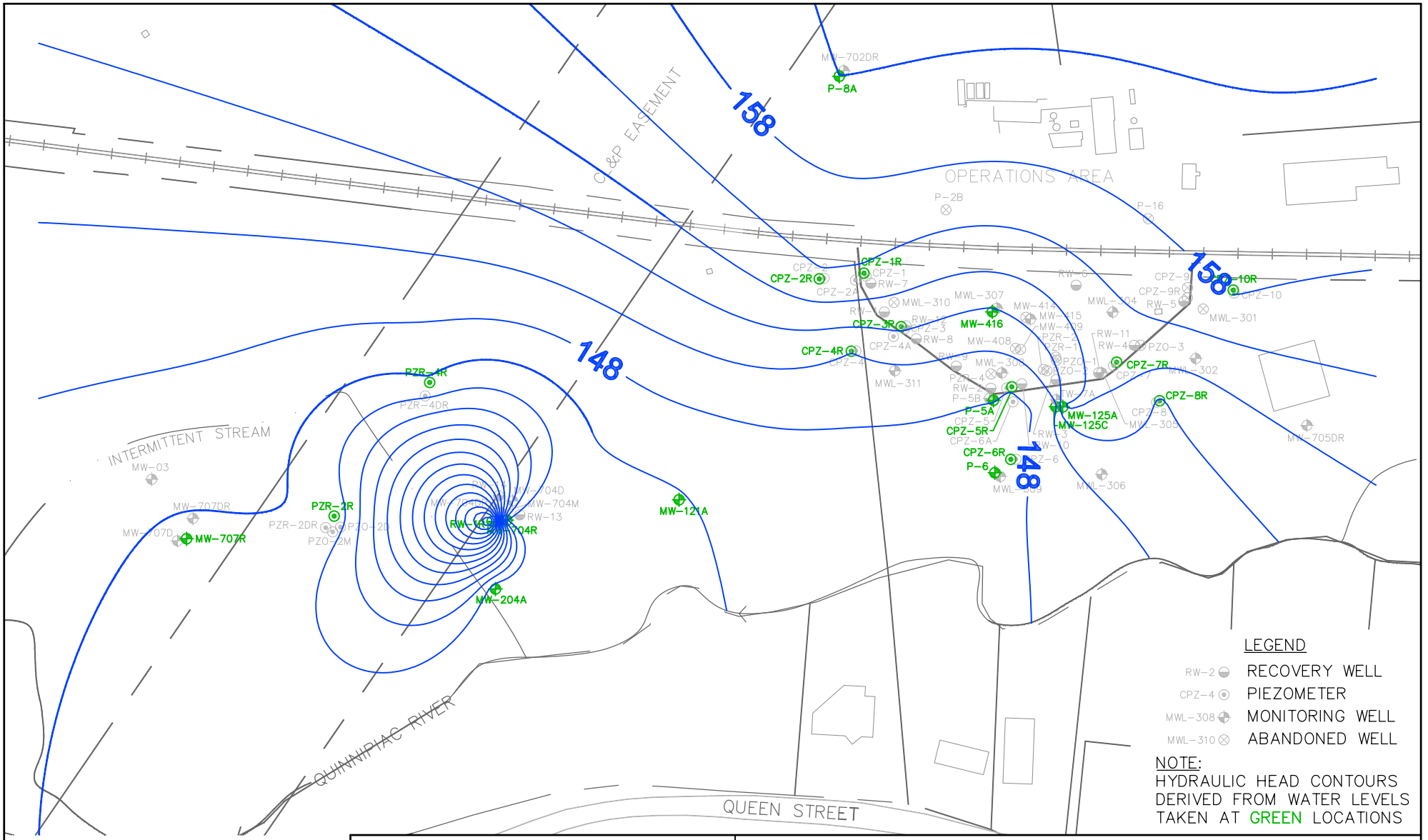
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	NOV 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		12A

M:\Design\DWG\SRSNE\Oct 25 2010\shallow bedrock.dwg, Layout1, 11/5/2010 2:07:38 PM, GIRARDEB, 1:1



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

SHALLOW BEDROCK HYDRAULIC HEAD CONTOURS OCTOBER 25, 2010

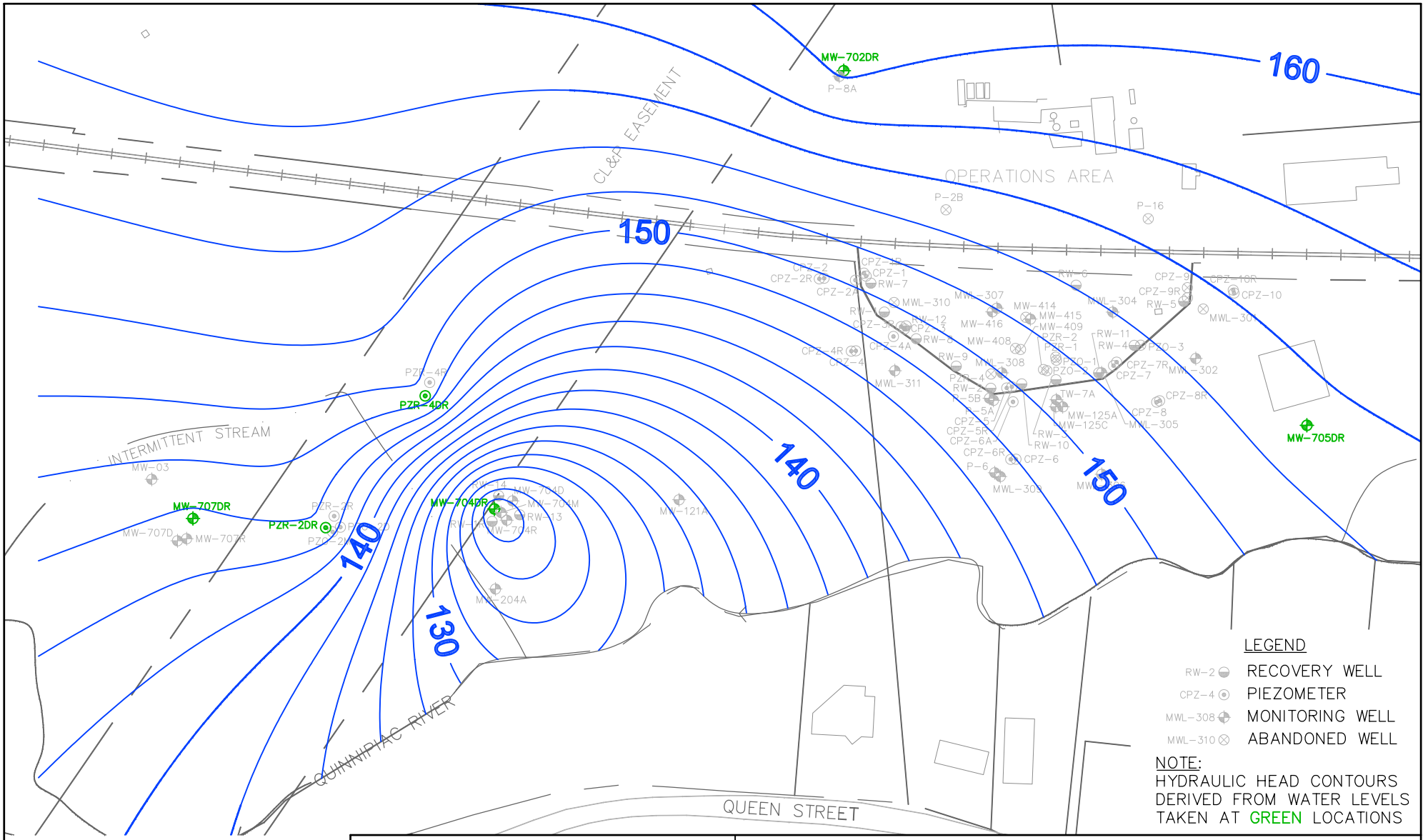
SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	NOV 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		12B

M:\Design\DWG\SRSNE\Oct 25 2010\deep bedrock.dwg, Layout1, 11/5/2010 2:16:15 PM, GIRARDEB, 1:1



GRAPHIC SCALE

200 100 0 100 200

APPROXIMATE SCALE IN FEET

DEEP BEDROCK HYDRAULIC HEAD CONTOURS OCTOBER 25, 2010

SRSNE
SOUTHINGTON, CONNECTICUT

WESTON SOLUTIONS

CONCORD NEW HAMPSHIRE

DRAWN	DATE	DES. ENG.	DATE	W.O. NO.
BEG	NOV 2010			13056.001.013
CHECKED	DATE	SCALE	REVISION	FIGURE NO.
		AS SHOWN		12C

FIGURE 13

31 Oct. 2009 through 30 Oct. 2010

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

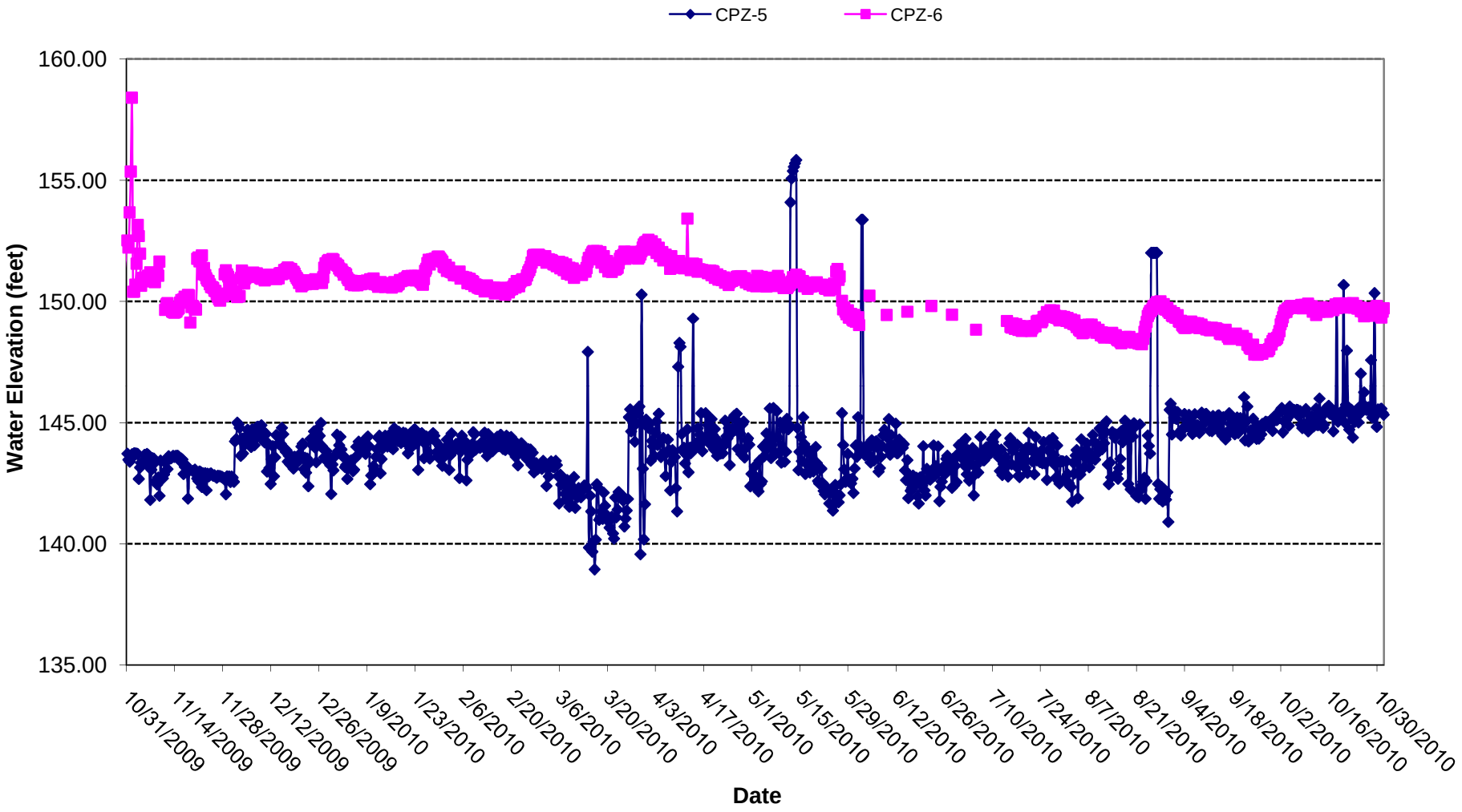
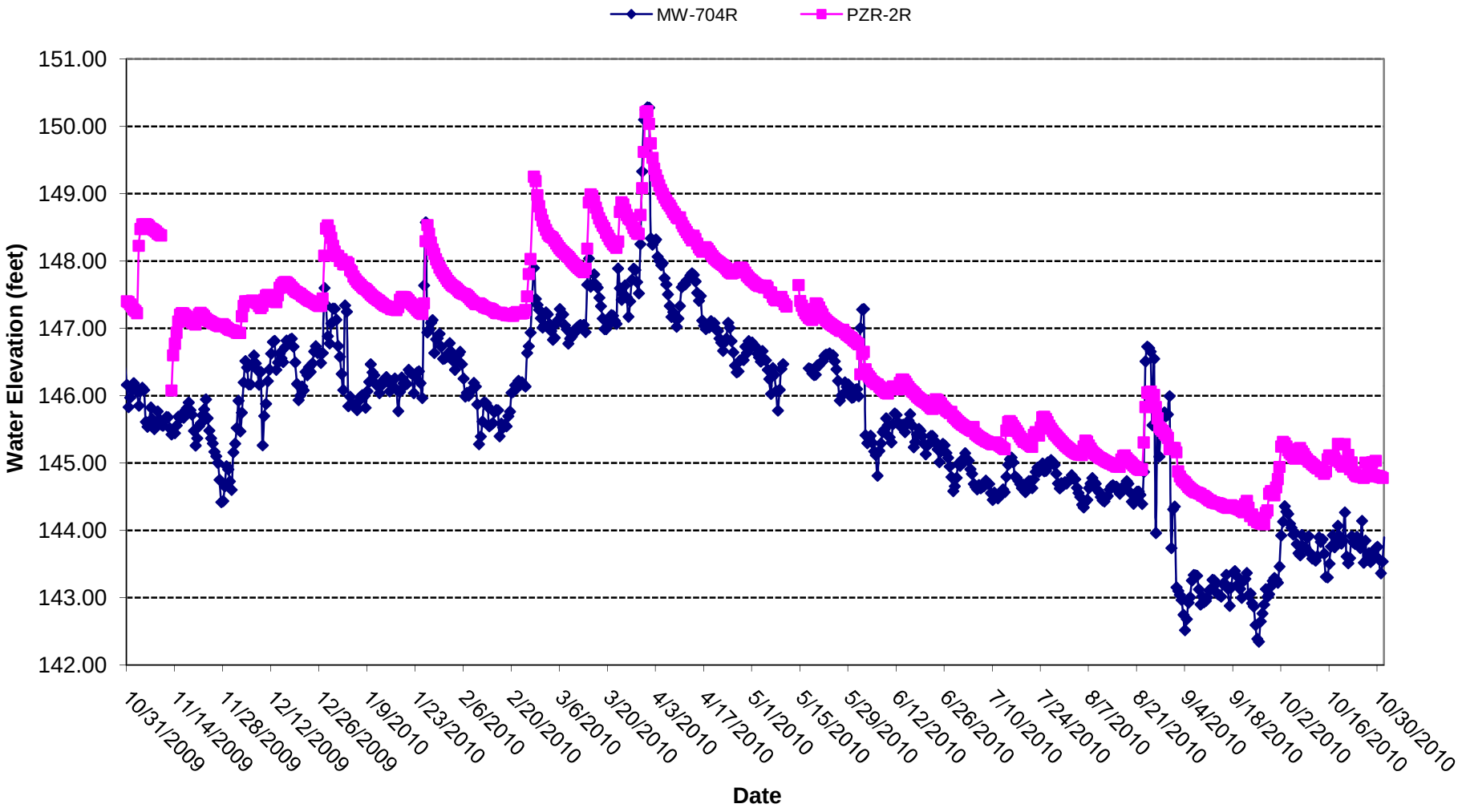


FIGURE 14A

31 Oct. 2009 through 30 Oct. 2010

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



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