



August 5, 2016

Ms. Claire Foster  
Environmental Analyst  
Connecticut Department of Energy and Environmental Protection  
Remediation Division, Bureau of Water Protection and Land Reuse  
79 Elm Street  
Hartford, Connecticut 06106

**RE: NOTIFICATION OF TERMINATION OF GROUNDWATER SAMPLING AND LNAPL UPDATE – FORMER TORRINGTON COMPANY FACILITY, 263 MYRTLE STREET, NEW BRITAIN, CONNECTICUT (HRP #ING0110.GW)**

Dear Ms. Foster:

On behalf of Ingersoll Rand Inc. (IR), HRP Associates Inc. (HRP), is providing groundwater sampling results for the former Torrington Company Facility located at 263 Myrtle Street (formerly known as 37 Booth Street) in New Britain, Connecticut (**Figure 1**). Groundwater sampling events were conducted in 2015 and 2016 in accordance with "Approach 3" as summarized in IR's correspondence dated March 26, 2015. This approach included continued groundwater monitoring until the RSRs have been met for four seasonal events or until a 5-year decreasing trend has been substantiated to the satisfaction of the Connecticut Department of Energy and Environmental Protection (CT DEEP).

**BACKGROUND**

The site first entered into the Connecticut Department of Environmental Protection (CT DEP) Transfer Program in 1995. At that time, ownership of the site was transferred from IR to the City of New Britain under Connecticut's "Transfer Act" (CGS 22a-134).

HRP conducted soil remediation (soil excavation and off-site disposal) at the site in 1998 and 1999, concurrent with demolition of the former Torrington Company Fafnir Bearing buildings (**Figure 2**). Petroleum, arsenic, volatile organic compounds (VOCs), lead, and polychlorinated biphenyl's (PCBs) were detected in soil at concentrations that exceeded RSR criteria. These soils were remediated to the Industrial/Commercial Direct Exposure Criteria (I/C DEC) in accordance with the RSR and a quarterly post-remediation groundwater monitoring plan was implemented at the site.

In 2007, the City transferred ownership of the site to Cakemaker LLC, and submitted a Form III Transfer Act filing to the CT DEP. Due to historic releases, the CT DEP retained oversight of the investigation and remediation necessary to achieve compliance with the Remediation Standard Regulations (RSR) for the site. The site was redeveloped in 2007 with a two-story commercial building, which is primarily used for the creation of ice cream cakes by Celebration Foods. Contaminated soils remaining in-place were encountered during the redevelopment activities. These soils were previously left beneath clean cover material as allowed by the RSR with CT DEP approval. During construction activities, contaminated materials were managed in accordance with the *Soil Management Plan* approved by the CT DEP in May 2007. All impacted soils encountered during site

redevelopment were retained and reused on-site, with one minor exception. Less than 5 cubic yards of hydraulic oil impacted soils were removed from the site for disposal in June 2007. The contaminated soil management activities were documented in the *Soil Closure Report* submitted to the CT DEP on April 7, 2010.

Since the current commercial building was installed over a large portion of the VOC plume, a potential vapor intrusion risk was recognized prior to building construction. A sub-slab depressurization (SSD) system was installed beneath the building at the time of its construction as a precautionary vapor intrusion mitigation measure.

Sub-slab soil gas monitoring was performed to determine if completion and operation of the SSD system was warranted. Following completion of building construction, sub-slab soil gas monitoring points, located within the building footprint, were sampled on a quarterly basis between August 2008 and May 2009. The results of the soil gas sampling were consistently below both the current 1996 promulgated numeric comparison criteria of the RSR and the 2003 proposed revisions, where established, and the sampling was discontinued in May 2009. No further soil gas sampling is planned, and completion of the SSD system was determined to be unnecessary.

Based upon monitoring results, the post-remediation monitoring plan was revised, submitted to the CT DEP, and approved in February 2008. The revised groundwater monitoring program included gauging and sampling of select monitoring wells. Following site redevelopment in 2007, monitoring wells MW-1, MW-2a, MW-3, MW-4a, MW-5, MW-6, MW-7, and MW-8a were installed to various depths as overburden/shallow bedrock wells in January and February 2008 (**Figure 2**). These and existing monitoring wells RMW-3, RMW-15, RMW-17 and RMW-19, were designed to meet specific goals for both compliance and post-remediation groundwater monitoring at the former Fafnir Bearing Plant. Monitoring well samples were analyzed for VOCs, select metals, and ETPH. Measurements for LNAPL accumulation were performed, and where an appreciable thickness was measured, the LNAPL was removed.

Following the September 2011 groundwater sampling event, RSR compliance was demonstrated at all monitoring wells, with the exception of MW-4a. HRP recommended the discontinuation of monitoring at all wells except MW-4a. The CT DEEP, formerly CT DEP, approved the proposed changes to the groundwater monitoring program in correspondence dated March 30, 2012, and agreed that following additional quarterly monitoring events at MW-4a with acceptable results; RSR compliance will have been achieved at all site monitoring wells and the groundwater monitoring program could then be discontinued.

The site was transferred from Cakemaker, LLC to NL Ventures IX Celebration, LLC in May 2012 under a Form IV Filing; indicating that remediation at the site has been completed.

In December 2013, HRP submitted a groundwater monitoring report summarizing five quarters of groundwater sampling data collected from August 2012 through September 2013. Analytical results from the groundwater samples collected from MW-4a during the five quarterly sampling events conducted between August 2012 and September 2013 indicated that low levels of VOCs were detected at concentrations that were less than RSR criteria, with the exception of vinyl chloride. Vinyl chloride was detected at concentrations that exceeded the 1996 and the proposed 2003 Residential Volatilization Criteria (RVC) during the December 2012 and September 2013 sampling events.

Although an Environmental Land Use Restriction (ELUR) limiting the site to industrial/commercial use has been placed on the site, the RVC is being applied to concentrations at monitoring well MW-4a due to its downgradient location in order to remain protective of offsite properties which may or may not be restricted to commercial/industrial uses. The report noted that although fluctuations of vinyl chloride concentrations have occasionally exceeded the 1996/2013 and 2003 Proposed RVC in monitoring well MW-4A, the overall concentration trend since early 2009 was strongly decreasing. Based upon this, HRP presented a first order decay model to demonstrate that concentrations of vinyl chloride would attenuate below the applicable volatilization criteria within five years, as allowed for within the RSR [CGS §22a-133k-3(c)(5)(A)(ii)].

In CT DEEP correspondence dated December 12, 2014, the CT DEEP concluded that the model presented within the report was not detailed enough to demonstrate groundwater will meet the applicable volatilization criteria within five years. Subsequently, a meeting between IR, HRP, and CT DEEP representatives took place on February 11, 2015, to discuss approaches that may potentially be implemented to achieve site closure. A summary of these discussions was provided in correspondence from IR to the CT DEEP dated March 26, 2015. One of the potential approaches outlined within that correspondence included continued groundwater monitoring at monitoring well MW-4a until demonstration of compliance with the default volatilization criteria could be achieved.

This report provides details and results of the quarterly results of groundwater sampling activities that were undertaken as part of that approach. Quarterly groundwater sampling events were conducted at the site from June 2015 to March 2016, the results of which are provided in detail below.

## GROUNDWATER MONITORING ACTIVITIES AND RESULTS

Quarterly groundwater monitoring activities were conducted at the site on June 3, 2015, September 10, 2015, January 8, 2016, and March 10, 2016. The depth to groundwater was measured at monitoring wells MW-4a and MW-4b during each of the four quarterly sampling events. Additionally, all accessible site monitoring wells (MW-1, MW-2a, MW-2b, MW-3, MW-5, MW-6, MW-7, MW-8a, MW-8b, RMW-3, RMW-16, RMW-17, and RMW-19) were gauged during the March 10, 2016, sampling event in order to confirm previously reported groundwater flow direction. Groundwater monitoring locations are shown on Figure 2.

All wells were gauged using a dual-phase interface probe capable of detecting non-aqueous phase liquid (NAPL) if present. No NAPL was detected in any monitoring well except for well MW-6 measured during the March 2016 event. MW-6 contained LNAPL at a measured thickness of 1.94 feet. LNAPL has historically been detected in well MW-6 and was determined to have been removed to the maximum extent practicable as previously reported to CT DEEP in the September 2011 *Semi-Annual Groundwater Quality Monitoring Report & Proposed Changes to Groundwater Monitoring Program* report and summarized in the December 2013 *Groundwater Quality Monitoring Report for the Third Quarter 2012 Through Third Quarter 2013* report.

A summary of groundwater elevation and LNAPL measurements is provided on **Table 1**. The gauging data were generally consistent with previous groundwater levels. Additionally, the groundwater flow direction for both the shallow and bedrock aquifers were determined to be in a generally southeasterly direction, which is consistent with previous monitoring events (**Figures 3a** and **3b**).

During each monitoring event, wells MW-4A and MW-4B were sampled following low-flow purge and sampling techniques. The following groundwater geochemical parameters were measured to determine well stabilization prior to sampling:

- pH,
- Temperature,
- Dissolved Oxygen (DO),
- Oxygen Reduction Potential (ORP),
- Turbidity, and
- Specific Conductivity

Upon stabilization, the groundwater samples were collected and submitted to Connecticut Testing Laboratories Inc. (CTL), a Connecticut-certified laboratory, for analysis of vinyl chloride by EPA Method 8260B. The groundwater samples from all four monitoring events were analyzed in accordance with CT DEEP Reasonable Confidence Protocols (RCP). Groundwater sampling logs are provided in Attachment A.

Sampling results indicate that dissolved concentrations of vinyl chloride were below the reporting limit of 0.5 µg/l in MW-4a during all four quarterly sampling events. Vinyl chloride results from monitoring well MW-4b ranged from less than the reporting limit of 0.5 µg/l to 2.0 µg/l. Analytical results are summarized on **Table 2** and complete analytical reports are provided in Attachment B.

Analytical results from monitoring well MW-4a are in compliance with the Surface Water Protection Criteria (SWPC), the 2003 proposed RVC previously approved for use at the site, and the default 2013 RVC applicable to offsite properties (e.g. downgradient well locations). Additionally, quarterly sampling results from monitoring well MW-4b are below the applicable SWPC. Note that the volatilization criteria do not apply to well MW-4b because it is screened below the water table at a depth of 41-51 feet below grade, at an interval deeper than MW-4a and the groundwater interface.

### **Quality Assurance / Quality Control**

The groundwater samples collected during the four quarterly sampling events were handled in accordance with the site-specific monitoring program and HRP's standard operating procedures. The samples were stored on ice and transported under chain-of-custody protocols to CTL. The groundwater samples were analyzed and reported in accordance with Connecticut Laboratory Quality Assurance and Quality Control (QA/QC) Guidance - *Reasonable Confidence Protocols* (RCP), and as such any deviations from the RCP that may affect the usability of the data are documented in the laboratory reports. The laboratory analytical reports included QA/QC certification forms, narratives, analytical results and quality control report, as prescribed by the RCP.

The laboratory analytical report case narratives were also reviewed in accordance with the CT DEEP *Data Quality Assessment and Data Usability Evaluation (DQA/DUE) Guidance Document*, (revised December 2010). Following a review of the case narratives, laboratory analytical results and the quality control report; the data quality is considered adequate to meet the data quality objectives for the site groundwater monitoring program.

## FINDINGS AND FUTURE ACTIONS

Based upon groundwater sampling activities conducted in 2015 and 2016, groundwater at the site has demonstrated compliance with the applicable RSR criteria. Therefore, this letter serves as our notification that no further groundwater sampling will be performed.

During the March 2016 monitoring event, LNAPL was detected at a thickness of 1.94 feet in monitoring well MW-6. While LNAPL has previously been detected in monitoring well MW-6 and demonstrated to be recovered to the maximum extent practicable, HRP plans to perform a bail down test and vacuum truck extraction event followed by monthly gauging for three months to confirm previous observations. A summary of the LNAPL assessment activities will be submitted to the CT DEEP following the three month observation period. It is anticipated that the findings of the additional LNAPL work will be provided in December 2016.

If you have any questions or require additional information, please feel free to contact HRP at (860) 674-9570.

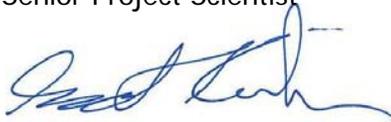
Sincerely,



Richard C. Kochan  
Senior Project Scientist



Jessica R. Kruczek, PE  
Senior Project Manager

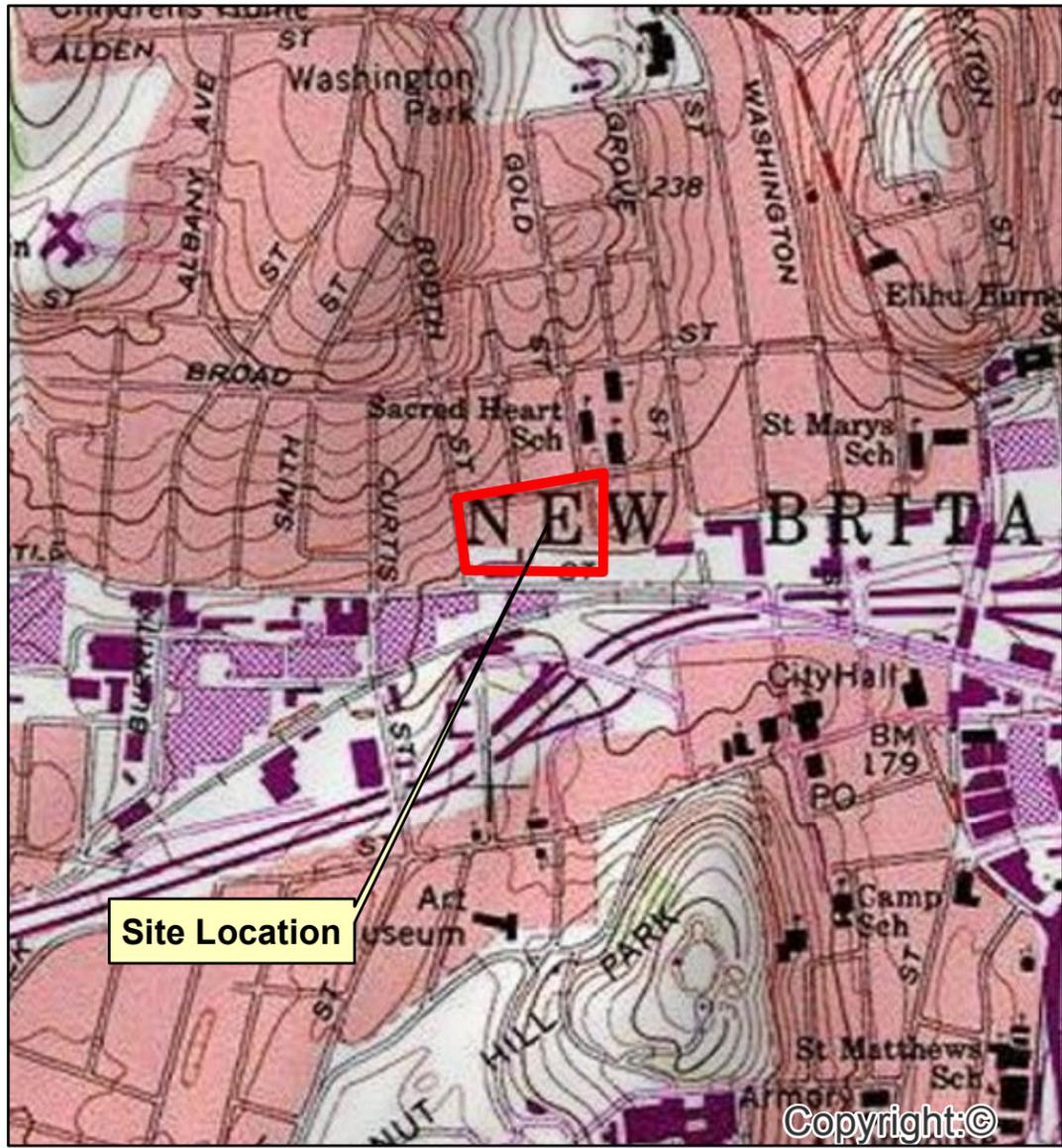


Scot Kuhn, LEP  
Regional Office Manager

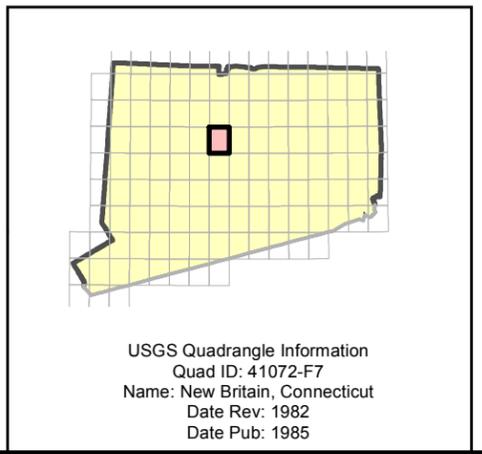
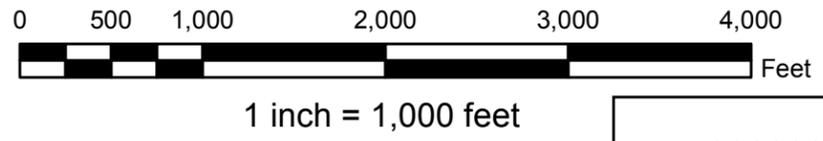
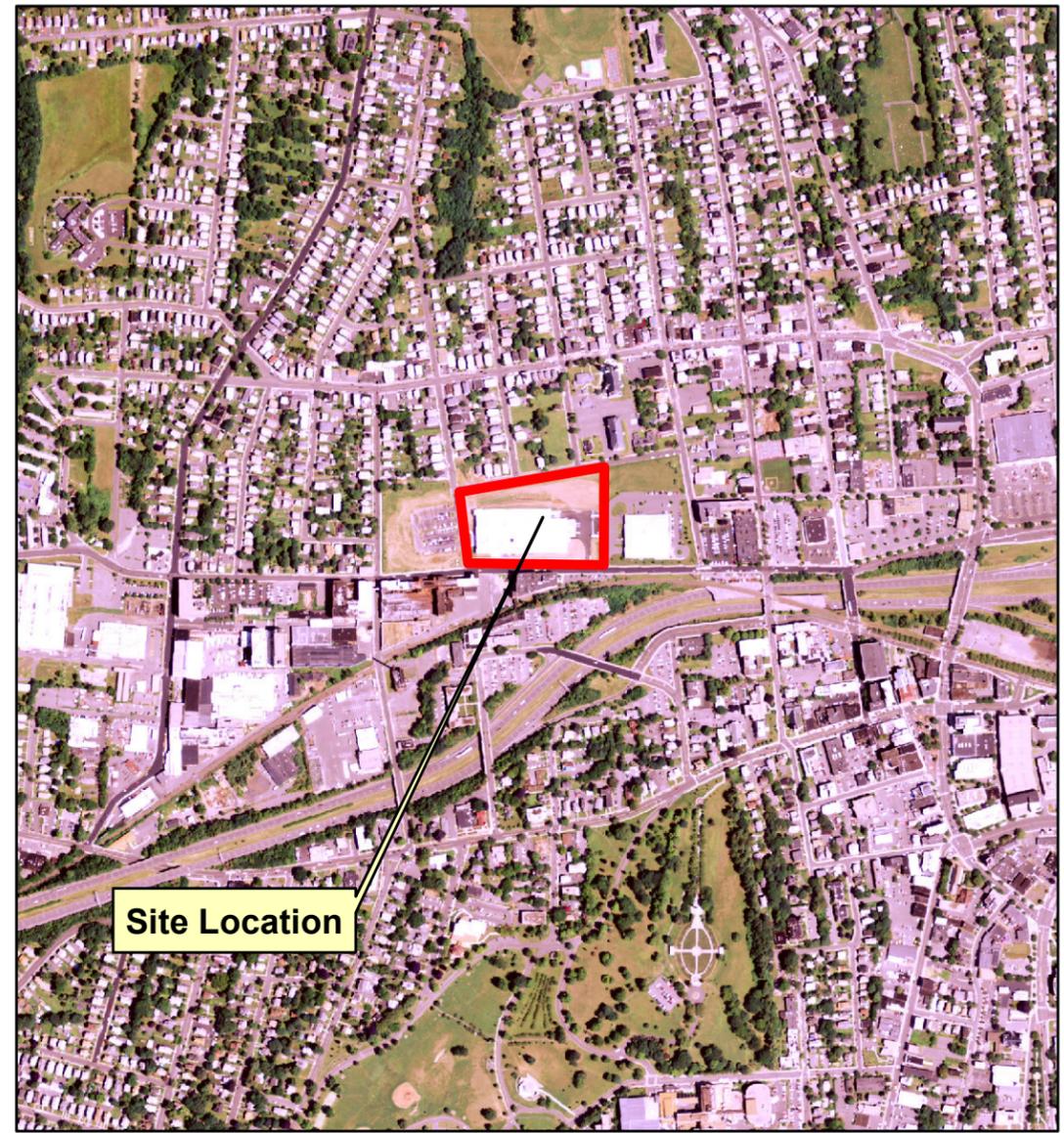
Attachments

# FIGURES

**Topographic Map  
(USGS New Britain, Connecticut)**



**Aerial Photograph  
(State of Connecticut 2008)**



197 SCOTT SWAMP ROAD  
 FARMINGTON, CT 06032  
 (860) 674-9570  
 HRPASSOCIATES.COM



Revisions	No.	Date
Designed By:	RCK	Drawn By: DML
Issue Date:	05/12/2016	Reviewed By: JRK
Project No:	ING0110.GW	Sheet Size: 11X17

**Site Location Map  
and Aerial Photograph**

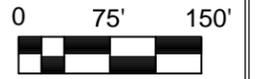
Former Fafnir Bearing  
 263 Myrtle Street  
 (Formerly 37 Booth Street)  
 New Britain, Connecticut

**FIGURE NO.  
1**

Map References:  
 USGS Quadrangle : Copyright:© 2009 National Geographic Society, i-cubed, Quad ID: 41072-F7  
 Aerial Photography: State Of Connecticut Department of Energy and Environmental Protection (DEEP)  
 SDE Feature Class - depgis.DEP.ORTHO\_2008\_4BAND\_NAIP\_INDEX



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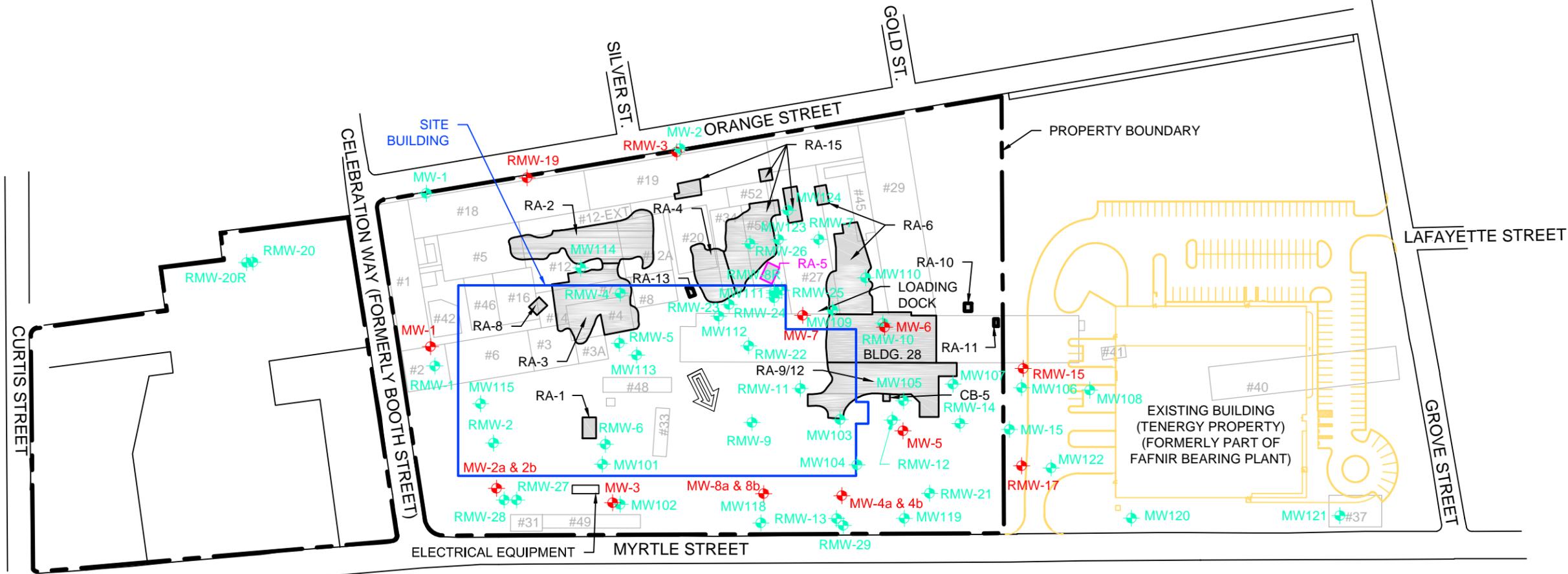
REVISIONS	
NO.	DATE

DESIGNED BY:	RCK
DRAWN BY:	DML
REVIEWED BY:	JRK

ISSUE DATE:	02/05/2015
PROJECT NUMBER:	ING0102.GW
SHEET SIZE:	11"X17"

**SITE PLAN**  
 FORMER FAFNIR BEARING  
 263 MYRTLE STREET  
 (FORMERLY 37 BOOTH STREET)  
 NEW BRITAIN, CONNECTICUT

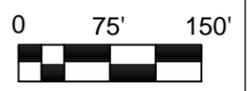
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- LEGEND**
- EXISTING MONITORING WELL
  - FORMER MONITORING WELL
  - FORMER REMEDIATION AREAS
  - FORMER BUILDING
  - INFERRED DIRECTION OF GROUNDWATER FLOW
  - TENERGY PROPERTY



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REVISIONS	
NO.	DATE

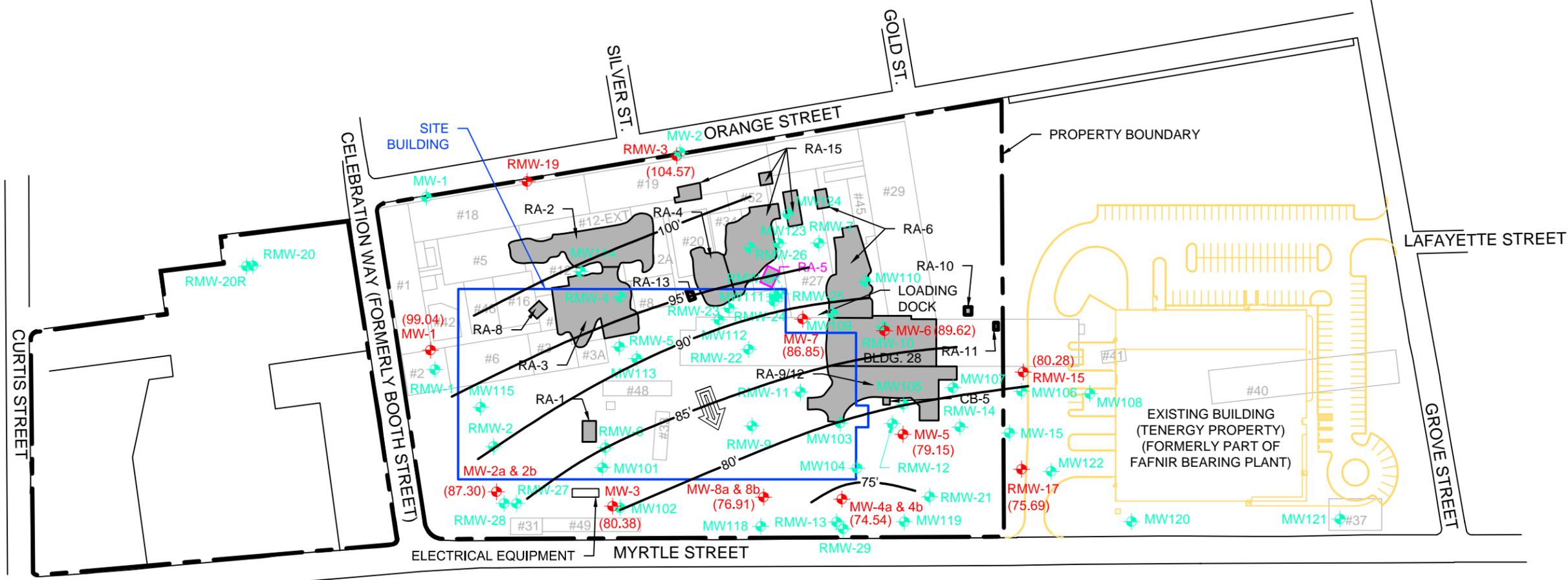
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DRAWN BY:	DML
REVIEWED BY:	JRK

ISSUE DATE:	05/05/2015
PROJECT NUMBER:	ING0102.GW
SHEET SIZE:	11"X17"

**SHALLOW GROUNDWATER  
CONTOUR MAP**

FORMER FAFNIR BEARING  
263 MYRTLE STREET  
(FORMERLY 37 BOOTH STREET)  
NEW BRITAIN, CONNECTICUT

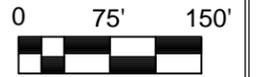
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- LEGEND**
- EXISTING MONITORING WELL
  - FORMER MONITORING WELL
  - FORMER REMEDIATION AREAS
  - #31 FORMER BUILDING
  - INFERRED DIRECTION OF GROUNDWATER FLOW
  - TENERGY PROPERTY



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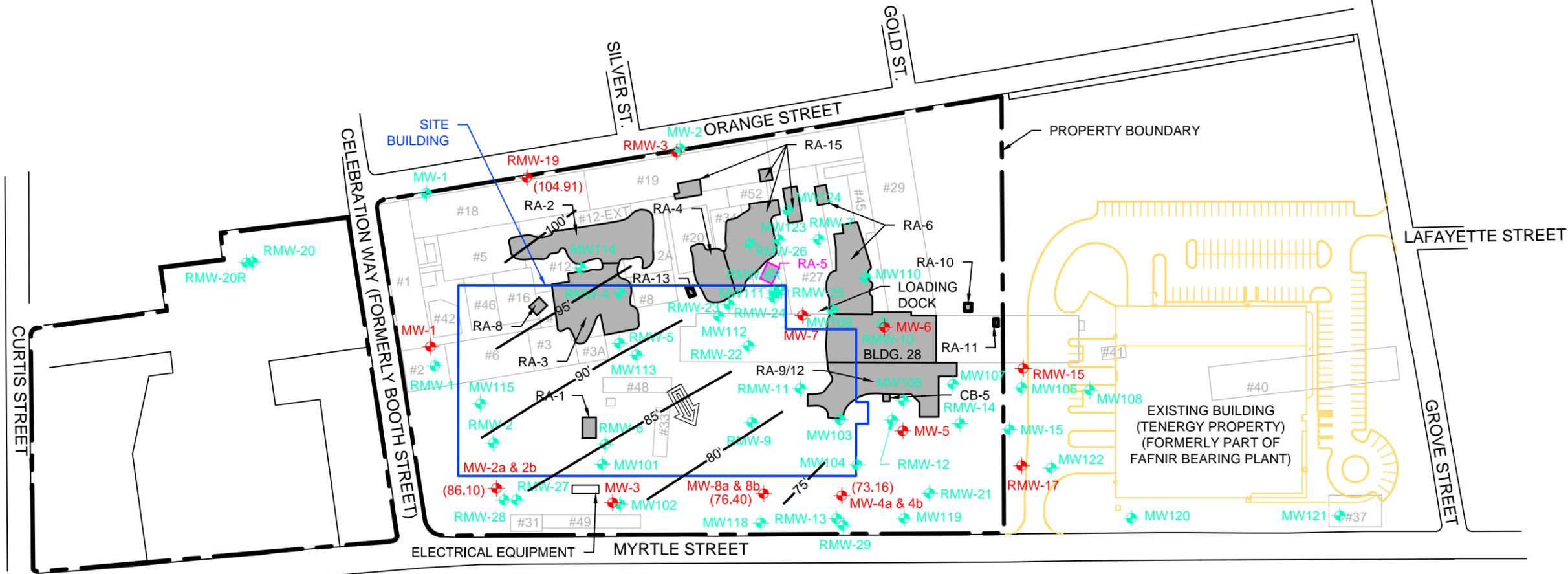
REVISIONS	
NO.	DATE

DESIGNED BY:	RCK
DRAWN BY:	DML
REVIEWED BY:	JRK

ISSUE DATE:	05/05/2015
PROJECT NUMBER:	ING0102.GW
SHEET SIZE:	11"X17"

**BEDROCK GROUNDWATER  
CONTOUR MAP**  
  
FORMER FAFNIR BEARING  
263 MYRTLE STREET  
(FORMERLY 37 BOOTH STREET)  
NEW BRITAIN, CONNECTICUT

SHEET NO.  
**3B**



- LEGEND**
- EXISTING MONITORING WELL
  - FORMER MONITORING WELL
  - FORMER REMEDIATION AREAS
  - FORMER BUILDING
  - INFERRED DIRECTION OF GROUNDWATER FLOW
  - TENERGY PROPERTY

# TABLES

Monitoring Well	Well Construction	Casing Elevation (PVC)	Well Screen	Depth to Bedrock	Gauging Date	Depth to Water	Groundwater Elevation	Depth to LNAPL	LNAPL Thickness	Corrected Depth to Water
MW-1	Overburden/Bedrock	104.29	3-15'	12'	3/14/2008	4.72	99.57	-	-	-
					6/23/2008	5.7	99.57	-	-	-
					9/22/2008	5.29	99.00	-	-	-
					12/4/2008	5.09	99.20	-	-	-
					3/25/2009	5.09	99.20	-	-	-
					6/29/2009	5.92	98.37	-	-	-
					9/4/2009	5.57	98.72	-	-	-
					12/29/2009	5.05	99.24	-	-	-
					3/9/2010	4.94	99.35	-	-	-
					6/11/2010	5.70	98.59	-	-	-
					9/1/2010	6.24	98.05	-	-	-
					12/7/2010	5.89	98.40	-	-	-
					3/8/2011	4.48	99.81	-	-	-
					9/13/2011	4.83	99.46	-	-	-
MW-2a	Overburden/Bedrock	102.44	11.5-26.5'	24'	3/14/2008	14.53	87.91	-	-	-
					6/23/2008	16.12	86.32	-	-	-
					9/22/2008	16.05	86.39	-	-	-
					12/4/2008	15.33	87.11	-	-	-
					3/25/2009	15.27	87.17	-	-	-
					6/29/2009	14.74	87.70	-	-	-
					9/4/2009	15.54	86.90	-	-	-
					12/29/2009	14.49	87.95	-	-	-
					3/9/2010	14.81	87.63	-	-	-
					6/11/2010	16.28	86.16	-	-	-
					9/1/2010	16.48	85.96	-	-	-
					12/7/2010	15.82	86.62	-	-	-
					3/8/2011	13.99	88.45	-	-	-
					9/13/2011	14.46	87.98	-	-	-
MW-2b	Bedrock	102.30	30-40'	24'	3/14/2008	16.55	85.75	-	-	-
					6/23/2008	17.86	84.44	-	-	-
					9/22/2008	17.56	84.74	-	-	-
					12/4/2008	16.94	85.36	-	-	-
					3/25/2009	16.82	85.48	-	-	-
					6/29/2009	16.37	85.93	-	-	-
					9/4/2009	17.06	85.24	-	-	-
					12/29/2009	16.21	86.09	-	-	-
					3/9/2010	16.48	85.82	-	-	-
					6/11/2010	17.57	84.73	-	-	-
					9/1/2010	17.80	84.50	-	-	-
					12/7/2010	17.24	85.06	-	-	-
					3/8/2011	15.41	86.89	-	-	-
					9/13/2011	16.05	86.25	-	-	-
MW-3	Overburden/Bedrock	103.98	20.5-40.5'	35.5'	3/14/2008	23.06	80.92	-	-	-
					6/23/2008	25.14	78.84	-	-	-
					9/22/2008	24.05	79.93	-	-	-
					12/4/2008	23.86	80.12	-	-	-
					3/25/2009	25.11	78.87	-	-	-
					6/29/2009	24.77	79.21	-	-	-
					9/4/2009	25.11	78.87	-	-	-
					12/29/2009	24.52	79.46	-	-	-
					3/9/2010	24.78	79.20	-	-	-
					6/11/2010	23.69	80.29	-	-	-
					9/1/2010	25.17	78.81	-	-	-
					12/7/2010	25.06	78.92	-	-	-
					3/8/2011	23.69	80.29	-	-	-
					9/13/2011	23.33	80.65	-	-	-
2/29/2012	24.01	79.97	-	-	-					
5/25/2012	23.76	80.22	-	-	-					
3/10/2016	23.60	80.38	-	-	-					

Monitoring Well	Well Construction	Casing Elevation (PVC)	Well Screen	Depth to Bedrock	Gauging Date	Depth to Water	Groundwater Elevation	Depth to LNAPL	LNAPL Thickness	Corrected Depth to Water
MW-4a	Overburden/Bedrock	100.55	15-35'	30-35'	3/14/2008	23.45	77.10	-	-	-
					6/23/2008	25.16	75.39	-	-	-
					9/22/2008	25.11	75.44	-	-	-
					12/4/2008	24.79	75.76	-	-	-
					3/25/2009	25.02	75.53	-	-	-
					6/29/2009	24.43	76.12	-	-	-
					9/4/2009	24.80	75.75	-	-	-
					12/29/2009	25.99	74.56	-	-	-
					3/9/2010	26.51	74.04	-	-	-
					6/11/2010	27.09	73.46	-	-	-
					9/1/2010	26.91	73.64	-	-	-
					12/7/2010	26.37	74.18	-	-	-
					3/8/2011	23.69	76.86	-	-	-
					9/13/2011	24.81	75.74	-	-	-
					1/3/2012	26.12	74.43	-	-	-
					2/29/2012	27.35	73.20	-	-	-
					5/25/2012	27.07	73.48	-	-	-
					6/7/2012	26.93	73.62	-	-	-
					8/10/2012	26.71	73.84	-	-	-
					12/5/2012	27.21	73.34	-	-	-
3/18/2013	25.14	75.41	-	-	-					
6/4/2013	26.93	73.62	-	-	-					
9/4/2013	27.56	72.99	-	-	-					
6/3/2015	26.38	74.17	-	-	-					
9/10/2015	28.09	72.46	-	-	-					
1/8/2016	26.34	74.21	-	-	-					
3/10/2016	26.01	74.54	-	-	-					
MW-4b	Bedrock	100.405	41-51'	30-35'	3/14/2008	24.59	75.82	-	-	-
					6/23/2008	24.59	75.82	-	-	-
					9/22/2008	25.76	74.65	-	-	-
					12/4/2008	25.64	74.77	-	-	-
					3/25/2009	25.53	74.88	-	-	-
					6/29/2009	25.75	74.66	-	-	-
					9/4/2009	25.63	74.78	-	-	-
					12/29/2009	26.97	73.44	-	-	-
					3/9/2010	27.42	72.99	-	-	-
					6/11/2010	27.68	72.73	-	-	-
					9/1/2010	27.70	72.71	-	-	-
					12/7/2010	27.44	72.97	-	-	-
					3/8/2011	26.15	74.26	-	-	-
					9/13/2011	26.69	73.72	-	-	-
					2/29/2012	27.70	72.71	-	-	-
					5/25/2012	27.74	72.67	-	-	-
					6/3/2015	27.50	72.91	-	-	-
					9/10/2015	28.94	71.47	-	-	-
					1/8/2016	27.67	72.74	-	-	-
					3/10/2016	27.25	73.16	-	-	-
MW-5	Overburden/Bedrock	97.72	6.5-26.5'	20.5'	3/14/2008	17.21	80.51	-	-	-
					6/23/2008	20.02	77.70	-	-	-
					9/22/2008	20.17	77.55	-	-	-
					12/4/2008	19.79	77.93	-	-	-
					3/25/2009	19.74	77.98	-	-	-
					6/29/2009	19.25	78.47	-	-	-
					9/4/2009	19.79	77.93	-	-	-
					12/29/2009	18.78	78.94	-	-	-
					3/9/2010	19.32	78.40	-	-	-
					6/11/2010	19.78	77.94	-	-	-
					9/1/2010	19.81	77.91	-	-	-
					12/7/2010	19.98	77.74	-	-	-
					3/8/2011	17.45	80.27	-	-	-
					9/13/2011	18.27	79.45	-	-	-
					2/29/2012	20.76	76.96	-	-	-
					5/25/2012	20.27	77.45	-	-	-
3/10/2016	18.57	79.15	-	-	-					

Monitoring Well	Well Construction	Casing Elevation (PVC)	Well Screen	Depth to Bedrock	Gauging Date	Depth to Water	Groundwater Elevation	Depth to LNAPL	LNAPL Thickness	Corrected Depth to Water
MW-6	Overburden/Bedrock	99.46	3-22'	20'	3/14/2008	9.48	89.98	9.41	0.07	9.42
					6/23/2008	10.18	89.28	-	-	-
					9/22/2008	10.37	89.09	10.10	0.27	10.14
					10/31/2008	10.17	89.29	10.15	0.02	10.15
					12/4/2008	10.07	89.39	10.05	0.02	10.05
					2/23/2009	10.11	89.35	10.02	0.09	10.03
					3/25/2009	10.12	89.34	10.08	0.04	10.09
					6/29/2009	9.91	89.55	Sheen	<0.01	9.91
					8/10/2009	9.91	89.55	9.94	0.03	9.88
					9/4/2009	9.75	89.71	9.73	0.02	9.73
					11/12/2009	10.02	89.44	9.98	0.04	9.99
					12/29/2009	9.64	89.82	-	-	-
					3/9/2010	9.70	89.76	9.67	0.03	9.67
					6/11/2010	10.05	89.41	9.97	0.08	9.98
					8/3/2010	10.02	89.44	9.98	0.04	9.99
					9/1/2010	9.94	89.52	9.91	0.03	9.91
					11/5/2010	9.82	89.64	9.79	0.03	9.79
					12/7/2010	9.91	89.55	9.88	0.03	9.88
					2/16/2011	9.62	89.84	9.58	0.04	9.59
					3/8/2011	9.08	90.38	9.05	0.03	9.05
					5/5/2011	9.66	89.80	9.61	0.05	9.62
					7/7/2011	10.01	89.45	9.91	0.10	9.93
					8/15/2011	10.14	89.32	10.06	0.08	10.07
					9/13/2011	9.46	90.00	9.43	0.03	9.43
					11/30/2011	9.85	89.61	9.80	0.05	9.81
					1/3/2012	10.47	89.30	10.10	0.37	10.16
					1/30/2012	10.45	89.27	10.14	0.31	10.19
					2/29/2012	10.65	89.07	10.35	0.30	10.40
4/4/2012	10.55	89.10	10.33	0.22	10.36					
5/25/2012	10.61	89.17	10.23	0.38	10.29					
6/7/2012	10.43	89.22	10.21	0.22	10.24					
8/10/2012	10.22	89.28	10.17	0.05	10.18					
12/5/2012	10.79	89.15	10.23	0.56	10.31					
3/18/2013	9.92	89.75	9.67	0.25	9.71					
6/4/2013	10.82	89.20	10.16	0.66	10.26					
9/4/2013	11.15	88.83	10.54	0.61	10.63					
3/10/2016	11.49	89.62	9.55	1.94	9.84					
MW-7	Overburden/Bedrock	100.42	5-20'	15'	3/14/2008	11.91	88.51	-	-	-
					6/23/2008	14.11	86.31	-	-	-
					9/22/2008	14.06	86.36	-	-	-
					12/4/2008	13.72	86.70	-	-	-
					3/25/2009	13.83	86.59	-	-	-
					6/29/2009	13.21	87.21	-	-	-
					9/4/2009	13.61	86.81	-	-	-
					12/29/2009	12.66	87.76	-	-	-
					3/9/2010	12.99	87.43	-	-	-
					6/11/2010	13.75	86.67	-	-	-
					9/1/2010	13.64	86.78	-	-	-
					12/7/2010	13.45	86.97	-	-	-
					3/8/2011	11.60	88.82	-	-	-
					9/13/2011	11.58	88.84	-	-	-
					2/29/2012	13.82	86.60	-	-	-
5/25/2012	13.57	86.85	-	-	-					
MW-8a	Overburden/Bedrock	103.27	17.5-37.5'	35'	3/14/2008	26.30	76.97	-	-	-
					6/23/2008	27.68	75.59	-	-	-
					9/22/2008	27.71	75.56	-	-	-
					12/4/2008	27.38	75.89	-	-	-
					3/25/2009	27.51	75.76	-	-	-
					6/29/2009	27.11	76.16	-	-	-
					9/4/2009	27.47	75.80	-	-	-
					12/29/2009	26.91	76.36	-	-	-
					3/9/2010	27.28	75.99	-	-	-
					6/11/2010	27.65	75.62	-	-	-
					9/1/2010	27.60	75.67	-	-	-
					12/7/2010	27.30	75.97	-	-	-
					3/8/2011	26.02	77.25	-	-	-
					9/13/2011	26.50	76.77	-	-	-
					2/29/2012	27.72	75.55	-	-	-
5/25/2012	27.42	75.85	-	-	-					
6/3/2015	26.64	76.63	-	-	-					
3/10/2016	26.36	76.91	-	-	-					

Monitoring Well	Well Construction	Casing Elevation (PVC)	Well Screen	Depth to Bedrock	Gauging Date	Depth to Water	Groundwater Elevation	Depth to LNAPL	LNAPL Thickness	Corrected Depth to Water
MW-8b	Bedrock	103.425	41-51'	35'	3/14/2008	26.47	76.96	-	-	-
					6/23/2008	27.86	75.57	-	-	-
					9/22/2008	27.87	75.56	-	-	-
					12/4/2008	27.56	75.87	-	-	-
					3/25/2009	27.70	75.73	-	-	-
					6/29/2009	27.31	76.12	-	-	-
					9/4/2009	27.67	75.76	-	-	-
					12/29/2009	27.10	76.33	-	-	-
					3/9/2010	27.37	76.06	-	-	-
					6/11/2010	27.85	75.58	-	-	-
					9/1/2010	27.82	75.61	-	-	-
					12/7/2010	27.51	75.92	-	-	-
					3/8/2011	26.25	77.18	-	-	-
					9/13/2011	26.73	76.70	-	-	-
2/29/2012	28.00	75.43	-	-	-					
5/25/2012	27.71	75.72	-	-	-					
3/10/2016	27.03	76.40	-	-	-					
RMW-3	Overburden/Bedrock	121.07	4-19'	16'	3/14/2008	10.14	110.93	-	-	-
					6/23/2008	NM	NM	-	-	-
					9/22/2008	12.26	108.81	-	-	-
					12/4/2008	11.66	109.41	-	-	-
					3/25/2009	16.12	104.95	-	-	-
					6/29/2009	11.46	109.61	-	-	-
					9/4/2009	9.39	111.68	-	-	-
					12/29/2009	9.21	111.86	-	-	-
					3/9/2010	8.80	112.27	-	-	-
					6/11/2010	9.49	111.58	-	-	-
					9/1/2010	9.30	111.77	-	-	-
					12/7/2010	9.16	111.91	-	-	-
					3/8/2011	7.87	113.20	-	-	-
					9/13/2011	8.85	112.22	-	-	-
2/29/2012	9.56	111.51	-	-	-					
5/25/2012	9.68	111.39	-	-	-					
3/10/2016	16.50	104.57	-	-	-					
*RMW-15	Overburden/Bedrock	87.42	5-25'	8'	3/14/2008	5.01	82.41	-	-	-
					6/23/2008	11.30	76.12	-	-	-
					9/22/2008	10.91	76.51	-	-	-
					12/4/2008	8.08	79.34	-	-	-
					3/25/2009	10.82	76.60	-	-	-
					6/29/2009	7.89	79.53	-	-	-
					9/4/2009	10.70	76.72	-	-	-
					12/29/2009	5.60	81.82	-	-	-
					3/9/2010	8.44	78.98	-	-	-
					6/11/2010	10.48	76.94	-	-	-
					9/1/2010	10.97	76.45	-	-	-
					12/7/2010	8.71	78.71	-	-	-
					3/8/2011	4.25	83.17	-	-	-
					9/13/2011	7.25	80.17	-	-	-
2/29/2012	11.13	76.29	-	-	-					
5/25/2012	10.75	76.67	-	-	-					
3/10/2016	7.14	80.28	-	-	-					
*RMW-17	Overburden/Bedrock	87.82	5-25'	9'	3/14/2008	11.73	76.09	-	-	-
					6/23/2008	NM	NM	-	-	-
					9/22/2008	14.26	73.56	-	-	-
					12/4/2008	13.82	74.00	-	-	-
					3/25/2009	14.22	73.60	-	-	-
					6/29/2009	13.48	74.34	-	-	-
					9/4/2009	14.13	73.69	-	-	-
					12/29/2009	11.97	75.85	-	-	-
					3/9/2010	13.45	74.37	-	-	-
					6/11/2010	14.09	73.73	-	-	-
					9/1/2010	14.17	73.65	-	-	-
					12/7/2010	13.67	74.15	-	-	-
					3/8/2011	8.47	79.35	-	-	-
					9/13/2011	12.10	75.72	-	-	-
2/29/2012	14.73	73.09	-	-	-					
5/25/2012	14.36	73.46	-	-	-					
3/10/2016	12.13	75.69	-	-	-					

Monitoring Well	Well Construction	Casing Elevation (PVC)	Well Screen	Depth to Bedrock	Gauging Date	Depth to Water	Groundwater Elevation	Depth to LNAPL	LNAPL Thickness	Corrected Depth to Water
RMW-19	Bedrock	121.24	11-26'	12'	4/25/2002	16.50	104.74	-	-	-
					8/1/2002	17.84	103.40	-	-	-
					7/22/2003	16.49	104.75	-	-	-
					3/14/2008	15.73	105.51	-	-	-
					6/23/2008	NM	NM	-	-	-
					9/22/2008	15.51	105.73	-	-	-
					12/4/2008	16.00	105.24	-	-	-
					3/25/2009	11.54	109.70	-	-	-
					6/29/2009	15.99	105.25	-	-	-
					9/4/2009	17.03	104.21	-	-	-
					12/29/2009	15.62	105.62	-	-	-
					3/9/2010	15.17	106.07	-	-	-
					6/11/2010	18.13	103.11	-	-	-
					9/1/2010	20.61	100.63	-	-	-
					12/7/2010	16.72	104.52	-	-	-
					3/8/2011	13.42	107.82	-	-	-
9/13/2011	15.63	105.61	-	-	-					
2/29/2012	18.39	102.85	-	-	-					
5/25/2012	17.43	103.81	-	-	-					
3/10/2016	16.33	104.91	-	-	-					

**Notes:**

All measurements are in feet  
 MW-1 through MW-8 were installed in January/February 2008  
 RMW wells were installed prior to 2007/2008 site redevelopment  
 LNAPL = Light Non-Aqueous Phase Liquid  
 NM = Not measured  
 \* = Off-Site Well on Tenergy Property  
 PVC = Polyvinyl Chloride  
 Corrected Depth to Water calculated:  
 CDTW = DTW - APT(specific gravity)  
 - APT = Apparent LNAPL thickness  
 - Specific gravity estimated to be 0.85

Sample ID	Sample Date	VOCs																			Other		
		1,1,1-Trichloroethane	1,1,2-Trichlorotrifluoroethane (Freon 113)	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloroethane	Benzene	Chloroethane	Chloroform	cis-1,2-Dichloroethylene	Dichlorodifluoromethane (Freon 12)	Isopropylbenzene	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethylene	Trichloroethylene	Trichlorofluoromethane (Freon 11)		Vinyl chloride	
Units		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/l
<b>SWPC</b>		62000	NE	NE	96	96	710	NE	14100	NE	NE	NE	NE	NE	NE	NE	88	2340	NE	15750	NE		
<b>ASWPC</b>		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>2003 Proposed I/C VC</b>		16000	NE	41000	920	68	310	29000	62	11000	NE	6800	NE	21000	NE	20000	NE	810	67	4200	52	NE	
<b>2003 Proposed Res VC</b>		6500	NE	3000	190	6.5	130	12000	26	830	NE	2800	NE	1500	NE	1500	NE	340	27	1300	1.6	NE	
<b>MW-1</b>	3/14/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	ND<1	ND<2	14.9	1.1	9.4	28.0	12.1	2.9	ND<1	ND<1	ND<1	ND<1	2	
	6/24/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	ND<1	ND<2	11.1	ND<1	6.9	20.4	9	2	ND<1	ND<1	ND<1	ND<1	0.6	
	9/22/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	ND<1	ND<2	10.2	ND<1	7.9	18.6	8.6	1.9	ND<1	ND<1	ND<1	ND<1	2.4	
	12/4/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	ND<1	ND<2	6.7	ND<1	6.0	12.1	6.1	3.6	ND<1	ND<1	ND<1	ND<1	0.5	
	3/25/2009	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<0.5	ND<0.5	0.7	10	ND<5	6.2	15.7	7.1	2.1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.829
	6/30/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.57	10	ND<7	6.8	18	7.9	1.7	ND<0.5	ND<0.5	ND<0.5	ND<2	0.78
	9/4/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.4	ND<3	ND<1	2	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	0.74	
	12/29/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.8	ND<2	6.7	17	7.3	1.8	ND<1	ND<1	ND<2	ND<2	0.82	
	3/9/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10	ND<2	7.1	18	7.5	1.9	ND<1	ND<1	ND<2	ND<2	0.75	
	6/11/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.6	ND<2	5.7	15	6.2	1.6	ND<1	ND<1	ND<2	ND<2	0.93	
	9/1/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.4	ND<2	5.4	13	5.9	1.6	ND<1	ND<1	ND<2	ND<1	0.91	
	12/7/2010	ND<0.5	ND<0.5	0.63	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.9	2	3.7	8.8	4.6	1.4	ND<1	ND<1	ND<2	ND<1	0.93	
	3/8/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	ND<2	7.9	19	8.6	2.1	ND<1	ND<1	ND<2	ND<1	0.8	
	9/13/2011	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.6	ND<5	5.2	15	6.6	1.5	ND<1	ND<1	ND<2	ND<1	1	
<b>MW-2a</b>	3/14/2008	ND<1	ND<1	ND<1	ND<1	ND<1	1.6	5.9	ND<1	ND<1	ND<2	29.8	ND<1	14.3	47	14.3	3.8	ND<1	ND<1	ND<1	ND<1	3	
	6/24/2008	ND<1	ND<1	ND<1	ND<1	ND<1	1.3	5.2	ND<1	ND<1	ND<2	32.8	ND<1	13.9	51.4	16.3	4	ND<1	ND<1	ND<1	ND<1	0.7	
	9/22/2008	ND<1	ND<1	ND<1	ND<1	ND<1	1.1	ND<2	ND<1	ND<1	ND<2	29	ND<1	13.4	45.6	14.1	1.8	ND<1	ND<1	ND<1	ND<1	2.6	
	12/4/2008	ND<1	ND<1	ND<1	ND<1	ND<1	1.2	6.8	ND<1	ND<1	ND<2	28.7	ND<1	12	37.6	11.8	4.8	ND<1	ND<1	ND<1	ND<1	1.3	
	3/25/2009	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2	5.1	ND<0.5	ND<0.5	2	34.6	ND<5	14	45.4	15.2	4.3	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.37	
	6/30/2009	ND<0.5	ND<0.5	0.53	ND<0.5	ND<0.5	1.1	5.3	ND<0.5	ND<0.5	ND<0.5	29	ND<7	14	44	14	3.6	ND<0.5	ND<0.5	ND<0.5	ND<2	1.4	
	9/4/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.3	ND<0.5	ND<0.5	2.6	30	ND<3	14	44	15	ND<1	ND<1	ND<1	ND<2	ND<2	1.1	
	12/29/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.85	3.8	ND<0.5	ND<0.5	ND<0.5	26	ND<2	11	38	12	3.4	ND<1	ND<1	ND<2	ND<2	1.2	
	3/9/2010	ND<0.5	ND<0.5	0.52	ND<0.5	ND<0.5	0.89	6.4	ND<0.5	ND<0.5	27	ND<2	13	39	13	3.9	ND<1	ND<1	ND<2	ND<2	ND<2	0.93	
	6/11/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.74	3.4	ND<0.5	ND<0.5	ND<0.5	25	ND<2	11	36	12	3.8	ND<1	ND<1	ND<2	ND<2	1.3	
	9/1/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.61	4.6	ND<0.5	ND<0.5	ND<0.5	27	ND<2	13	40	13	3.8	ND<1	ND<1	ND<2	ND<1	1.3	
	12/7/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.64	4.6	ND<0.5	ND<0.5	ND<0.5	22	2	8.6	30	9.3	2.7	ND<1	ND<1	ND<2	ND<1	1.4	
	3/8/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.66	ND<0.5	ND<0.5	ND<0.5	1	20	ND<2	7	26	7.9	2.9	ND<1	ND<1	ND<2	ND<1	0.96	
	9/13/2011	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.53	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	ND<5	7.6	26	8.6	2.6	ND<1	ND<1	ND<2	ND<1	1.1	
<b>MW-2b</b>	3/14/2008	ND<1	ND<1	ND<1	ND<1	ND<1	1.2	5	ND<1	ND<1	ND<2	22.4	ND<1	13.7	30.3	13.6	4.4	ND<1	ND<1	ND<1	ND<1	2.7	
	6/24/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	5.4	ND<1	ND<1	ND<2	24.3	ND<1	13.7	32.1	16.6	4.7	ND<1	ND<1	ND<1	ND<1	ND<0.1	
	9/22/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	ND<1	ND<2	19.2	ND<1	13.1	25.6	13.3	4	ND<1	ND<1	ND<1	ND<1	2	
	12/4/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	7.7	ND<1	ND<1	ND<2	17	ND<1	12.4	21.1	11.4	5.1	ND<1	ND<1	ND<1	ND<1	0.9	
	3/25/2009	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.7	ND<1	ND<0.5	ND<0.5	1.6	25.9	ND<5	15.6	29.9	16.1	5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.14	
	6/30/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.5	ND<0.5	ND<0.5	ND<0.5	16	ND<7	10	21	10	3	ND<0.5	ND<0.5	ND<0.5	ND<2	1.1	
	9/4/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.4	ND<0.5	ND<0.5	2.2	21	ND<3	16	28	16	ND<1	ND<1	ND<1	ND<2	ND<2	1	
	12/29/2009	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.4	ND<0.5	ND<0.5	ND<0.5	22	ND<2	16	30	15	4.8	ND<1	ND<1	ND<2	ND<2	1	
	3/9/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.6	ND<0.5	ND<0.5	ND<0.5	19	ND<2	14	25	13	4.3	ND<1	ND<1	ND<2	ND<2	0.91	
	6/11/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.3	ND<0.5	ND<0.5	ND<0.5	20	ND<2	14	27	14	4.2	ND<1	ND<1	ND<2	ND<2	1.2	
	9/1/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.1	ND<0.5	ND<0.5	ND<0.5	20	ND<2	15	27	14	4.5	ND<1	ND<1	ND<2	ND<1	1.1	
	12/7/2010	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.7	ND<0.5	ND<0.5	ND<0.5	19	2.1	14	26	14	4.4	ND<1	ND<1	ND<2	ND<1	1.1	
	3/8/2011	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.71	20	ND<2	15	25	15	4.5	ND<1	ND<1	ND<2	ND<1	0.98	
	9/13/2011	ND<1	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	14	ND<5	11	19	11	3.5	ND<1	ND<1	ND<2	ND<1	0.99	
<b>MW-3</b>	3/14/2008	ND<1	ND<1	2.8	ND<1	ND<1	ND<1	3.6	ND<1	ND<1	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	2.6	ND<1	ND<1	ND<1	ND<1	5.2	
	6/24/2008	ND<1	ND<1	2.4	ND<1	ND<1	ND<1	5.8	ND<1	ND<1	ND<2	ND<1	ND<1	ND<1	ND<1	1.3	2.2	ND<1	ND<1	ND<1	ND<1	ND<0.1	
	9/22/2008	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	1.6	ND<1	ND<1	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	1.4	ND<1	ND<1	ND<1	ND<1	0.8	
	12/5/2008	ND<1	ND<1	1.9	ND<1	ND<1	ND<1	6	ND<1	ND<1	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	3.4	ND<1	ND<1	ND<1	ND<1	1.5	
	3/25/2009	ND<1	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	4.4	ND<0.5	ND<0.5	1	ND<1	ND<5	ND<1	ND<0.5	ND<0.5	1.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.574	
	6/29/2009	ND<0.5	ND<0.5	2.7	ND<0.5	ND<0.5	ND<0.5	6.8	ND<0.5	ND<0.5	1	ND<0.5	ND<2	ND<0.5	ND<0.5	ND<0.5	1.4	ND<0.5	ND<0.5	ND<0.5	ND<2	0.65	
	9/4/2009	ND<0.5	ND<0.5	2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.59	1.1	ND<0.5	ND<3	ND<1	ND<1	ND<1	1.6	ND<1	ND<1	ND<2	ND<2	0.38	
	12/29/2009	ND<0.5	ND<0.5	2	ND<0.5	ND<0.5	ND<0.5	4.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	1.5	ND<1	ND<1	ND<2	ND<2	0.67	
	3/9/2010	ND<0.5	ND<0.5																				





Sample ID	Sample Date	VOCs																			Other		
		1,1,1-Trichloroethane	1,1,2-Trichlorotrifluoroethane (Freon 113)	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloroethane	Benzene	Chloroethane	Chloroform	cis-1,2-Dichloroethylene	Dichlorodifluoromethane (Freon 12)	Isopropylbenzene	Naphthalene	n-Butylbenzene	n-Propylbenzene	sec-Butylbenzene	tert-Butylbenzene	Tetrachloroethylene	Trichloroethylene	Trichlorofluoromethane (Freon 11)		Vinyl chloride	
	<b>Units</b>	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	mg/l
	<b>SWPC</b>	62000	NE	NE	96	96	710	NE	14100	NE	NE	NE	NE	NE	NE	NE	88	2340	NE	15750	NE	NE	
	<b>ASWPC</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<b>2003 Proposed I/C VC</b>	16000	NE	41000	920	68	310	29000	62	11000	NE	6800	NE	21000	NE	20000	NE	810	67	4200	52	NE	
	<b>2003 Proposed Res VC</b>	6500	NE	3000	190	6.5	130	12000	26	830	93	2800	NE	1500	NE	1500	NE	340	27	1300	1.6	NE	
<b>MW-8b</b>	3/14/2008	ND<1	ND<1	4.5	ND<1	ND<1	ND<1	13.2	ND<1	1	ND<2	2.6	1.2	1.7	ND<1	1.7	1.2	ND<1	ND<1	ND<1	1.3	1.3	
	6/23/2008	ND<1	ND<1	6.1	ND<1	ND<1	ND<1	ND<2	ND<1	1.9	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<0.1	
	9/22/2008	ND<1	ND<1	7.6	ND<1	ND<1	ND<1	ND<2	ND<1	2.3	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	0.8	
	12/4/2008	ND<1	ND<1	8.4	ND<1	ND<1	ND<1	ND<2	ND<1	2.3	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	1.0	ND<1	ND<1	ND<0.1	
	3/25/2009	ND<1	ND<0.5	7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	ND<0.5	ND<1	ND<5	ND<1	ND<0.5	ND<0.5	0.5	ND<0.5	0.9	ND<0.5	ND<0.5	0.22	
	6/29/2009	ND<0.5	ND<0.5	7	0.51	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.2	ND<0.5	ND<0.5	ND<7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	0.2
	9/4/2009	ND<0.5	ND<0.5	8	0.63	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.1	ND<0.5	ND<0.5	ND<3	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	0.14
	12/29/2009	ND<0.5	ND<0.5	5.8	ND<0.5	ND<0.5	ND<0.5	0.69	ND<0.5	2	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	0.18
	3/9/2010	ND<0.5	ND<0.5	6.8	0.55	ND<0.5	ND<0.5	1.6	ND<0.5	2	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	0.16
	6/11/2010	ND<0.5	ND<0.5	5.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.8	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	0.2
	9/1/2010	ND<0.5	ND<0.5	6.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.3	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	0.2
	12/7/2010	ND<0.5	ND<0.5	4.2	ND<0.5	ND<0.5	ND<0.5	1.2	ND<0.5	1.6	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	0.24
	3/8/2011	ND<0.5	ND<0.5	2.2	ND<0.5	ND<0.5	ND<0.5	6	ND<0.5	0.87	ND<0.5	0.9	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	0.43
	9/13/2011	ND<0.5	ND<0.5	1.5	ND<0.5	ND<0.5	ND<0.5	3.7	ND<0.5	ND<0.5	ND<0.5	1.4	7.8	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	0.53
<b>RMW-15</b>	3/14/2008	15.5	1.6	3.3	ND<1	ND<1	ND<1	ND<2	1.5	ND<1	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	1.4	ND<1	ND<0.1
	6/23/2008	11	ND<1	4.2	ND<1	ND<1	ND<1	ND<2	2.6	1.4	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<0.1
	9/22/2008	8.8	ND<1	3	ND<1	ND<1	ND<1	ND<2	4	2	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<0.1
	12/4/2008	5.8	ND<1	5.6	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<0.1
	3/25/2009	10	0.7	4.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2	1.9	ND<0.5	ND<1	ND<5	ND<1	ND<0.5	ND<0.5	ND<0.5	0.8	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.127
	6/30/2009	11	ND<0.5	6.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2	ND<0.5	ND<0.5	ND<7	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<2	0.22
	9/4/2009	14	ND<0.5	4.9	0.7	ND<0.5	ND<0.5	2.3	ND<0.5	2.8	ND<0.5	ND<0.5	ND<3	ND<1	ND<1	ND<1	ND<1	1.2	ND<1	ND<2	ND<2	ND<0.075	
	12/29/2009	7.2	ND<0.5	3.7	ND<0.5	ND<0.5	ND<0.5	0.89	1.4	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	0.17
	3/10/2010	13	ND<0.5	8	0.61	ND<0.5	ND<0.5	ND<0.5	1.2	2.4	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	ND<0.075
	6/11/2010	14	0.61	4.7	0.64	ND<0.5	ND<0.5	ND<0.5	2.3	2.5	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<2	0.076
	9/1/2010	14	0.58	3.4	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5	3.5	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	0.086
	12/7/2010	8.4	ND<0.5	5.2	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.4	1.8	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	0.15
	3/8/2011	5.2	ND<0.5	2.6	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.71	ND<0.5	ND<0.5	ND<0.5	ND<2	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<1	ND<2	ND<1	0.34

**Notes:**  
 Shaded and bold cells indicate an exceedance of the 2003 proposed I/C VC and/or the ASWPC (where applicable)  
 Bold cells indicate an exceedance of the current 2003 proposed Res VC and/or the SWPC  
 RSR compliance was achieved at RMW-15, and sampling was discontinued after the 03/2011 event.  
 SWPC = Surface Water Protection Criteria  
 ASWPC = Alternative Surface Water Protection Criteria  
 I/C VC = Industrial/Commercial Volatilization Criteria  
 ug/l = micrograms per liter  
 mg/l = milligrams per liter  
 VOCs = volatile organic compounds  
 ETPH = extractable total petroleum hydrocarbons  
 NA = not analyzed  
 NE = criteria not established  
 ND<# = not detected above given laboratory detection limit  
 NS = not sampled  
 \* Due to the high concentration of vinyl chloride during the June 2008 sampling event, monitoring well MW-4A was resampled for VOCs only on 7/18/2008

1,4-Dichlorobenzene was detected in MW-4A at a concentration of 30 ug/l during the June 2009 sampling event.  
 1,2,4-Trimethylbenzene was detected in MW-2B at a concentration of 0.73 ug/l during the September 2009 sampling event.  
 Bromodichloromethane was detected in MW-4B at a concentration of 18 ug/l during the September 2009 sampling event.  
 Trans-1,2-Dichloroethylene was detected in MW-4a at a concentration of 0.6 ug/l during the March 2009 sampling event  
 Acetone was detected in MW-7Dup at a concentration of 5.2 ug/l during the March 2011 sampling event.

# ATTACHMENT A

## Groundwater Sampling Logs

HRP Associates, Inc.  
 197 Scott Swamp Road  
 Farmington, Connecticut 06032  
 (860) 674-9570

Monitor Well Data Sheet

Page 1 of 1

Well ID:  
 MW 4A

Site Background Information

Site Location:	IR New Britain	Sampling Dates:	6/3/15
Job Number:	IN601076W	Field Team Leader:	
Weather:	Sunny 65-70	Team Personnel:	BE

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)		Depth to Bottom (ft)	
6/3/15	11:26	BE	Solinst-101	uncorrected		uncorrected	
			corr. factor	corrected	26.38	corrected	35.33

Measurement Point: 2" PVC flw

Well Condition

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	Good	Yes
Concrete Collar	Ponded Water	Comments:		
Good	No			

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
6/3/15	11:28	11:34	11:46	12:25	12:25	12:30	BE	6/3/15

Instrument Mfg & Model

pH	YSI-600XL/556 sn# 14631
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	HF Scientific DRT-15CE sn#

Initial Water Depth (ft):			26.50	Time:	11:25				
Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)	
12:00	26.41	100	6.56	14.45	1180	85.4	0.59	3.20	
12:05	26.41		6.58	14.32	1180	97.8	0.38	1.40	
12:10	26.41		6.57	14.66	1186	108.0	0.29	0.57	
12:15	26.41		6.57	14.32	1196	115.1	0.25	1.12	
12:20	26.41		6.57	13.92	1188	120.6	0.19	0.87	
12:25	26.41	✓	6.57	14.09	1199	122.2	0.24	0.72	
12:30									

Req. Limits for Last 3 Readings	0.1	3%	3%	10mV	10%/>.50	10%/ <5ntu
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Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
GeoPump Peristaltic	Clear	—	3700	30.53

Sample Containers

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
2 vials	40 mL	HCL	4 vials	4 x 40 mL	AS IS
<del>4 Amber</del>	<del>1000 mL</del>	<del>As Is</del>	1 Plastic	500 mL	AS IS
1 Plastic	500 mL	HNO3	1 Plastic	500 mL	19.45 Filtered & HNO3

HRP Associates, Inc.  
 197 Scott Swamp Road  
 Farmington, Connecticut 06032  
 (860) 674-9570

**Monitor Well Data Sheet**

Page 1 of 1

Well ID:  
MW-418

**Site Background Information**

Site Location:	<u>IR New Britain</u>	Sampling Dates:	<u>6/3/15</u>
Job Number:	<u>IN601076N</u>	Field Team Leader:	
Weather:	<u>Sunny 60-65</u>	Team Personnel:	<u>BE</u>

**Ground Water Elevation Data**

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
			Solinst-101	corr. factor	uncorrected	corrected	uncorrected	corrected
<u>6/3/15</u>	<u>10:46</u>	<u>BE</u>			uncorrected		uncorrected	
					corrected	<u>27.50</u>	corrected	<u>57.46</u>

Measurement Point: 2" Puck HW

**Well Condition**

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
<u>Good</u>	<u>Yes</u>	<u>Yes</u>	<u>Good</u>	<u>Yes</u>
Concrete Collar	Ponded Water	Comments: <u>unable to maintain 0-30' drawdown criteria</u>		
<u>Good</u>	<u>NO</u>			

**Well Purging Data**

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
<u>6/3/15</u>	<u>10:45</u>	<u>10:51</u>	<u>10:51</u>	<u>11:31</u>	<u>11:31</u>	<u>11:49</u>	<u>BE</u>	<u>6/3/15</u>

**Instrument Mfg & Model**

pH	YSI-600XL/556 sn# <u>14C31</u>
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
	Initial Water Depth (ft):							
			<u>27.50</u>					
				Time:				
				<u>10:40</u>				
<u>11:06</u>	<u>28.54</u>	<u>120</u>	<u>7.42</u>	<u>13.48</u>	<u>581</u>	<u>88.5</u>	<u>4.21</u>	<u>13.25</u>
<u>11:11</u>	<u>28.89</u>		<u>7.41</u>	<u>13.56</u>	<u>581</u>	<u>78.6</u>	<u>4.80</u>	<u>11.59</u>
<u>11:16</u>	<u>29.26</u>		<u>7.42</u>	<u>13.63</u>	<u>581</u>	<u>106.9</u>	<u>5.30</u>	<u>9.81</u>
<u>11:21</u>	<u>29.37</u>		<u>7.43</u>	<u>13.68</u>	<u>581</u>	<u>112.4</u>	<u>5.62</u>	<u>9.97</u>
<u>11:26</u>	<u>29.51</u>		<u>7.43</u>	<u>13.64</u>	<u>582</u>	<u>116.9</u>	<u>6.18</u>	<u>8.23</u>
<u>11:31</u>	<u>29.62</u>	<u>✓</u>	<u>7.44</u>	<u>13.82</u>	<u>581</u>	<u>119.8</u>	<u>5.64</u>	<u>8.87</u>
<u>11:36</u>								
<u>11:41</u>								
Req. Limits for Last 3 Readings			0.1	3%	3%	10mV	10%/>.50	10%/ <5ntu

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
<u>RED 1.75 Bladder Pump</u> <u>Geopump Peristaltic</u>	<u>Clear</u>	<u>-</u>	<u>4800</u>	<u>46.46</u>

**Sample Containers**

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
2 vials	40 mL	HCL	4 vials	4x40ml	AS IS
1 Amber	1000 mL	As Is	1 Plastic	500ml	AS IS
1 Plastic	500 mL	HNO3	1 Plastic	500ml	0.4% Filter + HNO3

HRP Associates, Inc.  
 197 Scott Swamp Road  
 Farmington, Connecticut 06032  
 (860) 674-9570

**Monitor Well Data Sheet**

Well ID: MW-4a

Page 1 of 1

**Site Background Information**

Site Location:	IR New Britain - Booth Street	Sampling Dates:	1/8/16
Job Number:	ING007.GW	Field Team Leader:	
Weather:	P. Sunny 25-30°F	Team Personnel:	10A

**Ground Water Elevation Data**

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)	Depth to Bottom (ft)
1/8/16	8:11	10	Solinst-101	uncorrected	uncorrected
			corr. factor 0	corrected 26.34	corrected 37.35

Measurement Point: 2" pvc HW cluster

**Well Condition (circle one)**

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	Good	Yes
Concrete Collar	Ponded Water	Comments: 20' well screen		
Good	No			

**Well Purging Data**

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
1/8/16	8:18	8:22	8:22	8:49	8:49	8:50	10	1/8/16

**Instrument Mfg & Model**

pH	YSI-600XL sn# HRP1
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	

Initial Water Depth (ft):	26.34	Time:	8:18					
Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
8:28	26.54	100	6.33	12.12	999	176.3	0.98	1.22
8:33	26.56		6.24	11.94	1001	202.7	0.52	0.58
8:38	26.58		6.24	11.95	1003	214.4	0.44	0.33
8:43	26.60		6.25	12.06	1001	209.3	0.37	0.12
8:48	26.60	✓	6.28	12.16	1002	204.9	0.34	0.06
Req. Limits for Last 3 Readings			0.1	3%	3%	10mV	10%	10%

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
Geo Pump2 peristaltic	clear	-	2700	31.84

**Sample Containers**

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
2 vials	2 x 40mL	HCL			

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 Farmington, Connecticut 06032  
 (860) 674-9570

Monitor Well Data Sheet

Well ID: MW-4b

Page 1 of 2

Site Background Information

Site Location:	IR New Britain - Booth Street	Sampling Dates:	1/8/16
Job Number:	ING0007.GW	Field Team Leader:	
Weather:	M. Sunny 30°F	Team Personnel:	KQ

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
			Solinst-101	corr. factor	uncorrected	corrected	uncorrected	corrected
1/8/16	8:12	KQ		0		27.67		53.52

Measurement Point: 2" pvc HW cluster

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	Good	Yes
Concrete Collar	Ponded Water	Comments:		
Good	No	Unable to maintain 0.3' drawdown criteria		

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
1/8/16	8:50	9:04	9:04	10:04	10:04	10:06	KQ	1/8/16

Instrument Mfg & Model

pH	YSI-600XL sn# HRP 1
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
8:08	28.46	120	7.10	12.32	632	173.4	2.95	55.1
9:13	28.82	80	7.18	12.44	625	172.7	1.26	43.3
9:16	28.86		7.21	12.36	621	164.8	0.92	33.6
9:23	28.95		7.23	12.34	618	162.4	0.74	27.2
9:28	29.06		7.24	12.28	618	161.3	0.68	22.8
9:33	29.12		7.25	12.27	618	162.2	0.57	15.55
9:38	29.08		7.28	12.17	617	157.4	0.50	13.42
9:43	29.14		7.27	12.32	616	157.6	0.48	11.58
9:48	29.21	↓	7.27	12.41	616	162.6	0.44	10.22
Req. Limits for Last 3 Readings			0.1	3%	3%	10mV	10%	10%

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
QED bladder 1.75"	cloudy/clear	-	5160	48.52

Sample Containers

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
2 vials	2 x 40mL	HCL			



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**Monitor Well Data Sheet**

Well ID: MW-4a

**Site Background Information**

Site Location:	IR New Britain - Booth Street	Sampling Dates:	3/10/16
Job Number:	INC0110-GW T-2	Field Team Leader:	
Weather:	M. Cloudy 60°F	Team Personnel:	LR

**Ground Water Elevation Data**

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)	Depth to Bottom (ft)
3/10/16	7:42	LR	Solinst-101	uncorrected	uncorrected
			corr. factor 0	corrected 26.01	corrected 37.35

Measurement Point: 2" pvc HW cluster

**Well Condition (circle one)**

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	Good	Yes
Concrete Collar	Ponded Water	Comments:		20' well screen
Good	No			

**Well Purging Data**

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
3/10/16	7:42	7:50	7:50	8:37	8:37	8:58	LR	3/10/16

Instrument Mfg & Model	
pH	YSI-600XL sn# H201
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	HF Scientific DRT-15CE sn# H203

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
7:56	25.83	110	6.10	13.07	873	118.5	1.19	25.0
8:01	25.82	↓	6.21	13.13	877	136.2	1.15	11.49
8:06	25.81		6.26	13.14	878	153.6	1.01	2.02
8:11	25.81		6.29	13.15	877	164.3	0.90	1.23
8:16	25.81		6.30	13.17	878	177.6	0.77	1.00
8:21	25.80		6.30	13.22	877	180.0	0.63	1.06
8:26	25.80		6.30	13.22	877	179.2	0.55	1.38
8:31	25.80		6.31	13.26	877	179.8	0.60	0.79
8:36	25.80		6.30	13.22	872	179.0	0.57	0.63
Req. Limits for Last 3 Readings			0.1	3%	3%	10mV	10%	10%

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
Geo Pump2 peristaltic	clear	-	5170	31.68

**Sample Containers**

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
2 vials	2 x 40mL	HCL			

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**Monitor Well Data Sheet**

Well ID: MW-4b

Page 1 of 2

**Site Background Information**

Site Location:	IR New Britain - Booth Street	Sampling Dates:	3/10/16
Job Number:	INGO 110-5W T-2	Field Team Leader:	
Weather:	M. Cloudy 65°F	Team Personnel:	KB

**Ground Water Elevation Data**

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)	Depth to Bottom (ft)
3/10/16	7:43	KB	Solinst-101	uncorrected	uncorrected
			corr. factor 0	corrected 27.25	corrected 53.52

Measurement Point: 2" pvc HW cluster

**Well Condition (circle one)**

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	Good	Yes
Concrete Collar	Ponded Water	Comments:		
Good	No	Unable to maintain 0.3' drawdown criteria		

**Well Purging Data**

Date	Equipment Set-up		Time Purging		Sample Collection		Sampler Initials	Instrument Calibration Date
	Start	Finish	Start	Finish	Start	Finish		
3/10/16	8:40	8:53	8:53	10:10	10:10	10:12	KA	3/10/16

**Instrument Mfg & Model**

pH	YSI-600XL sn# 1421
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
8:59	28.28	100	7.10	13.35	618	147.6	2.26	149.9
9:09	28.50		7.19	13.32	615	144.4	1.20	142.6
9:09	28.61		7.24	13.39	613	144.4	0.94	104.7
9:14	28.79		7.27	13.36	613	146.9	0.71	73.2
9:19	28.67		7.29	13.30	613	148.8	0.67	42.0
9:24	28.68		7.31	13.38	612	150.0	0.66	34.9
9:29	28.77		7.32	13.39	611	149.2	0.59	28.0
9:34	28.83		7.32	13.39	609	150.0	0.56	23.7
9:39	28.86		7.31	13.49	607	151.2	0.52	19.25
Req. Limits for Last 3 Readings			0.1	3%	3%	10mV	10%	10%

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
QED bladder	cloudy br / clear	-	7700	48.52

**Sample Containers**

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
2 vials	2 x 40mL	HCL			



HRP Associates, Inc.  
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Monitor Well Data Sheet

Well ID: MW-4a

Page 1 of 1

Site Background Information

Site Location:	IR New Britain - Booth Street	Sampling Dates:	9/10/15
Job Number:	ING007.GW	Field Team Leader:	
Weather:	Overcast Lt Rain 75°F	Team Personnel:	KB

Ground Water Elevation Data

Date	Time	Sampler Name	Equipment Model	Depth to Water (ft)		Depth to Bottom (ft)	
				uncorrected	corrected	uncorrected	corrected
9/10/15	10:05	KB	Solinst-101 corr. factor 0	28.09	28.09	37.33	37.33

Measurement Point: 2" pvc HW cluster DTB post: 37.3

Well Condition (circle one)

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	Good	Yes
Concrete Collar	Ponded Water	Comments: 20' well screen		
Good	No			

Well Purging Data

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
9/10/15	10:05	10:09	10:09	10:47	10:47	10:48	KB	9/10/15

Instrument Mfg & Model

pH	YSI-600XL sn# HRP1
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	HF Scientific DRT-15CE sn# HRP3

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
	Initial Water Depth (ft): 28.09			Time: 10:05				
10:16	28.22	30	6.74	16.68	1446	151.1	0.76	2.05
10:21	28.23		6.33	17.02	1438	160.1	0.55	1.68
10:26	28.24		6.33	17.00	1434	176.7	0.40	1.93
10:31	28.25		6.34	16.10	1447	182.3	0.34	1.31
10:36	28.26		6.36	16.03	1445	176.1	0.33	0.98
10:41	28.26		6.37	15.90	1441	170.2	0.32	0.70
10:46	28.27		6.36	15.87	1442	166.8	0.37	0.73
Req. Limits for Last 3 Readings			0.1	3%	3%	10mV	10%	10%

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
Geo Pump2 peristaltic	clear	-	3040	32.71

Sample Containers

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
1 amber	1L	As1s			
2 vials	2x 40mL	HCL			

HRP Associates, Inc.  
 197 Scott Swamp Road  
 Farmington, Connecticut 06032  
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Monitor Well Data Sheet

Well ID: MW-4b

Page 1 of 2

**Site Background Information**

Site Location:	IR New Britain - Booth Street	Sampling Dates:	9/10/15
Job Number:	ING0107.GW	Field Team Leader:	
Weather:	Rain 75°F	Team Personnel:	KB

**Ground Water Elevation Data**

Date	Time	Sampler Name	Equipment Model		Depth to Water (ft)		Depth to Bottom (ft)	
			Solinst-101	corr. factor	uncorrected	corrected	uncorrected	corrected
9/10/15	10:06	KB		0		28.94		53.39

Measurement Point: 2" pvc HW cluster

DTB post: 53.52

**Well Condition (circle one)**

General Condition	Visible Well ID	Well Cap Present	Well Plumbness	Lock
Good	Yes	Yes	Good	Yes
Concrete Collar	Ponded Water	Comments:		
Good	No			

**Well Purging Data**

Date	Time						Sampler Initials	Instrument Calibration Date
	Equipment Set-up		Purging		Sample Collection			
	Start	Finish	Start	Finish	Start	Finish		
9/10/15	10:50	10:58	10:58	12:12	12:12	12:13	KB	9/10/15

**Instrument Mfg & Model**

pH	YSI-600XL sn# HR11
Temp.	
Sp. Cond.	
ORP	
DO	
Turbidity	HF Scientific DRT-15CE sn# HR13

Time	Water Depth (ft)	Flow Rate (ml/min)	pH (s.u.)	Temp (°C)	Sp Con (uS)	ORP (mV)	DO (mg/l)	Turbidity (ntu)
			7.91					
				10:50				
11:06	29.53	80	7.16	16.61	659	141.7	2.26	43.1
11:11	29.48		7.13	17.35	636	143.2	1.95	41.9
11:16	29.52		7.13	17.83	628	144.7	1.87	35.3
11:21	29.52		7.11	18.00	627	145.1	1.36	30.9
11:26	29.52		7.11	18.06	628	145.1	1.18	25.5
11:31	29.53		7.10	18.04	628	144.2	1.03	18.86
11:36	29.52		7.13	18.07	623	141.6	0.88	16.22
11:41	29.50		7.09	18.19	622	143.6	0.97	12.92
11:46	29.53		7.11	18.02	624	142.2	0.88	12.56
Req. Limits for Last 3 Readings			0.1	3%	3%	10mV	10%	10%

Pump Mfg & Model	Color	Odor	Purge Vol (ml)	Sample Depth (ft.)
QED bladder 1.75"	clear	-	5920	48.39

**Sample Containers**

Type & No.	Volume	Preservative	Type & No.	Volume	Preservative
4-amber	1L	As is			
2 vials	2 x 40mL	HCL			



# ATTACHMENT B

## Analytical Reports

January 13, 2016

HRP Associates, Inc.  
197 Scott Swamp Road  
Farmington, CT 06032

**Attn: Ms. Jenny Mooney**

Please find attached laboratory report(s) for the samples submitted on:  
**January 08, 2016.**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing or the test results, please have the following information readily available:

**Lab No.** : 0116078  
**PO/Job No.** : ING0107GW  
**Invoice No.** : 196256  
**Customer No.** : 350

Please contact us if you have any questions.

Very truly yours,

  
Stephen J. Franco  
Laboratory Director  
PH-0547



**STEPHEN J. FRANCO**  
Laboratory Director  
**PHONE ■ 203/634-3731**

[www.ctl-web.com](http://www.ctl-web.com) / [ctestlab@erols.com](mailto:ctestlab@erols.com)  
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

**REASONABLE CONFIDENCE PROTOCOL  
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM**

Laboratory Name: Connecticut Testing Lab's, Inc. Client: HRP Associates, Inc.  
 Project Location: \_\_\_\_\_ Project Number: ING0107GW  
 Laboratory Sample Id(s): 325-327 Sampling Date(s): 01/08/16  
 List RCP Method(s) Used: 8260 CTL Lab #: 0116078

Reactivation  Date Reactivated: \_\_\_\_\_

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	<i>VPH and EPH Methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature? <input checked="" type="checkbox"/> Iced <input type="checkbox"/> No Ice <input type="checkbox"/> Iced (insufficient time to cool samples)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Na <input type="checkbox"/> Time
4	Was all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Na
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Partial 8260 list
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.



Authorized Signature: \_\_\_\_\_  
 Printed Name: Stephen J. Franco

Position: Lab Director PH-0547  
 Date: 01/12/16

Name of Laboratory: Connecticut Testing Laboratories, Inc.

---

# CASE NARRATIVE

## Connecticut Testing Laboratories, Inc.

**Prepared for:**

HRP Associates, Inc.  
197 Scott Swamp Rd  
Farmington, CT 06032

**Order#:** 0116078

**Project:** ING0107GW

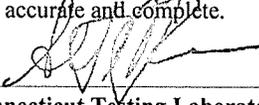
The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
MW-4A	325	WATER	01/08/2016	01/08/2016
MW-4B	326	WATER	01/08/2016	01/08/2016
TB	327	WATER	01/08/2016	01/08/2016

**There were no anomalies associated with the reported data.**

The enclosed results of analyses are representative of the samples as received by the laboratory. Connecticut Testing Laboratories, Inc. makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: \_\_\_\_\_

  
Connecticut Testing Laboratories, Inc.

Date: \_\_\_\_\_

1/12/16

Date Samples Received: 01/08/2016

Client Name: HRP Associates, Inc.	CTL Lab No.: 0116078
Report Date: 01/12/2016	PO No: ING0107GW
Method #: 8260B/5030	Analyst: MDR

**RESULTS OF ANALYSIS**

**EPA 8260B Halogens RCP**

Matrix Type:	WATER	WATER	WATER
CTL Sample No.:	325	326	327
Field ID:	MW-4A	MW-4B	TB
Date Analyzed:	01/11/2016	01/11/2016	01/11/2016
Date Extracted:	01/11/2016	01/11/2016	01/11/2016

Parameters	Units	RL				
Vinyl chloride	ug/L	0.5	ND	2.0	ND	
1,2-Dichloroethane-d4	%	----	98	94	94	
Toluene-d8	%	----	96	98	96	
4-Bromofluorobenzene	%	----	101	96	96	

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

**EPA 8260B Halogens RCP**

Order#: 0116078

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0049822-02			ND		
<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0049822-03		48.0	49.0	102.1%	

Type of QC	Surrogates	% Recovered	QC Limits (%)	
BLANK	1,2-Dichloroethane-d4	94%	70	130
BLANK	Toluene-d8	95%	70	130
BLANK	4-Bromofluorobenzene	91%	70	130
Type of QC	Surrogates	% Recovered	QC Limits (%)	
CONTROL	1,2-Dichloroethane-d4	83%	70	130
CONTROL	Toluene-d8	87%	70	130
CONTROL	4-Bromofluorobenzene	102%	70	130

RCP DQA SUMMARY TABLE

EPA Method 8260B  
Halogens

CTL Lab No.: 0016078  
Client: HRP Associates, Inc.  
Project: ING0107GW

Sample #	Analyte	QC Type	Calibr.		RF	RCP Criteria	Bias	Notes
			Date	%DEV				
325-327	VINYL CHLORIDE	ICAL	1/6/16			<15% RSD, CCCs ≤30% RSD, RF≥0.05		No Anomalies
325-327	VINYL CHLORIDE	ICV	1/6/16			+/- 20% Dev		No Anomalies
325-327	VINYL CHLORIDE	ITUNE	1/6/16			See Method		No Anomalies

QC Type	Result	Spike Value	%D	%R	RCP Criteria	Bias	RPD Bias	Notes
CCAL					+/-30%D			No Anomalies
TUNE					See Method			No Anomalies
MB	ND				<RL			No Anomalies
LCS					70-130%R			No Anomalies
SR					70-130%R			No Anomalies
IS					50% to 200% A			No Anomalies
MS					70-130%R			
MSD					RPD≤30%			
DUPE					RPD≤30%			

BATCH = Series of samples analyzed under one DQA summary.

Bias: L=Low H= High NDR=Non Directional

ITUNE= Initial Tune BFB

ICAL = Initial Calibration

ICV= Initial Calibration Verification 2nd Source

CCAL=Continuing Calibration

A= Area counts compared to CCAL

CCGs= Calibration Check Compounds

MB= Method Blank

LCS= Laboratory Control Sample

SR=Surrogate Recovery %

MS= Matrix Spike

MSD= Matrix Spike Dupe

DUPE= Laboratory Duplicate

% RSD= Relative Standard Deviation

%R= % Recovery

%D= % Drift

RPD= Relative Percent Difference

IS= Internal Standard

ND= None Detected



March 16, 2016

HRP Associates, Inc.  
197 Scott Swamp Road  
Farmington, CT 06032

**Attn: Ms. Jenny Mooney**

Please find attached laboratory report(s) for the samples submitted on:  
**March 11, 2016.**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing or the test results, please have the following information readily available:

Lab No. : 0316153  
PO/Job No. : ING0110GW  
Invoice No. : 197185  
Customer No. : 350

Please contact us if you have any questions.

Very truly yours,

  
Stephen J. Franco  
Laboratory Director  
PH-0547



STEPHEN J. FRANCO  
Laboratory Director  
PHONE ■ 203/634-3731

[www.ctl-web.com](http://www.ctl-web.com) / [ctestlab@erols.com](mailto:ctestlab@erols.com)  
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451  
Page 1 of 7

**REASONABLE CONFIDENCE PROTOCOL  
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM**

Laboratory Name: Connecticut Testing Lab's, Inc. Client: HRP Associates, Inc.  
 Project Location: \_\_\_\_\_ Project Number: ING0110GW  
 Laboratory Sample Id(s): 3634-3636 Sampling Date(s): 03/10/16  
 List RCP Method(s) Used: 8260 CTL Lab #: 0316153

Reactivation  Date Reactivated: \_\_\_\_\_

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	<i>VPH and EPH Methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature? <input checked="" type="checkbox"/> Iced <input type="checkbox"/> No Ice <input type="checkbox"/> Iced (insufficient time to cool samples)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Na <input type="checkbox"/> Time
4	Was all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Na
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Partial 8260 list
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.



Authorized Signature: \_\_\_\_\_  
 Printed Name: Stephen J. Franco

Position: Lab Director PH-0547  
 Date: 03/15/16

Name of Laboratory: Connecticut Testing Laboratories, Inc.

---

# CASE NARRATIVE

Connecticut Testing Laboratories, Inc.

**Prepared for:**

HRP Associates, Inc.  
197 Scott Swamp Rd  
Farmington, CT 06032

**Order#:** 0316153

**Project:** ING0110GW

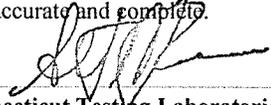
The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
MW-4A	3634	WATER	03/10/2016	03/11/2016
MW-4B	3635	WATER	03/10/2016	03/11/2016
TB	3636	WATER	03/10/2016	03/11/2016

**There were no anomalies associated with the reported data.**

The enclosed results of analyses are representative of the samples as received by the laboratory. Connecticut Testing Laboratories, Inc. makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: \_\_\_\_\_



Connecticut Testing Laboratories, Inc.

Date: \_\_\_\_\_

3/15/16

Date Samples Received: 03/11/2016

Client Name: HRP Associates, Inc.	CTL Lab No.: 0316153
Report Date: 03/15/2016	PO No: ING0110GW
Method #: 8260B	Analyst: MDR

**RESULTS OF ANALYSIS**

Matrix Type:	WATER	WATER	WATER
CTL Sample No.:	3634	3635	3636
Field ID:	MW-4A	MW-4B	TB
Date Analyzed:	03/11/2016	03/11/2016	03/11/2016
Date Extracted:	03/11/2016	03/11/2016	03/11/2016

Parameters	Units	RL				
1,2-Dichloroethane-d4	%	----	94	94	95	
4-Bromofluorobenzene	%	----	94	93	93	
Toluene-d8	%	----	105	101	92	
Vinyl chloride	ug/L	0.5	ND	1.4	ND	

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

### Test Parameters

Order#: 0316153

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0050749-02			ND		
<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0050749-03		48.0	47.0	97.9%	

Type of QC	Surrogates	% Recovered	QC Limits (%)	
BLANK	1,2-Dichloroethane-d4	96%	70	130
BLANK	4-Bromofluorobenzene	98%	70	130
BLANK	Toluene-d8	94%	70	130
Type of QC	Surrogates	% Recovered	QC Limits (%)	
CONTROL	1,2-Dichloroethane-d4	89%	70	130
CONTROL	4-Bromofluorobenzene	98%	70	130
CONTROL	Toluene-d8	88%	70	130

CONNECTICUT TESTING LAB'S, INC.

EPA Method 8260B  
Select Analytes

CTL Lab No.: 0316153  
Client: HRP Associates, Inc.  
Project: ING0110GW

RCP DQA SUMMARY TABLE

CTL		QC		Calibr.		RCP		Notes	
Sample #	Analyte	Type	Date	%DEV	RF	Criteria	Bias		
3634-3636	Vinyl Chloride	ICAL	3/10/16			≤15% RSD, CCCs ≤30% RSD, RF≥0.05			No Anomalies
3634-3636	Vinyl Chloride	ICV	3/10/16			+/- 20% Dev			No Anomalies
3634-3636	Vinyl Chloride	ITUNE	3/10/16			See Method			No Anomalies

QC		Spike		RCP		RPD	
Type	Result	Value	%D	%R	Criteria	Bias	Bias
CCAL					+/-30%D		
TUNE					See Method		
MB	ND				<RL		
LCS					70-130%R		
SR					70-130%R		
IS					50% to 200% A		
MS					70-130%R		
MSD					RPD≤30%		
DUPE					RPD≤30%		

BATCH = Series of samples analyzed under one DQA summary.

Bias: L=Low H=High NDR=Non Directional

ITUNE= Initial Tune BFB

ICAL = Initial Calibration

ICV= Initial Calibration Verification 2nd Source

CCAL=Continuing Calibration

A= Area counts compared to CCAL

CCC= Calibration Check Compounds

MB= Method Blank

LCS= Laboratory Control Sample

SR=Surrogate Recovery %

MS= Matrix Spike

MSD= Matrix Spike Dupe

DUPE= Laboratory Duplicate

% RSD= Relative Standard Deviation

%R= % Recovery

%D= % Drift

RPD= Relative Percent Difference

IS= Internal Standard

ND= None Detected



June 15, 2015

HRP Associates, Inc.  
197 Scott Swamp Road  
Farmington, CT 06032

**Attn: Ms. Jenny Mooney**

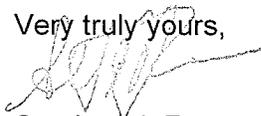
Please find attached laboratory report(s) for the samples submitted on:  
**June 04, 2015.**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing or the test results, please have the following information readily available:

**Lab No.** : 0615080  
**PO/Job No.** : ING0107.GW  
**Invoice No.** : 192868  
**Customer No.** : 350

Please contact us if you have any questions.

Very truly yours,



Stephen J. Franco  
Laboratory Director  
PH-0547



**STEPHEN J. FRANCO**  
Laboratory Director  
**PHONE ■ 203/634-3731**

[www.ctl-web.com](http://www.ctl-web.com) / [ctestlab@erols.com](mailto:ctestlab@erols.com)  
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

**REASONABLE CONFIDENCE PROTOCOL  
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM**

Laboratory Name: Connecticut Testing Lab's, Inc. Client: HRP Associates, Inc.

Project Location: \_\_\_\_\_ Project Number: ING0107.GW

Laboratory Sample Id(s): 7929, 7930, 7933 Sampling Date(s): 06/03/15

List RCP Method(s) Used: 8260 CTL Lab #: 0615080

Reactivation  Date Reactivated: \_\_\_\_\_

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	<i>VPH and EPH Methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature? <input checked="" type="checkbox"/> Iced <input type="checkbox"/> No Ice <input type="checkbox"/> Iced (insufficient time to cool samples)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Na <input type="checkbox"/> Time
4	Was all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Na
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Partial 8260 list for 7929 & 7930
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.



Authorized Signature: \_\_\_\_\_  
Printed Name: Stephen J. Franco

Position: Lab Director PH-0547  
Date: 06/12/15

Name of Laboratory: Connecticut Testing Laboratories, Inc.

---

# CASE NARRATIVE

## Connecticut Testing Laboratories, Inc.

**Prepared for:**

HRP Associates, Inc.  
197 Scott Swamp Rd  
Farmington, CT 06032

**Order#:** 0615080

**Project:** ING0107.GW

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
MW-4A	7929	WATER	06/03/2015	06/04/2015
MW-4B	7930	WATER	06/03/2015	06/04/2015
MW-8A	7931	WATER	06/03/2015	06/04/2015
RMW-3	7932	WATER	06/03/2015	06/04/2015
TB	7933	WATER	06/03/2015	06/04/2015

Iron and Manganese are not currently on the RCP metals analyte list, however, all method specific quality control and performance standards have been analyzed and meet the requirements of the method used.

There is currently no RCP criteria for Sulfate, Nitrate, Chloride, Methane, Ethane or Ethene analyses, however, QC data has been reported and meets the requirements of each non-RCP method.

There were no anomalies associated with the reported data.

The enclosed results of analyses are representative of the samples as received by the laboratory. Connecticut Testing Laboratories, Inc. makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: \_\_\_\_\_

\_\_\_\_\_  
Connecticut Testing Laboratories, Inc.

Date: \_\_\_\_\_

6/12/15

Date Samples Received: 06/04/2015

Client Name: HRP Associates, Inc.

CTL Lab No.: 0615080

Report Date: 06/12/2015

PO No: ING0107.GW

Analyst: CP

**RESULTS OF ANALYSIS**

Matrix Type: WATER WATER WATER  
CTL Sample No.: 7929 7930 7932  
Field ID: MW-4A MW-4B RMW-3

Parameters	Date Tested	RL					Method #
Chloride-mg/L	06/08/2015	1.0	224	97.3	72.1		4500-Cl E
Iron, Dissolved-mg/L	06/11/2015	0.05	ND	0.09	9.45		6010B
Iron, Total-mg/L	06/11/2015	0.05	ND	0.31	11.9		6010B
Manganese, Dissolved-mg/L	06/11/2015	0.01	0.08	0.02	6.59		6010B
Manganese, Total-mg/L	06/11/2015	0.01	0.08	0.73	6.59		6010B
Nitrate-N-mg/L	06/05/2015	0.1	0.6	0.3	ND		4500-NO3 F
Sulfate-mg/L	06/09/2015	5	37	20	27		375.2

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

Date Samples Received: 06/04/2015

Client Name: HRP Associates, Inc.	CTL Lab No.: 0615080
Report Date: 06/12/2015	PO No: ING0107.GW
	Analyst: LP

**RESULTS OF ANALYSIS**

Matrix Type: WATER  
CTL Sample No.: 7931  
Field ID: MW-8A

Parameters	Date Tested	RL				Method #
Chloride-mg/L	06/08/2015	1.0	74.4			4500-CI E
Iron, Dissolved-mg/L	06/11/2015	0.5	24.7			6010B
Iron, Total-mg/L	06/11/2015	0.5	28.9			6010B
Manganese, Dissolved-mg/L	06/11/2015	0.01	5.92			6010B
Manganese, Total-mg/L	06/11/2015	0.01	6.12			6010B
Nitrate-N-mg/L	06/05/2015	0.1	0.2			4500-NO3 F
Sulfate-mg/L	06/09/2015	5	32			375.2

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

Date Samples Received: 06/04/2015

Client Name: HRP Associates, Inc.	CTL Lab No.: 0615080
Report Date: 06/12/2015	PO No: ING0107.GW
Method #: RSK175	Analyst: SO

**RESULTS OF ANALYSIS**

Matrix Type:	WATER	WATER	WATER	WATER
CTL Sample No.:	7929	7930	7931	7932
Field ID:	MW-4A	MW-4B	MW-8A	RMW-3
Date Analyzed:	06/08/2015	06/08/2015	06/08/2015	06/08/2015
Date Extracted:	06/08/2015	06/08/2015	06/08/2015	06/08/2015

Parameters	Units	RL				
Ethane	mg/L	0.010	ND	ND	ND	ND
Ethene	mg/L	0.010	ND	ND	ND	ND
Methane	mg/L	0.010	0.0110	0.191	0.356	0.792

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

Date Samples Received: 06/04/2015

Client Name: HRP Associates, Inc.	CTL Lab No.: 0615080
Report Date: 06/12/2015	PO No: ING0107.GW
Method #: 5030/8260B	Analyst: HG

**RESULTS OF ANALYSIS**

***EPA 8260B Halogens RCP***

Matrix Type:	WATER	WATER
CTL Sample No.:	7929	7930
Field ID:	MW-4A	MW-4B
Date Analyzed:	06/06/2015	06/09/2015
Date Extracted:	06/06/2015	06/09/2015

Parameters	Units	RL				
Vinyl chloride	ug/L	0.5	ND	ND		
1,2-Dichloroethane-d4	%	----	102	105		

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

Date Samples Received: 06/04/2015

Client Name: HRP Associates, Inc.	CTL Lab No.: 0615080
Report Date: 06/12/2015	PO No: ING0107.GW
Method #: 5030/8260B	Analyst: MDR

**RESULTS OF ANALYSIS**

**EPA 8260B Volatile Organics RCP**

Matrix Type: WATER  
CTL Sample No.: 7933  
Field ID: TB  
Date Analyzed: 06/05/2015  
Date Extracted: 06/05/2015

Parameters	Units	RL			
Dichlorodifluoromethane	ug/L	0.5	ND		
Chloromethane	ug/L	0.5	ND		
Vinyl chloride	ug/L	0.5	ND		
Bromomethane	ug/L	0.5	ND		
Chloroethane	ug/L	0.5	ND		
Trichlorofluoromethane	ug/L	0.5	ND		
Trichlorotrifluoroethane	ug/L	0.5	ND		
Acetone	ug/L	5.0	ND		
1,1-Dichloroethylene	ug/L	0.5	ND		
Methylene chloride	ug/L	0.5	ND		
Methyl tert-butyl ether (MTBE)	ug/L	0.5	ND		
Carbon disulfide	ug/L	0.5	ND		
Acrylonitrile	ug/L	0.5	ND		
trans-1,2-Dichloroethylene	ug/L	0.5	ND		
1,1-Dichloroethane	ug/L	0.5	ND		
Methyl ethyl ketone	ug/L	5.0	ND		
2,2-Dichloropropane	ug/L	0.5	ND		
cis-1,2-Dichloroethylene	ug/L	0.5	ND		
Tetrahydrofuran	ug/L	5.0	ND		
Chloroform	ug/L	0.5	ND		
Bromochloromethane	ug/L	0.5	ND		
1,1,1-Trichloroethane	ug/L	0.5	ND		
1,1-Dichloropropylene	ug/L	0.5	ND		
Carbon tetrachloride	ug/L	0.5	ND		
Benzene	ug/L	0.5	ND		
1,2-Dichloroethane	ug/L	0.5	ND		
Trichloroethylene	ug/L	0.5	ND		
1,2-Dichloropropane	ug/L	0.5	ND		
Bromodichloromethane	ug/L	0.5	ND		
Dibromomethane	ug/L	0.5	ND		
MIBK	ug/L	5.0	ND		
cis-1,3-Dichloropropylene	ug/L	0.5	ND		
Toluene	ug/L	0.5	ND		
trans-1,3-Dichloropropylene	ug/L	0.5	ND		

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

Date Samples Received: 06/04/2015

Client Name: HRP Associates, Inc.	CTL Lab No.: 0615080
Report Date: 06/12/2015	PO No: ING0107.GW
Method #: 5030/8260B	Analyst: MDR

**RESULTS OF ANALYSIS**

**EPA 8260B Volatile Organics RCP**

Matrix Type: WATER  
CTL Sample No.: 7933  
Field ID: TB  
Date Analyzed: 06/05/2015  
Date Extracted: 06/05/2015

Parameters	Units	RL				
1,1,2-Trichloroethane	ug/L	0.5	ND			
Methyl butyl ketone	ug/L	5.0	ND			
Tetrachloroethylene	ug/L	0.5	ND			
1,3-Dichloropropane	ug/L	0.5	ND			
Dibromochloromethane	ug/L	0.5	ND			
1,2-Dibromoethane	ug/L	0.5	ND			
Chlorobenzene	ug/L	0.5	ND			
Ethyl Benzene	ug/L	0.5	ND			
1,1,1,2-Tetrachloroethane	ug/L	0.5	ND			
p/m-Xylene	ug/L	0.5	ND			
o-Xylene	ug/L	0.5	ND			
Styrene	ug/L	0.5	ND			
Bromoform	ug/L	0.5	ND			
Isopropylbenzene	ug/L	0.5	ND			
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND			
Bromobenzene	ug/L	0.5	ND			
n-Propylbenzene	ug/L	0.5	ND			
1,2,3-Trichloropropane	ug/L	0.5	ND			
2-Chlorotoluene	ug/L	0.5	ND			
1,2,4-Trimethylbenzene	ug/L	0.5	ND			
t-1,4-Dichloro-2-butene	ug/L	0.5	ND			
4-Chlorotoluene	ug/L	0.5	ND			
tert-Butylbenzene	ug/L	0.5	ND			
1,3,5-Trimethylbenzene	ug/L	0.5	ND			
p-Isopropyltoluene	ug/L	0.5	ND			
1,3-Dichlorobenzene	ug/L	0.5	ND			
sec-Butylbenzene	ug/L	0.5	ND			
1,4-Dichlorobenzene	ug/L	0.5	ND			
n-Butylbenzene	ug/L	0.5	ND			
1,2-Dichlorobenzene	ug/L	0.5	ND			
1,2-Dibromo-3-chloropropane	ug/L	0.5	ND			
1,2,4-Trichlorobenzene	ug/L	0.5	ND			
Hexachlorobutadiene	ug/L	0.45	ND			
Naphthalene	ug/L	0.5	ND			

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

Date Samples Received: 06/04/2015

Client Name: HRP Associates, Inc.	CTL Lab No.: 0615080
Report Date: 06/12/2015	PO No: ING0107.GW
Method #: 5030/8260B	Analyst: MDR

**RESULTS OF ANALYSIS**

**EPA 8260B Volatile Organics RCP**

Matrix Type: WATER  
CTL Sample No.: 7933  
Field ID: TB  
Date Analyzed: 06/05/2015  
Date Extracted: 06/05/2015

Parameters	Units	RL				
1,2,3-Trichlorobenzene	ug/L	0.5	ND			
1,2-Dichloroethane-d4	%	----	104			
Toluene-d8	%	----	95			
4-Bromofluorobenzene	%	----	96			

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
165 Gracey Avenue / Meriden, CT 06451  
(203) 634-3731 (Fax) 630-1336  
Certification CT-PH0547 / MA-CT035

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

### Test Parameters

Order#: 0615080

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0046800-02			ND		
Ethane-mg/L	0046831-02			ND		
Ethene-mg/L	0046831-02			ND		
Iron, Dissolved-mg/L	0046825-01			ND		
Iron, Total-mg/L	0046825-01			ND		
Manganese, Dissolved-mg/L	0046825-01			ND		
Manganese, Total-mg/L	0046825-01			ND		
Methane-mg/L	0046831-02			ND		
Nitrate-N-mg/L	0046763-02			ND		
Sulfate-mg/L	0046801-02			ND		
<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Chloride-mg/L	0046800-03		39.5	38.6	97.7%	
Ethane-mg/L	0046831-03		0.010	0.0135	92.6%	
Iron, Dissolved-mg/L	0046825-02		2.58	2.61	101.2%	
Iron, Total-mg/L	0046825-02		2.58	2.61	101.2%	
Manganese, Dissolved-mg/L	0046825-02		0.540	0.560	104.1%	
Manganese, Total-mg/L	0046825-02		0.540	0.560	104.1%	
Methane-mg/L	0046831-03		0.010	0.00778	98.%	
Nitrate-N-mg/L	0046763-03		5.1	5.5	107.8%	
Sulfate-mg/L	0046801-03		37.0	33.0	89.2%	

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

EPA 8260B Halogens RCP

Order#: 0615080

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0046790-02			ND		
<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0046790-03		48.0	49.0	102.1%	

Type of QC	Surrogates	% Recovered	QC Limits (%)	
BLANK	1,2-Dichloroethane-d4	99%	70	130
Type of QC	Surrogates	% Recovered	QC Limits (%)	
CONTROL	1,2-Dichloroethane-d4	83%	70	130

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

### EPA 8260B Volatile Organics RCP

Order#: 0615080

<i>BLANK</i> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pet (%) Recovery	RPD
Dichlorodifluoromethane-ug/L	0046768-02			ND		
Chloromethane-ug/L	0046768-02			ND		
Vinyl chloride-ug/L	0046768-02			ND		
Bromomethane-ug/L	0046768-02			ND		
Chloroethane-ug/L	0046768-02			ND		
Trichlorofluoromethane-ug/L	0046768-02			ND		
Trichlorotrifluoroethane-ug/L	0046768-02			ND		
Acetone-ug/L	0046768-02			ND		
1,1-Dichloroethylene-ug/L	0046768-02			ND		
Methylene chloride-ug/L	0046768-02			ND		
Methyl tert-butyl ether (MTBE)-ug/L	0046768-02			ND		
Carbon disulfide-ug/L	0046768-02			ND		
Acrylonitrile-ug/L	0046768-02			ND		
trans-1,2-Dichloroethylene-ug/L	0046768-02			ND		
1,1-Dichloroethane-ug/L	0046768-02			ND		
Methyl ethyl ketone-ug/L	0046768-02			ND		
2,2-Dichloropropane-ug/L	0046768-02			ND		
cis-1,2-Dichloroethylene-ug/L	0046768-02			ND		
Tetrahydrofuran-ug/L	0046768-02			ND		
Chloroform-ug/L	0046768-02			ND		
Bromochloromethane-ug/L	0046768-02			ND		
1,1,1-Trichloroethane-ug/L	0046768-02			ND		
1,1-Dichloropropylene-ug/L	0046768-02			ND		
Carbon tetrachloride-ug/L	0046768-02			ND		
Benzene-ug/L	0046768-02			ND		
1,2-Dichloroethane-ug/L	0046768-02			ND		
Trichloroethylene-ug/L	0046768-02			ND		
1,2-Dichloropropane-ug/L	0046768-02			ND		
Bromodichloromethane-ug/L	0046768-02			ND		
Dibromomethane-ug/L	0046768-02			ND		
MIBK-ug/L	0046768-02			ND		
cis-1,3-Dichloropropylene-ug/L	0046768-02			ND		
Toluene-ug/L	0046768-02			ND		
trans-1,3-Dichloropropylene-ug/L	0046768-02			ND		
1,1,2-Trichloroethane-ug/L	0046768-02			ND		
Methyl butyl ketone-ug/L	0046768-02			ND		
Tetrachloroethylene-ug/L	0046768-02			ND		
1,3-Dichloropropane-ug/L	0046768-02			ND		
Dibromochloromethane-ug/L	0046768-02			ND		
1,2-Dibromoethane-ug/L	0046768-02			ND		

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

### EPA 8260B Volatile Organics RCP

Order#: 0615080

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pet (%) Recovery	RPD
Chlorobenzene-ug/L	0046768-02			ND		
Ethyl Benzene-ug/L	0046768-02			ND		
1,1,1,2-Tetrachloroethane-ug/L	0046768-02			ND		
p/m-Xylene-ug/L	0046768-02			ND		
o-Xylene-ug/L	0046768-02			ND		
Styrene-ug/L	0046768-02			ND		
Bromoform-ug/L	0046768-02			ND		
Isopropylbenzene-ug/L	0046768-02			ND		
1,1,2,2-Tetrachloroethane-ug/L	0046768-02			ND		
Bromobenzene-ug/L	0046768-02			ND		
n-Propylbenzene-ug/L	0046768-02			ND		
1,2,3-Trichloropropane-ug/L	0046768-02			ND		
2-Chlorotoluene-ug/L	0046768-02			ND		
1,2,4-Trimethylbenzene-ug/L	0046768-02			ND		
t-1,4-Dichloro-2-butene-ug/L	0046768-02			ND		
4-Chlorotoluene-ug/L	0046768-02			ND		
tert-Butylbenzene-ug/L	0046768-02			ND		
1,3,5-Trimethylbenzene-ug/L	0046768-02			ND		
p-Isopropyltoluene-ug/L	0046768-02			ND		
1,3-Dichlorobenzene-ug/L	0046768-02			ND		
sec-Butylbenzene-ug/L	0046768-02			ND		
1,4-Dichlorobenzene-ug/L	0046768-02			ND		
n-Butylbenzene-ug/L	0046768-02			ND		
1,2-Dichlorobenzene-ug/L	0046768-02			ND		
1,2-Dibromo-3-chloropropane-ug/L	0046768-02			ND		
1,2,4-Trichlorobenzene-ug/L	0046768-02			ND		
Hexachlorobutadiene-ug/L	0046768-02			ND		
Naphthalene-ug/L	0046768-02			ND		
1,2,3-Trichlorobenzene-ug/L	0046768-02			ND		
<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pet (%) Recovery	RPD
Dichlorodifluoromethane-ug/L	0046768-03		48.0	45.0	93.8%	
Chloromethane-ug/L	0046768-03		48.0	50.0	104.2%	
Vinyl chloride-ug/L	0046768-03		48.0	51.0	106.3%	
Bromomethane-ug/L	0046768-03		48.0	48.0	100.0%	
Chloroethane-ug/L	0046768-03		48.0	49.0	102.1%	
Trichlorofluoromethane-ug/L	0046768-03		48.0	48.0	100.0%	
Trichlorotrifluoroethane-ug/L	0046768-03		48.0	51.0	106.3%	
Acetone-ug/L	0046768-03		48.0	50.0	104.2%	
1,1-Dichloroethylene-ug/L	0046768-03		48.0	51.0	106.3%	

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

EPA 8260B Volatile Organics RCP

Order#: 0615080

<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Methylene chloride-ug/L	0046768-03		48.0	45.0	93.8%	
Methyl tert-butyl ether (MTBE)-ug/L	0046768-03		48.0	47.0	97.9%	
Carbon disulfide-ug/L	0046768-03		48.0	49.0	102.1%	
Acrylonitrile-ug/L	0046768-03		48.0	49.0	102.1%	
trans-1,2-Dichloroethylene-ug/L	0046768-03		48.0	51.0	106.3%	
1,1-Dichloroethane-ug/L	0046768-03		48.0	46.0	95.8%	
Methyl ethyl ketone-ug/L	0046768-03		48.0	47.0	97.9%	
2,2-Dichloropropane-ug/L	0046768-03		48.0	46.0	95.8%	
cis-1,2-Dichloroethylene-ug/L	0046768-03		48.0	44.0	91.7%	
Tetrahydrofuran-ug/L	0046768-03		48.0	50.0	104.2%	
Chloroform-ug/L	0046768-03		48.0	46.0	95.8%	
Bromochloromethane-ug/L	0046768-03		48.0	43.0	89.6%	
1,1,1-Trichloroethane-ug/L	0046768-03		48.0	53.0	110.4%	
1,1-Dichloropropylene-ug/L	0046768-03		48.0	50.0	104.2%	
Carbon tetrachloride-ug/L	0046768-03		48.0	54.0	112.5%	
Benzene-ug/L	0046768-03		48.0	54.0	112.5%	
1,2-Dichloroethane-ug/L	0046768-03		48.0	49.0	102.1%	
Trichloroethylene-ug/L	0046768-03		48.0	55.0	114.6%	
1,2-Dichloropropane-ug/L	0046768-03		48.0	51.0	106.3%	
Bromodichloromethane-ug/L	0046768-03		48.0	49.0	102.1%	
Dibromomethane-ug/L	0046768-03		48.0	47.0	97.9%	
MIBK-ug/L	0046768-03		48.0	47.0	97.9%	
cis-1,3-Dichloropropylene-ug/L	0046768-03		48.0	47.0	97.9%	
Toluene-ug/L	0046768-03		48.0	49.0	102.1%	
trans-1,3-Dichloropropylene-ug/L	0046768-03		48.0	46.0	95.8%	
1,1,2-Trichloroethane-ug/L	0046768-03		48.0	48.0	100.0%	
Methyl butyl ketone-ug/L	0046768-03		48.0	47.0	97.9%	
Tetrachloroethylene-ug/L	0046768-03		48.0	49.0	102.1%	
1,3-Dichloropropane-ug/L	0046768-03		48.0	44.0	91.7%	
Dibromochloromethane-ug/L	0046768-03		48.0	47.0	97.9%	
1,2-Dibromoethane-ug/L	0046768-03		48.0	47.0	97.9%	
Chlorobenzene-ug/L	0046768-03		48.0	50.0	104.2%	
Ethyl Benzene-ug/L	0046768-03		48.0	48.0	100.0%	
1,1,1,2-Tetrachloroethane-ug/L	0046768-03		48.0	53.0	110.4%	
p/m-Xylene-ug/L	0046768-03		96.0	103	107.3%	
o-Xylene-ug/L	0046768-03		48.0	53.0	110.4%	
Styrene-ug/L	0046768-03		48.0	51.0	106.3%	
Bromoform-ug/L	0046768-03		48.0	47.0	97.9%	
Isopropylbenzene-ug/L	0046768-03		48.0	51.0	106.3%	
1,1,2,2-Tetrachloroethane-ug/L	0046768-03		48.0	42.0	87.5%	

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

### EPA 8260B Volatile Organics RCP

Order#: 0615080

<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Bromobenzene-ug/L	0046768-03		48.0	49.0	102.1%	
n-Propylbenzene-ug/L	0046768-03		48.0	53.0	110.4%	
1,2,3-Trichloropropane-ug/L	0046768-03		48.0	44.0	91.7%	
2-Chlorotoluene-ug/L	0046768-03		48.0	53.0	110.4%	
1,2,4-Trimethylbenzene-ug/L	0046768-03		48.0	49.0	102.1%	
t-1,4-Dichloro-2-butene-ug/L	0046768-03		48.0	56.0	116.7%	
4-Chlorotoluene-ug/L	0046768-03		48.0	51.0	106.3%	
tert-Butylbenzene-ug/L	0046768-03		48.0	55.0	114.6%	
1,3,5-Trimethylbenzene-ug/L	0046768-03		48.0	51.0	106.3%	
p-Isopropyltoluene-ug/L	0046768-03		48.0	52.0	108.3%	
1,3-Dichlorobenzene-ug/L	0046768-03		48.0	48.0	100.0%	
sec-Butylbenzene-ug/L	0046768-03		48.0	51.0	106.3%	
1,4-Dichlorobenzene-ug/L	0046768-03		48.0	46.0	95.8%	
n-Butylbenzene-ug/L	0046768-03		48.0	55.0	114.6%	
1,2-Dichlorobenzene-ug/L	0046768-03		48.0	44.0	91.7%	
1,2-Dibromo-3-chloropropane-ug/L	0046768-03		48.0	46.0	95.8%	
1,2,4-Trichlorobenzene-ug/L	0046768-03		48.0	47.0	97.9%	
Hexachlorobutadiene-ug/L	0046768-03		48.0	51.0	106.3%	
Naphthalene-ug/L	0046768-03		48.0	43.0	89.6%	
1,2,3-Trichlorobenzene-ug/L	0046768-03		48.0	49.0	102.1%	

Type of QC	Surrogates	% Recovered	QC Limits (%)	
BLANK	1,2-Dichloroethane-d4	97%	70	130
BLANK	Toluene-d8	99%	70	130
BLANK	4-Bromofluorobenzene	95%	70	130
Type of QC	Surrogates	% Recovered	QC Limits (%)	
CONTROL	1,2-Dichloroethane-d4	94%	70	130
CONTROL	Toluene-d8	105%	70	130
CONTROL	4-Bromofluorobenzene	90%	70	130

CONNECTICUT TESTING LAB'S, INC.

RCP DQA SUMMARY TABLE

EPA Method 8260B  
 Halogens  
 BATCH 1 OF 2

CTL Lab No.: 0615080  
 Client: HRP Associates, Inc.  
 Project: ING0107.GW

Sample #	Analyte	QC Type	Calibr.		RF	RCP Criteria	Bias	Notes
			Date	%DEV				
7929	ALL	ICAL	6/4/15			≤15% RSD, CCCs ≤30% RSD, RF ≥ 0.05		No Anomalies
7929	ALL	ICV	6/4/15			+/- 20% Dev		No Anomalies
7929	ALL	ITUNE	6/4/15			See Method		No Anomalies

Sample #	QC Type	Result	Spike		%R	RCP Criteria	Bias	RPD Bias	Notes
			Value	%D					
7929	CCAL					+/-30%D			No Anomalies
7929	TUNE					See Method			No Anomalies
7929	MB	ND				<RL			No Anomalies
7929	LCS					70-130%R			No Anomalies
7929	SR					70-130%R			No Anomalies
7929	IS					50% to 200% A			No Anomalies
7929	MS	****				70-130%R			No Anomalies
7929	MSD	****				RPD≤30%			
7929	DUPE	****				RPD≤30%			

BATCH = Series of samples analyzed under one DQA summary.

Bias: L=Low H= High NDR=Non Directional

ITUNE= Initial Tune BFB

ICAL = Initial Calibration

ICV= Initial Calibration Verification 2nd Source

CCAL=Continuing Calibration

A= Area counts compared to CCAL

CCCs= Calibration Check Compounds

MB= Method Blank

LCS= Laboratory Control Sample

SR=Surrogate Recovery %

MS= Matrix Spike

MSD= Matrix Spike Dupe

DUPE= Laboratory Duplicate

% RSD= Relative Standard Deviation

%R= % Recovery

%D= % Drift

RPD= Relative Percent Difference

IS= Internal Standard

ND= None Detected

RCP DQA SUMMARY TABLE

EPA Method 8260B  
 Halogens  
 BATCH 2 OF 2

CTL Lab No.: 0615080  
 Client: HRP Associates, Inc.  
 Project: ING0107.GW

Sample #	Analyte	QC Type	Calibr.		RF	RCP Criteria	Bias	Notes
			Date	%DEV				
7930	ALL	ICAL	6/8/15			≤15% RSD, CCCs ≤30% RSD, RF ≥0.05		No Anomalies
7930	ALL	ICV	6/8/15			+/- 20% Dev		No Anomalies
7930	ALL	ITUNE	6/8/15			See Method		No Anomalies

Sample #	Analyte	QC Type	Result	Spike		%R	RCP Criteria	Bias	RPD
				Value	%D				
7930	ALL	CCAL					+/-30%D		No Anomalies
7930	ALL	TUNE					See Method		No Anomalies
7930	ALL	MB	ND				<RL		No Anomalies
7930	ALL	LCS					70-130%R		No Anomalies
7930	ALL	SR					70-130%R		No Anomalies
7930	ALL	IS					50% to 200% A		No Anomalies
7930	ALL	MS	----				70-130%R		No Anomalies
7930	ALL	MSD	----				RPD ≤30%		
7930	ALL	DUPE	----				RPD ≤30%		

BATCH = Series of samples analyzed under one DQA summary.

Bias: L=Low H= High NDR=Non Directional

ITUNE= Initial Tune BFB

ICAL = Initial Calibration

ICV= Initial Calibration Verification 2nd Source

CCAL=Continuing Calibration

A= Area counts compared to CCAL

CCCs= Calibration Check Compounds

MB= Method Blank

LCS= Laboratory Control Sample

SR=Surrogate Recovery %

MS= Matrix Spike

MSD= Matrix Spike Dupe

DUPE= Laboratory Duplicate

% RSD= Relative Standard Deviation

%R= % Recovery

%D= % Drift

RPD= Relative Percent Difference

IS= Internal Standard

ND= None Detected

CONNECTICUT TESTING LABS, INC.

RCP DQA SUMMARY TABLE

EPA Method 8260B

CTL Lab No.: 0615080  
 Client: HRP Associates, Inc.  
 Project: ING0107.GW

Sample #	Analyte	QC Type	Callbr. Date	%DEV	RF	RCP Criteria	Bias	Notes
7933	ALL	ICAL	6/4/15			<15% RSD, CCCs <30% RSD, RF ≥ 0.05		No Anomalies
7933	ALL	ICV	6/4/15			+/- 20% Dev		No Anomalies
7933	ALL	ITUNE	6/4/15			See Method		No Anomalies
7933	ALL	CCAL				+/-30%D		No Anomalies
7933	ALL	TUNE				See Method		No Anomalies
7933	ALL	MB				<RL		No Anomalies
7933	ALL	LCS				70-130%R		No Anomalies
7933	ALL	SR				70-130%R		No Anomalies
7933	ALL	IS				50% to 200% A		No Anomalies
7933	ALL	MS				70-130%R		No Anomalies
	ALL	MSD				RPD ≤ 30%		
	ALL	DUPE				RPD ≤ 30%		

BATCH = Series of samples analyzed under one DQA summary.

Bias: L=Low H= High NDR=Non Directional

ITUNE= Initial Tune BFB

ICAL = Initial Calibration

ICV= Initial Calibration Verification 2nd Source

CCAL=Continuing Calibration

A= Area counts compared to CCAL

CCCs= Calibration Check Compounds

MB= Method Blank

LCS= Laboratory Control Sample

SR=Surrogate Recovery %

MS= Matrix Spike

MSD= Matrix Spike Dupe

DUPE= Laboratory Duplicate

% RSD= Relative Standard Deviation

%R= % Recovery

%D= % Drift

RPD= Relative Percent Difference

IS= Internal Standard

ND= None Detected



September 17, 2015

HRP Associates, Inc.  
197 Scott Swamp Road  
Farmington, CT 06032

**Attn: Ms. Jenny Mooney**

Please find attached laboratory report(s) for the samples submitted on:  
**September 11, 2015.**

All pertinent information for this analysis is located on the report. Should it be necessary to contact us regarding billing or the test results, please have the following information readily available:

**Lab No.** : 0915151  
**PO/Job No.** : ING0107.GW  
**Invoice No.** : 194450  
**Customer No.** : 350

Please contact us if you have any questions.

Very truly yours,



Stephen J. Franco  
Laboratory Director  
PH-0547



**STEPHEN J. FRANCO**  
Laboratory Director  
**PHONE ■ 203/634-3731**

[www.ctl-web.com](http://www.ctl-web.com) / [ctestlab@erols.com](mailto:ctestlab@erols.com)  
165 GRACEY AVENUE ■ MERIDEN, CT ■ 06451

**REASONABLE CONFIDENCE PROTOCOL  
LABORATORY ANALYSIS QA/QC CERTIFICATION FORM**

Laboratory Name: Connecticut Testing Lab's, Inc. Client: HRP Associates, Inc.

Project Location: \_\_\_\_\_ Project Number: ING0107.GW

Laboratory Sample Id(s): 13706-13708 Sampling Date(s): 09/10/15

List RCP Method(s) Used: 8260 CTL Lab #: 0915151

Reactivation  Date Reactivated: \_\_\_\_\_

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	<i>VPH and EPH Methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature? <input checked="" type="checkbox"/> Iced <input type="checkbox"/> No Ice <input type="checkbox"/> Iced (insufficient time to cool samples)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Na <input type="checkbox"/> Time
4	Was all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Na
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Partial 8260 list
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence." This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.



Authorized Signature: \_\_\_\_\_  
Printed Name: Stephen J. Franco

Position: Lab Director PH-0547  
Date: 09/16/15

Name of Laboratory: Connecticut Testing Laboratories, Inc.

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# CASE NARRATIVE

## Connecticut Testing Laboratories, Inc.

**Prepared for:**

HRP Associates, Inc.  
197 Scott Swamp Rd  
Farmington, CT 06032

**Order#:** 0915151

**Project:** ING0107.GW

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
MW-4A	13706	WATER	09/10/2015	09/11/2015
MW-4B	13707	WATER	09/10/2015	09/11/2015
TB	13708	WATER	09/10/2015	09/11/2015

**There were no anomalies associated with the reported data.**

The enclosed results of analyses are representative of the samples as received by the laboratory. Connecticut Testing Laboratories, Inc. makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By: \_\_\_\_\_

\_\_\_\_\_  
Connecticut Testing Laboratories, Inc.

Date: \_\_\_\_\_

9/14/15

Date Samples Received: 09/11/2015

Client Name: HRP Associates, Inc.	CTL Lab No.: 0915151
Report Date: 09/16/2015	PO No: ING0107.GW
Method #: 8260B/5030	Analyst: MDR

**RESULTS OF ANALYSIS**

**EPA 8260B Halogens RCP**

Matrix Type:	WATER	WATER	WATER
CTL Sample No.:	13706	13707	13708
Field ID:	MW-4A	MW-4B	TB
Date Analyzed:	09/15/2015	09/15/2015	09/15/2015
Date Extracted:	09/15/2015	09/15/2015	09/15/2015

Parameters	Units	RL				
Vinyl chloride	ug/L	0.5	ND	1.0	ND	
1,2-Dichloroethane-d4	%	----	83	87	93	
Toluene-d8	%	----	86	89	90	
4-Bromofluorobenzene	%	----	84	84	92	

RL=Reporting Level ND = None Detected

Connecticut Testing Laboratories, Inc.  
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Certification CT-PH0547 / MA-CT035

# Connecticut Testing Laboratories, Inc.

## QUALITY CONTROL REPORT

**EPA 8260B Halogens RCP**

Order#: 0915151

<b>BLANK</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0048240-02			ND		
<b>CONTROL</b> WATER	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Vinyl chloride-ug/L	0048240-03		48.0	51.0	106.3%	

Type of QC	Surrogates	% Recovered	QC Limits (%)	
BLANK	1,2-Dichloroethane-d4	79%	70	130
BLANK	Toluene-d8	94%	70	130
BLANK	4-Bromofluorobenzene	86%	70	130
Type of QC	Surrogates	% Recovered	QC Limits (%)	
CONTROL	1,2-Dichloroethane-d4	77%	70	130
CONTROL	Toluene-d8	96%	70	130
CONTROL	4-Bromofluorobenzene	87%	70	130

RCP DQA SUMMARY TABLE

EPA Method 8260B  
Halogens

CTL Lab No.: 0915151  
Client: HRP Associates, Inc.  
Project: ING0107.GW

Sample #	Analyte	QC Type	Calibr.		RCP		Bias	Notes
			Date	%DEV	RF	Criteria		
13706-13708	VINYL CHLORIDE	ICAL	9/8/15			≤15% RSD, CCCs ≤30% RSD, RF <sub>2</sub> 0.05		No Anomalies
13706-13708	VINYL CHLORIDE	ICV	9/8/15			+/- 20% Dev		No Anomalies
13706-13708	VINYL CHLORIDE	ITUNE	9/8/15			See Method		No Anomalies

Sample #	Analyte	QC Type	Result	Spike Value	%D	%R	RCP		RPD	
							Criteria	Bias	RPD	Bias
13706-13708	VINYL CHLORIDE	CCAL					+/-30%D			No Anomalies
13706-13708	VINYL CHLORIDE	TUNE					See Method			No Anomalies
13706-13708	VINYL CHLORIDE	MB	ND				<RL			No Anomalies
13706-13708	VINYL CHLORIDE	LCS					70-130%R			No Anomalies
13706-13708	VINYL CHLORIDE	SR					70-130%R			No Anomalies
13706-13708	VINYL CHLORIDE	IS					50% to 200% A			No Anomalies
	VINYL CHLORIDE	MS					70-130%R			
	VINYL CHLORIDE	MSD					RPD <sub>2</sub> ≤30%			
	VINYL CHLORIDE	DUPE					RPD <sub>2</sub> <30%			

BATCH = Series of samples analyzed under one DQA summary.

Bias: L=Low H=High NDR=Non Directional

ITUNE= Initial Tune BFB

ICAL = Initial Calibration

ICV= Initial Calibration Verification 2nd Source

CCAL=Continuing Calibration

A= Area counts compared to CCAL

CCC= Calibration Check Compounds

MB= Method Blank

LCS= Laboratory Control Sample

SR=Surrogate Recovery %

MS= Matrix Spike

MSD= Matrix Spike Dupe

DUPE= Laboratory Duplicate

% RSD= Relative Standard Deviation

%R= % Recovery

%D= % Drift

RPD= Relative Percent Difference

IS= Internal Standard

ND= None Detected

