## SURFACE WATER AND GROUNDWATER MONITORING PROGRAM FALL 2013 MONITORING REPORT

ARCH CHEMICALS
ROCHESTER PLANT SITE
ROCHESTER, NEW YORK

ARCH CHEMICALS, INC. (A WHOLLY-OWNED SUBSIDIARY OF LONZA)

**JANUARY 2014** 

### SURFACE WATER AND GROUNDWATER MONITORING PROGRAM **FALL 2013 MONITORING REPORT**

### **ARCH CHEMICALS ROCHESTER PLANT SITE ROCHESTER, NEW YORK**

Prepared by

AMEC Environment & Infrastructure, Inc. Portland, Maine

for

ARCH CHEMICALS, INC. (A Wholly-Owned Subsidiary of Lonza)

January 2014

3616086023.06

Nelson M. Breton Associate Hydrogeologist

Associate Engineer

### **TABLE OF CONTENTS**

			<u>Page</u>
Exec	utive Sเ	ummary	1
1.0	Introd	duction	2
2.0	Sam	ole Collection and Analysis	2
	2.1	Groundwater	2
	2.2	Surface Water	2
	2.3	Analytical Procedures	3
	2.4	Quality Control	3
3.0	Analy	rtical Results	4
	3.1	Groundwater	4
		3.1.1 Chloropyridines	4
		3.1.2 Selected VOCs	5
	3.2	Surface Water	5
		3.2.1 Quarry	6
		3.2.2 Quarry Discharge Ditch	6
		3.2.3 Barge Canal	6
4.0	Extra	ction System Performance and Mainte	nance 6
5.0	Next	Monitoring Event	6

### **APPENDICES**

Appendix A Groundwater Field Sampling Data Sheets

Appendix B Well Trend Data

### **LIST OF FIGURES**

		Prepared By:	Checked By:
Figure 1	Off-Site Groundwater Monitoring Well Locations	<u> 158</u>	NW
Figure 2	On-Site Monitoring Well Locations	Myw	JEB
Figure 3	Fall 2013 Overburden Groundwater Interpreted Piezometric Contours	mw	16B
Figure 4	Fall 2013 Bedrock Groundwater Interpreted Piezometric Contours	MW	<u>kg</u>
Figure 5	Fall 2013 Deep Bedrock Groundwater Interpreted Piezometric Contours	mm	158
Figure 6	Sample Locations - Erie Barge Canal	EB	0 MM/r
Figure 7	Sample Locations – Dolomite Products Quarry	JES	And
Figure 8	Fall 2013 Selected Chloropyridine Concentration Contours for Groundwater	my	JEB
Figure 9	Fall 2013 Selected Volatile Organic Compound Concentration Contours for Groundwater	hm	JEB

### **LIST OF TABLES**

		Prepared By:	Checked By:
Table 1	Fall 2013 Sampling and Analytical Program	b55	<u> 1603</u>
Table 2	Fall 2013 Groundwater Monitoring Results  – Chloropyridines	15JS	<u> 58</u>
Table 3	Fall 2013 Groundwater Monitoring Results  – Volatile Organic Compounds	BJS	JEB .
Table 4	Comparison of Fall 2013 Chloropyridines and Volatile Organic Concentrations in Groundwater to Previous Results	NWS	<b>JE</b> S
Table 5	Fall 2013 Canal/Quarry Monitoring Results	BJS	IES .
Table 6	Extraction Well Weekly Flow Measurements  – June 2013 Through November 2013	JEB .	NWS
Table 7	Mass Removal Summary, Period: June 2013 Through November 2013	<b>150</b> 8	_ NWB
Table 8	2014 Sampling Schedule	183	Nuf

### **EXECUTIVE SUMMARY**

This monitoring report presents the results of an on-going groundwater and surface water monitoring program being conducted by Arch Chemicals at its Rochester, New York, manufacturing facility. Arch Chemicals is a wholly-owned subsidiary of Lonza, a leading supplier to the global life sciences, healthcare and pharmaceutical industries headquartered in Basel, Switzerland.

During this monitoring event conducted in November 2013, samples from a total of 33 groundwater monitoring or pumping wells and four locations associated with the Dolomite Products Quarry seep and outfall were collected and analyzed by TestAmerica in Amherst, New York.

As in prior reports, monitoring results were compared with previous average concentrations at each sampling location. Fifteen of the 33 wells sampled for chloropyridines had contaminant concentrations that were at or below their respective 5-year prior averages. Twenty of the 32 wells sampled for volatile organic compounds had concentrations at or below their 5-year prior averages. The contaminant contour plot for chloropyridines is generally consistent with past observations. For the VOCs, the configuration of the contaminant plume has changed from prior year depictions due to the inclusion of chlorobenzene in the list of selected VOCs starting with this monitoring event. Overall VOC concentrations, however, show a downward or stable trend in most wells.

Sampling locations associated with the quarry included the main quarry seep (QS-4), the quarry ditch where the quarry dewatering discharge enters the ditch (QD-1), the quarry ditch as it enters the Erie Barge Canal (QO-2), and the surface water in the canal approximately 100-feet downstream of the quarry ditch (QO-2S1). The total concentration of chloropyridines in quarry seep QS-4 was below its prior 5-year average. Chloropyridines were not detected in the sample from location QD-1, or in the canal water at sample location QO2-S1. Sample QO-2 contained total chloropyridines at a concentration exceeding its 5-year average.

All accessible on-site monitoring wells were checked for the presence of dense non-aqueous phase liquids (DNAPL) and floating (or light) NAPL (LNAPL), using an interface probe. No DNAPL or LNAPL was observed in any of these wells.

During the period June 2013 through November 2013, the on-site groundwater extraction system pumped approximately 8.7 million gallons of groundwater to the on-site treatment system, containing an estimated 1,281 pounds of chloropyridines and 79 pounds of target volatile organic compounds. Improved mass removal was noted in extraction well PW-15 due to increased flow rates. The activation of new pumping well PW-17 also contributed to the system's overall increase in contaminant mass removal.

The next regular monitoring event will occur in May 2014 and will include groundwater, surface water, and seep sampling.

### 1.0 INTRODUCTION

In accordance with the Order on Consent executed between Arch Chemicals, Inc., and the New York State Department of Environmental Conservation (NYSDEC), effective August 21, 2003, Arch is conducting a Remedial Action program at its facility on McKee Road in Rochester, New York. As part of this program, Arch conducts twice-yearly monitoring events consisting of sampling and chemical analysis of groundwater and surface water in the vicinity of the Rochester facility.

The Fall 2013 sampling event included the collection and analysis of a total of 37 groundwater, surface water, and seep samples from off-site and on-site locations. Samples were collected November 8 through 15, 2013, for analysis of selected chloropyridines and volatile organic compounds (VOCs).

This report presents the results of the Fall 2013 monitoring event.

### 2.0 SAMPLE COLLECTION AND ANALYSIS

### 2.1 GROUNDWATER

Groundwater samples were collected from off-site wells, on-site wells and piezometers for analysis of selected chloropyridines (2-chloropyridine, 2,6-dichloropyridine, 3-chloropyridine, 4-chloropyridine, pyridine, and p-fluoroaniline) and target compound list (TCL) VOCs. Samples were collected by personnel from Test America Laboratories, Inc., (TestAmerica) and transported to their lab in Amherst, New York for analysis. Table 1 lists the wells that were sampled and the requested analyses. The off-site and on-site locations of these sampling points are shown in Figures 1 and 2, respectively. Groundwater sampling data sheets are provided in Appendix A.

Groundwater was collected with the low flow/low stress purging technique from most of the wells using bladder or peristaltic pumps. Samples from active pumping wells were collected from the discharge lines.

Groundwater piezometric elevations were measured on November 8, 2013. Piezometric contour maps were constructed for each water-bearing zone (overburden, bedrock, and deep bedrock) and are presented in Figures 3, 4, and 5.

All accessible on-site monitoring wells were again checked for the presence of non-aqueous phase liquid (NAPL), using an interface probe. No dense NAPL (DNAPL) or floating (light) NAPL (LNAPL) was observed in any of these wells.

### 2.2 SURFACE WATER

Surface water and quarry seep samples were collected as part of the on-going monitoring program for the Arch Rochester site. The location of the quarry and its outfall in relation to the site is shown on Figure 6. Samples of the main quarry seep (QS-4), the quarry ditch where the quarry dewatering discharge enters the ditch (QD-1), the quarry ditch as it enters the Erie Barge Canal (QO-2), and the surface water in the canal approximately 100-feet

downstream of the quarry ditch (QO-2S1) were collected by TestAmerica on November 8, 2013. Due to possible sample labeling errors, locations QS-4, QD-1 and QO-2 were resampled on December 13, 2013. All quarry-related samples were analyzed for the Arch suite of selected chloropyridines. The quarry locations sampled during the Fall 2013 event are shown on Figure 7.

### 2.3 ANALYTICAL PROCEDURES

The analytical procedures, data review findings, and validated data for this groundwater and surface water monitoring event are discussed in the following paragraphs.

Samples were analyzed for the Arch suite of selected chloropyridines and TCL VOCs by USEPA SW-846 Methods 8270D and 8260C, respectively. The reporting limits for the chloropyridines and VOCs are approximately 10 micrograms per liter ( $\mu$ g/L) and 5 to 25  $\mu$ g/L, respectively, for undiluted samples.

### 2.4 QUALITY CONTROL

Laboratory analytical results were reviewed and qualified following U.S. Environmental Protection Agency Contract Laboratory Program (USEPA CLP), "National Functional Guidelines for Superfund Organic Methods Data Review", June, 2008, as modified by USEPA Region II, "SOP No. HW-6 Revision 14", September 2006. Analytical results were evaluated for the following parameters:

- Collection and Preservation
- \* Holding Times
  - Surrogate Recoveries
- Blank Contamination
   Duplicates
   Laboratory Control Samples
   Matrix Spike/Matrix Spike Duplicates
   Miscellaneous

With the qualifications discussed below, results are determined to be usable as reported by the laboratory.

<u>Surrogate Recoveries</u>. Percent recovery of the surrogate bromofluorobenzene (123) in sample PW-12 was above the laboratory control limits, indicating potential high biases for positive results. Positive detections for VOCs in PW-12 were qualified estimated (J) and may represent potential high biases.

<u>Duplicates</u>. The relative percent difference (RPD) between field duplicate results for 2,6-dichloropyridine (54) was above the control limit of 50 for sample BR-126 and the associated field duplicate. Positive detections of 2,6-dichloropyridine in BR-126 and the field duplicate were qualified estimated (J).

<sup>\* -</sup> all criteria were met for this parameter

<u>Laboratory Control Samples (LCS)</u>. RPDs between LCS and LCSD percent recoveries were above control limits for 4-chloropyridine (36) and p-fluoroaniline (27) in the LCS/LCSD associated with a subset of samples. Positive and non-detected results for 4-chloropyridine and p-fluoroaniline in samples PW-10, PZ-102, PZ-103, PZ-104, PW-17, PW-15, PW-16, PW-13, and BR-7A were qualified estimated (J/UJ).

Matrix Spike/Matrix Spike Duplicates (MS/MSD). Percent recoveries of chlorobenzene (68, 59) were below laboratory control limits in the MS/MSD associated with sample PZ-103. The detection of chlorobenzene in sample PZ-103 was qualified estimated (J).

Percent recoveries of chlorobenzene (53, 63) were below laboratory control limits in the MS/MSD associated with sample B-5. The detection of chlorobenzene in sample B-5 was qualified estimated (J).

<u>Miscellaneous</u>. Samples from a subset of wells were analyzed at dilutions due to high concentrations of volatile organic and/or semivolatile organic target analytes. Non-detects are reported at elevated reporting limits.

#### 3.0 ANALYTICAL RESULTS

### 3.1 GROUNDWATER

The validated results from the Fall 2013 groundwater monitoring event are provided in Tables 2 and 3. Table 4 provides a comparison of the Fall 2013 analytical results for selected chloropyridines and VOCs in representative wells to mean concentrations of the prior five years (Fall 2008 through Spring 2013). Long term trends for both selected chloropyridines and VOCs are also presented as time-series plots for representative wells in Appendix B. A summary of the analytical findings is presented below by parameter class.

### 3.1.1 Chloropyridines

<u>On-Site.</u> Chloropyridines were detected above sample quantitation limits in all 21 on-site wells sampled in the Fall 2013 event. Concentrations of chloropyridines ranged from 24 micrograms per liter ( $\mu$ g/L) (sum of all chloropyridine and pyridine isomer concentrations) in monitoring well B-4 to 170,000  $\mu$ g/L in monitoring well PW-10. Ten of the on-site wells exhibited total chloropyridine concentrations that were above their respective means from monitoring events over the previous five years (see Table 4).

<u>Off-Site.</u> Chloropyridines were detected above sample quantitation limits in all 12 off-site wells that were sampled. Concentrations of total selected chloropyridines ranged from 7.4  $\mu$ g/L (in well MW-16 on the former General Circuits property) to 25,000  $\mu$ g/L in well PZ-103 on the west side of McKee Road. Eight of the off-site wells contained total chloropyridine concentrations above their respective 5-year prior means (see Table 4).

<u>Concentration Contours</u>. Chloropyridine distribution in groundwater is shown as a set of concentration contours on Figure 8. The contours were developed using data from both overburden and bedrock monitoring wells. In general, the distribution of chloropyridines in groundwater is consistent with past interpretations.

### 3.1.2 Selected VOCs.

<u>On-Site.</u> Selected VOCs were detected in all 21 on-site wells sampled in the Fall 2013 event. Total concentrations of selected VOCs ranged from 1.4  $\mu$ g/L (in well PZ-105) to 64,000  $\mu$ g/L (in both PZ-106 and PW-17) for the sum of the principal site-related contaminants. At the request of the NYSDEC, starting with the Spring 2013 monitoring report chlorobenzene has been included as a selected VOC, along with the VOCs carbon tetrachloride, chloroform, methylene chloride, tetrachloroethene, and trichloroethene, included in prior reporting. Six of the on-site wells contained concentrations of total VOCs above their 5-year prior means (see Table 4).

In addition to the selected VOCs, other notable constituents detected in multiple on-site wells include toluene (in 13 out of 21 wells), benzene (12 of 21), carbon disulfide (9 of 21), 1,2-dichloroethene (7 of 21), vinyl chloride (9 of 21), total xylenes (7 of 21), bromoform (7 of 21), ethyl benzene(4 of 21), acetone (4 of 21), chlorodibromomethane (3 of 21), 1,1-dichloroethane (3 of 21), 1,1,2,2-tetrachloroethane (3 of 21), and bromodichloromethane (2 of 21).

<u>Off-Site.</u> Selected VOCs were detected in 10 of the 11 off-site wells sampled for VOCs in the Fall 2013 event. The total concentration of selected VOCs ranged from non-detect (in well BR-126) to 1,400  $\mu$ g/L in PZ-103. Six of the off-site wells contained concentrations of total VOCs above their 5-year prior means (see Table 4).

In addition to the selected VOCs, other notable constituents detected in multiple off-site wells include benzene (in 9 out of 11 wells), carbon disulfide (3 of 11), and 1,2-dichloroethene (3 of 11).

<u>Concentration Contours</u>. The distribution of selected VOCs in groundwater is shown as a set of concentration contours on Figure 9. These contours were developed using both overburden and bedrock groundwater data, and are dashed where approximated using historical data. The inclusion of chlorobenzene in the total concentration of selected VOCs starting in 2013 has altered the shape of the VOC groundwater plume somewhat, in comparison to prior year interpretations. VOC Concentration trends, however, are downward or stable in most wells.

### 3.2 SURFACE WATER

Results from the Fall 2013 canal and quarry monitoring event are presented in Table 5. As a result of a possible sample labeling error, the quarry seep and quarry ditch samples collected on November 8, 2013 were rejected and new samples were collected on December 13, 2013. The results are included in Table 5 and are discussed below.

### **3.2.1 Quarry**

One quarry seep (QS-4) was sampled in the Fall 2013 monitoring event. The sample contained 100 µg/L total chloropyridines, which is below its prior 5-year mean.

### 3.2.2 Quarry Discharge Ditch

Two locations within the quarry discharge ditch were sampled and analyzed for chloropyridines: QD-1, at the point where the quarry's dewatering discharge enters the ditch; and QO-2, at the location where the ditch discharges to the canal. Sample QD-1 contained no detectible chloropyridines, while sample QO-2 contained approximately 22  $\mu$ g/L of chloropyridine-related compounds. The reported total concentration of chloropyridines at QO-2 is above the prior 5-year mean for that location.

### 3.2.3 Barge Canal

One sample was collected from the Erie Barge Canal location (QO-2S1, approximately 100 feet downstream of QO-2). Chloropyridines were not detected in this sample.

### 4.0 EXTRACTION SYSTEM PERFORMANCE AND MAINTENANCE

Table 6 is a summary of the system flow measurements for the on-site extraction wells from June 2013 through November 2013. The total volume pumped during the six-month period was approximately 8.7 million gallons.

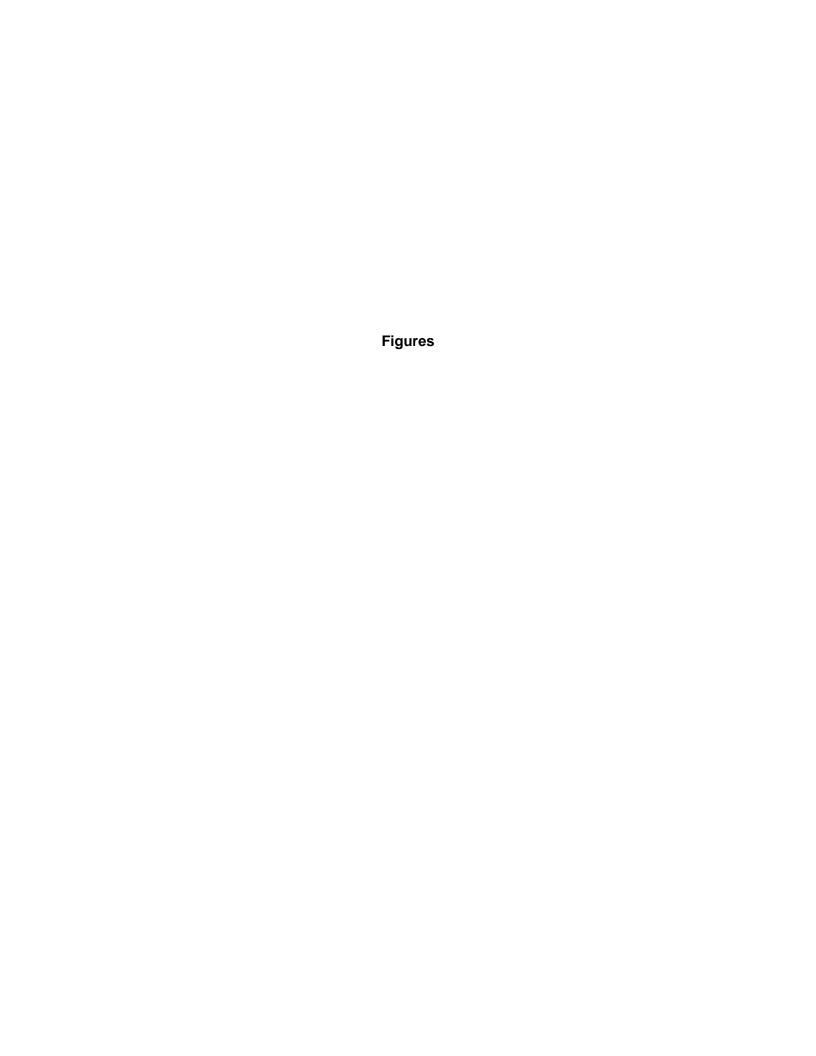
During the reporting period, pumps were repaired or replaced in wells BR-7A, BR-9, and PW-15. Toward the end of the period, wells PW-14, PW-15, PW-17, and BR-127 were shut down to prevent interference with the in-situ chemical oxidation pilot test (results of the pilot test will be discussed in a separate report to be issued in the Spring of 2014).

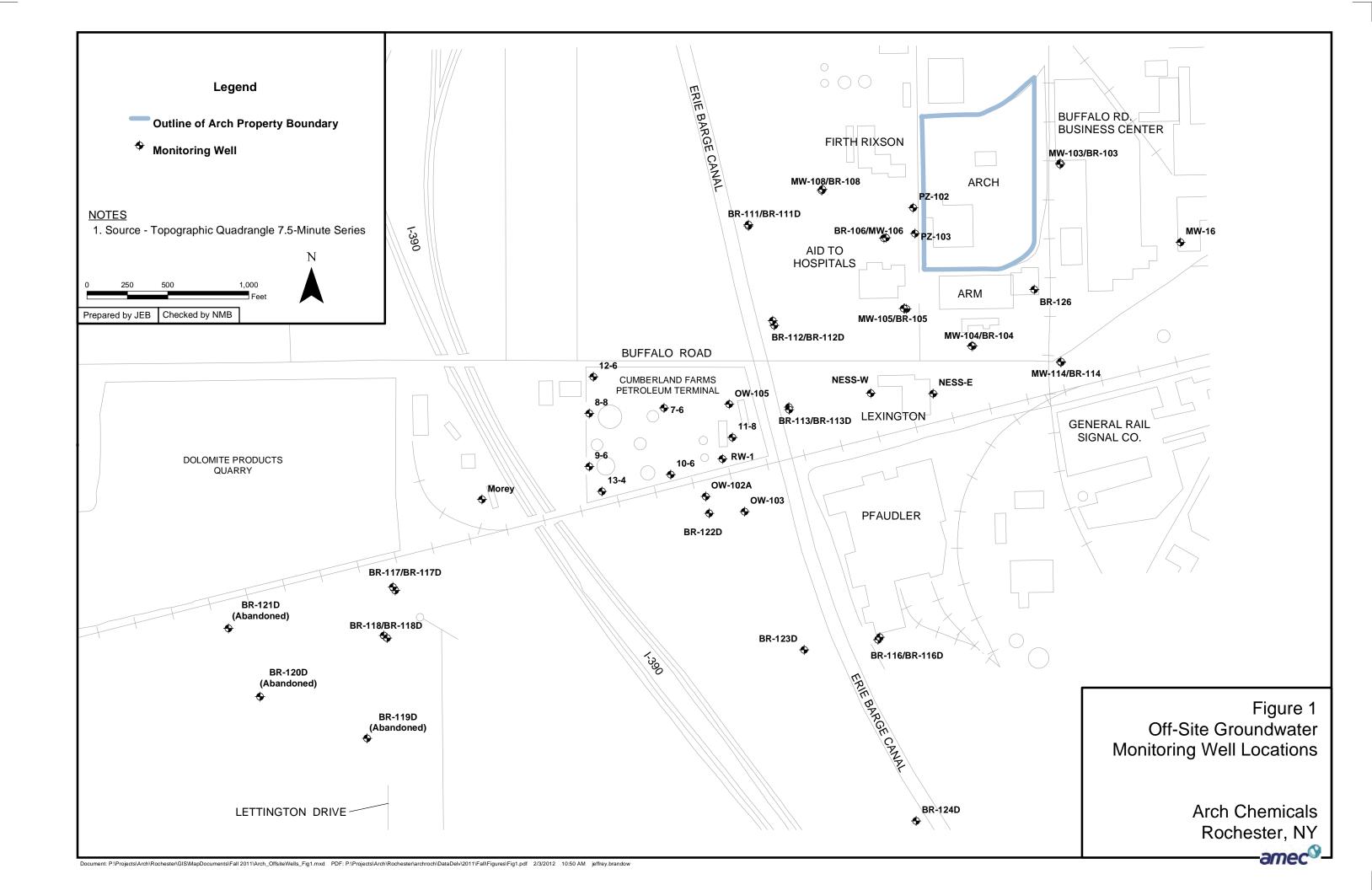
Table 7 provides a calculation of mass removal rates since the previous groundwater monitoring event (i.e., from June 2013 through November 2013). Arch estimates that approximately 79 pounds of target VOCs and 1,281 pounds of chloropyridine compounds were removed by the groundwater extraction system and treated by the plant's activated carbon adsorption units over that time period. Improved mass removal was noted in extraction well PW-15 due to its significantly higher pumping rate. The activation of new pumping well PW-17 on May 27, 2013 also contributed to an increased overall contaminant mass removal during the reporting period, particularly for VOCs.

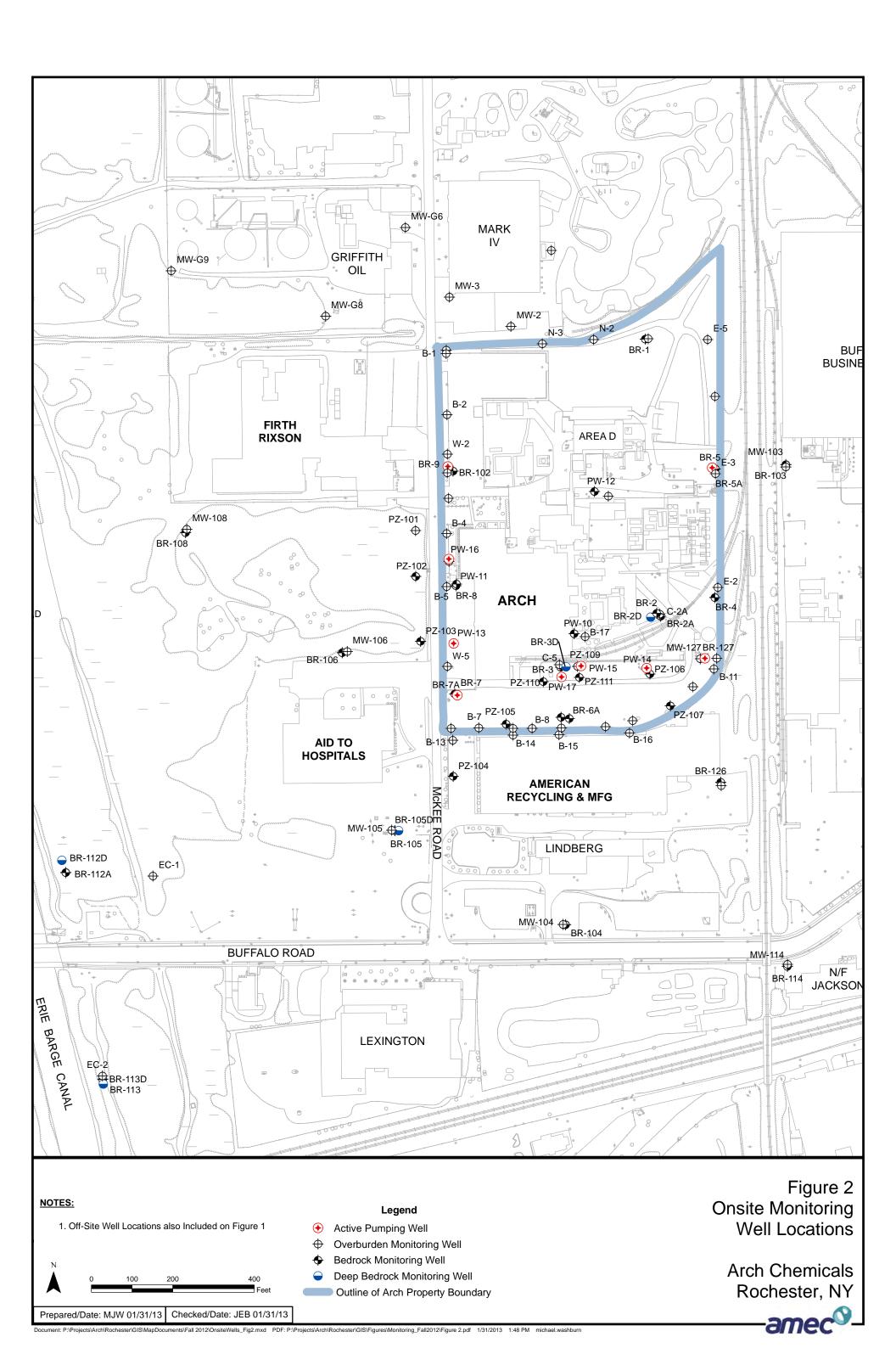
### 5.0 NEXT MONITORING EVENT

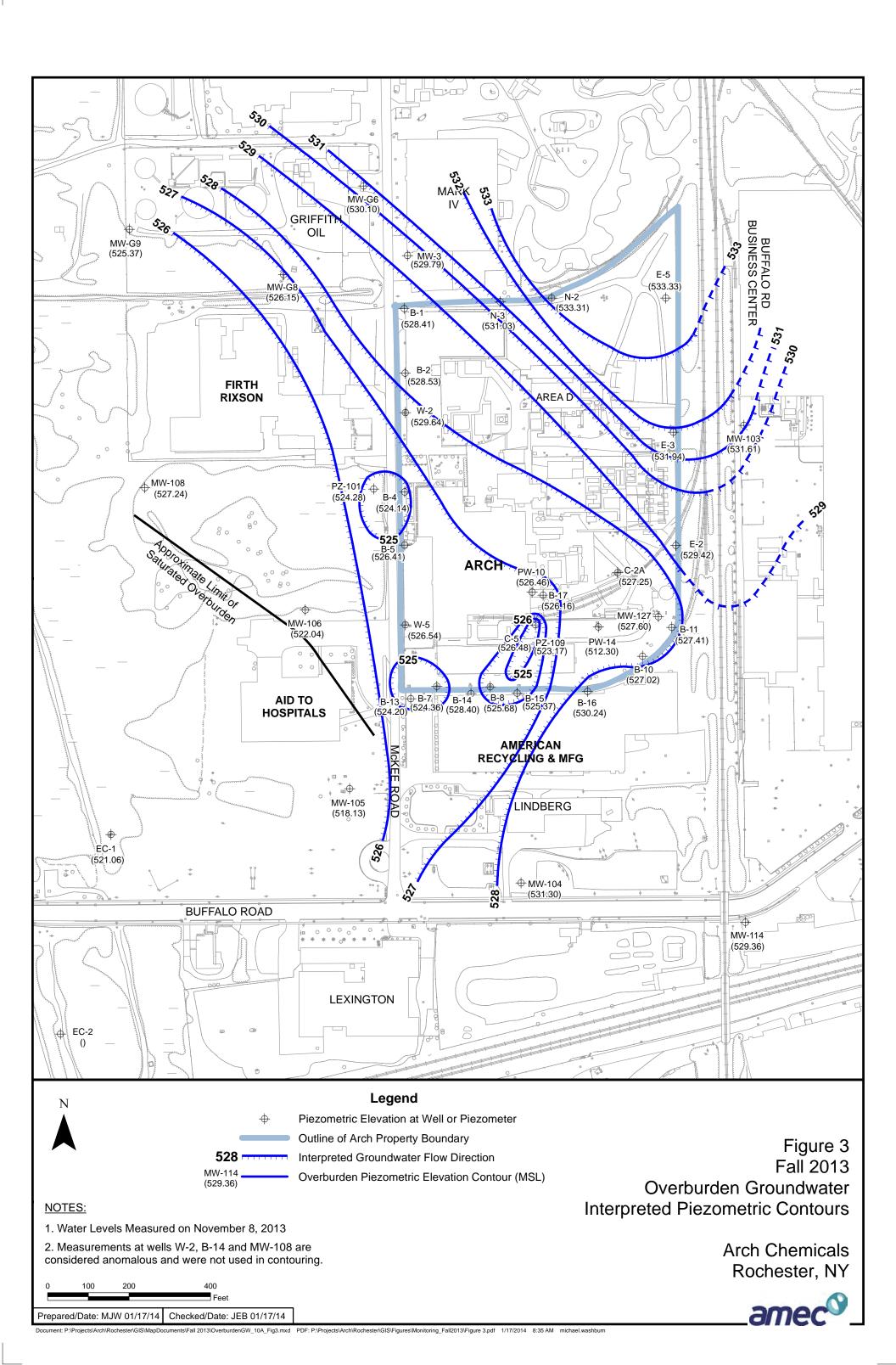
The next regular monitoring event will occur in May 2014 and will include groundwater, surface water, and seep sampling.

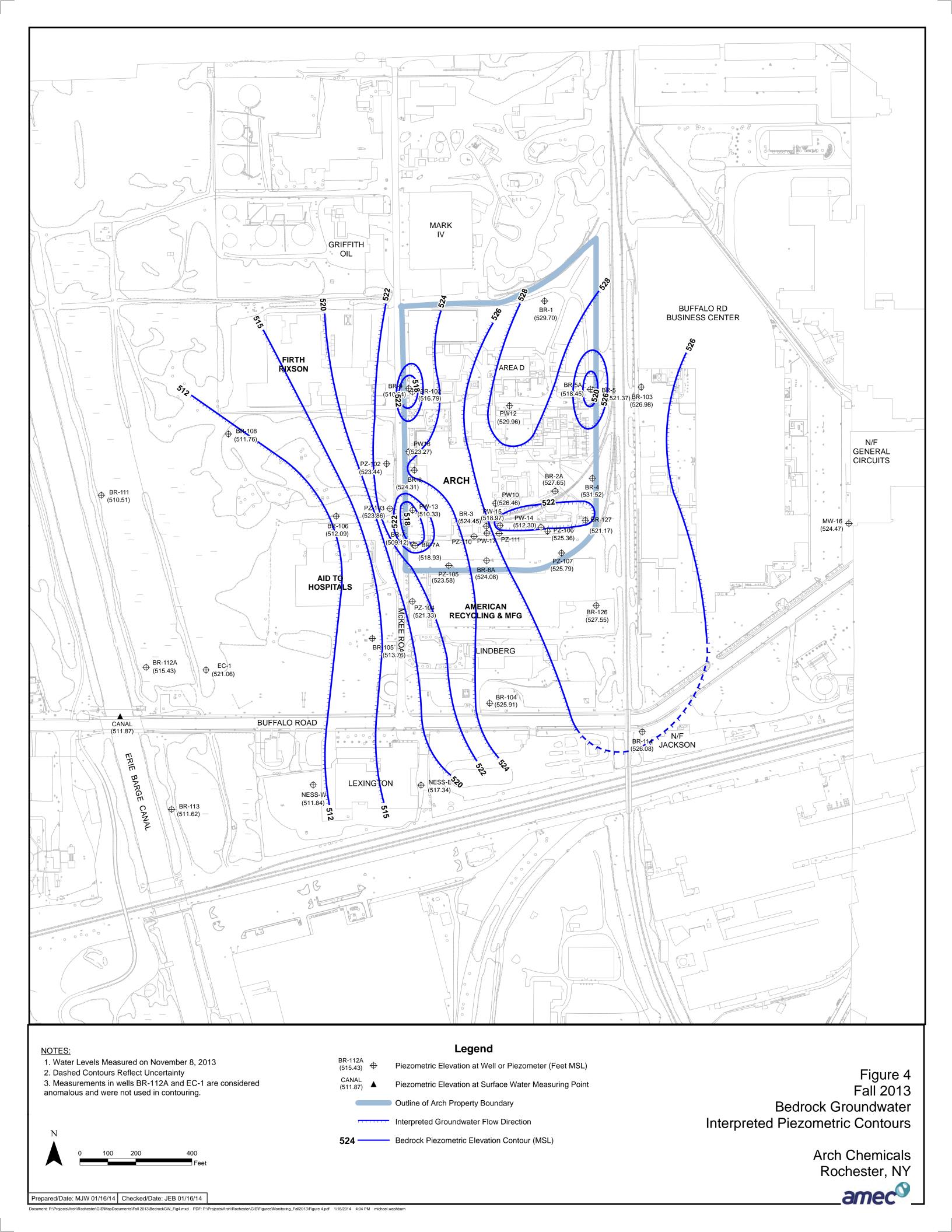
Table 8 shows the current monitoring program for the Arch Rochester site.

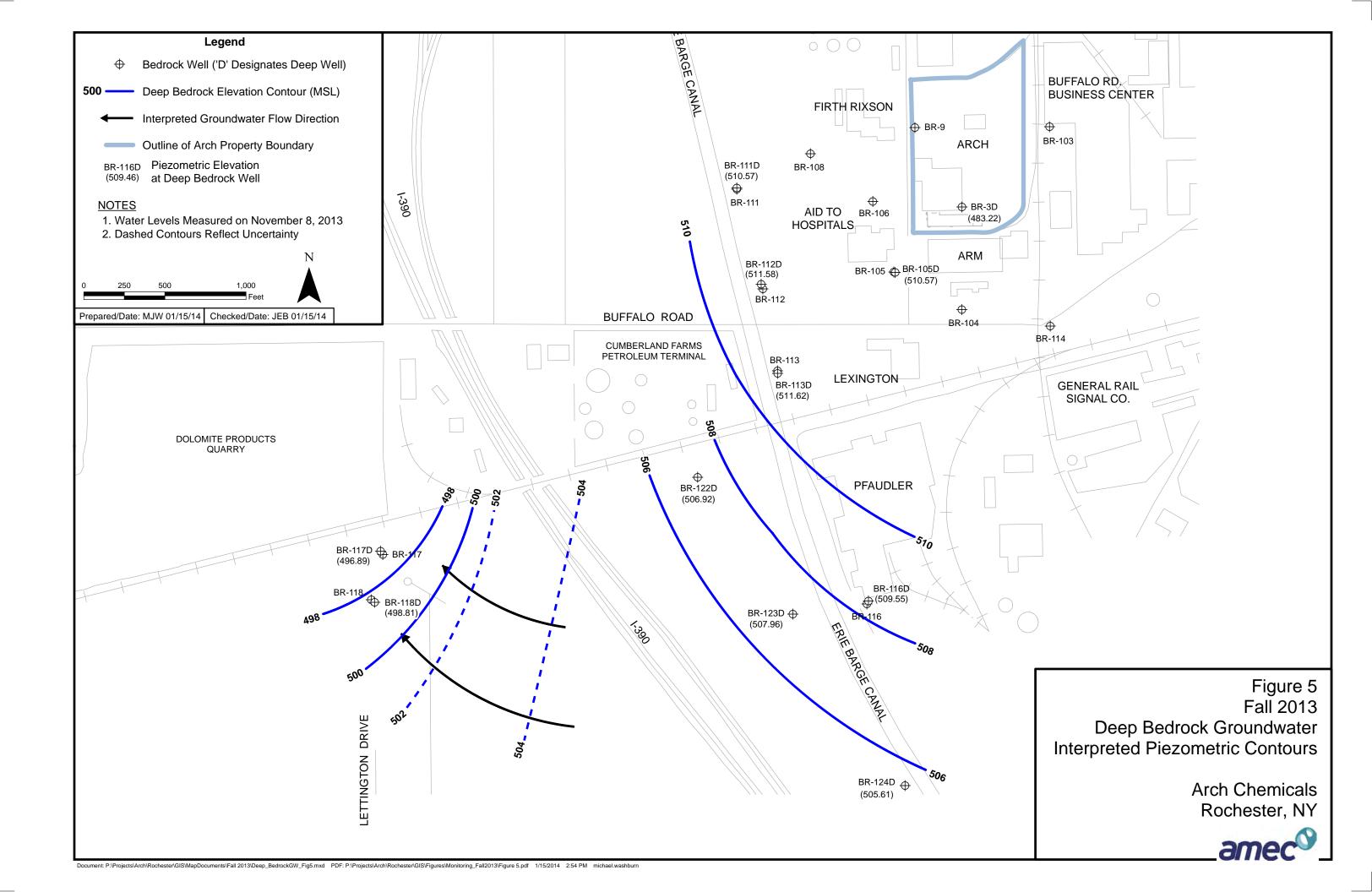


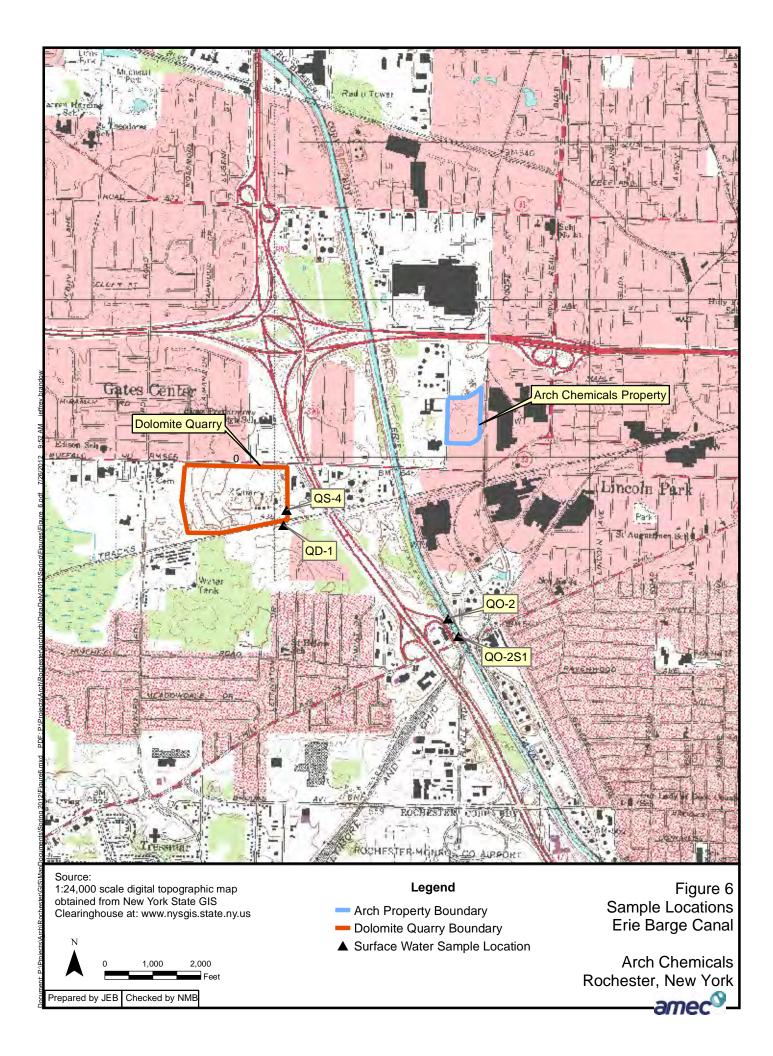


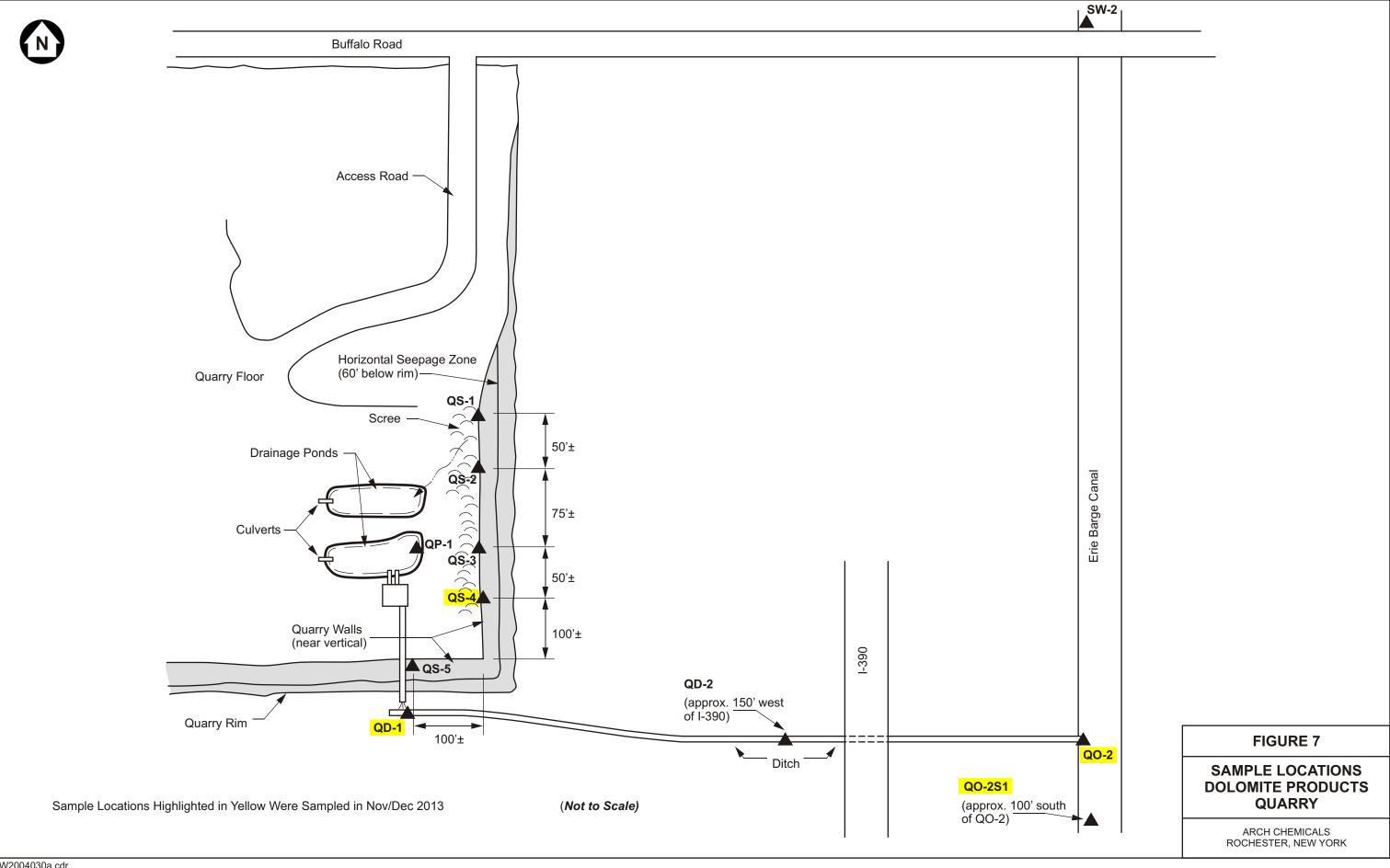


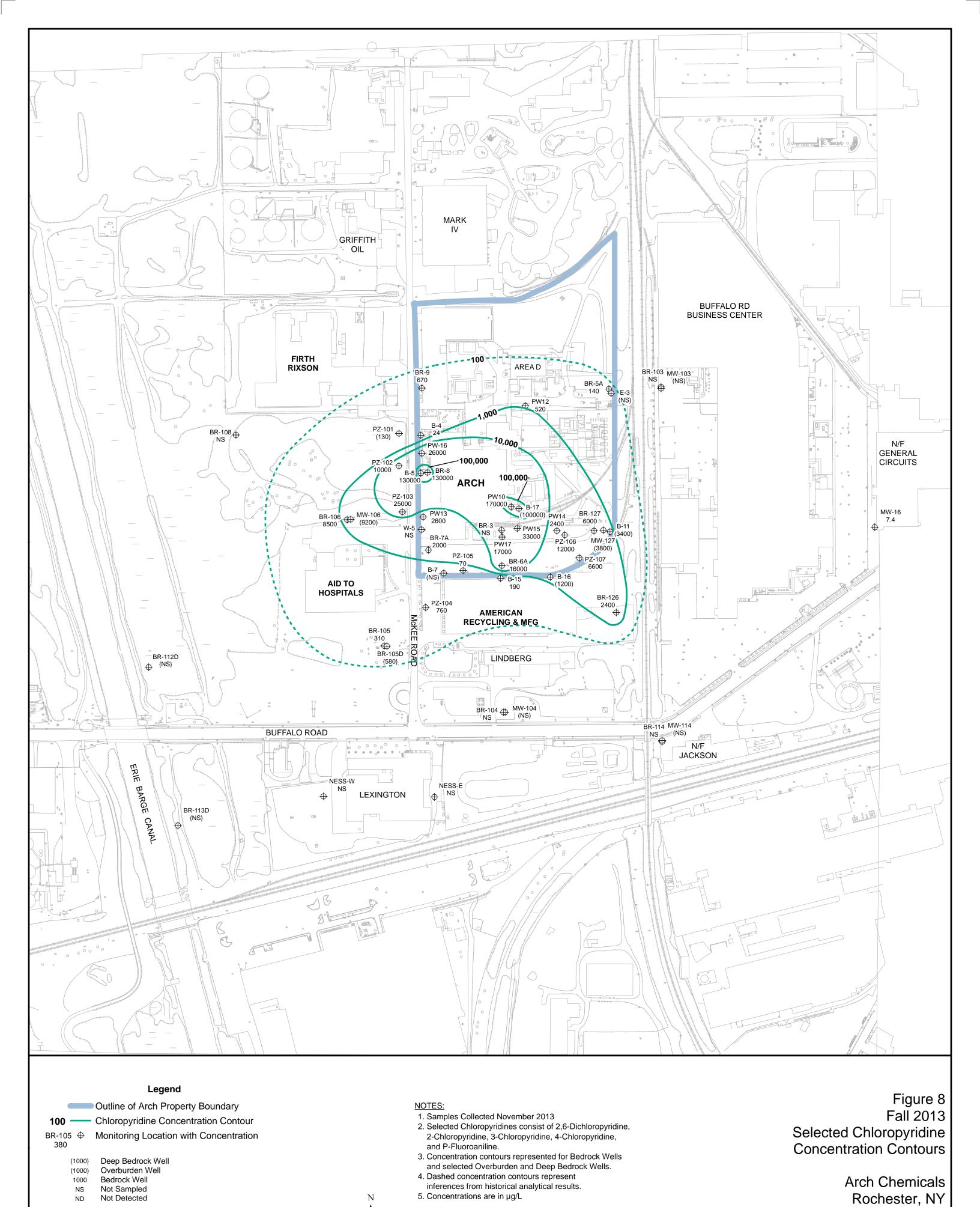






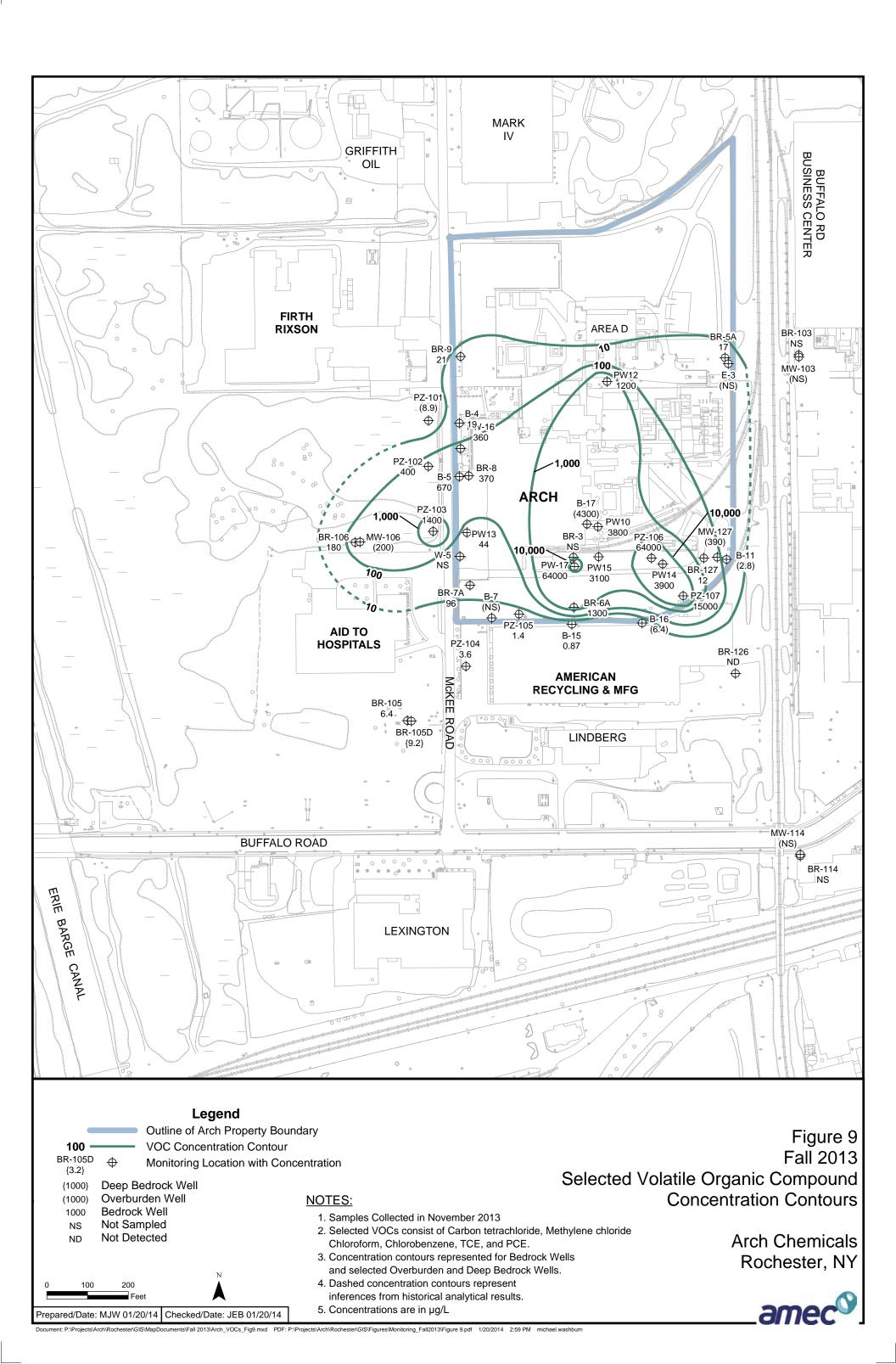


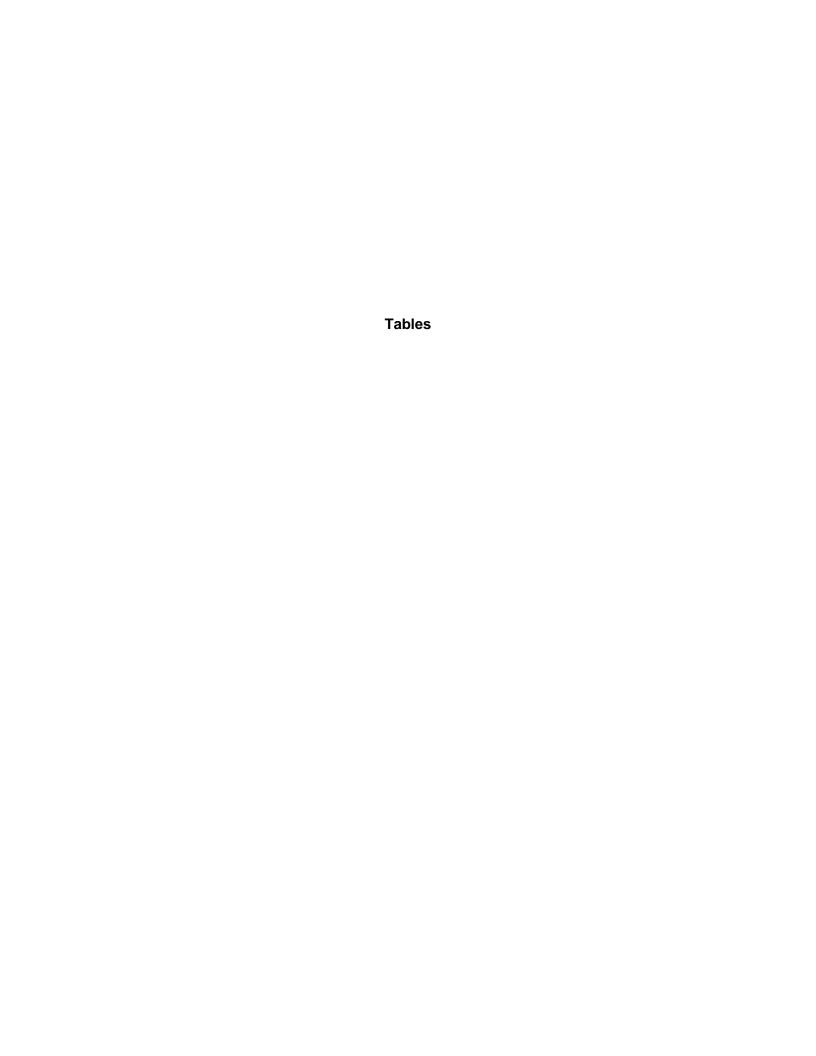




Prepared/Date: MJW 01/20/14 Checked/Date: JEB 01/20/14

Document: Pstrojects\Arch\Rochester\GIS\ManDocuments\Eall 2013\ChloroParidine Fin8-1 myd PDF: Pstrojects\Arch\Rochester\GIS\Finures\Monitoring Fall2013\Finure 8 ndf 1/20/2014 2:57 PM michael washburn





### TABLE 1 FALL 2013 GROUNDWATER SAMPLING AND ANALYTICAL PROGRAM

## ARCH CHEMICALS, INC ROCHESTER, NEW YORK

				ANA	ALYSIS
SITE / AREA	WELL / POINT	DATE	QC TYPE	PYRIDINES	VOCs
AID TO HOSPITALS	BR-106	11/15/2013	Sample	X	Χ
	MW-106	11/15/2013	Sample	Χ	Χ
	PZ-101	11/12/2013	Sample	Χ	Χ
	PZ-102	11/12/2013	Sample	Χ	Χ
	PZ-103	11/12/2013	Sample	Χ	Χ
AMERICAN RECYCLE MANUF. (58	B-15	11/13/2013	Sample	Χ	Χ
MCKEE ROAD)	B-16	11/13/2013	Sample	Χ	X
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	BR-126	11/13/2013	Duplicate	Χ	X
	BR-126	11/13/2013	Sample	Χ	Χ
	PZ-104	11/12/2013	Sample	Χ	Χ
ARCH ROCHESTER	B-11	11/12/2013	Sample	Χ	Χ
	B-17	11/11/2013	Sample	Χ	X
	B-4	11/13/2013	Sample	Χ	Χ
	B-5	11/13/2013	Sample	Χ	Χ
	BR-127	11/11/2013	Sample	Χ	Χ
	BR-5A	11/12/2013	Sample	Χ	Χ
	BR-6A	11/11/2013	Sample	Χ	Χ
	BR-7A	11/12/2013	Sample	Χ	Χ
	BR-8	11/13/2013	Sample	Χ	Χ
	BR-9	11/12/2013	Sample	Χ	Χ
	MW-127	11/11/2013	Sample	Χ	Χ
	PW10	11/11/2013	Sample	Χ	Χ
	PW12	11/13/2013	Sample	Χ	Χ
	PW13	11/12/2013	Sample	Χ	Χ
	PW14	11/11/2013	Sample	Χ	Χ
	PW15	11/12/2013	Sample	Χ	Χ
	PW16	11/12/2013	Sample	Χ	Χ
	PW17	11/12/2013	Sample	Χ	Χ
	PZ-105	11/13/2013	Sample	Χ	Χ
	PZ-106	11/11/2013	Sample	Х	Χ
	PZ-107	11/11/2013	Sample	Χ	Χ
DOLOMITE PRODUCTS, INC.	QD-1	11/8/2013	Sample	Χ	
·	QS-4	11/8/2013	Sample	Χ	
ERIE BARGE CANAL (Samples in	QO-2	11/8/2013	Sample	Χ	
canal or property along canal)	QO-2S1	11/8/2013	Sample	Χ	
FORMER GENÉRAL ČIRCUTS	MW-16	11/8/2013	Sample	Χ	
RG & E RIGHT OF WAY	BR-105	11/15/2013	Sample	Χ	Χ
	BR-105D	11/15/2013	Sample	Χ	Χ

Prepared/Date: BJS 01/08/14

Checked/Date: JEB 01/24/14

## ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

LOCATION:	B-11	B-15	B-16	B-17	B-4	B-5	BR-105	BR-105D	BR-106	BR-126
SAMPLE DATE:	11/12/2013	11/13/2013	11/13/2013	11/11/2013	11/13/2013	11/13/2013	11/15/2013	11/15/2013	11/15/2013	11/13/2013
QC TYPE:	Sample									
SELECTED CHLOROPYRIDINES BY										
SW-846 Method 8270C (µg/L)										
2,6-Dichloropyridine	440	120	400	25,000 U	17	50,000 U	68	42 J	1100	490 J
2-Chloropyridine	2,900	66	770	100,000	7 J	130,000	240	510	7,300	1,900
3-Chloropyridine	42	47 U	240 U	25,000 U	9.4 U	50,000 U	47 U	10 J	500 U	100 U
4-Chloropyridine	18 U	47 U	240 U	25,000 UJ	9.4 U	50,000 U	47 U	47 U	500 U	100 U
p-Fluoroaniline	7.3 J	47 U	240 U	25,000 UJ	9.4 U	50,000 U	47 U	17 J	75 J	100 U
Pyridine	45 U	120 U	590 U	63.000 U	24 U	130.000 U	120 U	120 U	1300 U	250 U

#### Notes:

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value

## ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

LOCATION:	BR-126	BR-127	BR-5A	BR-6A	BR-7A	BR-8	BR-9	MW-106	MW-127	MW-16
SAMPLE DATE:	11/13/2013	11/11/2013	11/12/2013	11/11/2013	11/12/2013	11/13/2013	11/12/2013	11/15/2013	11/11/2013	11/8/2013
QC TYPE:	Duplicate	Sample	Sample							
SELECTED CHLOROPYRIDINES BY										
SW-846 Method 8270C (µg/L)										
2,6-Dichloropyridine	280 J	710 J	23	2,100 J	280 J	100,000 U	41 J	1,100 J	250	3.5 J
2-Chloropyridine	1,200	4,600	110	14,000	1,700	130,000	630	8,100	2,800	4 J
3-Chloropyridine	4.8 J	650 J	9.5 U	5,000 U	500 U	100,000 U	95 U	2,500 U	690	9.7 U
4-Chloropyridine	9.4 U	2,000 UJ	9.5 U	5,000 UJ	500 UJ	100,000 U	95 U	2,500 U	49	9.7 U
p-Fluoroaniline	5.5 J	2,000 UJ	8.7 J	5,000 UJ	500 UJ	100,000 U	95 U	2,500 U	47 U	9.7 U
Pvridine	24 U	5.000 U	24 U	13.000 U	1300 U	250.000 U	240 U	6.300 U	120 U	24 U

#### Notes:

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value

## ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

LOCATION:	PW10	PW12	PW13	PW14	PW15	PW16	PW17	PZ-101	PZ-102	PZ-103
SAMPLE DATE:	11/11/2013	11/13/2013	11/12/2013	11/11/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
QC TYPE:	Sample									
SELECTED CHLOROPYRIDINES BY										
SW-846 Method 8270C (µg/L)										
2,6-Dichloropyridine	13,000	100	210 J	310	1100 J	2,300 J	2,000	32	910 J	3,300
2-Chloropyridine	150,000	310	2,400	2,000	30,000	24,000	13,000	94	9,100	22,000
3-Chloropyridine	7,800 J	94 U	1,000 U	33 J	5,000 U	5,000 U	430 J	9.4 U	2,500 U	2,000 U
4-Chloropyridine	10,000 UJ	94 U	1,000 UJ	100 UJ	5,000 UJ	5,000 UJ	1,200 J	9.4 U	2,500 UJ	2,000 UJ
p-Fluoroaniline	10,000 UJ	110	1,000 UJ	27 J	5,000 UJ	5,000 UJ	1,000 UJ	4 J	2,500 UJ	2,000 UJ
Pvridine	25.000 U	240 U	2.500 U	32 J	1.500 J	13.000 U	630 J	24 U	6.300 U	5.000 U

#### Notes:

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value

## ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

LOCATION:	PZ-104	PZ-105	PZ-106	PZ-107
SAMPLE DATE:	11/12/2013	11/13/2013	11/11/2013	11/11/2013
QC TYPE:	Sample	Sample	Sample	Sample
SELECTED CHLOROPYRIDINES BY				
SW-846 Method 8270C (µg/L)				
2,6-Dichloropyridine	190	18 J	1,700 J	980
2-Chloropyridine	560	52 J	8,700	5,500
3-Chloropyridine	50 U	100 U	1,300 J	74 J
4-Chloropyridine	50 UJ	100 U	3,200 UJ	500 UJ
p-Fluoroaniline	5.9 J	100 U	3,200 UJ	500 UJ
Pyridine	130 U	250 U	8,000 U	1,300 U

#### Notes:

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value

## ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

LOCATION:	B-11	B-15	B-16	B-17	B-4	B-5	BR-105	BR-105D	BR-106
SAMPLE DATE:	11/12/2013	11/13/2013	11/13/2013	11/11/2013	11/13/2013	11/13/2013	11/15/2013	11/15/2013	11/15/2013
QC TYPE:	Sample								
VOCs BY SW-846 Method 8260/5ML (μg/L)								•	
1,1,1-Trichloroethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	130 U	1.1 J	0.59 J	5 U	5 U	10 U
1,1,2-Trichloroethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
1,1-Dichloroethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	1.3 J	10 U
1,1-Dichloroethene	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
1,2,4-Trimethylbenzene	5 U	5 U	5 U	130 U	5 U	2.2 J	5 U	5 U	10 U
1,2-Dichloroethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	1.4 J	250 U	10 U	2.8 J	13	5.7 J	20 U
1,2-Dichloropropane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
1,3,5-Trimethylbenzene	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
2-Butanone	25 U	25 U	25 U	630 U	25 U	25 U	25 U	25 U	50 U
2-Hexanone	25 U	25 U	25 U	630 U	25 U	25 U	25 U	25 U	50 U
4-Methyl-2-pentanone	25 U	25 U	25 U	630 U	25 U	2.3 J	25 U	25 U	50 U
Acetone	25 U	25 U	25 U	630 U	25 U	25 U	25 U	25 U	50 U
Benzene	0.5 J	5 U	1.7 J	98 J	5 U	26	1.2 J	4.1 J	13
Bromodichloromethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Bromoform	5 U	5 U	5 U	47 J	5 U	5 U	5 U	5 U	10 U
Bromomethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Carbon disulfide	5 U	5 U	5 U	29 J	5 U	5 U	5 U	0.79 J	0.88 J
Carbon tetrachloride	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Chlorobenzene	1.2 J	0.87 J	6.4	230	16	670 J	6.4	8.8	180
Chlorodibromomethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Chloroethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Chloroform	1.2 J	5 U	5 U	2200	2.1 J	0.39 J	5 U	0.38 J	10 U
Chloromethane	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
cis-1,3-Dichloropropene	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Ethyl benzene	5 U	5 U	5 U	130 U	1.5 J	2 J	5 U	5 U	10 U
Methylene chloride	5 U	5 U	5 U	1300	5 U	5 U	5 U	5 U	10 U
Styrene	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Tetrachloroethene	0.36 J	5 U	5 U	570	0.94 J	0.41 J	5 U	5 U	10 U
Toluene	5 U	5 U	5 U	160	14	63	5 U	5 U	10 U
trans-1,3-Dichloropropene	5 U	5 U	5 U	130 U	5 U	5 U	5 U	5 U	10 U
Trichloroethene	5 U	5 U	5 U	24 J	5 U	0.54 J	5 U	5 U	10 U
Vinyl acetate	25 U	25 U	25 U	630 U	25 U	25 U	25 U	25 U	50 U
Vinyl chloride	5 U	5 U	5 U	130 U	5 U	5 U	12	5 U	10 U
Xylenes, Total	15 U	15 U	15 U	380 U	8.6 J	7.8 J	15 U	15 U	30 U

Notes:

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value.

### ARCH CHEMICALS, INC. **ROCHESTER, NEW YORK**

LOCATION:	BR-126	BR-126	BR-127	BR-5A	BR-6A	BR-7A	BR-8	BR-9	MW-106
SAMPLE DATE:	11/13/2013	11/13/2013	11/11/2013	11/12/2013	11/11/2013	11/12/2013	11/13/2013	11/12/2013	11/15/2013
QC TYPE:	Duplicate	Sample							
VOCs BY SW-846 Method 8260/5ML (μg/L)									
1,1,1-Trichloroethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
1,1,2,2-Tetrachloroethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
1,1,2-Trichloroethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
1,1-Dichloroethane	5 U	5 U	25 U	5 U	100 U	3.7 J	50 U	5.9	10 U
1,1-Dichloroethene	5 U	5 U	25 U	5 U	100 U	5 U	50 U	0.75 J	10 U
1,2,4-Trimethylbenzene	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
1,2-Dichloroethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	50 U	8.4 J	200 U	12	100 U	66	20 U
1,2-Dichloropropane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
1,3,5-Trimethylbenzene	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
2-Butanone	25 U	25 U	130 U	25 U	500 U	25 U	250 U	25 U	50 U
2-Hexanone	25 U	25 U	130 U	25 U	500 U	25 U	250 U	25 U	50 U
4-Methyl-2-pentanone	25 U	25 U	130 U	25 U	500 U	25 U	250 U	25 U	50 U
Acetone	25 U	25 U	130 U	25 U	500 U	25 U	250 U	25 U	50 U
Benzene	2.5 J	2.7 J	25 U	6.7	100 U	8.4	50 U	54	14
Bromodichloromethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
Bromoform	5 U	5 U	25 U	5 U	25 J	5 U	50 U	5 U	10 U
Bromomethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
Carbon disulfide	5 U	5 U	25 U	0.96 J	71 J	5 U	50 U	5 U	0.82 J
Carbon tetrachloride	5 U	5 U	25 U	5 U	990	11	50 U	5 U	10 U
Chlorobenzene	5 U	5 U	25 U	16	100 U	31	370	20	200
Chlorodibromomethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
Chloroethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
Chloroform	5 U	5 U	9.1 J	0.42 J	240	12	50 U	5 U	10 U
Chloromethane	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
cis-1,3-Dichloropropene	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
Ethyl benzene	5 U	5 U	25 U	5 U	100 U	5 U	50 U	0.92 J	10 U
Methylene chloride	5 U	5 U	3.2 J	5 U	15 J	36	50 U	5 U	10 U
Styrene	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
Tetrachloroethene	5 U	5 U	25 U	5 U	22 J	4 J	50 U	5 U	10 U
Toluene	5 U	5 U	25 U	2.2 J	35 J	0.83 J	8.1 J	1 J	10 U
trans-1,3-Dichloropropene	5 U	5 U	25 U	5 U	100 U	5 U	50 U	5 U	10 U
Trichloroethene	5 U	5 U	25 U	0.97 J	100 U	1.6 J	50 U	1 J	10 U
Vinyl acetate	25 U	25 U	130 U	25 U	500 U	25 U	250 U	25 U	50 U
Vinyl chloride	5 U	5 U	5.2 J	2.2 J	18 J	18	50 U	41	10 U
Xylenes, Total	15 U	15 U	75 U	0.87 J	300 U	15 U	150 U	0.68 J	30 U

Notes:

U = Compound not detected; value represents sample quantitation limit. J = Estimated value.

## ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

LOCATION:	MW-127	PW10	PW12	PW13	PW14	PW15	PW16	PW17	PZ-101
SAMPLE DATE:	11/11/2013	11/11/2013	11/13/2013	11/12/2013	11/11/2013	11/12/2013	11/12/2013	11/12/2013	11/12/2013
QC TYPE:	Sample								
VOCs BY SW-846 Method 8260/5ML (µg/L)									
1,1,1-Trichloroethane	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
1,1,2,2-Tetrachloroethane	25 U	25 U	99 J	5 U	250 U	5 U	40 U	4 U	5 U
1,1,2-Trichloroethane	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
1,1-Dichloroethane	25 U	25 U	100 U	3.7 J	250 U	5 U	40 U	4 U	5 U
1,1-Dichloroethene	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
1,2,4-Trimethylbenzene	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
1,2-Dichloroethane	25 U	25 U	22 J	5 U	250 U	5 U	40 U	4 U	5 U
1,2-Dichloroethene (total)	50 U	50 U	200 U	10	500 U	9.4 J	80 U	70	10 U
1,2-Dichloropropane	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
1,3,5-Trimethylbenzene	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
2-Butanone	130 U	130 U	500 U	25 U	1300 U	50 U	200 U	40 U	25 U
2-Hexanone	130 U	130 U	500 U	25 U	1300 U	25 U	200 U	20 U	25 U
4-Methyl-2-pentanone	130 U	130 U	500 U	25 U	1300 U	25 U	200 U	20 U	25 U
Acetone	130 U	130	350 J	25 U	1300 U	54	200 U	71	25 U
Benzene	25 U	81	9.9 J	13	250 U	26	6.2 J	19	5 U
Bromodichloromethane	25 U	13 J	100 U	5 U	250 U	5 U	40 U	3.1 J	5 U
Bromoform	5.7 J	1500	100 U	5 U	250 U	22	40 U	200 J	5 U
Bromomethane	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
Carbon disulfide	140	760	100 U	5 U	79 J	400	40 U	1000	5 U
Carbon tetrachloride	34	62	100 U	5 U	250 U	530	40 U	30000	5 U
Chlorobenzene	25 U	130	970 J	41	250 U	55	360	33	8.9
Chlorodibromomethane	25 U	89	100 U	5 U	250 U	2 J	40 U	48	5 U
Chloroethane	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
Chloroform	340	1900	120 J	0.9 J	3200 J	2100	40 U	29000	5 U
Chloromethane	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
cis-1,3-Dichloropropene	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
Ethyl benzene	25 U	25 U	140 J	5 U	250 U	5 U	40 U	4 U	5 U
Methylene chloride	4.5 J	420	100 U	5 U	610	140	40 U	3100	5 U
Styrene	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
Tetrachloroethene	6.8 J	1200	92 J	1.2 J	44 J	260	40 U	1500	5 U
Toluene	25 U	180	960 J	0.76 J	250 U	77	40 U	190	5 U
trans-1,3-Dichloropropene	25 U	25 U	100 U	5 U	250 U	5 U	40 U	4 U	5 U
Trichloroethene	25 U	36	100 U	0.93 J	250 U	23	40 U	52	5 U
Vinyl acetate	130 U	130 U	500 U	25 U	1300 U	25 U	200 U	20 U	25 U
Vinyl chloride	25 U	25 U	100 U	21	92 J	7.7	40 U	55	5 U
Xylenes, Total	75 U	22 J	850 J	15 U	750 U	5.6 J	120 U	8 U	15 U

Notes:

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value.

## ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

LOCATION:	PZ-102	PZ-103	PZ-104	PZ-105	PZ-106	PZ-107
SAMPLE DATE:	11/12/2013	11/12/2013	11/12/2013	11/13/2013	11/11/2013	11/11/2013
QC TYPE:	Sample	Sample	Sample	Sample	Sample	Sample
VOCs BY SW-846 Method 8260/5ML (µg/L)						
1,1,1-Trichloroethane	25 U	50 U	5 U	5 U	5000 U	1000 U
1,1,2,2-Tetrachloroethane	25 U	50 U	5 U	5 U	5000 U	1000 U
1,1,2-Trichloroethane	25 U	50 U	5 U	5 U	5000 U	1000 U
1,1-Dichloroethane	25 U	50 U	5 U	5 U	5000 U	1000 U
1,1-Dichloroethene	25 U	50 U	5 U	5 U	5000 U	1000 U
1,2,4-Trimethylbenzene	25 U	50 U	5 U	5 U	5000 U	1000 U
1,2-Dichloroethane	25 U	50 U	5 U	5 U	5000 U	1000 U
1,2-Dichloroethene (total)	50 U	100 U	10 U	10 U	10000 U	2000 U
1,2-Dichloropropane	25 U	50 U	5 U	5 U	5000 U	1000 U
1,3,5-Trimethylbenzene	25 U	50 U	5 U	5 U	5000 U	1000 U
2-Butanone	130 U	250 U	25 U	25 U	25000 U	5000 U
2-Hexanone	130 U	250 U	25 U	25 U	25000 U	5000 U
4-Methyl-2-pentanone	130 U	250 U	25 U	25 U	25000 U	5000 U
Acetone	130 U	250 U	25 U	25 U	25000 U	5000 U
Benzene	17 J	22 J	1.4 J	5 U	5000 U	1000 U
Bromodichloromethane	25 U	50 U	5 U	5 U	5000 U	1000 U
Bromoform	25 U	50 U	5 U	5 U	960 J	1000 U
Bromomethane	25 U	50 U	5 U	5 U	5000 U	1000 U
Carbon disulfide	25 U	50 U	5 U	5 U	17000	1000 U
Carbon tetrachloride	25 U	50 U	5 U	5 U	5000 U	1000 U
Chlorobenzene	400	1400 J	3.6 J	1.4 J	5000 U	1000 U
Chlorodibromomethane	25 U	50 U	5 U	5 U	5000 U	1000 U
Chloroethane	25 U	50 U	5 U	5 U	5000 U	1000 U
Chloroform	25 U	50 U	5 U	5 U	61000	11000
Chloromethane	25 U	50 U	5 U	5 U	5000 U	1000 U
cis-1,3-Dichloropropene	25 U	50 U	5 U	5 U	5000 U	1000 U
Ethyl benzene	25 U	50 U	5 U	5 U	5000 U	1000 U
Methylene chloride	25 U	50 U	5 U	5 U	1800 J	4000
Styrene	25 U	50 U	5 U	5 U	5000 U	1000 U
Tetrachloroethene	25 U	50 U	5 U	5 U	870 J	430 J
Toluene	25 U	50 U	5 U	5 U	5000 U	1000 U
trans-1,3-Dichloropropene	25 U	50 U	5 U	5 U	5000 U	1000 U
Trichloroethene	25 U	50 U	5 U	5 U	5000 U	1000 U
Vinyl acetate	130 U	250 U	25 U	25 U	25000 U	5000 U
Vinyl chloride	25 U	50 U	5 U	5 U	5000 U	1000 U
Xylenes, Total	75 U	150 U	15 U	15 U	15000 U	3000 U

Notes:

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value.

# TABLE 4 COMPARISON OF FALL 2013 CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)

## ARCH ROCHESTER SEMI-ANNUAL GROUNDWATER MONITORING REPORT

WELL	SE	LECTED CHL	OROPYRIDIN	ES	SELECTED VOCs					
	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV 2013 RESULT	# EVENTS IN PRIOR 5 YRS	HISTORIC MAXIMUM	5-YEAR MEAN	NOV 2013 RESULT		
ON-SITE WELLS/LOCATIONS										
B-11	7	4,800	1,400	3,400	7	570	110	2.8		
B-17	5	28,000,000	340,000	100,000	5	350,000	9,800	4,300		
B-4	1	740	26	24	1	42	1	19		
B-5	1	130,000	31,000	130,000	1	320	51	670		
B-7	5	9,100	470	,	5	270	28			
BR-127	10	29,000	9,400	6,000	10	1,300	150	12		
BR-3	5	6,500,000	64,000	,	5	930,000	100,000			
BR-5A	10	1,700	150	140	10	9,400	19	17		
BR-6A	10	140,000	13,000	16,000	10	26,000	280	1,300		
BR-7A	10	510,000	16,000	2,000	10	4,400	390	96		
BR-8	5	160,000	82,000	130,000	5	7,800	570	370		
BR-9	10	720	110	670	10	210	11	21		
E-3	5	600	92		5	15,000	19			
MW-127	10	15,000	3,700	3,800	10	7,500	830	390		
PW10	10	240,000	59,000	170,000	10	120,000	1,600	3,800		
PW12	10	15,000	1,000	520	10	120,000	9,200	1,200		
PW13	10	7,500	3,100	2,600	10	1,800	350	44		
PW14	10	29,000	4,900	2,400	10	160,000	23,000	3,900		
PW15	10	730,000	57,000	33,000	10	8,300	4,300	3,100		
PW16	6	31,000	23,000	26,000	6	1,200	790	360		
PW17	2	17,000	6,500	17,000	2	64,000	38	64,000		
PZ-105	10	190,000	6,700	70	10	9,900	110	1.4		
PZ-106	10	120,000	25,000	12,000	10	1,400,000	380,000	64,000		
PZ-107	10	11,000	6,300	6,600	10	89,000	24,000	15,000		
W-5	1	450,000	ND	·	1	2,500	17	·		
OFF-SITE	WELLS/LOCA	TIONS	•			•				
B-15	1	13,000	140	190	1	1,600	ND	0.87		
B-16	7	33,000	760	1,200	7	4,500	9.8	6.4		
BR-103	5	400	2.1		5	46	ND			
BR-104	5	3,100	1.6			11				
BR-105	10	24,000	720	310	10	350	6.4	6.4		
BR-105D	10	10,000	340	580	10	230	3.9	9.2		
BR-106	10	25,000	2,700	8,500	10	12,000	100	180		
BR-108	5	1,700	18			2				
BR-112D	5	310	46			4.3				
BR-113D	5	490	26			2.8				
BR-114	5	520	24		5	12	0.2			
BR-116	5	12	ND			86				
BR-116D	5	710	42			130				
BR-117D	5	80	4.4			1.9				
BR-118D	5	330	40			6.6				
BR-122D	5	650	100			ND				
BR-123D	5	860	50			7				
BR-126	10	12,000	2,800	2,400	10	240	3.7	ND		

# TABLE 4 COMPARISON OF FALL 2013 CHLOROPYRIDINES AND VOLATILE ORGANICS CONCENTRATIONS IN GROUNDWATER TO PREVIOUS RESULTS (ug/L)

## ARCH ROCHESTER SEMI-ANNUAL GROUNDWATER MONITORING REPORT

WELL	SELECTED CHLOROPYRIDINES					SELECTED VOCs				
	# EVENTS	HISTORIC	5-YEAR	NOV 2013	# EVENTS	HISTORIC	5-YEAR	NOV 2013		
	IN PRIOR 5	MAXIMUM	MEAN	RESULT	<b>IN PRIOR 5</b>	MAXIMUM	MEAN	RESULT		
	YRS				YRS					
MW-103	5	97	0.6		5	750	ND			
MW-104	5	180	1.2			5.8				
MW-106	10	130,000	7,400	9,200	10	4,000	290	200		
MW-114	5	18	1		5	27	23			
MW-16	5	360	7.9	7.4		10				
NESS-E	5	5,000	43			710				
NESS-W	5	2,100	ND			94				
PZ-101	10	27,000	58	130	10	620	3.2	8.9		
PZ-102	10	58,000	4,900	10,000	10	11,000	300	400		
PZ-103	10	73,000	8,900	25,000	10	46,000	980	1,400		
PZ-104	10	9,100	1,300	760	10	52	7	3.6		
QD-1	10	170	4.5	ND		ND				
QO-2	10	380	6.9	22.0		ND				
QO-2S1	10	27	2.4	ND	_	ND				
QS-4	10	3,400	110	100.0		ND				

### Note:

- 1) Number of samples and mean reflect 5-year sampling period from November 2008 through May 2013. Historic maximum based on all available results from March 1990 through May 2013.
- 2) Chloropyridines represented by: 2-Chloropyridine, 2,6-Dichloropyridine, 3-Chloropyridine, 4-Chloropyridine, p-Fluoroaniline, and Pyridine.
- 3) Selected VOCs represented by Carbon Tetrachloride, Chlorobenzene, Chloroform, Methylene Chloride, Tetrachloroethene, and Trichloroethene.
- 4) Bold and shade November 2013 exceeds 5-year mean.
- 5) ND = Not detected BLANK = Not sampled

Prepared/Date: NMB 01/13/14 Checked/Date: JEB 01/15/14

### TABLE 5 FALL 2013 QUARRY SEEP AND OUTFALL WATER SAMPLE RESULTS **CHLOROPYRIDINES**

### ARCH CHEMICALS, INC. **ROCHESTER, NEW YORK**

LOCATION:	QS-4	QO-2	QO-2S1	QD-1
SAMPLE DATE:	12/13/2013	12/13/2013	11/8/2013	12/13/2013
QC TYPE:	Sample	Sample	Sample	Sample
SELECTED CHLOROPYRIDINES BY SW-846				
Method 8270C (μg/L)				
2,6-Dichloropyridine	26	3.3 J	10 U	9.6 U
2-Chloropyridine	74	15	10 U	9.6 U
3-Chloropyridine	9.5 U	3.4 J	10 U	9.6 U
4-Chloropyridine	9.5 U	9.5 U	10 U	9.6 U
p-Fluoroaniline	9.5 U	9.5 U	10 U	9.6 U
Pyridine	24 U	24 U	25 U	24 U

U = Compound not detected; value represents sample quantitation limit.

J = Estimated value.

 $\mu$ g/L = micrograms per liter

Prepared/Date: BJS 01/06/14

Checked/Date: JEB 01/24/14

TABLE 6 **EXTRACTION WELL WEEKLY FLOW MEASUREMENTS - JUNE 2013 THROUGH NOVEMBER 2013** 

### ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

Week	BR-5A	BR-7A	BR-9	PW-13	PW-14	PW-15	PW-16	PW-17	BR-127	Total
Ending	[Gal./Wk.]	[Gal.]								
Jun '13										
06/02/13	14,437	84,151	22,101	81,914	1,364	12,875	47,397	1,970	56,200	322,409
06/09/13	14,997	74,418	21,728	82,934	1,417	2,419 *	,	3,567	48,426	298,507
06/16/13	16,275	81,841	21,805	84,464	1,544	66,097	49,768	4,117	45,913	371,824
06/23/13	15,077	76,076	20,280	76,620	1,571	143,751	46,327	3,892	39,623	423,217
06/30/13	15,522	81,563	17,570	80,314	1,918	123,995	49,941	3,784	42,719	417,326
									Total [Gal.]	<u>1,833,283</u>
Jul '13										
07/07/13	14,885	77,758	12,602	74,258	1,929	101,267	45,667	3,355	38,445	370,166
07/14/13	14,939	83,005	16,008	72,449	2,221	98,178	47,070	3,478	38,906	376,254
07/21/13	13,976	88,464	25,028	61,417	2,445	88,560	45,248	3,392	37,185	365,715
07/28/13	13,453	86,027	24,890	58,658	2,672	81,547	42,173	3,301	34,921	347,642
									Total [Gal.]	1,459,777
Aug '13										
08/04/13	13,883	80,587	23,543	55,593	2,926	79,262	40,158	3,142	35,842	334,936
08/11/13	15,881	91,275	26,248	64,734	2,853	89,980	47,434	3,718	40,692	382,815
08/18/13	14,959	82,242	23,376	57,779	2,469	78,143	42,038	3,409	36,888	341,303
08/25/13	14,889	68,600		61,998	3,128	76,508	43,318	3,463	38,175	334,963
									Total [Gal.]	1,394,017
Sep '13										
09/01/13	14,999	97,637	20,362	59,193	3,152	74,506	40,947	3,394	38,249	352,439
09/08/13	14,294	94,747	20,950	58,995	2,853	70,973	37,371	3,282	23,258 *	326,723
09/15/13	14,394	96,184	24,783	62,285	2,591	65,653	37,439	3,264	25,250	306,850
09/13/13	14,547	96,304	23,435	63,573	2,583	48,007	36,847	3,285	34,209	322,790
09/22/13	14,868	96,103	22,548	64,841	2,668	48,428	36,597	3,205	37,131	326,399
09/29/13	14,000	30,103	22,540	04,041	2,000	40,420	30,331	3,213	Total [Gal.]	1,635,201
									rotai [Gai.]	1,033,201
Oct '13	10.000	0F 770	10.070	EQ 440	2.270	40	* 22.067	2,605	24.764	240.004
10/06/13	12,868	85,772	18,973	58,446	3,379	10	,	2,605	34,761	249,881
10/13/13	15,349	85,785	16,490	60,252	3,410	34,984		3,180	32,829	286,791
10/20/13	14,995	94,831	14,583	67,442	3,221	61,700	37,919	3,258	35,991	333,940
10/27/13	14,747	100,302	210	* 70,483	4,103	58,669	36,617	3,192	36,563	324,886
									Total [Gal.]	<u>1,195,498</u>
Nov '13										
11/03/13	14,687	94,086	21,807	69,492	4,084	56,244	35,722	3,132	33,265	332,519
11/10/13	15,542	93,218	29,427	68,968	4,147	53,788	34,563	3,199	33,723	336,575
11/17/13	15,298	94,997	29,398	51,980	1,606	24,289	33,691	1,482	15,136	267,877
11/24/13	15,391	96,107	29,423	45,362	0 **	0 *	* 33,567	0 *	* 0 **	219,850
									Total [Gal.]	1,156,821
Total 6 Mo										
Removal		10,000,000	550.450	14 744 444	00.054	14 000 000	14.000.000	04.070	000 007	0.074.507
(Gal.)	385,152	2,282,080	552,452	1,714,444	66,254	1,639,833	1,063,999	81,076	889,307	8,674,597

### Notes:

Prepared/Date: JEB 01/17/14 Checked/Date: NMB 01/24/14

<sup>-</sup> Flow rate adversely affected by pump failure, pluggage in discharge line, or other maintenance activity - Wells PW-14, PW-15, PW-17, and BR-127 shut down for ISCO Pilot Test

### **TABLE 7**

## MASS REMOVAL SUMMARY PERIOD: JUNE 2013 THROUGH NOVEMBER 2013

## ARCH ROCHESTER FALL 2013 GROUNDWATER MONITORING REPORT

Well	Total Vol. Pumped (gallons)	Avg. VOC Conc. (ppm)	Avg. PYR. Conc. (ppm)	VOCs Removed (pounds)	PYR. Removed (pounds)
BR-5A	385,200	0.019	0.15	0.06	0.5
BR-7A	2,282,000	0.27	2.5	5	48
BR-9	552,500	0.015	0.41	0.07	1.9
PW-13	1,714,400	0.5	3.5	7.3	49
PW-14	66,300	11	3.9	5.8	2.2
PW-15	1,639,800	2.3	55	31.9	755
PW-16	1,064,000	0.7	39	5.8	347
PW-17	81,100	31.9	13	21.5	9
BR-127	889,300	0.25	9.3	1.8	69
Totals:	8,674,600			79	1,281

Notes: VOC and pyridine concentrations used in this table are an average of the analytical results from the Spring 2013 and Fall 2013 sampling events for each well;

Total select VOCs now includes chlorobenzene in addition to PCE, TCE, methylene chloride,

carbon tetrachloride, and chloroform

#### TABLE 8 2014 SAMPLING SCHEDULE ARCH CHEMICALS, INC. ROCHESTER, NEW YORK

ARCH ROCHEST	ER							20	014	1	
MONITORING PR	OGRAM					SPR	ING	FΔ	LL	то	ΤΔΙ
INOTHIT CRING TR	O CITALII					+					·AL
	Well	zone	area	Frequency/Parameters	Purpose	Pyridines	VOCs	Pyridines	VOCs	Pyridines	VOCs
OFF-SITE	MW-103	ОВ	BRBC	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
MONITORING	BR-103	BR	BRBC	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	MW-104 BR-104	OB BR	BUFFALO RD	annual monitoring, PYR annual monitoring, PYR	trend monitoring	1				1	0
	BR-104 BR-105	BR BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	trend monitoring perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-105D	BR deep	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	MW-106	ОВ	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-106	BR	AID-HOSP	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-108	BR	AID-HOSP	annual monitoring, PYR	trend monitoring	1				1	0
	BR-112D	BR deep	NYSDOT	annual monitoring, PYR	trend monitoring	1				1	0
	BR-113D	BR deep	NYSDOT	annual monitoring, PYR	trend monitoring	1	١.			1	0
	MW-114	OB	JACKSON	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-114 BR-116	BR BR	JACKSON PFAUDLER	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	0
	BR-116 BR-116D	BR deep	PFAUDLER	annual monitoring, PYR annual monitoring, PYR	trend monitoring trend monitoring	1 1				1	0
	BR-117D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-118D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-122D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	BR-123D	BR deep	QUARRY	annual monitoring, PYR	trend monitoring	1				1	0
	NESS-E	BR deep	NESS	annual monitoring, PYR	trend monitoring	1				1	0
	NESS-W	BR deep	NESS	annual monitoring, PYR	trend monitoring	1				1	0
	PZ-101	BR	McKee Rd	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-102	BR	McKee Rd	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PZ-103 PZ-104	BR BR	McKee Rd ARM	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1 1	2	2
	BR-126	BR	ARM	semi-annual monitoring, VOCs & PYR semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring trend monitoring	1	1	1	1	2	2
	B-16	OB	ARM	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	MW-16	BR	Gen'l Circuits	annual monitoring, PYR	trend monitoring			1	-	1	0
ON-SITE	PZ-107	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
MONITORING	PZ-106	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	PZ-105	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1	2	2
	BR-127	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	BR-3	BR	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	BR-8 BR-9	BR	ON-SITE ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	1	1	1	1 1	2	2
	BR-5A	pumping well pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring mass removal/trend monitoring	1	1	1	1	2	2
	BR-6A	BR	ON-SITE	semi-annual monitoring, VOCs & PYR	trend monitoring	Ιί	1	1	1	2	2
	BR-7A	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	B-17	ОВ	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	B-7	ОВ	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	B-11	ОВ	ON-SITE	semi-annual monitoring, VOCs & PYR	continue until replaced by trench	1	1	1	1	2	2
	B-5	ОВ	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	B-15	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	E-3	OB	ON-SITE	annual monitoring, VOCs & PYR	trend monitoring	1	1			1	1
	MW-127	OB	ON-SITE	semi-annual monitoring, VOCs & PYR	perimeter sentinel/trend monitoring	1	1	1	1	2	2
	PW10 PW12	pumping well BR	ON-SITE ON-SITE	semi-annual monitoring, VOCs & PYR semi-annual monitoring, VOCs & PYR	trend monitoring trend monitoring	1	1	1	1 1	2	2
	PW13	pumping well	ON-SITE	semi-annual monitoring, VOCs & PTR	mass removal/trend monitoring	1	1	1	1	2	2
	PW14	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW15	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW16	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
	PW17	pumping well	ON-SITE	semi-annual monitoring, VOCs & PYR	mass removal/trend monitoring	1	1	1	1	2	2
QUARRY/CANAL	QS-4	quarry seep	QUARRY	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
MONITORING	QD-1	quarry ditch	DITCH	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
	QO-2	quarry outfall	DITCH	semi-annual monitoring, PYR	trend monitoring	1		1		2	0
TOTAL CAMP	QO-2S1	canal at outfall	CANAL	semi-annual monitoring, PYR	surface water monitoring	1	20	1	20	2	0
TOTAL SAMP	LES					55	38	35	30	90	68

Revised: 01/24/14

# Appendix A Groundwater Field Sampling Data Sheets



#### FIELD REPORT

TestAmerica Laboratories, Inc.

# REMEDIAL INVESTIGATION SAMPLING LONZA CHEMICAL ROCHESTER, NEW YORK

FALL 2013 Event

Prepared For:

AMEC, Inc. 511 Congress Street Portland, Maine 04101

Attention: Mr. Nelson Breton

Prepared By:

**TestAmerica Inc** Audubon Business Center

10 Hazelwood Drive Amherst, New York 14228-2298

NY5A5762

Written By:

Reviewed By:

Date:

Roger Senf

#### 1.0 INTRODUCTION

This report describes the sampling of the following points:

- Fourty-one (41) groundwater samples (1st Event)
- One (1) barge canal sample
- Three (3) quarry outfall / seep samples
- Fifteen (15) groundwater samples (2<sup>nd</sup> Event)

  These activities were in support of the Phase II Remediation Investigation being conducted at the Lonza Chemical facility in Rochester, New York. The samples were collected from November 08 15 & December 11-12, 2013 by TestAmerica Inc (TAL) Field personnel.

#### 2.0 METHODOLOGIES

#### 2.1 Water Level Measurements

Static water levels in all groundwater wells were measured from the top of the well casing/riser with an electronic water level indicator. All well bottoms were sounded with the weighted steel measuring tape. All measurements were recorded to the nearest hundredth of a foot (0.01 feet). The length of the measuring device which contacted the water was cleaned between wells with a deionized water rinse and paper towel wipe. These data are presented on Sampling Summary Table and Field Observation forms.

#### 2.2 Well Purging

Monitoring wells were evacuated prior to sampling employing one of the following methods:

- Purging three (3) times the standing water volume using precleaned or dedicated 1.25" X
   stainless steel bailers, 2" X 5' polyvinyl chloride bailers, peristaltic pump or QED Low-Flow Bladder pumps.
- 2) Evacuated with the low flow/low stress puring technique using either QED Low-Flow Bladder pumps or a variable rate peristaltic pump.

Wells that were purged of three (3) standing volumes were mainly wells located on or very near the Erie Canal and historically purged with this method prior to sampling. The remaining wells were evacuated with a low flow/low stress purging technique. This technique involves the use of a variable flow rate bladder or peristaltic pump. The pumps were employed to purge the monitoring wells at a flow rate such that drawdown of the water column from static conditions is minimal. Field measurements of pH, specific

conductance, temperature, ORP, dissolved oxygen and turbidity are monitored every 3-5 minutes until stabilization of parameters is realized. Once stabilization has occurred, sampling can be conducted. All purged water was collected into 55-gallon drums for disposal at the on-site wastewater treatment facility. Data pertaining to each evacuation are presented on the Sampling Summary Table and field Observation Forms.

#### 2.3 Surface Water Samples

Surface water samples were collected from one (1) location on the Erie Barge Canal, two (2) outfall samples and one (1) seep location. Sample locations were noted on the Field Forms.

#### 3.0 SAMPLING

#### 3.1 Monitoring Wells

All groundwater wells were sampled using precleaned or dedicated 1.25" X 1.25" X 5' stainless steel bailers, perisaltic pumps or bladder (SamplePro) pumps when low flow purging techniques were used. Each bailer was constructed with teflon, bottom-filling check valve and was assembled without glues or welds. New ¼" poly rope was attached to each bailer. The bailer was slowly lowered into the water column, minimizing agitation and devolatilization. Low density polyethylene (LDPE) tubing was used with both the bladder (QED) and the peristaltic pumps. The bladder pumps were decontaminated between sample locations in accordance with the work plan. Personnel exercised care in all aspects of the sampling to ensure the collection of a representative sample An additional sample container was collected from each well in order to facilitate the measurement of field analytical parameters. Data pertaining to sampling are presented on the Sampling Summary Table and the Field Observation Forms.

#### 3.2 Canal Sampling

When possible, samples were collected directly from the canal into appropriate sample containers. Otherwise, samples were collected with the use of a unique, laboratory-cleaned stainless steel bailer. The bailers were immersed just below the surface and removed. Sample was poured directly into the appropriate container. An additional container was collected to facilitate the measurement of field parameters. Additional data pertaining to these samples is presented in the Sampling Summary Table and Field Observation Forms.

#### 3.3 Seep Sampling

Groundwater samples were collected from seeps at the quarry (QS4) located on Buffalo Road. The samples were collected with the use of a laboratory cleaned stainless steel bucket

and was then poured directly into the appropriate containers. An additional container was collected to facilitate the measurement of field parameters. Data pertaining to this sampling is presented in the Sampling Summary Table and Field Observation Forms.

#### 4.0 SAMPLE CONTAINERS

Monitoring wells and surface water samples requiring analysis for volatile organics were collected into 40 ml glass vials with teflon septa. Samples for semi-volatile and Pyridine analysis were collected into one (1) liter amber glass bottles with teflon-lined caps. All bottles were purchased new and cleaned (Protocol A, 300 series) from Environmental Supply Services. Each container was labeled with the following information:

- Sample Identification (Well/Point I.D.)
- Date
- Project Number
- Sampler's Initials

#### 5.0 FIELD MEASUREMENTS

On-site field measurements were made of each sample's pH, specific conductance and temperature. All measurements were made in accordance with protocols outlined in Methods for Chemical Analysis of Water and Wastes (EPA – 600/4-79-9020). These data were presented on the Sampling Summary Table and Field Observation Forms.

#### 6.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

#### 6.1 Trip Blanks

Trip blanks were collected with each sample shipment requiring volatile organic analysis. Each trip blank consisted of two 40 ml glass vials with teflon septa which were filled with deionized water at the TAL laboratory. These blanks were transported to the site, stored with field collected samples and submitted to the TAL facility for analysis.

#### 6.2 Equipment Rinse Blank

Equipment rinse blanks were collected as required by the work plan.

#### 7.0 CHAIN OF CUSTODY

Chain of custody was initiated at the time of sample collection and maintained through delivery to the TAL facility in Amherst, New York. Copies of these documents are included in the analytical report package.

SAMPLE POINT	DATE	DEPTH TO WATER	CASING LELEVATION	GW ELEVATION	TIME	Comments
B-1	11/08/13	9.34		-9.34	1159	NO L-NAPL ; NO D-NAPL
B-10		11.78		-11.78	1147	NO L-NAPL ; NO D-NAPL
B-11		8.59		-8.59	1145	NO L-NAPL ;NO D-NAPL 11.55 BOT.
B-13		12.87		-12.87	1255	DRY @ 12.87
B-14		12.25		-12.25	1258	
B-15		9.92		-9.92	1300	
B-16		9.83		-9.83	1302	NO L-NAPL ;NO D-NAPL 13.20 BOT.
B-17		12.58		-12.58	1130	NO L-NAPL ; NO D-NAPL
B-2		10.49		-10.49	1201	NO L-NAPL ; NO D-NAPL
B-4		18.73		-18.73	1031	NO L-NAPL ; NO D-NAPL
B-5		15.80		-15.80	1028	NO L-NAPL ; NO D-NAPL
B-7		16.75		-16.75	1218	NO L-NAPL ; NO D-NAPL
B-8		13.20		-13.20	1107	NO L-NAPL ; NO D-NAPL
BR-1		7.58		-7.58	1042	NO L-NAPL ; NO D-NAPL
BR-102		22.64		-22.64	1206	
BR-103		6.21		-6.21	1205	
BVT-1		9.96			1036	
BVT-2		10.00			1130	
BVT-3		9.75			1220	
MW-103		1.64	1	-1.64	1206	
BR-104		11.65		-11.65	1215	
MW-104		6.24		-6.24	1216	
BR-105		23.14		-23.14	1314	
BR-105D		25.92		-25.92	1315	
MW-105		18.78		-18.78	1316	
BR-106		23.85		-23.85	1320	
MW-106		13.40		-13.40	1322	
BR-108		28.82		-28.82	1335	
MW-108		13.45		-13.45	1337	
BR-111		29.91		-29.91	1253	
BR-111D		29.77	,	-29.77	1252	

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW	TIME	Gomments
BR-112A		32.29		-32.29	1247	STATE OF THE PARTY
BR-112D		36.33		-36,33	1246	
BR-113		31.40		-31.40	1230	
BR-113D		31.31		-31.31	1231	
BR-114	11/08/13	13.69		-13.69	1213	
MVV-114		10.33		-10.33	1212	
BR-116		29.73		-29.73	1145	
BR-116D		35.67		-35.67	1150	
BR-117		24.00		-24.00	1050	CASCADING WELL
BR-117D		50.27		-50.27	1055	
BR-118		27.90		-27.90	1040	
BR-118D		49.12		-49.12	1045	
BR-122D		45.42		-45.42	1110	
BR-123D		45.66		-45.66	1105	
BR-124D		31.84		-31.84	1100	
BR-126		10.35		-10.35	1306	
BR-127		13.63			1142	NO L-NAPL
MW-127		9.27			1141	NO L-NAPL ; NO D-NAPL
BR-2		11.83		-11.83	1136	NO L-NAPL ; NO D-NAPL
BR-2A		12.71		-12.71	1134	NO L-NAPL ; NO D-NAPL
BR-2D		0.05		-0.05	1133	NO L-NAPL ; NO D-NAPL
BR-3		13.75		-13.75	1117	NO L-NAPL
BR-3D		54.45		-54.45	1118	NO L-NAPL ; NO D-NAPL
BR-4		7.51		-7.51	1138	NO L-NAPL
BR-5		14.93		-13.82	1052	NO L-NAPL ; NO D-NAPL
BR-5A		17.90		-17.90	1053	NO L-NAPL
BR-6A		16.82		-16.82	1109	NO L-NAPL
BR-7		29.98	7	-29.98	1214	NO L-NAPL
BR-7A		20.19		-20.19	1213	NO L-NAPL ; NO D-NAPL
BR-8		15.41	38.43.55	-15.41	1029	NO L-NAPL ; NO D-NAPL
BR-9		31.53		-31.53	1200	NO L-NAPL

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME	Comments.
C-2A		12.41		-12.41	1135	NO L-NAPL ; NO D-NAPL
C-3						BURIED
C-5		13.15		-13.15	1119	NO L-NAPL ; NO D-NAPL
E-2		8.90		-8.90	1139	NO L-NAPL ; NO D-NAPL
E-3		4.65		-4.65	1050	NO L-NAPL ; NO D-NAPL
E-5	11/08/13	5.98	N-100-0-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	-5.98	1046	NO L-NAPL ; NO D-NAPL
EC-1		18.93		-18.93	1233	
EC-2		DRY	***************************************	#VALUE!	1238	DRY
ERIE CANAL		32.92		-32.92	1235	
MW-16		12.32		-12.32	1152	
MW-3		6.10		-6.10	1259	
MW-G6		4.55		-4.55	1303	
MW-G7					****	NOT LOCATED
MW-G8		8.10		-8.10	1305	
MW-G9		11.23		-11.23	1310	
N-2		4.02		-4.02	1044	NO L-NAPL ; NO D-NAPL
N-3		6.35		-6.35	1157	NO L-NAPL
NESS-E		22.97		-22.97	1220	
NESS-W		31.20		-31.20	1225	
OVT-1		10.08		-10.08	1034	
OVT-2		9.91	,	-9.91	1125	
OVT-3		9.51		-9.51	1224	
OVT-4		10.39		-10.39	1300	
PW-10		12.30		-12.30	1132	NO L-NAPL
PW-12		7.53		-7.53	1056	NO L-NAPL
PW-13		25.80		-25.80	1210	NO L-NAPL; NO D NAPL
PW-14		24.73		-24.73	1036	NO L-NAPL
PW-15		19.35		-19.35	1126	NO L-NAPL
PW-16		16.03			1034	NO L-NAPL
PW-17	·····	31.02	- Walder - W		1112	NO L-NAPL ; NO D-NAPL
PZ-101		18.67		-18.67	1230	

SAMPLE POINT	DATE	DEPTH TO	CASING	GW.	TIME	<b>C</b> omments:
SAMI LET ON	DAIL.	WATER	ELEVATION	ELEVATION	1000E (	Comments
PZ-102		17.45		-17.45	1225	
PZ-103		16.34		-16.34	1221	
PZ-104		15.52		-15.52	1256	
PZ-105		13.35		-13.35	1106	NO L-NAPL ; NO D-NAPL
PZ-106		11.88		-11.88	1037	NO L-NAPL ; NO D-NAPL
PZ-107		12.60	p	-12.60	1149	NO L-NAPL ; NO D-NAPL
PZ-109	11/08/13	15.42		-15.42	1120	NO L-NAPL; NO D-NAPL
PZ-110		16.30			1115	NO L-NAPL ; NO D-NAPL
PZ-111		12.55			1123	NO L-NAPL ; NO D-NAPL
W-2		10.68		-10.68	1203	NO L-NAPL ; NO D-NAPL
W-5		11.99		-11.99	1108	NO L-NAPL ; NO D-NAPL
- Alaska Rahaman						, , , , , , , , , , , , , , , , , , ,
						1 V V + 1 V = - 4 V =
						and the second of the second o
						and the second s
					* - 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	
			:			7.69.5000

# Sampling Summary Table LONZA

- E	0.51	0.33	0.23	0.52	0.65		9.68	08.0		0.28		0.18		0.47	0.45	0.31			1.00	79.0			0.21										0.49				
DO (maa)	<u>,</u>											_		Ū	Ū	_			•	Ŭ																	
ORP (mx)	(1114)	-74	-142	S	165	-74	29	174	183	-20	126	09	132	-199	-170	∞	-6	8	-79	-35	86-	-158	176	-11	-113	-45	132	-76	79	38	183	66-	-75	86-	-59	-51	-183
Turb	3.37	3.28	4.29	5.81	33.0	16.1	3.42	43.8	71.8	10.3	5.33	1.07	99.7	1.94	3.22	3.84	4.99	2.65	39.7	3.87	4.6	5.18	2.48	21.6	34.1	1.00	5.4	6.22	54.5	38	146	16.05	3.32	23.1	9.32	19.2	11.82
remp	8.3	11.7	10.6	15.2	13.9	12.7	12.3	14.1	14.1	12.1	14.9	12.3	14.3	12.8	12.8	11.8	12.6	12.0	12.9	13.0	12.5	14.7	12.3	14.0	18.3	12.9	13.7	12.1	13.9	13.1	10.9	14.9	13.1	15.2	14.9	14.4	15.6
Spec. Cond. 1	55	3824	4041	2627	317	4692	2577	4523	1499	4663	1729	5689	2353	2900	21220	3350	1009	3082	4487	2431	4649	13870	4449	2573	2526	3953	4888	3738	9107	6380	1944	950	2169	8308	1835	1173	10160
PH TD Unife	6.81	7.08	7.43	6.65	6.92	6.95	6.74	7.86	7.00	7.44	7.40	7.51	6.99	7.55	7.24	7.11	7.11	7.51	7.07	6.75	7.38	9.87	7.48	7.19	6.82	7.91	6.90	6.90	7.28	7.7	7.11	6.45	7.05	9.22	7.03	7.06	8.09
Bottom of Well (#)	מיו וויים																																		,		
Water	18.8	17.68	16.48	15.54	13.02	11.83	12.55	12.46	17.61	16.71	30.01	15,35	31.26	22.32	25.85	20.91	10.31	13.11	12.32	13.29	9.53	12.30	7.58	26.81	24.73	18.02	16.21	30.81	17.16	15.72	9.16	9.95	9.75	12.5	96.6	10.00	9.75
Sample Time	1045	1300	1155	1315	1130	1138	1340	1150	1105	1240	1215	1315	1120	1330	1225	1135	1255	1200	1418	1050	1215	1420	1215	1235	1120	1025	1130	1015	1240	1330	1050	1110	1155	1325	1115	1205	1250
Sample Date	11/12/2013	11/12/2013	11/12/2013	11/12/2013	11/13/2013	11/11/2013	11/11/2013	11/11/2013	11/12/2013	11/11/2013	11/12/2013	11/13/2013	11/12/2013	11/15/2013	11/15/2013	11/15/2013	11/13/2013	11/11/2013	11/8/2013	11/15/2013	11/11/2013	11/11/2013	11/13/2013	11/12/2013	11/11/2013	11/12/2013	11/12/2013	11/12/2013	11/13/2013	11/13/2013	11/12/2013	11/13/2013	11/13/2013	11/11/2013	11/8/2013	11/8/2013	11/8/2013
Sample Point	PZ-101	PZ-102	PZ-103	PZ-104	PZ-105	PZ-106	PZ-107	PZ-111	BR-5A	BR-6A	BR-7A	BR-8	BR-9	BR-105	BR-105D	BR-106	BR-126	BR-127	MW-16	MW-106	MW-127	PW-10	PW-12	PW-13	PW-14	PW-15	PW-16	PW-17	B-4	B-5	B-11	B-15	B-16	B-17	BVT-1	BVT-2	BVT-3

# Sampling Summary Table LONZA

	C (mdd)								
9	m (vm)	-27	48	-117	68-				
<u>-</u>	(NTU)	4.85	3.68	16.25	14.92				
2 2 2	<u>ရ</u> (၁)	15.4	14.9	15.8	14.7	10.6	9.0	8.4	8.9
Spec.	(umhos) (c	1786	1141	9692	2409	1477	1460	604	1877
=	STD Units (un	7.02	7.01	7.83	7.12	7.93	8.12	7.91	8.07
#0 #0	f Well (ft)								
Motor	vvalei Level (ft) o	10.08	9.91	9.51	10.39	¥	¥	₹	¥
olamoo	Time	1110	1208	1253	1331	1410	1130	1140	1350
Comple	Dafe	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013	11/8/2013
S C C C C C C C C C C C C C C C C C C C	Point	OVT-1	OVT-2	OVT-3	OVT-4	QD-1	QO-2	QO-2S1	QS-4

# Sampling Summary Table LONZA

	00	(mdd)																		
	ORP	(mv)	74	7	117	51	92	102	107	-171	54	ကု	<u>,</u>	20	38	-82	-153			
	Turb	(NTU)	10.97	33.4	3.19	7.28	4.57	5.81	6.12	13.55	7.23	5.00	4.18	24.5	14.52	12.82	25.8			
	emp	(c)	10.6	12.9	12.8	10.9	12.3	10.9	12.6	12.3	11.8	16.6	7.0	12.8	7.7	12.1	$\overline{}$	3.4	5.7	4.7
Spec.	ond.	(soqı	11570	24860	9037	1991	8247	8874	16510	4675	3848	11030	4731	9946	997	13780	8980	1872	1424	1937
	Hd	STD Units	9.21	12.44	8.96	8.96	8.42	7.85	10.43	7.69	11.8	8.11	7.38	7.59	7.32	9.56	9.27	7.14	7.99	7.99
	Bottom	f Well (ft)																		
	Water	Level (ft)	7.19	7.09	7.00	7.20	7.32	6.82	7.72	16.30			8.31	12.41	12.41	9.79	10.72			
		Time										1122	1202	1150	1300	1315	1417	1100	1125	1135
	Samble	Date	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/11/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/13/2013	12/13/2013	12/13/2013
	Sample	Point	BVT-1	BVT-2	BVT-3	OVT-1	OVT-2	OVT-3	0VT-4	BR-6A	BR-127	PW-14	MW-127	PZ-106	PZ-107	PZ-111	B-17	QO-2	QS-4	QD-1

### FIELD OBSERVATIONS LONZA Sample Point ID: D2-101 OC, TW PA Sample Matrix: Field Personnel: MONITORTING WELLINSPECTION: Cond of seal: (/Good () Cracked () None () Buried Cond of prot. Casing/riser: // Unlocked () Good Prot. Casing/riser height: () Flush Mount () Loose () Damaged If prot.casing; depth to riser below: Gas Meter (Calibration/ Reading): % Gas: Vol. Organic Meter (Calibration/Reading): Volatiles (ppm) PURGEINFORMATION:

Date / Time Initiated:	Date	1	Time	initiated:	
------------------------	------	---	------	------------	--

10:20

Date / Time Completed:

11-12-11/1045

Surf. Meas. Pt: () Prot. Casing

(YRiser

Riser Diameter, Inches:

Initial Water Level, Feet: 18.80

Elevation. G/W MSL: Method of Well Purge:

PROISTACTE

Well Total Depth, Feet:

Dedicated:

Total Volume Purged, Gal:

Purged To Dryness Y / N

Purge Observations:

LO-FLO

One (1) Riser Volume, Gal:

Start Clear

Finish

## PURGE DATA: (if applicable)

Time		e Rate n/htz)	Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other BAA	Other 00
10:35		mymin 100		8.9	G. 77	4524	4.88	7	0.54
640	1	1		8-6	6.79	4495	3.83	8	0.52
1045				8.3	G. 81	4465	3,37	5	0.51
(0.10	\\\\					ear:			

SAMPLIN	GINFORMA	TION:		· · · · · · · · · · · · · · · · · · ·	- Andrew Control Control		illan Salata ja seksi en s	*
POINT ID	PZI	101	_					
Date/Time		-13 1 1	045	_	Water Leve	l @ Sampling	յ, Feet:	20.58
Method of	Sampling:		Zeristalt	¿ pump		_Dedicated:	(V) N	
Multi-phas	ed/ layered:	() Yes	<b>N</b> O		If YES:	( ) light	( ) heavy	
SAMPLIN	G DATA:							
Time	Temp. (°C)	pH (std units)	ł .	uctivity os/cm)	Turb. (NTU)	Other (One)	Other ( /).0 )	
1047	8.3	G.81	44	G5	3.31	5	051	
			18 c - 18 c		. 4.	The second		
INSTRUM	ENT-CALIBR	ATION/CHE	ČK DATA:					<b>高级的</b> 为 <b>在</b> 样心
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		, at.250	18 a			1= 10701	in sec	N. 1. 1
Solution ID#				:				
GENERAL	INFORMATI	Marine 24 314 3213 W 4344 W 477 2711 4				70E		
	nditions @ tin irać <b>t</b> eristics:	i safettar e	green V	tear	A i Hillian	Spatial	entina esta	
		. 23.50		rear .	<u> </u>	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
COMMENT	S AND OBS	ERVATIONS	3:		·			
·	The same of the sa			<u>.</u>				
	·		<u> </u>	<u> </u>	<del></del>			
			p2 .					
					•			
I certify that protocals.	sampling pro	ocedures wer	e in accorda	nce with all a	ipplicable EP	A, State and	Site-Specific	
Date:	11/12/13	Ву:	Tromes	-NEC	3	Company: _	TAL	

I ILLD OBGEN	
Facility: LONZA	Sample Point ID: PZ-102
Field Personnel: R, TW PN	Sample Matrix:
MONITORTING WELLINSPECTION:	
Date/Time 11-12-13 / 1225	Cond of seal: () Good () Cracked%  () None () Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: // Unlocked ( ) Good ( ) Loose ( ) Flush Mount ( ) Damaged
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL: /
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm)
PURGE INFORMATION:	
Date / Time Initiated: <u>//- 12-13/ 1125 1225</u>	Date / Time Completed: <u>n-12-8//300</u>
Surf. Meas. Pt: () Prot. Casing WRiser	Riser Diameter, Inches: 2.0
Initial Water Level, Feet:	Elevation. G/W MSL:
Well Total Depth, Feet: 30.20	Method of Well Purge: Peristante
One (1) Riser Volume, Gal:	Dedicated: ØIN
Total Volume Purged, Gal:	Purged To Dryness Y / N
Purge Observations:	Start Clear Finish Cle
PURGE DATA: (if applicable)	

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other BNP	Other DO
1240	W.L.			11.8	7.23	3566	3.54	-67	0.39
1245	17.71			11.8	7.12	3646	2.89	-10	0.37
1250	11.73			11.8	7.09	3755	3.34	-73	0.37
	17.74			11.7	7.08	3819	3.30	-74	0.34
1255	17.74			11.7	7.08	3824	3.28	-74	0.33
1300	1.14			(,,					

		TION:		de de la companya de	en geranden er sta.	A STATE OF THE PARTY OF THE PAR	पूर्वित्यु कर्व निष्	
POINT ID		102	· <del>-</del>					
Date/Time	11-17	-13 /	1300	<del>_</del>	Water Leve	l @ Sampling	ı, Feet:	17.74
Method of Sa	ampling:		perist	ealtre pum	P	_Dedicated:	Ø/N	
Multi-phased	d/ layered:	( ) Yes	MNO		If YES:		( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)	1	luctivity os/cm)	Turb. (NTU)	Other (CIP)	Other ( <i>D.o</i> )	
1302	11.7	17-08	3,	824	3.28	-74	0.37	
		The 11-12-13				A		
	•							
INSTRUMEN	NT-CALIBR	ATION/CHE	CK DATA:				J. J	PORT AND
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Sto 10 NTU (± 10%)
		1		11.				det de
Solution ID#								
	,							
GENERALIN	NEORMATI	ON:						
Weather conc	litions @ tir			thy Sun	14			
Sample Chara	acteristics:	भू कृति विशेष्ट्रकरः वृत्यसम्बद्धाः		our			arem e i i i i i i Bili e	•
COMMENTS	AND OBS	ERVATIONS	· ·					
		, i				THE PROPERTY OF THE PARTY OF TH		
<del></del>						<del></del>		
ž ,		, .						
			Ŋ					<u> </u>
· · · · · · · · · · · · · · · · · · ·	<u> </u>		***************************************				· .	
certify that sa	ampling pro	cedures were	in accorda	nce with all a	pplicable EP	'A, State and	Site-Specific	
	A / 17/ 174	D	1		and the state of t		-/ A.	
/a.c	1/12/13	By:	Thome	MA	2	Company: _	1776	<u> </u>

# FIELD OBSERVATIONS Facility: LONZA Sample Point ID: P2-10-3 Field Personnel: Name of the proof of the proof

Volatiles (npm)			
Val Organia Motor (Calibration/Reading): Volatios (PPI).	Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm)	

% Gas:

				ON:
				THE PARTY

If prot.casing; depth to riser below:

Gas Meter (Calibration/ Reading):

Date / Time Initiated: n-12-13/1125 Date / Time Completed: n-12-13/1155

Surf. Meas. Pt: () Prot. Casing WRiser Riser Diameter, Inches:

Initial Water Level, Feet: 1648 Elevation. G/W MSL:

Well Total Depth, Feet: 32.52 Method of Well Purge: PerioTACTCC

One (1) Riser Volume, Gal: Dedicated:  $(\cancel{y} \ / \ N)$ 

Total Volume Purged, Gal: Purged To Dryness Y / 🕦

Purge Observations: LO-FLO Start Clear Finish Char

# PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other PO
1140	18.25			108	750	3999-	3.28	-99	0.26
1145	18,40			10,8	7.46	3479	4.34	-117	0.24
1150	18,51			10.7	7.44	4005	4.57	-135	0.23
1155	18.68			106	7.43	4041	4.29	-142	0.23
-									

SAMPLING	INFORMA	TION:		Marie Carlo	The second secon	and the state of t	4	· * 7\$-
POINT ID	p2-10	23	: : : : : : : : : : : : : : : : : : :					
Date/Time	11-12-	13 /	1155	<del>-</del> ,	Water Level	@ Sampling	ı, Feet:	18.68
Method of S	Sampling:		peri.	Staltic		Dedicated:	Ø/N	
Multi-phase	d/ layered:	( ) Yes	LYNO		If YES:	( ) light	( ) heavy	y
SAMPLING	DATA:							
Time	Temp.	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other	Other (D.O)	
1157	10.6	7.43	404	11	4.29	-142	0.23	
			e jê ve dire gerê 🕏		24 × 1	estitue e		
				:			4111, 4	
INSTRUME	NT CALIBR	ATION/CHE	CK DATA					3. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
erika etikalan etga, an								
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std (± 10%)
		i etert (\$60) j	A CONTRACTOR OF A SEC		x			
	<u> </u>							<u> </u>
		4,414				217.1	91	
Solution ID#								
and the second s	NEORMATI ditions @ tin	<b>用于在1000年1000年1000年1000年1000日</b>	a: 0	rtly Sur	12 Cm			The state of the s
		e proposition	Tally of the		7007 (28)			:
	acteristics:		:	s). c	oder	* * * * * * * * * * * * * * * * * * *		
COMMENTS	S AND OBS	ERVATIONS	<u>:</u>		<u></u>	·		
		· ·	2.5					
				: " :				
, 1111								
l certify that s protocals.	sampling pro	cedures were	e in accordar	nce with all a	ipplicable EP	A, State and	Site-Specifi	С
•	11 /12/13	By:	Vinema	11/0		Company	TA,	
	11 112112	Бу.	9110110	1000	New Commence	company: _	1776	

Facility: LONZA	Sample Point ID: P2-104
Field Personnel: PC, TW PN	Sample Matrix:
MONITORTING WELLINSPECTION:	
Date/Time 11-12-13 / 12-45	Cond of seal: Good ( ) Cracked % ( ) None ( ) Burjed
Prot. Casing/riser height:	Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL: /
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm,/
PURGEINFORMATION:	
Date / Time Initiated: 11-12-13/ 1250	Date / Time Completed: 11-12-13/131)
Surf. Meas. Pt: ( ) Prot. Casing / Riser	Riser Diameter, Inches: 2.0
Initial Water Level, Feet: /5.54	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Peristantic
One (1) Riser Volume, Gal:	Dedicated: Y (N)
Total Volume Purged, Gal:	Purged To Dryness Y / N
Purge Observations:	Start Clear Finish Clear
PURGE DATA: (if applicable)	

Time		e Rate n/htz)	Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other OO
1300	15.57	200		15.2	6.98	2756	6.01	28	.54
1305	15.67			15.4	6.59	2630	5,97	4	.54
1310				15.4	6.101	2629	5.89	-1	,52
1315				15.2	6.65	2627	5.81	-5	,52

SAMPLING	INFORMAT	JON:		<b>除进</b> 了	in the same of a second		a de la companya del companya de la companya del companya de la co	VA 1138
POINT ID	P2-	104						
	•	3 ,	1315	-	Water Level	@ Sampling	, Feet:	15-GE
Method of S	ampling:	, · · · · · · · · · · · · · · · · · · ·	perist	altic		_Dedicated:	Ø)IN	V
Multi-phased	d/ layered:	( ) Yes	LINO		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:	· · ·						
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other ( or P )	Other ( \$1.0.)	
1317	15-2	Co.Co.S	26	27	5.81	-5	0.57	
			. 1	<u> </u>				
·						1 4 25 1		
INSTRUME	NT CALIBR	ATION/CHE	OK DATA!			ight Torrange exam	×	
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
			1 1 2 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					-t
Solution ID#	-				<u> </u>			
	Marine de Santon Santano						47.25.25.1845.1835.25.18	
GENERALI							iki .	A. C.
Weather con	ditions @ tin	ne of samplin		<del>andron a de la com</del> Portugação de la composição		<u>rangan dan ke</u>	· · · · · · · · · · · · · · · · · · ·	
Sample Char	acteristics:		lest.		<u> </u>	ATT 1 - ET		
COMMENTS	S AND OBS	ERVATIONS	<b>:</b>	· · · · ·	·	* ****	j:	
3							3-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	i :
	•			<u> </u>			·	
		4						
				· · · · · · · · · · · · · · · · · · ·			N.,	
							1	
I certify that sprotocals.	sampling pro	ocedures wer	e in accorda	nce with all a	applicable El	PA, State and	Site-Specific	;
Date:	11/2/13	By:		1>		Company:	TA (	<b>-</b>

# FIELD OBSERVATIONS Facility: LONZA Sample Point ID: P2-105

Field Personnel: R, TW		Sample Matrix:	6W
MONITORTING WELLINSPECTION:			plot Latini
Date/Time 11-13-13 / /1	00	Cond of seal: ( ) Good ( ) ( ) None (	
Prot. Casing/riser height:		Cond of prot. Casing/rise ()	er: ( ) Unlocked ( ) Good Loose (X Flush Mount Damaged
If prot.casing; depth to riser below:			
Gas Meter (Calibration/ Reading):	% Gas:	/ % LEL:	
Vol. Organic Meter (Calibration/Reading	):	Volatiles (ppm;/	
PURGE INFORMATION:			
Date / Time Initiated: #- 13 -13/	1101	Date / Time Completed:	11-13-13/ 1130
Quet Mana Pt. ( ) Prot Casing	<b></b> A) Riser	Riser Diameter, Inches:	2, 4

Vol. Organic Meter (Calibration/Reading).	Column (PP	
PURGE INFORMATION:		The state of the s
Date / Time Initiated: //- /3 -/3 / /10/	Date / Time Completed:	11-13-13/1130
Surf. Meas. Pt: ( ) Prot. Casing	Riser Diameter, Inches:	2. u
Initial Water Level, Feet: 13.02	Elevation. G/W MSL:	
Well Total Depth, Feet:	Method of Well Purge:	Personate
One (1) Riser Volume, Gal:	Dedicated: Y / 🗭	
Total Volume Purged, Gal:	Purged To Dryness Y / N	Clear
Purge Observations: CO - FCO	Start 6 7 7 ml Finish	Gray Just

# PURGE DATA: (if applicable)

Purge Observations:

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00
1115	13,13	Miler		145	7.00	319	54.0	162	0,70
1120	1	1		14.5	6.90	316	33,1	164	0.65
1125				14.1	6.91	316	34.5	165	0.65
1130	1	11		13.9	6.92	317	33.0	165	0.65
					7				

SAMPER (a 1130 /11-13-13)
Page

Page 1 of 2

SAMPLING	HNFORMA	TION:	The state of the s	6%2 r	and the second s	makaina pro almenana	ing the second	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
POINT ID			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Date/Time	<u></u>	1			Water Leve	l @ Sampling	g, Feet:	11
Method of S	Sampling:		- 1			_Dedicated:	Y / N	
Multi-phase	d/ layered:	( ) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp.	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (	Other (	
		eres Stand			· · · ·	1,55		
			Stage Seed		:			n, est
INSTRUME	NT CALIBR	ATION/CHÉ	CK DATA:			January de la company de la co		
a now we can be going a girly to by Agent and				5 47 5 N S (				mi i Pangusi kembar Tanggaran
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std \1,413 \mumhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		<i>i</i>				1= 1.9 /01		E consulta
Solution ID#	<u> </u>		- 1 to 1					
10 10 10 10 10 10 10 10 10 10 10 10 10 1	Section and an arrangement of the section of the se			Sinter metales company of present			150	વસાર સુંબારનો
GENERALI	NEORMATI	ON:				V.1.761.741.761		
Weather con	ditions @ tin	ne of samplir	ng:	1. 11 (1.			4	
Sample Char	acteristics:			ist.	13	jegu jeun. Sprije		
COMMENTS	S AND OBS	ERVATIONS	3; 3;		**		and the	
		•	N. E.	48				
			- X					· · · · · · · · · · · · · · · · · · ·
***************************************								
				T.			<u>V</u>	
•			· · · · · · · · · · · · · · · · · · ·	<u></u>				
certify that sprotocals.	sampling pro	cedures wer	e in accorda	nce with all a	ipplicable EP	PA, State and	Site-Specific	:
Date:	1 1	By:		· · ·		Company:	e e ig	

Facility: LONZA	Sample Point ID: P 2-106
Field Personnel: Pt, Tw Pn	Sample Matrix:
MONITORTING WELLINSPECTION:	
Date/Time 11-11 -13 1 10:01:07	Cond of seal: ( ) Good // Cracked % ( ) None ( ) Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: // Unlocked ( ) Good ( ) Loose ( ) Flush Mount ( ) Damaged
If prot.casing; depth to riser below:	****
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL: /
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm;/
PURGEINFORMATION:	
Date / Time Initiated: /1-11 -13/ 11:07	Date / Time Completed: <u>n-l1-13/1137</u>
Surf. Meas. Pt: ( ) Prot. Casing	Riser Diameter, Inches: 2.0
Initial Water Level, Feet: (1.83	Elevation. G/W MSL:
Well Total Depth, Feet: 27.90	Method of Well Purge: Personal Tice
One (1) Riser Volume, Gal:	Dedicated: Y (N)
Total Volume Purged, Gal:	Purged To Dryness Y / D C/c-
Purge Observations: LO-FCO	Start Yellow Finish Yellow

## PURGE DATA: (if applicable)

Time		e Rate n/htz)	Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00
(1:22	WL 12.01	mymin		129	G. 80	4741	19.6	-98	
11:27				12.8	Ce.90	4745	16.9	-83	
11.32	12.63			12.8	Ce.92	4736	l Ce. 4	-75	
(1,37	1	1		12.7	Ce. 95	4692	16.1	-74	

SAMPLING	INFORMAT	ION:		NA C	gogaly springs sometimality		A second	
POINT ID	PZ-10	<u>G</u>		T.	•			
Date/Time	11-11-1		138		Water Level		, Feet:	12-63
Method of S	ampling:		perista	Itic pum	p - 1	Dedicated:	Ø/N	
Multi-phased	d/ layered:	( ) Yes	LTNO		If YES:	( ) light	( ) heavy	,
SAMPLING	DATA:	:						
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (orp)	Other (	
1139	12-7	6.95	469	)	16.1	-74	· 25	
			i kaj prita di la		) F1.5			
						150		
NSTRUME	NT CALIBRA	ATION/CHE	CK DATA:	<b>W</b>				
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std	Check Std 10 NTU (± 10%)
	7			.8		1= 10/0/		1,34, 1,515
		14						National Control
	<u>,</u>	V-	y					
Solution ID#			, s <sup>2</sup> / <sub>3</sub> / <sub>3</sub>					
GENERAL	NEORMATIO	ON:						
Weather con	ditions @ tim	ne of samplin	т <b>g:</b> <i>Цо</i>	udy 24	14°C			· · · · · · · · · · · · · · · · · · ·
Sample Char	ačteristics:		Clas		entre formation by the following section of the following section is a section of the following section of the following section is a section of the following section of t		State of the state	Martin Staff
COMMENTS	S AND OBS	ERVATIONS	4. 5. a 3	14.5.				
OCIENTALIA	3 7.(4D 0 00)							
-		71 go			- 1			
	<u>.</u>				Ť	· · · · · · · · · · · · · · · · · · ·		
	<u> </u>					-		
						<del></del>		<del></del>
I certify that protocals.	sampling pro	cedures wer	e in accorda	nce with all	applicable EF	PA, State and	l Site-Specif	ic
Date:	11/11/13	Ву:	Thom	-Me	5	Company:	TAL	

Facility: LONZA	Sample Point ID: P2-167
Field Personnel: R, Tw PA	Sample Matrix:
MONITORTING WELL INSPECTION:	
Date/Time 11-11-13 / 13/3	Cond of seal: ( ) Good ( ) Cracked % ( ) None Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: ( ) Unlocked (i) Good ( ) Loose ( ) Flush Mount ( ) Damaged
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	% LEL:
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm) / /
RURGENNFORMATION:	
Date / Time Initiated: #- 11 -13 / 1315	Date / Time Completed: 11-11-13/1340
Surf. Meas. Pt: ( ) Prot. Casing 🙀 Riser	Riser Diameter, Inches: 2.0
Initial Water Level, Feet: 1255	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Peri 3716 TU
One (1) Riser Volume, Gal:	Dedicated: Y / 🐿
Total Volume Purged, Gal:	Purged To Dryness Y / 😥
Purge Observations: LO-FLO	Start clear Finish Clear
PURGE DATA: (if applicable)	

Time		e Rate n/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other &PA	Other DO
1325		MU/N 200		12.1	6.99	2637	5.40	3/	0.72
1330	1			12.4	6.79	2589	3,70	30	0.70
1335		,		12.3	6.75	2530	3.59	29	0.69
1340				123	6,74	2577	3.42	29	6.68

SAMPLING	SINFORMA	TION:		na e	and the second s		And the second second	STATE OF THE STATE
POINT ID		tasi						
Date/Time				_	Water Leve	I @ Sampling	, Feet:	
Method of S	ampling:	·			1.200	_Dedicated:	Y / N	
Multi-phase	d/ layered:	( ) Yes	( ) No		If YES:	() light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (	Other (	
					. 1	alle sea a te	,	
			* t		, est.	1.4.4.1		
INSTRUME	NT-CALIBR	ATION/CHE	CK DATA:	<b>44.</b>				
<u> </u>			4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	77-15-15-16-15-16-15-16-15-16-16-16-16-16-16-16-16-16-16-16-16-16-		Check.Std		The control of the second
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	1,413 μm hos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		£ th				\= 10701		11 12 12 12 12 12 12 12 12 12 12 12 12 1
						<u>.</u>		
	<u> </u>							
Solution ID#	1 (4.7)			·				
GENERALI	NFORMATI	ON:	ing a state of the			Calpaga, and		
Weather con	ditions @ tir	ne of samplir	g:		er Beginning Sente Historia Alexan Tilerings			
Sample Char	Access to the contract of the						evilya il Pitos	į
COMMENTS	S AND OBS	ERVATIONS	) v	Ŷ.,	-4-1	:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
					·	<u>iiiiititt</u>		
· · · · · · · · · · · · · · · · · · ·	<del> </del>	Totale 	<u> </u>	N				
							· · · · · · · · · · · · · · · · · · ·	- 4.1
	- N.1		\$ \tag{\frac{1}{2}}	No. A .			<i>y</i> .	111
certify that s protocals.	ampling pro	cedures were	in accordar	nce with all a	ipplicable EP	A, State and	Site-Specific	
Date:	, ,	Ву:				Company		
		~y		r <sub>at</sub> to a		Company: _		

Facility:	LO	NZA Pl, P.			Sample Poir	nt ID:	BR-S	A
Field Person	nel:	Pl, P.			Sample Mat	rix:	60	
SAMPLING	TINFORWAT	TION:					(x) Grab ()	Composite
Date/Time	11-12-13	<i>1</i>	1105		Water Level	@ Sampling	, Feet:	17.61
Method of S	ampling:	s 1 SA	me s	Park		Dedicated:	ØIN	
		( ) Yes			If YES:	( ) light	( ) heavy	
SAMPLING	DATA:	•						
Time	Temp.	pH (SU)		uctivity os/cm)	Turb. (NTU)	Other ( OV)	Other (	
1107	14.1	7.00	140		71.8	183		
INSTRUME	INTE CALLIBIE	VAVIFIKØIN/KGIFIE	CK DATA.	Name of the second				
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								
GENERAL	INFORMAT	TON:						
Weather co	nditions @ ti	me of sampli	ing:	Cled	70	- 144		
Sample Cha	aracteristics:		SLA	1311	RA	The		
COMMENT	S AND OB	SERVATION	IS:				yydysdau <del>Dddo a sillyydd Dddd lleith ac y</del> ydd ddd lleith ac y dd ddd lleith ac y dd ddd lleith ac y dd dd dd dd	
	*************							
l certify tha	t sampling p	rocedures w	ere in accord	dance with a	II applicable	USEPA, State	e and Site-Spo	ecific
Date:	11 1124 12	ያ By:	1	1	d .	Company	: T19	٧

#### FIELD OBSERVATIONS Sample Point ID: BR-619 LONZA PC, TW PA Sample Matrix: Field Personnel: MONITORTING WELLINSPECTION: Cond of seal: ( ) Good ( ) Cracked Date/Time () None & Buried Cond of prot. Casing/riser: (AUnlocked () Good Prot. Casing/riser height: () Flush Mount ()Loose ( ) Damaged If prot.casing; depth to riser below: % Gas: Gas Meter (Calibration/ Reading): Volatiles (ppm) Vol. Organic Meter (Calibration/Reading): PURGEINFORMATION: 11-11-11/1240 Date / Time Completed: Date / Time Initiated: Riser Riser Diameter, Inches: Surf. Meas. Pt: () Prot. Casing Initial Water Level, Feet: \_\_\_\_\_\_/(...7/ Elevation. G/W MSL: PENISTACTE Method of Well Purge: Well Total Depth, Feet: Dedicated: One (1) Riser Volume, Gal: Purged To Dryness Total Volume Purged, Gal: Low Flow Start Clar Finish Purge Observations: PURGE DATA: (if applicable)

Time	_	Rate /	Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00
1225	16,75	200		12.6	7.47	4625	12.4	-46	0.31
1230	Ì			12.7	7.46	4656	12.0	-47	0.30
1235				12.5	7.45	4661	11.7	-48	0,29
1240	J	4		12.1	7.44	4663	103	_50	0,28

SAMULE 1240/11-11-13 NYFS GW Form 12/20/11 Pa

SAMPLING	SINFORMA	FION:		927	www.a. Washington		The sections	人名 经复数人
POINT ID	, :	No. 10 Marie	·					
Date/Time				_	Water Leve	@ Sampling	, Feet:	1.47
Method of S	Sampling:	· <del></del>				_Dedicated:	Y/N	
Multi-phase	d/ layered:	( ) <u>Y</u> es	( ) No		If YES:	( ) light	() heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (	Other (	
	,			•				ı
			4 4 (15, 42 million 1 a million					
								15.7
INSTRUME	NT-CALIBR	ATION/CHÉ	CK DATA:					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		#, N. J.   K. J.	tha the Warshar	W		12 10/0/	1 1/2	- 17
Solution ID#				(-				. *
1905								14:41:1
GENERAL	NFORMAT	ON:		enter				
Weather con	ditions @ ti	me of samplir	ng:				· · · · · · · · · · · · · · · · · · ·	
Sample Cha	racteristics:					recording to		
COMMENT	S AND OBS	ERVATIONS	3:	145	· 1			i e e e
we in the		· •	13	N.	1 ( 1			
		F 4	r ()		en sa		:	
			· \_ ***	3.2				
							· · · · · · · · · · · · · · · · · · ·	
			· · · · · · · · · · · · · · · · · · ·					
I certify that protocals.	sampling pr	ocedures wer	e in accorda		applicable El	PA, State and	Site-Specific	:
Date:	1 1	Ву:		f		Company:		
paid,	1 1	_y				Company.		

FIELD O	BSERV	'ATIONS	•					
Facility:	10	NZA			Sample Poi	nt ID:	_BR-	7A
Field Personi	nel:	Pl, F			Sample Mat	rix:	60	
SAMPLING	INFORMAT	TIØNE -					√ Grab ()	Composite
Date/Time	11-12-13	3 1	1215		Water Level	, Feet:	30.01	
Date/Time Method of Sa	ımpling:	SAM	me fo	)(J		_Dedicated:	(Y) / N	
Multi-phased	/ layered:	( ) Yes	MNO		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:				A-F-103 (4-1)			
Time	Temp. ( °C)	pH (SU)		uctivity os/cm)	Turb. (NTU)	Other ( ( ( ) )	Other (	!
1217	149	7.40	-	129	5.33	124		
INSTRUME	NT CALIBR	VATILION/ICIH IE	CK DATA:	e Canal				
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								·
			PERMITER SERVICES					
GENERALI	INFORMATI	ION:			View and the second			
Weather con	ditions @ ti	me of sampli	ing: S	[ ] 30	3			**************************************
Sample Char	racteristics:	Beautiful Company	Cle:	A Proposition	- Marketon	· · · · · · · · · · · · · · · · · · ·		akon di mana mana mana mana mana mana mana man
COMMENTS	S AND OBS	SERVATION	S:		**************************************	was a second and a		***************************************
	10000 VIII							

I certify that sampling procedures were in accordance with all applicable USEPA, State and Site-Specific protocals.

Date:

11 112/13

#### FIELD OBSERVATIONS LONZA Sample Point ID: OC, TW PA Sample Matrix: Field Personnel: MONITORITING WELL INSPECTION: 11-13-13 1 1254 Cond of seal: () Good () Cracked Date/Time () None (4). Buried Cond of prot. Casing/riser: ( ) Unlocked (\*Good Prot. Casing/riser height: () Loose () Flush Mount ( ) Damaged If prot.casing; depth to riser below: Gas Meter (Calibration/ Reading): % Gas: Volatiles (ppm - / Vol. Organic Meter (Calibration/Reading): PURGE INFORMATION: 11-13-13/ Date / Time Completed: Date / Time Initiated: Riser Diameter, Inches: (X) Riser Surf. Meas. Pt: () Prot. Casing Initial Water Level, Feet: \( \square{5.35} \) Elevation. G/W MSL: PENISTALTER Well Total Depth, Feet: Method of Well Purge: Y 1 (W) Dedicated: Onë (1) Riser Volume, Gal: Purged To Dryness Y / (N)

#### PURGE DATA: (if applicable)

Total Volume Purged, Gal:

Purge Observations:

Time	_	e Rate n/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other DO
1300	15.40	MIIM		12.3	7,23	5767	1,20	64	0,22
1305		1		120	7.42	5679	3.11	63	0.20
1310				12:4	7.47	5683	1.11	60	0.19
13/5	V		ant i	12.3	7.51	5689	1.07	60	0.18

Start Cle

60-F60

SAMPLING	GINFORMA	TION:		<b>総</b> 定で	and another and allow	na di kananan da kanan Kananan da kananan da k	A Company of the	<b>,</b> \$₩		
POINT ID			_							
Date/Time				Water Level @ Sampling, Feet:						
Method of Sampling:  Multi-phased/ layered:		( ) Yes ( ) No			, ,	_Dedicated:	Y/N			
				If YES:		( ) light	() heavy			
SAMPLING	DATA:									
Time Temp.				uctivity os/cm)	Turb. (NTU)	Other ( )	Other ( )			
					-		Anger Comment	e e		
INSTRUME	NT CALIBR	ATION/CHE	CK DATA:			ant state of the	10.000			
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)		
	Tarte in a second of the secon	्रीके पूर्व १ व	erije i izali izali. P			12 10 /01				
Solution ID#	+									
GENERAL	NEORMANI ditions @ tir	ne of samplir								
COMMENT	S AND OBS	ERVATIONS	(* ). <b>5:</b> , .		· \					
					4 <sub>24.3</sub> - 27					
			ž	5	£.,			· · · · · · · · · · · · · · · · · · ·		
							· · · · · · · · · · · · · · · · · · ·			
					<u> </u>					
			***							
l certify that protocals.	sampling pro	ocedures wer	e in accorda	nce with all a	ipplicable EF	PA, State and	Site-Specific			
Date:	1 1	Ву:				Company: _				

FIELD C	BSERV	'ATIONS	•						
Escilitus LONZA					Sample Poir	nt ID:	BR-9 EW		
Field Person	nel:	Pl, F	~~		Sample Mat	rix:	Grab () Composite		
SAVIPLING	INFORWAY	TIONE					( )		
Date/Time         //-/2-/3         // 120           Method of Sampling:         Sampling:				Water Level	@ Sampling	, Feet:	31,26		
Method of Sa	ampling:	SAMUAC		Port	Dedicated:		(Y) N		
Multi-phased/ layered:		()Yes KNo			If YES:	( ) light	( ) heavy		
SAMPLING	DATA:							1	
Time	Temp. ( °C)	pH (SU)	Conductivity (µmhos/cm)		Turb. (NTU)	Other ( OV)	Other (		
1127	14.3	6-99	23		99.7	132			
			and the second						
VINISTIRKUIVIE	NTGALLES	R/ATTION/CHI	EGIK IDVATI/AS					•	
						Check.Std	T		
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)	
Solution ID#									
GENERAL	INFORMA	TIONE							
Weather co	nditions @ t	ime of sampl	ing:	cless:	za o Nu				
Sample Cha	racteristics		56	TURA	o pu	Tiert			
COMMENT	S AND OB	SERVATION	IS:		,				

I certify that sampling procedures were in accordance with all applicable USEPA, State and Site-Specific

protocals.

# FIFI D OBSERVATIONS

Facility: LONZA	Sample Point ID: BR-10)
Field Personnel: R, Tw PN	Sample Point ID: BR-103 Sample Matrix: 6w
MONITORTING WELLINSPECTION:	
Date/Time 11-15-13 / 1213	Cond of seal: Good ( ) Cracked%  ( ) None ( ) Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose Flush Mount ( ) Damaged
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL: /
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm) /
PURGE INFORMATION:	
Date / Time Initiated: 11-15-13/ 13.05	Date / Time Completed:
Surf. Meas. Pt: () Prot. Casing	Riser Diameter, Inches: 4-0
Initial Water Level, Feet: 2232	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Pers JACTAC
One (1) Riser Volume, Gal:	Dedicated: Y / 🕅
Total Volume Purged, Gal:	Purged To Dryness Y / (N)
Purge Observations: Low Flor	Start Clear Finish Clear
PURGE DATA: (if applicable)	

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other BNP	Other 00
1315	22,37	M/~		127	7.69	3078	2.94	-209	0.51
1320		ı		12,5	7.60	2911	2.15	-201	0.50
1325				12.9	7.57	2902	2.01	-200	0.48
1330				12.8	7.55	2900	1.94	-199	047
					·				

SAMU @ 1330/11-15-13

Page 1 of 2

SAMPLING	INFORMA	TION:		199.E 1	an open process of the second	nikaligung o glossing est et e e e e e e e e e e e e e e e e	de sandrone	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
POINT ID								
Date/Time		1		-	Water Leve	l @ Sampling	յ, Feet:	
Method of Sa	ampling:		Marie Land			_Dedicated:	Y/N	
Multi-phased	l/ layered:	( <sub>/ , ,</sub> ) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other ( )	Other ( )	
	•							
				• . •				the state of the s
INSTRUMEN	NT-CALIBR	ATION/CHÉ	CK DATA:					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
P.		1,411,54				,= , , , , ,		
			3 11.2-4.					
Solution ID#	-			<del></del>				
GENERALII Weather conc		ne of samplin	g:				Company of the second s	
COMMENTS	AND OBS	ERVATIONS	### # ##		es de la companya de	-		i i
		:		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	:			
		1 3 1 T					\ \	
					A. A.		l'	
		N. C.		200				
certify that s	ampling pro	cedures were	in accordar	nce with all a	pplicable EP	A, State and	Site-Specific	(1)
ate:	<i>f I</i>	By:		e versione	e ja Nasana	Company:		
,		- j ·		. :		Company,		

#### FIELD OBSERVATIONS Sample Point ID: BR-165-D LONZA R, TW PA Sample Matrix: Field Personnel: MONITORTING WELLINS RECTION: 11-15-13 Cond of seal: & Good () Cracked () None () Buried Cond of prot. Casing/riser: ( ) Unlocked ( ) Good Prot. Casing/riser height: () Damaged If prot.casing; depth to riser below: Gas Meter (Calibration/ Reading): % Gas: Volatiles (ppm) / Vol. Organic Meter (Calibration/Reading): PURGE INFORMATION: 11-15-13/ 1205 Date / Time Completed: Date / Time Initiated: Riser Diameter, Inches: **K**Riser Surf. Meas. Pt: () Prot. Casing Initial Water Level, Feet: 25.85 Elevation, G/W MSL: Well Total Depth, Feet: Method of Well Purge: YID Dedicated: One (1) Riser Volume, Gal: Purged To Dryness Y / (N) Total Volume Purged, Gal: Low Flow cler

#### PURGE DATA: (if applicable)

Purge Observations:

Time		e Rate n/htz)	Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00
1210	25.99			13.1	7.07	19720	3.82	-150	0.51
1215				130	7,19	20,770	3,79	-167	0.49
1220				12.7	7,21	21,610	3.56	-168	0.47
1225	J			12.8	7.24	21,220	3,22	-170	0.45
		-							

Mer Finish

SAMPLING	INFORMA	TION:		A.C.			all to present	n gar
POINT ID								
Date/Time				nu.	Water Leve	l @ Sampling	ı, Feet:	
Method of S	ampling:		A Property of the Control of the Con		e de la companya de	_Dedicated:	Y / N	
Multi-phase	d/ layered:	( ) <u>Y</u> es	( ) No	٠.	If YES:	() light	() heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (	Other ( )	
		eren de la companya d	••	e e e		11.1		
			Area Life		-1:			
			:			. 4		
INSTRUME	NT CALIBR	ATION/CHE	CK DATA:					
Meter ID#	Cal Std 7,0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		74.7.47		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		10 701		7
Solution ID#		Na e	et in the test					
					4, 475, 40 2, 45		Synt.	
GENERALI	NEORMATI	ON:						
Weather con	ditions @ tir	me of samplin	g:					
Sample Char	acteristics:			i i i i i i i i i i i i i i i i i i i		Attendig (1) Letter	12 (A)	. 1:
COMMENTS	AND OBS	ERVATIONS	<b>5</b>		i j		en e	
		· · · · · · · · · · · · · · · · · · ·			100			
		10.3	5.			, ·······		
			er 25.		,			
		: <u>/</u>	<u> </u>	•	<u> </u>		. tr .	
		······································						
	sampling pro	ocedures were	e in accorda	nce with all a		2 1 2	Site-Specific	
protocals.					7.80 			
Date:		Ву:		*****	:	Company: _		

	0.4.4.0
Facility: LONZA	Sample Point ID: B1-10 C
Field Personnel: R, TW PN	Sample Matrix:
MONITORTING WELL INSPECTION:	
Date/Time 11-15-13 / 1052	Cond of seal: () Good () Cracked %  () None () Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: () Unlocked () Good () Loose (Flush Mount () Damaged
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm//
PURGE INFORMATION:	
Date / Time Initiated: 11-15-13/ 1110	Date / Time Completed: 11-13-13/13)
Surf. Meas. Pt: ( ) Prot. Casing	Riser Diameter, Inches: 4.0
Initial Water Level, Feet: 2079	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Personal Tuc
One (1) Riser Volume, Gal:	Dedicated: Y / M
Total Volume Purged, Gal:	Purged To Dryness Y / N
Purge Observations: Low Flow	Start Clar Finish Clar
PURGE DATA: (if applicable)	

Time		e Rate n/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other DO
1120	20.91	M/m 200		12.2	7.06	3309	5.72	11	0-37
1121	2011	9		11.9	7103	3350	4001	10	0.35
1130				11.9	708	3350	3.96	8	0.33
1135				11.0	7.11	3350	3.84	8	0.31

Spare @ 1135/11-15-13
Page 1 of 2

		· · ·	•		** ***			
Date/Time			· Pi 4		Water Leve	l @ Sampling	g, Feet:	18 T ad
Method of Sa	ampling:		tan ing panganan		1000	_Dedicated:	Y / N	
Multi-phased	l/ layered:	( ,) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (	Other ( )	
			4.5-			. 1806 A	ra in Linea	. •
	****		er eg er skipter o		:	unite (etg. )	r yarti	
	•						1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	
INSTRUMEN	IT CALIBRA	ATION/CHE	CK DATA:			And the second second		MERCY AND
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm	Cal.Std 10 NTU	Check Sto 10 NTU (± 10%)
		18 (19)				(± 10%)	r C. Begg	
		)	* = x 71 					
Solution ID#			A Medican					
	JEORMATIO	DN:	Marine San					
GENERALIN		A STATE OF THE PARTY OF THE PAR						and and
SENERALIN Veather cond	litions @ tim	A STATE OF THE PARTY OF THE PAR	d:					and and
GENERALIN Veather cond	litions @ tim	ne of samplin	g:					
Solution ID#    GENERAL IN  Weather cond  Sample Chara  COMMENTS	litions @ tim	ne of samplin	g:			and the second second		ave
GENERALIN Veather cond	litions @ tim	ne of samplin	g:			and the second second		
GENERALIN Veather cond	litions @ tim	ne of samplin	g:			and the second second		
GENERALIN Veather cond Sample Chara	litions @ tim	ne of samplin	g:			and the second second		
GENERALIN Veather cond Sample Chara	litions @ tim	ne of samplin	g:			and the second second		
SENERAL NO.	litions @ tim	e of sampling	g:				Site-Specific	

Facility: LONZA	Sample Point ID: BR-126
Field Personnel: R, TW PN	Sample Matrix:
MONITORITING WELL INSPECTION:	
Date/Time 11-13-13 1 1222	Cond of seal: ( Good ( ) Cracked % ( ) None ( ) Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose K Flush Mount ( ) Damaged
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	/ LEL:/_
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm /
PURGEINFORMATION:	
Date / Time Initiated: //- 13-13/ 1225	Date / Time Completed:
Surf. Meas. Pt: ( ) Prot. Casing	Riser Diameter, Inches:
Initial Water Level, Feet: 10.31	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Peristantic
One (1) Riser Volume, Gal:	Dedicated: $(y)$ / N
Total Volume Purged, Gal:	Purged To Dryness Y / N
Purge Observations: Low Flow	Start Clean Finish Clean
PURGE DATA: (if applicable)	

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other 6PP	Other 00
1240	200			12.8	7.09	983	6.08	-42	
1245	i	ì	,	12.6	7.12	992	5.19	-56	
1250				12.5	7.14	1002	5.08	- 60	
1255		1		12.6	7.11	1009	4.99	-61	
			·						

SAMPLING	INFORMA	FION:		<b>3</b> 2.1	A STEEL	And Marine Const.	To finish in the second	STATE OF THE PARTY
POINT ID	BR-1	25				a.		
Date/Time	11-13-1	3 11	255		Water Level	l @ Sampling	, Feet:	10-42
Method of S	ampling:		Peris	Jaltic	······································	_Dedicated:	G/N	•
Multi-phase	d/ layered:	( ) Yes	K No		If YES:	( ) light	() heavy	
SAMPLING	DATA:	- 1. 2.194						
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (Oペア)	Other (	
1255	12.6	7.11	1009	?	4.99	-61		
					- 1	a skipe osta		
								4.1
INSTRUME	NT CALIBR	ATION/CHÈ	CK DATA:					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		4				\= 10701		1.4
		19 .						
		n Ne pay	<u> </u>					
Solution ID#					<u> </u>			
GENERAL	NEORMATI	ON:						
Weather con	ditions @ tir	ne of samplir	ig: Sunny	1 1300				
Sample Cha	racteristics:	crew				15a 11 <b>j</b> .		
COMMENT	S AND OBS	ERVATIONS	s: D	up der	m			
		• · · · · •						
,								
I certify that protocals.	sampling pro	ocedures wer	e in accorda	nce with all	applicable E	PA, State and	l Site-Specifi	c
Date:	11/13/13	Ву:	It ly	y/	-	Company:	TAI	

Page 2 of 2

FIELD O	DOEKV	AHUNS						pullin3
Facility:	۷	onZA			Sample Poi	nt ID:		126 127
Field Personr	nel:	The pr	786		Sample Mat		Gu	
SAMPLING	INFORMAT	TION:					√/ Grab ()	Composite
Date/Time	11-11-1	13 1	1200		Water Level	@ Sampling	ı, Feet:	13.11
Method of Sa		,	Sample	part		Dedicated:		
Multi-phased					If YES:	· ()light		
SAMPLING		( )	<i>x</i> 7			( /g	( ,	
Time	Temp.	рН	t .	uctivity	Turb.	Other	Other	
10 : 4.1	(°C)	(SU)		os/cm) 82	(NTU)	(01P) -80		
12:01	12.0	7.51	30	02	2-65	8		
INSTRUME	NT CALIBIR	VANTIJONVICIHI:	ECK DATA					<b></b>
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								
GENERALI	NFORMAT	ION:						
Weather con	ditions @ ti	me of sampli	ing:	Claredy	· ~44 - f		WORTH-10-24	
Sample Char	acteristics:	1446	clear	YV	to Their Kirks Inc.		4-7/1 o.u., o.u., o.u.	
COMMENTS	S AND OBS	SERVATION	<u>s:</u>		74F-74F-74L-1			· · · · · · · · · · · · · · · · · · ·
Bright Control								
the second secon								
I certify that protocals.	sampling pr	rocedures we	ere in accord	ance with al	l applicable l	JSEPA, State	and Site-Sp	ecific
Date:	U 1111113	_ By:	Tromo	2 Me	5	_ Company:	1AL	

Facility:	Sample Point ID: MW -16
Field Personnel:	Sample Matrix: 6/W
MONITORTING WELL INSPECTION:	
Date/Time //- 08 - 13   /4/8	Cond of seal: Good ( ) Cracked % ( ) None ( ) Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose
If prot.casing; depth to riser below:	<del>``</del>
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL:/
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm) 1
PURGE INFORMATION:	
Date / Time Initiated: 11-08-13/1420	Date / Time Completed: 11-08-13/1445
Surf. Meas. Pt: () Prot. Casing Riser	Riser Diameter, Inches: 4,0
Initial Water Level, Feet: 12.32	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge:  PREISTACTIC  PUILLE
One (1) Riser Volume, Gal:	Dedicated: Y / N
Total Volume Purged, Gal:	Purged To Dryness Y N
Purge Observations: 20-FCO	Start YELLON TIN Finish YELLON TINT

#### PURGE DATA: (if applicable)

Time	_	e Rate n/htz)	Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other On P	Other Po
1430				13.0	7.40	4008	YACCON	-86	1.13
1435				12.9	7.17	4319	St. TURD	-82	0.99
1440		13.05		12.9	7.11	4475	St. Tung	~79	1.03
1445	2%	13.05		12.9	7.07	4487	39.7	-79	1.00

SAMPLEO @ 1445/11-08-13

Page 1 of 2

NYFS GW Form 12/20/11

SAMPLING	INFORMA	TION:		<b>Fact</b>				
POINT ID			_					
Date/Time				,	Water Leve	l @ Sampling	ı, Feet:	
Method of S	ampling:	****	·		***************************************	_Dedicated:	Y / N	
Multi-phase	d/ layered:	( ) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)	1	uctivity os/cm)	Turb. (NTU)	Other ( )	Other ( )	·
	·	:			1.			
								ı
INSTRUME	NT/CALIBR	ATION/CHE	CK DATA:		**************************************	ne status est de la company		Carlos Ascelo
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
	· .	2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -						
Solution ID#								
GENERALI	NEORMATI	ON:					e de mante de la composición	
Weather con	ditions @ tin	ne of samplin	ia:					
Sample Char	acteristics:		6.		er pel			
					•			
				•				
						A, State and		
Date: _	1 1	Ву:				Company: _		

#### FIELD OBSERVATIONS Sample Point ID: MW- 166 LONZA PC, TW PN Sample Matrix: Field Personnel: MONITORTING WELLINSPECTION: Date/Time 11- 15-13 / 1020 Cond of seal: MGood () Cracked () None () Buried Cond of prot. Casing/riser: ( ) Unlocked ( ) Good Prot. Casing/riser height: () Loose 🔑 Flush Mount () Damaged If prot.casing; depth to riser below: % LEL: / -% Gas: Gas Meter (Calibration/ Reading): Vol. Organic Meter (Calibration/Reading): Volatiles (ppm) - / -PURGEINFORMATION: 11-15-13/ 1025 11-15-13/100 Date / Time Completed: Date / Time Initiated: **KRiser** Riser Diameter, Inches: Surf. Meas. Pt: () Prot. Casing Initial Water Level, Feet: 13.29 Elevation, G/W MSL:

PURGE DATA: (if applicable)

Total Volume Purged, Gal:

Purge Observations:

Well Total Depth, Feet:

One (1) Riser Volume, Gal:

Con Flow

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other 6PP	Other DO
1035	WL 13.35	m1/ar		13.3	6-53	2357	802	-27	073
1040				132	6.71	2418	3.41	-33	0.71
1045				13.5	6.73	2429	3-95	-35	0.63
1050	V			13.0	6.75	2431	3,87	-35	0.67
		A PARTY LANGE COMPANY							

Method of Well Purge:

Purged To Dryness Y / (Ñ)

Start <u>Clear</u> Finish

Dedicated:

YIND

PerisTALTIC

5AMA @ 1050/11.15-13

SAMPLING	HORMA	TION:		NG T	and the same of the same of	Maria Mariana da	The figure to her	glinning *
POINT ID								
Date/Time					Water Level	@ Sampling	, Feet:	
Method of S	Sampling:		·		· · · · · · · · · · · · · · · · · · ·	_Dedicated:	YIN	
Multi-phase	d/ layered:	( ) Yes	( ), No ;		If YES:	( ) light	() heavy	
SAMPLING	DATA:						•	
Time	Temp. (°C)	pH (std units)		ictivity os/cm)	Turb. (NTU)	Other (	Other ( )	
			<b>.</b>			Sept		
			e jag tilage					
						17.		15 A
INSTRUMÉ	NT CALIBR	ATION/CHE	ČK DÄTA:		e a salar e sa			
		STATE OF STA				Check.Std		
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		- ia si	ese ser secesió			(± 10/6)	12-11/15/	
		je						<del>/</del>
			a, De thughe	,				
Solution ID#		<u>l</u>						
GENERAL	NFORMAT	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				77.4 7.50.2 (8.30.4)		
Weather con	ıditions @ tiı	me of samplin		19 10 10 10 10 10 10 10 10 10 10 10 10 10			지하는	
Sample Cha	racteristics:	oli (Nederland) Militaria Militaria			·			: 1071
COMMENT	S AND OBS	ERVATIONS	<b>}</b> :	· SS	. <b>.</b> .			
				3 · · ·				
<del></del>		· · · · · · · · · · · · · · · · · · ·		et.				····
,				<del></del>				
	,						į.	11
	sampling pro	ocedures wer	e in accordai	nce with all a	applicable EF	PA, State and	Site-Specific	<b>;</b>
protocals.						$\hat{V}_{i}^{\prime}$	<b>.</b>	
Date:	1 1	By:				Company:		

Sample Point ID: MW-127
Sample Matrix:
Cond of seal:  () None () Buried  %
Cond of prot. Casing/riser: // Unlocked ( ) Good ( ) Loose ( ) Flush Mount ( ) Damaged
% LEL:
Volatiles (ppm
Date / Time Completed:
Riser Diameter, Inches: 2.0
Elevation. G/W MSL:
Method of Well Purge: Personal Tile
Dedicated: Ø/N
Purged To Dryness Y / 🕦
Start Clear Finish Clear

Time		e Rate n/htz)	Cumulative Volume	Temp.	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other 8PP	Other 00
1205	W.L 953	75	,	125	7.38	4742	4.0	-102	
1210	10,09			12.5	7.38	4696	4.5	-104	
1215	10.22			12.5	7.38	4649	4.6	-98	
						1.7			

SAMPLING	SINFORMA	TION:	30%	2 <b>6.</b> 2-7	and the second	4 (-21 <b>/5)</b>		
POINT ID	Mu	N-127						
Date/Time	11-11-1	3 1	1215		Water Leve	l @ Sampling	ı, Feet:	10.22
Method of S	Sampling:	p	eristalti	c pump	*	_Dedicated:	COIN	
Multi-phase	d/ layered:	( ) Yes	LINO		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:	4.27						
Time	Temp. (°C)	pH (std units)	1	luctivity os/cm)	Turb. (NTU)	Other	Other (	-
1217	12.5	7.38	460	19	4.le	-98		
								• • • •
INSTRUME	NT CALIBR	ATION/CHÉ	CK DATA:	<b>4</b>		sar Sarasan		
	A Control of the Cont	SUNA MARKETAN	And the state of the state of		er en seguing a construction			The section of the section of
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		1949				12 10/01		
	ъ.	. ,	1 1 44					
Solution ID#	4							
GENERALI	NEORMATI	ON:						
ATTENDED TO A TOTAL OF THE STATE OF THE STAT		ne of samplin	ıg:	ckudy	~4401			
Sample Char	acteristics:		Clear					
COMMENTS	S AND OBS	ERVATIONS	3:	in the second of				
3	A.	·	, \		, i		Yo	
	er .	. Programme in the second seco	* 		*			
		Œ			· · · · · · · · · · · · · · · · · · ·			
certify that sprotocals.	sampling pro	cedures wer	e in accorda	nce with all a	applicable EP	A, State and	Site-Specific	
Date:	11/11/13	Ву:	Thremos	rult		Company: _	TAL.	

TILLD ODGETTER	
Facility: LONZA	Sample Point ID: PW-10
Field Personnel: R, Tw PN	Sample Matrix:
MONITORTING WELLINSPECTION:	
Date/Time 11-11 -13   1358	Cond of seal: () Good () Cracked %  () None (XBuried
Prot. Casing/riser height:	Cond of prot. Casing/riser: () Unlocked () Good () Loose () Flush Mount () Damaged puns. wasca
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	% LEL:
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm'
PURGE INFORMATION:	
Date / Time Initiated: //- 11 -13 / 1400	Date / Time Completed: 11-11-13/1420
Surf. Meas. Pt: (Prot. Casing () Riser	Riser Diameter, Inches:
Initial Water Level, Feet: 12-30	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Personatic
One (1) Riser Volume, Gal:	Dedicated: Ø/N
Total Volume Purged, Gal:	Purged To Dryness Y / (N)
Purge Observations: LO-FCO	Start yellow fort Finish Ambertat
PURGE DATA: (if applicable)	

Time		e Rate n/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other EPP	Other 00
1410	W.L. 1258	mby min		14.5	9.83	14060	5.28	-133	
1415	1241			14.5	9.86	13990	5.34	-149	
1420	12.63			14.7	9.87	13870	5.18	-158	
12100	112.00					-			

SAMPLING	INFORMA	TION		<b>等為</b> 10 m 12 m	Specific street and the	propries of the contract of th	Agricus .	(A. 4)
POINT ID	pw-	10	· .		*.			
Date/Time		13 /	1420		Water Leve	l @ Sampling	ı, Feet:	12-63
Method of S	ampling:		peristalt	ic pump		_Dedicated:	OIN	
Multi-phased	l/ layered:	( ) Yes	peristalli Mo		If YES:	() light	() heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		luctivity ios/cm)	Turb. (NTU)	Other ( Orp )	Other (	
1422	14.7	9.87	13	870	5.18	-158	,	
			\$ _s		·	. 4.		
INSTRUMEN	NTCALIBR	ATION/CHÉ	CK DATA:			in the state of th		
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
			Harris and the second			10/0/		
Solution ID#			RATION SUPER					
GENERALIN	NEORMÁTII	ON:						
Weather conc	CAN THE REPORTED BY AND STATE OF THE P.	Come with the second of the second	a: C	landy - 4	13°f			
Sample Chara			4mber	*	1 oder		* e	
COMMENTS	AND OBS							7.
		_				· · · · · · · · · · · · · · · · · · ·		Ÿ · ¥ ·
			. Vi					. § 9.1
				<u> </u>			·	
					···			
certify that sa	ampling pro	cedures were	e in accorda	nce with all a	pplicable EP	A, State and	Site-Specific	
Pate: Ł	1/11/13	Ву:	Thouse.	wee		Company:	TAL	

• • • • • • • • • • • • • • • • • • • •	
Facility: LONZA	Sample Point ID: PW-12
Field Personnel: R, Tw PN	Sample Matrix: 6W
MONITORTING WELL INSPECTION:	
Date/Time 11-13 -13   1153	Cond of seal: () Good () Cracked %  () None () Buried Form
Prot. Casing/riser height:	Cond of prot. Casing/riser: () Unlocked () Good () Loose () Flush Mount () Damaged
If prot.casing; depth to riser below:	ps
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL:
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm / _ /
PURGE INFORMATION:	
Date / Time Initiated: 11-13 -13/ 1155	Date / Time Completed: 11-13-13/ 1215
Surf. Meas. Pt: (*) Prot. Casing (*) Riser	Riser Diameter, Inches:
Initial Water Level, Feet: 7,59	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Pers JACT2
One (1) Riser Volume, Gal:	Dedicated: Y / 🗭
Total Volume Purged, Gal:	Purged To Dryness Y /
Purge Observations:	Start Cler Finish clear

#### PURGE DATA: (if applicable)

Time	_	e Rate n/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other 6PP	Other OO
1200	7.64	200		12.3	7.42	4240	4,99	180	0.25
1205	1	1		12.1	7,49	4244	3,16	177	0,24
12/0				12.5	7.49	4447	2.59	176	0.22
1215	1			123	7.48	4449	2.48	176	6,21
									·

SAMM @ 1215 /11-13-13

SAMPLING	INFORMA	FION:		62 t	and the second s	and the second second	The section of	Popularia de la composição de la composi
POINT ID	· :		•	•				
Date/Time		1		-	Water Leve	l @ Sampling	ı, Feet:	
Method of S	ampling:		2			_Dedicated:	YIN	
Multi-phase	d/ layered:	( ) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							_
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (	Other (	÷
								+ # +
			A MONARA				÷	
	•				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	:		
INSTRUME	NT-CALIBR	ATION/CHE	CK DATA:					<b>建</b> 2000年1
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm	Cal.Std 10 NTU	Check Std .10 NTU (± 10%)
		n e tot tige	8 7 8 J	(= 1575)		(± 10%)		1, 5°
		1.1	·Fa · · · · · · · ·					
Solution ID#	1 1-12 A 1-12	. 4						
GENERÂL								
Weather con	iditions @ tir	ne of samplii	ng: Zarel				98.4g.C.   DH-F	1
Sample Cha	racteristics:		·		. 37			
COMMENT	S AND OBS	ERVATION	3:	· · · · · · · · · · · · · · · · · · ·			<u> Ka</u>	
	Y.	je si			1			
		ar .	t		5.3		ŧ	
				(et ego )				
I certify that protocals.	sampling pro	ocedures wer	e in accorda	nce with all	applicable El	PA, State and	l Site-Specifi	<b>3</b>
Date:	1 1	Ву:				Company:		

Facility:	10	LONZA  el: Pl, PN			Sample Poir	nt ID:	Aw 1	3
Field Person	nel:	Pl, P.	N		Sample Mati		60	
SAMPLING	IINEORINAT	IIONE -					(∱Grab ()	Composite
Date/Time	11-12-13	3 1 1	235		Water Level	@ Sampling	, Feet:	26.81
Method of Sa	ampling:	S I I	a for			Dedicated:	(Y) N	
Multi-phased	d/ layered:	( ) Yes	K)No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (SU)		uctivity os/cm)	Turb. (NTU)	Other ( OV )	Other (	
1237	14.0	7.19	25	73	21.6	_//		
INSTIRUME	NT CALIBR	VATTION/CHIE	OK DATAR					
						Check.Std		THE TAXABLE PROPERTY OF THE PR
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
				1	-			
Solution ID#				<u> </u>				
GENERAL Weather con	nditions @ ti	me of sampli	ng: S					
				<del> </del>				
COMMENT	S AND OBS	SERVATION	S:				······································	
		, and a block to the state of t		***************************************	- Warrier Long -			ter extra transcription and the second transcription and transcription
l certify that protocals.	t sampling p	rocedures we	re in accord	ance with al	l applicable l	JSEPA, State	and Site-Spe	ecific
Date:	11 112 13	By:	_D		4	_ Company:	TA	<u>(</u>

FIELD (	JD2EL A W	IIONO								
Facility:	LONZ	A	*****	Sample F	Point ID: 101	W-14				
Field Persor		PC, TW	PA	Sample I	Vlatrix:	6w				
MONITOR	TING WELL IN	SPECTION:				A CONTRACTOR				
- Late of the same		/ 11-1		Cond of	seal: ( ) Good ( ) ( ) None (			<u>%</u>		
Prot. Casin	g/riser height:_			Cond of prot. Casing/riser: ( ) Unlocked ( ) Good						
lf prot.casii	ng; depth to rise	er below:								
Gas Meter	(Calibration/ Re	ading): %	% Gas:	1	% LEL:					
Vol. Organ	ic Meter (Calibra	ation/Reading):		Volatile	s (ppm)/		·			
PURGEIN	NEORMATION:									
Date / Time	e Initiated: <u>/</u>	113/	· · · · · · · · · · · · · · · · · · ·	Date / T	ime Completed:	yla ta	11B	/		
Surf. Meas	s. Pt: ( ) Prot. Ca	sing (	() Riser	Riser D	iameter, Inches:					
Initial Wat	er Level, Feet: _		· · · · · · · · · · · · · · · · · · ·	Elevation. G/W MSL:						
Well Total	Depth, Feet: _			Method	PeristA	(M				
One (1) Ri	iser Volume, Ga	<u>l:                                      </u>		Dedicated: Y / N						
Total Volu	ıme Purged, Gal	l: <u>, e </u>		Purgeo	To Dryness	(				
Purge Ob	servations:			Start	F	Finish	:	4		
PURGE	DATA: (if appli	cable)								
Time	Purge Rate	Cumulative	Temp.	рН	Conductivity	Turb.	Other	Other		
	(gpm/htz)	Volume	(C)	(SU)	(µmhos/cm)	(NTU)	OPP	00		
11		1			1			4		

SAMPLING	SINFORMA	TION:		で移立て	Sources and sources by the source of the		A Comment	1.00
POINT ID	Pw.	-14	_					
Date/Time		3 /	11:20		Water Leve	l @ Sampling	ı, Feet:	24.7
Method of S	Sampling:		Scimple	port		_Dedicated:	Øin.	
Multi-phase	d/ layered:	( ) Yes	₩ No	•	If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp.	pH (std units)	ŀ	luctivity los/cm)	Turb. (NTU)	Other (Off)	Other (	
11:22	18.3	6.82	25	526	34.1	-113		
<u> </u>							·	
INSTRUME	NT CALIBR	ATION/CHÉ	CK DATA:"					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
						12 10/01		
Solution ID#								
GENERALI	NEORMATI	on₌					, W	
Weather con-	ditions @ tin	ne of samplin	g: cla	ndy	ermone i respectivo de proprio de la constante			All and the Capability of the
Sample Char	acteristics:		leur W	dedris				
COMMENTS			_					
		<u></u>			The state of the s			
					2344		***	
I certify that s protocals.	ampling pro	cedures were	in accorda	nce with all a	pplicable EP	A, State and	Site-Specific	
Date:	61 1111 17	Bÿ:	Swams-	- Men		Company:	TAL	

Facility:	LO	NZA			Sample Poir	nt ID:	flv-	<u> </u>
Field Person	nel:	NZA Pl, Pi	~		Sample Mat		Lew	
SAMPLING							(∠) Grab ()	Composite
		3 1 SA-1	1025		Water Level	@ Sampling	, Feet:	18.02
Method of Sa	ampling:	SAN	nace y	Port		Dedicated:	Ø/N	
Multi-phased	d/ layered:	( ) Yes	(*)-No		If YES:	() light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (SU)		uctivity os/cm)	Turb. (NTU)	Other ( OV)	Other ( )	
1627	12.9	7.91	395	3	1,00	-45		
		•						
INSTIRUME	INTE GALLIBIE	VATTIØN/CHIE	CK DATA:		100			
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
						(2 1070)		
Solution ID#								
	<u> </u>	1						
<i>Ceneral</i>	INFORMA	ĪĪŌNE -	Spirit in the second	To an area	Telle Views			
Weather co	nditions @ t	ime of sampli	ng;	Clos	30			
Sample Cha	aracteristics	ime of sampli	Clei-	7 relli	a Jin	1		
		SERVATION		•				
And the second s								
l certify tha	t sampling բ	procedures we						ecific
Date:	11 1121 1	<u>了</u> By:	74		* •	Company	: T/i	LC
Date.								

	\D&ED\/	ATIONO				·		
FIELD (		ATIONS					<i>a</i> .	11
Facility:		NZA Pl, P.			Sample Poi	nt ID:	gw	10
Field Person	inel:	Pl, P.	N		Sample Mat	rix:	fw Liver Grah ()	Composite
SAMPLING	NINFORMATI	T(O)N;						
Date/Time	11-12-13	BALE	1136		Water Level	l @ Sampling	, Feet:	16.29
Method of S	ampling:	BALE			4	_Dedicated:	(Y) N	
Multi-phase	d/ layered:	( ) Yes	MO		If YES:	( ) light	()heavy	
SAMPLING	DATA:							
Time	Temp.	pH (SU)		uctivity os/cm)	Turb. (NTU)	Other ( OV )	Other (	
1(33	13.7	6.90	4938	3	5-40	132		
S.	j							
INSTIRUME	NT GALIBR	ATHON/GHE	OK DATA:					1
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								
GENERAL	INFORMATI	ION;			ave a second second			
Weather co	nditions @ ti	me of sampli	ng: CC	uoy,	30°F	w		
Sample Cha	racteristics:	<u> </u>	21		of the state of the		to the state of th	
COMMENT	S AND OBS	SERVATIONS	S:					
				`				-
		N.						
					************			·

protocals.

Date: 11 112 13 By: Company: TAC

I certify that sampling procedures were in accordance with all applicable USEPA, State and Site-Specific

Facility:	LO.	NZM			Sample Poin	it ID:	- Ju-17	
Field Person	nel:	N2/1 Pl, P	<u> </u>		Sample Matr		(x) Grab ()	
SAMPLING	INFORMA	TION:					N) Glab ( )	Composite
Date/Time	11-12-13	3	1015		Water Level	@ Sampling	Feet:	30.8/
Method of Sa	ımpling:	SAO	M Pe	<u></u>		Dedicated:	(Y) N	
Multi-phased	/ layered:	( ) Yes	No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. ( °C)	pH (SU)	Condu (µmhc	uctivity os/cm)	Turb. (NTU)	Other ( OV )	Other (	
1617	1617 121 6,90 3738					_76		
				, , , , , , , , , , , , , , , , , , ,				
INSTRUME	NTE GAVLTEVE	VATFION/CIHI <b>E</b>	@K.DATAE					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								
GENERAL  Weather con		IØN: me of sampli	ng:	cloul	<b>3</b> 0			
Sample Cha	racteristics:	part on the last of the last o	Clein	Yell	v Tins			MMM-Andrewskielen von der der verschen der versche der verschen der verschen der verschen der verschen der versche der verschen der verschen der verschen der verschen der versche der verschen der verschen der verschen der verschen der versche der verschen der verschen der verschen der verschen der versche der verschen der verschen der verschen der verschen der versche der verschen der verschen der verschen der verschen der versche der verschen der verschen der verschen der versche der v
COMMENT	S AND OBS	SERVATION	s:					
					dom <u></u>			
	to the second se							
		NAME OF THE OWNER.	······································			^		
I certify that protocals.	sampling p	rocedures we	ere in accord	ance with al	l applicable l	JSEPA, State	and Site-Spe	ecific
Date:	11 1124 13	. By:	N			_ Company:	TA	(

#### FIELD OBSERVATIONS LONZA Sample Point ID: OC, TW PA Sample Matrix: Field Personnel: MONITORING WELLINSPECTION: Date/Time 11-12-13 / 1142 Cond of seal: ( ) Good ( ) Cracked () None & Buried Cond of prot. Casing/riser: (XUnlocked ( ) Good Prot. Casing/riser height: () Loose () Flush Mount () Damaged If prot.casing; depth to riser below: Gas Meter (Calibration/ Reading): % Gas: Vol. Organic Meter (Calibration/Reading): Volatiles (ppm) PURGE(INFORMATION: 11-12-13/ 1145 Date / Time Completed: Date / Time Initiated: Riser Diameter, Inches: Surf. Meas. Pt: ( ) Prot. Casing Elevation, G/W MSL: Initial Water Level, Feet: Method of Well Purge: Well Total Depth, Feet: Dedicated: One (1) Riser Volume, Gal: Purged To Dryness Y Total Volume Purged, Gal: LOW Start Clear Purge Observations: PURGE DATA: (if applicable)

Time	Purge I (gpm/l	Rate htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other SPP	Other PO
	e ·								· ·
		······································							

SAMPLING	INFORMA	FION:		ni :	o from the sides was a constituti		A second second	, huge r
POINT ID	B-7							
Date/Time	11-13	-13   - Per	1240	_	Water Level	@ Sampling	ı, Feet:	17,16
Method of S	Sampling:	Per	ryuc		1. 1. 1.	_Dedicated:	Y10	
Multi-phase	d/ layered:	( ) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							_
Time	Temp. (°C)	pH (std units)	1	uctivity os/cm)	Turb. (NTU)	Other (O//)	Other ( )	
1243	13.9	7.29	91	07	54.5	79		
						1.		
INSTRUME	NT-CALIBR	ATION/CHÉ	CK DATA:					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std / \ 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
						A. M		
		- 4						
Solution ID#								
	INFORMATI	ON:						
Weather cor	iditions @ tin	ne of samplin	ıg: ک	1~ 30		· · · · · · · · · · · · · · · · · · ·		
Sample Cha	racteristics:	1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	cler		e english in the english of the english	· · · · · · · · · · · · · · · · · · ·		
COMMENT	S AND OBS	ERVATIONS	S:	····		<del></del>		
<del> </del>			. // '					
I certify that protocals.	sampling pro	ocedures wer	e in accorda	nce with all a	applicable EF	A, State and	Site-Specific	:
Date:	11 /13 / 13	By: 💋	112	-		Company: _	TAC	

Facility: LONZA	Sample Point ID: B-5	
Field Personnel: R, Tw PA	Sample Matrix:	
MONITORTING WELL INSPECTION:		
Date/Time 11-12-13 / 1153	Cond of seal: ( ) Good ( ) Cracked ( ) None & Buried	<u> </u>
Prot. Casing/riser height:	Cond of prot. Casing/riser: ✔\□loose () Loose () Damaged	() Flush Mount
If prot.casing; depth to riser below:	( ) Damaged_	2-16
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL: / /	
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm; /	
PURGEINFORMATION:		
Date / Time Initiated: //- 12-13/ //55	Date / Time Completed:	11- n-B/1158
Surf. Meas. Pt: () Prot. Casing () Riser	Riser Diameter, Inches:	2.0
Initial Water Level, Feet:	Elevation. G/W MSL:	_
Well Total Depth, Feet: /8,00	Method of Well Purge:	PerisTALTEL
One (1) Riser Volume, Gal: 436	Dedicated: Y / 😥	
	® MyPurged To Dryness Ø N	
Purge Observations: LOW VOL.	Start Chr Finish	SC TUIND
PURGE DATA: (if applicable)		
Time Purge Rate Cumulative Temp. (gpm/htz) Volume (C)	pH Conductivity Turb. (SU) (µmhos/cm) (NTU)	Other Other
(gpninz) volume (9)		

SAMPLING	INFORMA	FION:		194 t	and the same source of the same	Andrew of Spice of the Spice of	and the grant server	Control of the contro
POINT ID	B-	5						
Date/Time	11-12	3-13 1 Pr.	1330	_	Water Level	@ Sampling	, Feet:	15.72
Method of S	ampling:	Pt.	-11TACT (			Dedicated:	YO	et e
Multi-phase	d/ layered:	( ) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:	• 4. •						
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (ONR)	Other (	
1331	13.0	7.70	67	30 Gu	38.0	38		
			in establish			A et .		
INSTRUME	NT CALIBR	ATION/CHE	CK DATA:		e o opini opini di	range sa aksar na aksar Tangga sa aksar na a		
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
				1.00		(± 10%)		(= 1070)
		4	<u> </u>					
								***
Solution ID#	<u> </u>							
GENERAL Weather con		ØN: ne of samplir	ng:	Sin 30	) )			
Sample Chai	racteristics:		56 76	Berl 6	brurg	im va nivalisti. Venas ila 1		Tall to
COMMENT	S AND OBS	ERVATIONS	3: ·					
		-						
								ß
			, , , , , , , , , , , , , , , , , , , ,					
							ħ	
<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>								
l certify that protocals.	sampling pro	ocedures wer	e in accorda	ince with all a	applicable EF	PA, State and	Site-Specific	: 
Date:	1 1 1131 13	Bv:	ML	oor placement and the relative and and		Company:	THE	

Facility:	LONZ	A		Sample	Point ID:	B-11		
Field Personr	nel:	Pl, Th	PN	Sample	Matrix:	60	/	
MONITORTI	NG WELL IN	ISPECTION:						
Date/Time	11-11 -13	3 1 16	38	Cond o	f seal: // Good ( () None	) Cracked () Buried	-	- 5/6
Prot. Casing/	riser height <u>:</u>			Cond o			() Flush M	
If prot.casing	; depth to ris	er below:			· ·	,		
Gas Meter (C	alibration/ Re	eading):	% Gas:	1	% LEL:			
Vol. Organic	Meter (Calibr	ration/Reading):		Volatile	es (ppm)/		• •	
PURGEINE	ORMATION							
Date / Time I		11-11-13/ 1	240	Date /	Time Completed:		11-11-0	1/1245
	et: ( ) Prot. Ca	sing	(/) Riser	Riser D	Diameter, Inches:		2.0	)
Initial Water	Level, Feet:	8.65		Elevati	on. G/W MSL:		<u></u>	
		11.55		Method	d of Well Purge:		Peris7A	ere
	r Volume, Ga	(0 117		Dedica	ited:	<i>)</i> / N	`	
Total Volume	e Purged, Ga	1: Drye ~	1.0	Purgeo	d To Dryness	r)/ N		
Purge Obser	_	COW			Clear 1	- Fin <b>i</b> sh	Char	
_	TA: (if appli	cable)						
Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00

SAMPLING	INFORMA	FION:		# <b>9</b> 2	entally arises and a marketing		and the second	(J-488)
POINT ID	B-1	/						
Date/Time	11-12	-13 ,	1050		Water Level	@ Sampling	, Feet:	9.16
Method of S	ampling:	PI	- ISTAU	۲(		Dedicated:	Y 10	
Multi-phased	d/ layered:	() Yes	WNO		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp.	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (O/P)	Other (	
1051	10.9	7.11		944	146	133	/\	
			of parts			)		
						194	٠, .	
INSTRUME	NT CALIBR	ATION/CHE	CK DÄTA:		Silve Sancit.	and the second second		
animate in gelinglist ministration will			e der versieren er geben 1961 geleit 2005				Control of the Contro	and the second
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		2 1 2 2 2	AND AND BUILDING			1= 10/01		·
	;		<u></u>		i nga e			
		-1 \$1- A.A.Pa				14. 1924		
Solution ID#			Age of		Salanga Sala		<u> </u>	
GENERALI	NFORMATI	on.						
Weather con	ditions @ tin	ne of samplin	ig:					i. Ogravit <u>a</u> .
Sample Char	acteristics:							
				1. mites	1 1/0	Iva	male.	
COMMENTS	7/4	butter	Coal	1				
	- V /		3////	: (				
				<del></del>		· · · · · · · · · · · · · · · · · · ·		
· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·		<u> </u>	
I certify that s protocals.	sampling pro	ocedures wer	e in accorda	ince with all a	appli <b>c</b> able EF	PA, State and	Site-Specific	:
Date:	1 1	Ву:				Company:		

#### FIFI D OBSERVATIONS LONZA Sample Point ID: 8-/5 De TW PA Sample Matrix: Field Personnel: MONITORTING WELLINSPECTION: Date/Time 11-12-13 1 12-45 Cond of seal: ( ) Good ( ) Cracked % () None Buried Cond of prot. Casing/riser: ( ) Unlocked ( ) Good Prot. Casing/riser height: () Loose KFlush Mount ( ) Damaged If prot.casing; depth to riser below: Gas Meter (Calibration/ Reading): % Gas: Vol. Organic Meter (Calibration/Reading): Volatiles (ppm) -/ -PURGE INFORMATION: 11-12-13/ 1250 Date / Time Completed: Date / Time Initiated: ARiser Riser Diameter, Inches: Surf. Meas. Pt: () Prot. Casing Initial Water Level, Feet: / 0,00 Elevation. G/W MSL: PerisTACTU Method of Well Purge: Well Total Depth, Feet: Dedicated: One (1) Riser Volume, Gal: Total Volume Purged, Gal: 0.25 TO DT Purged To Dryness LOW VOL. Finish Purge Observations: PURGE DATA: (if applicable)

Time	Purge Rate (gpm/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00

SAMPLING	GINFORMAT	JON:		7 S.66	A Johnston Week of the Control of	all spiles of the party of the spiles of the	e de la seguine a	
POINT ID	B-15							
Date/Time	11-13-13	) / /	110	_	Water Level	@ Sampling	, Feet:	9.95
Method of	Sampling:	Pe	-istaltic	Pump		Dedicated:	(Y) N	
Multi-phase	ed/ layered:	( ) Yes	<b>⋈</b> No		If YES:	( ) light	( ) heavy	
SAMPLING	G DATA:							
Time	Temp.	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (OパP)	Other ( )	
1117	14.9	4.45	950		1605	-99		
			ust e					
INSTRUME	ENT CALIBR	ATION/CHÉ	ok data:					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
		. 1. 2. 2.				12 10/01		
					-			
Solution ID#			<u></u>					
				Navage of Greeting and Good of Their Res				Consective states of the state
GENERAL	INFORMATI	ON:						
Weather co	nditions @ tin	ne of samplir	g: Sunny	~ 300			· · · ·	
Sample Cha	ıraćteristics:	clear			4.			<del>~~</del>
COMMENT	S AND OBS	ERVATIONS	S:					
							,	·
<u>, , , , , , , , , , , , , , , , , , , </u>								
				**************************************			-	
I certify that protocals.	sampling pro	ocedures wer	e in accorda	nce with all	applicable El	PA, State and	Site-Specific	<b>:</b>
Date:	11 113113	By:	/A/bs	16		Company: _	7AC	

Page 2 of 2

Facility: LONZA	Sample Point ID: 3-16
Field Personnel: Pt, Tw Pn	Sample Matrix:
MONITORIUNG WELL INSPECTION:	
Date/Time 11-13-13 1 1124	Cond of seal:X) Good ( ) Cracked % ( ) None ( ) Buried
Prot. Casing/riser height:	Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose ( ) Flush Mount ( ) Damaged
If prot.casing; depth to riser below:	
Gas Meter (Calibration/ Reading): % Gas:	/ % LEL:/
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm) / -
PURGEINFORMATION:	
Date / Time Initiated: //- 13 -13 / 1130	Date / Time Completed: 11-13-13/1155
Surf. Meas. Pt: ( ) Prot. Casing	Riser Diameter, Inches: 2"
Initial Water Level, Feet: 9.75	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Personatic
One (1) Riser Volume, Gal:	Dedicated:
Total Volume Purged, Gal:	Purged To Dryness Y / (N)
Purge Observations: Low Flow	Start Clear Finish Clear
PURGE DATA (if applicable)	

Time	Purge Rate (gpm/htz)		Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00
1145	me/mn	9.98		13.2	7.06	2153	3.43	-68	0.47
1150				13.1	7.04	2166	3,37	-72	0.49
1155				13.1	7 05	2169	3 .32	- 75	0 49
			-						
]		<u> </u>	<u> </u>	1.					

SAMPLING	INFORMAJ	TION:	-1-1-1			The state of the s	The state of the s	10 to
POINT ID	13-16	· · · · · · · · · · · · · · · · · · ·	4 - X.					
Date/Time	11-13:13	> 11	155		Water Level	@ Sampling	, Feet:	9.98
Method of S	ampling:		eristaltic	Pump	······································	Dedicated:	/ N	
Multi-phase	d/ layered:	( ) Yes	(≺) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (ORP)	Other (PG)	
1155	13.1	7.05	216	7	3.32	275 . 3	0.49	
						11 11 11 11 12		
							ROMAN .	
UNICTRIBUME	NTCALIBR	ATION/CHÉ	TK DATA!			gadas esta		
MASINATUME	NICALIDIN				y ou			
<b>M</b> eter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
1 **		2.12.11.1	14.5.	:		10/0/	i e e e e e e e e e e e e e e e e e e e	
Solution ID#		2820	<u>z. 140 (* 1454)</u>					
	in in the state of		NO THE RESERVE OF THE PROPERTY	was of case was the company of the case of	<u> </u>			Western Street Street
GENERALI	NEORMATI	ON:						
Weather con	ditions @ tin	ne of samplin	g: (600)					
Sample Char	acteristics:	clear			1877 - A. A. A. B	484 1. 1944	Formula (Control of Control of Co	√.W
COMMENTS	S AND OBS	ERVATIONS	:					
		en e						
·				· · · · · · · · · · · · · · · · · · ·				
		,					<u> </u>	
<del> </del>								· ·
Loortify that	sampling pro	ocedures were	in accorda	nco with all	annlicable ==	ON Ctata and	Site Specific	
protocals.	zamping pro	voedales well	. In accordan	A	applicable Er	A, Glate allu	one-opecing	•
Ďate:	11/13/13	Ву: _	11/1/2	y/l		Company: _	TAL	· · · · · · · · · · · · · · · · · · ·

Page 2 of 2

Facility: LONZA	Sample Point ID: 13-17
Field Personnel: PL, TW PN	Sample Matrix:
MONITORTING WELLINSPECTION:	
Date/Time 11-11-13 1 12:46	Cond of seal: (/ Good ( ) Cracked
Prot. Casing/riser height:	Cond of prot. Casing/riser: ( ) Unlocked ( ) Good ( ) Loose
If prot.casing; depth to riser below:	<del></del>
Gas Meter (Calibration/ Reading): % Gas:	/ - % LEL: - / -
Vol. Organic Meter (Calibration/Reading):	Volatiles (ppm) // /
PURGE INFORMATION:	
Date / Time Initiated: 11-13/ 1300	Date / Time Completed:
Surf. Meas. Pt: () Prot. Casing ARiser	Riser Diameter, Inches:
Initial Water Level, Feet: 12-50	Elevation. G/W MSL:
Well Total Depth, Feet:	Method of Well Purge: Pers JACTEC
One (1) Riser Volume, Gal:	Dedicated: (Y) N
Total Volume Purged, Gal:	Purged To Dryness Y / (N)
Purge Observations: Low-Flo	Start Clear Finish Clear S1. fml
PURGE DATA: (if applicable)	

Time	1	e Rate n/htz)	Cumulative Volume	Temp. (C)	pH (SU)	Conductivity (µmhos/cm)	Turb. (NTU)	Other	Other 00
1315		ml/min		15,0	9.12	8402	24.6n	-42	
1320	)			15-1	9.19	8324	23.9	-74	
1325		1		15.2	9.22	8308	23.1	-98	

SAMPLING	SINFORMA	TION:			entification of the second conflict	and the second		
POINT ID	13-1	17	 _					
Date/Time	1)-11-1	1 (	1325		Water Level	@ Sampling	, Feet:	12:52
Method of S	Sampling:		peristall	icpump		Dedicated:	Ý / N	
Multi-phase	d/ layered:	(, ) Yes	MNO		If YES:	() light	(· ) heavy	
SAMPLING	DATA:	and the second of the second o						
Time	Temp.	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (OPP)	Other (	
1327	15.2	9.22	8308		23.1	-98		
INSTRUME	NT CALIBR	ATION/CHÉ	CK DATA:					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
						(£ 10%)	12.141	
								<del> </del>
				Ç.			Casa t. St	
Solution ID#								
GENERAL	INFORMÁTI	ON:						
Weather cor	ditions @ tir	me of samplir	ng: Clu	edy 243°	<del></del>			
Sample Cha			8). tut					
COMMENT	S AND OBS	ERVATIONS	<b>\$</b> : 32		e produce in the contract of t			
		V		1 1	)			
	·	* * * * * * * * * * * * * * * * * * * *	3	:	1 A			
						;		Þ
· /								
I certify that protocals.	sampling pro	ocedures wer	e in accorda	nce with all a	applicable EF	A, State and	Site-Specific	;
Date:	11/11/13	Ву:	Thomas	115		Company:	AL	

#### FIELD OBSERVATIONS Sample Point ID: W-5 Facility: LONZA PC. TW PN Sample Matrix: Field Personnel: MONITORTING WELLINSPECTION: Date/Time 11-13-13 / 1357 Cond of seal: () Good () Cracked () None () Buried WAULT Cond of prot. Casing/riser: ( ) Unlocked ( ) Good Prot. Casing/riser height: () Loose () Flush Mount () Damaged If prot.casing; depth to riser below: % LEL: Gas Meter (Calibration/ Reading): % Gas: / Volatiles (ppm) / Vol. Organic Meter (Calibration/Reading): PURGE INFORMATION: 11- -13/ Date / Time Completed: Date / Time Initiated: () Riser Riser Diameter, Inches: Surf. Meas. Pt: ( ) Prot. Casing Initial Water Level, Feet: 12.30 MUD Elevation, G/W MSL: PENISTALTEL Method of Well Purge: Y / N Dedicated: One (1) Riser Volume, Gal: Purged To Dryness Y / N Total Volume Purged, Gal: DRY-NOSAMPLED Start Finish Purge Observations: PURGE DATA: (if applicable) Other Other рΗ Conductivity Turb. Temp. Cumulative Purge Rate Time BRP DO (NTU) (umhos/cm) (SU) (C) (gpm/htz) Volume

SAMPLING	SINFORMAT	FION:		Ra C	might distributed and in	in figure of Maintenance of the second	Marine	Sylve Silver
POINT ID								
Date/Time		1		<u>-</u>	Water Leve	l @ Sampling	j, Feet:	
Method of S	ampling:	93. <u>24 </u>			, , , , , , , , , , , , , , , , , , ,	_Dedicated:	Y/N	
Multi-phase	d/ layered:	( ) Yes	( ) No		If YES:	( ) light	( ) heavy	
SAMPLING	DATA:							
Time	Temp. (°C)	pH (std units)		uctivity os/cm)	Turb. (NTU)	Other (	Other ( )	
		-			25.11	A Section 1		
					24.74	e e jerestar		
ă.		e pře jed					Hey with the	
INSTRUME	NT CALIBR	ATION/CHE	CK DATA:					
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std \ 1,413 µmhos/cm	Check.Std \ 1,413 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
	Harry Comments		gay en water		4.54.	12 10 /8/		*: \$1.
·								·
		Ha gara	ordonal in order					
Solution ID#				- 552,				
	NF@RMATI ditions @ tin		iskisis.					
Sample Char		The Andrews	ATTER E	Paris de la Caracteria de La caracteria de la Caracteria	tini. Salah tet Lini. Salah tet Lini.	evilonerei soon oo a		
COMMENTS	S AND OBS	ERVATIONS	<b>):</b>					
		•	in the state of th	and the second s	<u> </u>	<del></del>		
<del> </del>						188-AL		
l certify that sprotocals.	sampling pro	cedures wer	e in accorda	nce with all a	pplicable EF	PA, State and	Site-Specific	:
Date:	1 1	By:				Company		
vale.	<i>i i</i>	By:				Company: _	···	

PTO

Meter ID# Cal Std Cal Std Cal Std 7.0 SU 1,413 Cal.Std 10 NTU		200	12A			Sample Poin	t ID:	QD -		
### AMPLING INFORMATION    ate/Time	ield Personn	el:	R. Pr						Composito	
Meter ID#  Cal Std  C	AMPLINE I	NEORIATI	IØN:				4	() Grab () G	Joinposite	
Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy    SAMPLING DATA:   Time   Temp.   pH   Conductivity   Turb.   Other   Other   ( )	ate/Time _	12-13-13		11 35		Water Level @ Sampling, Feet:				
Multi-phased/ layered: ( ) Yes ( ) No If YES: ( ) light ( ) heavy  SAMPLING DATA:  Time Temp. pH Conductivity Turb. Other ( ) ( ) ( )  ( °C) (SU) (µmhos/cm) (NTU) ( ) ( )  ( 137 4.7 7.99 1937	กethod of Saเ	mpling:	MANO	er GA	1B		Dedicated:	Y / N		
Time Temp. pH Conductivity Turb. Other Other (°C) (SU) (μmhos/cm) (NTU) ( ) ( )  i(37) 4.7 7.99 1937  NSTRUMENT CALIBRATION/CHECK DATA:  Meter ID# Cal Std Cal Std Cal Std 7.0 SU 1,413 μmhos/cm 10 NTU (± 10%)						If YES:	( ) light	( ) heavy		
(°C) (SU) (µmhos/cm) (NTU) ( ) ( )  137 4.7 7.99 1937  **NSTRUMENT CALIBRATION/CHECK DATA*:  Meter ID# Cal Std Cal Std Cal Std 7.0 SU 1,413	SAMPLING I	DATA:								
137	Time	- 1			•	1	Other ( )	Other (		
Meter ID#	1137									
Meter ID# Cal Std Cal Std Cal Std Cal Std 7.0 SU 1,413			,							
Meter ID#	NSTRUMBN	NIT CAVUETR	ATHON/GHE	CK DATAS			10.5			
	Meter ID#				7.0 SU	1,413	1,413 µmhos/cm	I I	Check Std 10 NTU (± 10%)	
							(2 10 /0/			
Solution ID#	Solution ID#			<del></del>						
	001411011112111									
	Contract of the Contract of th				Ca tron ba	, 9.	. o commercia			
Weather conditions @ time of sampling: SNOW 25	Contract of the Contract of th			ng:	SNOH	/ 21				
Weather conditions @ time of sampling: Show 23  Sample Characteristics: Cler-	Control of the Contro			ng: Cle	SN0 4	/ 21	, , , , , , , , , , , , , , , , , , , ,			
Sample Characteristics:  COMMENTS AND OBSERVATIONS:	Weather con	iditions @ ti	me of sampli	_						
		iditions @ ti	me of sampli	_						
Sample Characteristics: Cler-	Weather con	iditions @ ti	me of sampli	_						
	Weather con	iditions @ ti	me of sampli	_						
	Weather con Sample Chai COMMENTS	iditions @ til racteristics: S AND OBS	me of sampli	S:					•	

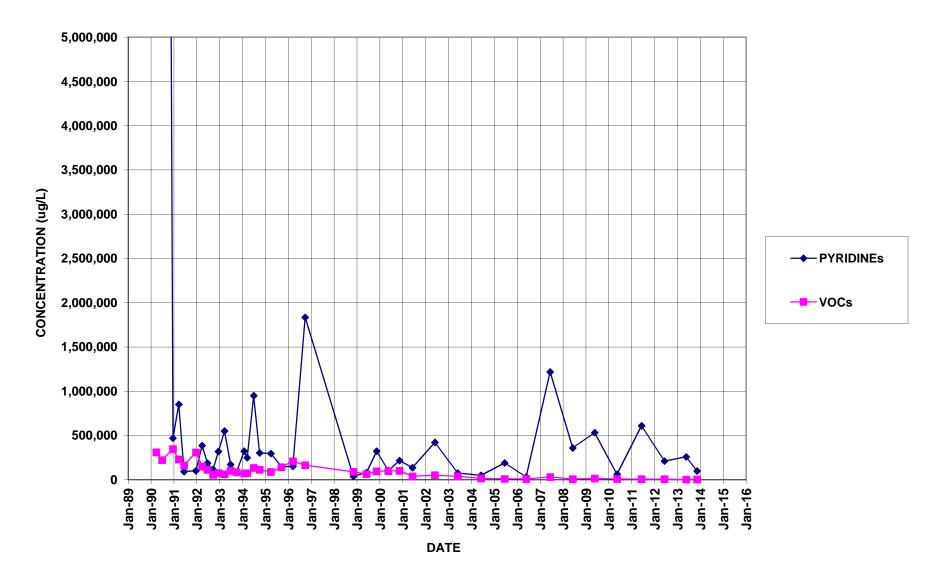
Facility: Lond Sample Point ID: $QO^{-2}$ Field Personnel: $R$ $R$ Sample Matrix: $SQ$										
Field Person	nel:	A PI		Sample Matrix:		Say (O Corch L) Composite				
SAMPLING	JINFORMAT	TIONS -			Grab () Composite					
Date/Time	12-13-1	3 1	1100		Water Level @ Sampling, Feet:					
Method of Sa	ampling:	MA	nu 66	ras		Dedicated:	Y / N			
Multi-phased/layered: ( ) Yes (/) No					If YES:	( ) light	( ) heavy			
SAMPLING DATA:										
Time	Time Temp. pH Conductivity ( °C) (SU) (μmhos/cm)				Turb. (NTU)	Other ( )	Other (			
1102	3.4	7.14	18°	72						
INSTRUME	NT CALIBR	ATHON/GHE	OK DATA:							
				Charle Chri	0-104-1	Check.Std				
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 4,413 µmhos/cm	4,413 µmhos/cm	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)		
C	7.00	4.00		6-97	1000	(± 10%)		,		
Solution ID#	1137269	1294292		912236	1395034	1820284				
L-						7,000				
GENERAL	INFORMATI	IONE								
Weather cor	nditions @ tir	me of sampli	ng: _	Sana	27					
Sample Cha	racteristics:		cler-							
COMMENT	S AND OBS	ERVATIONS	S:							
								-		
<b>*</b>				<del></del>						
I certify that protocals.	sampling pr	ocedures we	re in accord	ance with al	l applicable l	JSEPA, State	and Site-Spe	cific		
•	12 113 13	_ By:	De.			Company:	TAC			
		-								

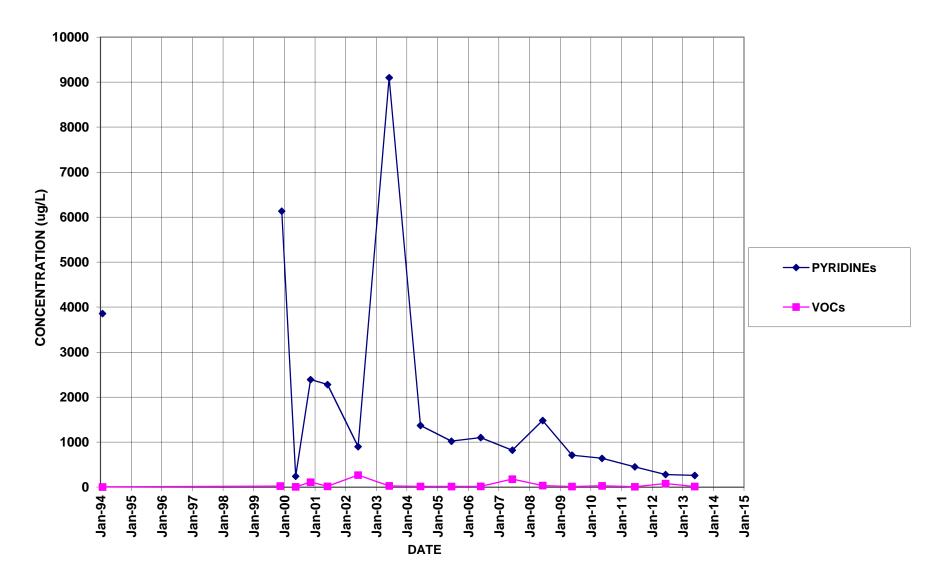
Facility:	201	vz a	······································	Sample Point ID:			90-28/ s/w	
Field Persor	inel:	R.56	in C		Sample Mat			
SAMPLING	INFORMAT	TION:					(/) Grab ()	Composite
Date/Time	Tate/Time 11-08-13   1/40  Tethod of Sampling: DIPPRE				Water Level	@ Sampling	, Feet:	11/2
Method of S	ampling:	DI	pphe	***************************************		Dedicated:	<b>Y</b> /N	
Multi-phased/ layered: ( ) Yes No			No		If YES:	( ) light	( ) heavy	
SAMPLING DATA:								
Time	Time Temp. pH Condu (°C) (SU) (μmho			uctivity os/cm)	Turb. (NTU)	Other (	Other (	
1145	8.4	7.91	604					
INSTIRUME	NT CALIBIR	ATION/CHE	CK DATA		±17)_21	C. C.		
						Check.Std		
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10.0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)
Solution ID#								
GENERAL	NFORMAT	ØN:						
Weather con	_	•		uoy, 40	° F			
Sample Chai	acteristics:	CLEA	1					
COMMENT	S AND OBS	ERVATIONS	3:		**************************************	·		
NAME OF THE OWNER, AND ADDRESS OF THE OWNER,			······································					
,	147-147-1							
Bertal Control of the								
I certify that protocals.	sampling pr	ocedures we	re in accorda	ance with all	applicable U	SEPA, State	and Site-Spe	cific
Date:	11 /08/13	By:		1		Company:	TAL	
	7 /		/ (	7	**************************************	, In <b>J</b> -		

Facility:	Lon	21		Sample Point ID:			4		
Field Person	Field Personnel:    A Parallel   Parallel					rix:	Q5-	SEEP	
SAMPLING					人) Grab ()Composite				
Date/Time	12-13-0	3 1	1125		Water Level @ Sampling, Feet:				
Method of Sa	ampling:	MAI	ved 6A	43		Dedicated:	Y / N		
Multi-phased/ layered:		( ) Yes 🔑 No			If YES:	( ) light	( ) heavy		
SAMPLING	DATA:								
Time	Temp. ( °C)	pH (SU)	· · · · · · · · · · · · · · · · · · ·		Turb. (NTU)	Other (	Other (		
1126	5.7	7.99	1424						
INSTRUME	NTE GALLIBE	ATTION/GHE	OK DATA!						
Meter ID#	Cal Std 7.0 SU	Cal Std 4.0 SU	Cal Std 10,0 SU	Check Std 7.0 SU (± 10%)	Cal.Std 1,413 µmhos/cm	Check.Std 1,413 µmhos/cm (± 10%)	Cal.Std 10 NTU	Check Std 10 NTU (± 10%)	
						(± 10%)			
Solution ID#									
<u> </u>		<u> </u>			<u> </u>		<u> </u>		
Sample Cha	nditions @ ti	me of sampli	cle	-					
COMMENT	S AND OBS	SERVATIONS	<b>S:</b>						
Level - 14 HTML - 14 - 14 - 14 - 14 - 14 - 14 - 14 - 1				- Marie garanto					
l certify that protocals.	sampling pr	ocedures we	re in accord	ance with al	l applicable l	JSEPA, State	and Site-Spe	cific	
Date:	12  13  13	_ Ву:	N	2		_ Company:	7	H	

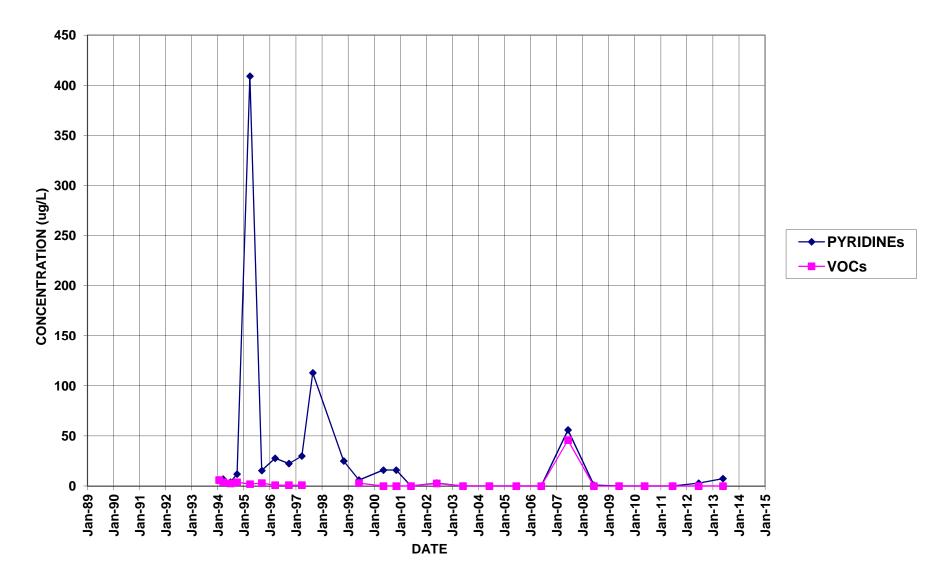
### Appendix B

**Well Trend Data** 

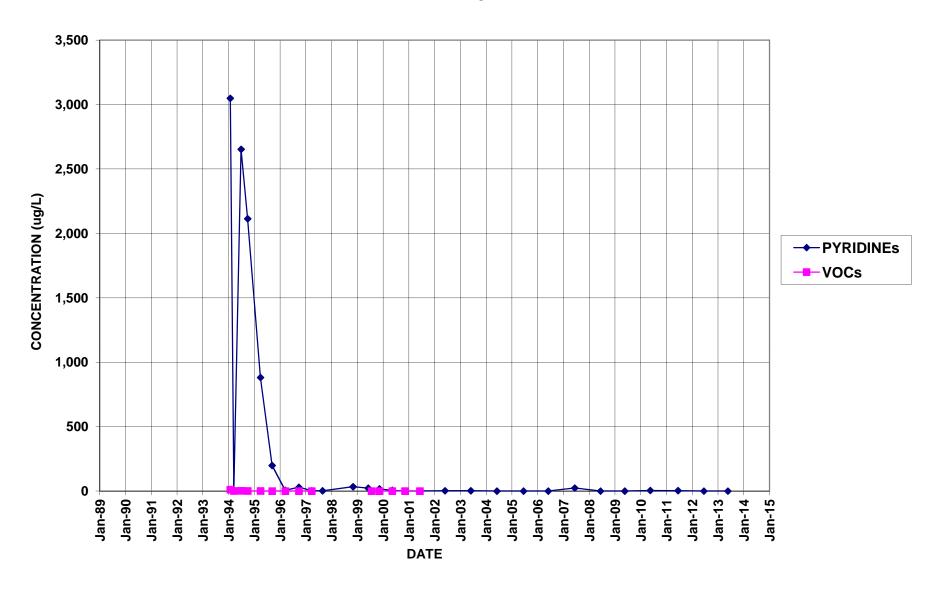




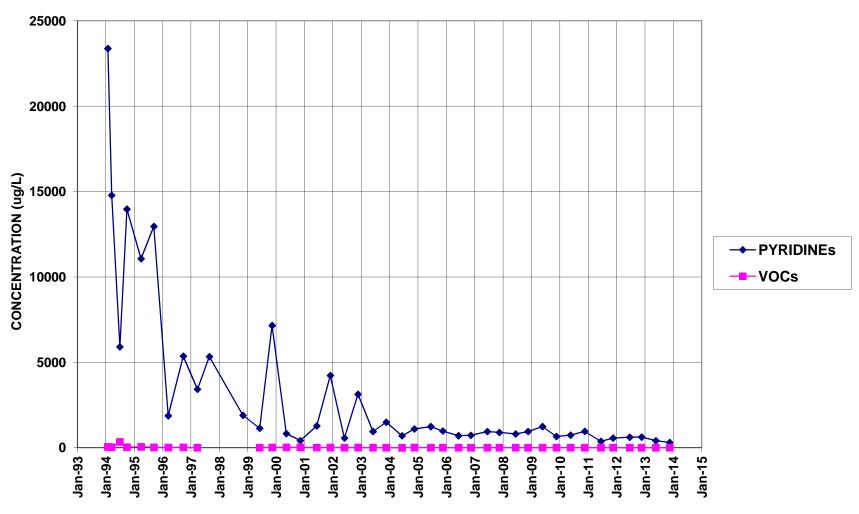
## **BR-103**



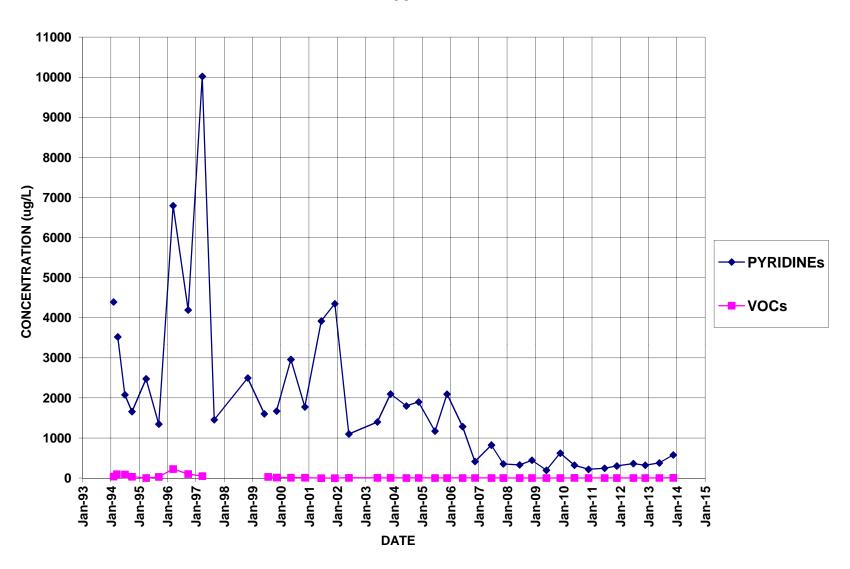
### **BR-104**



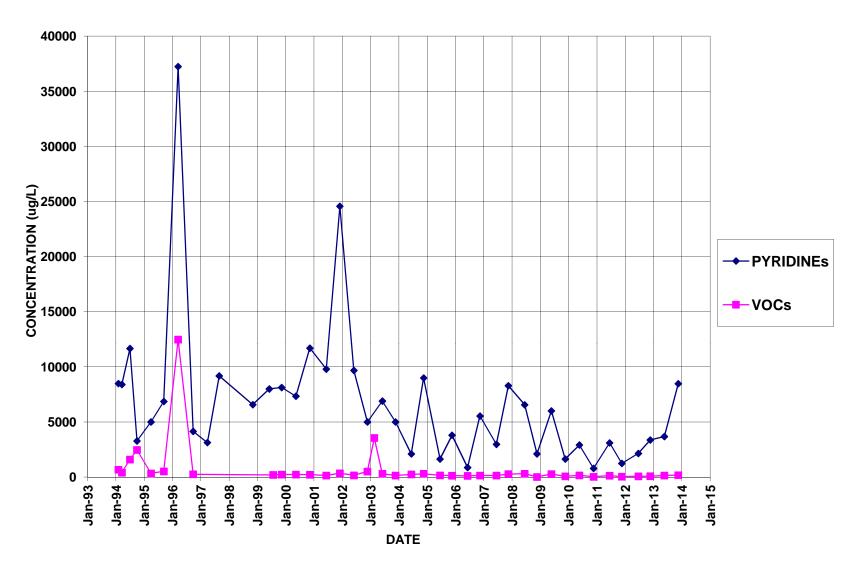


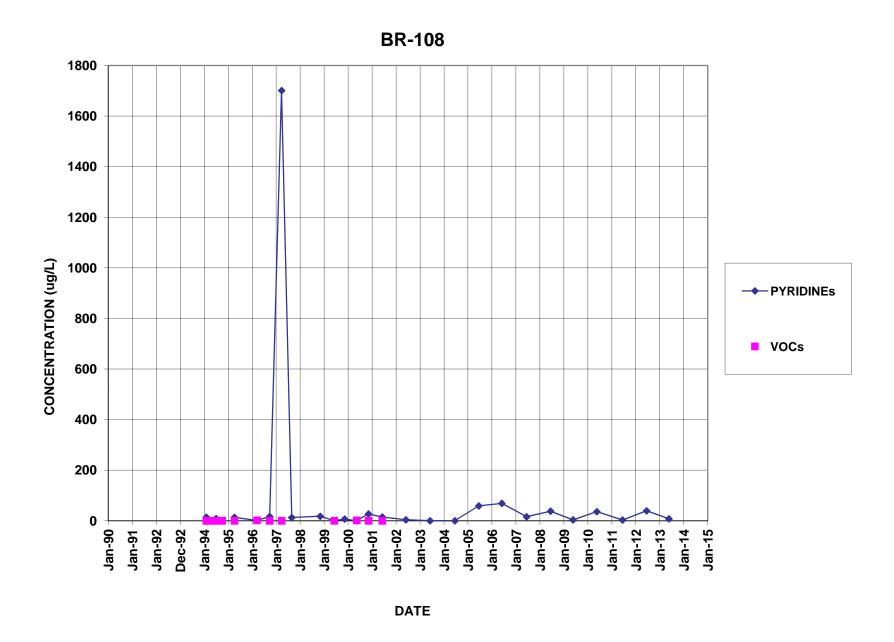


## **BR-105D**

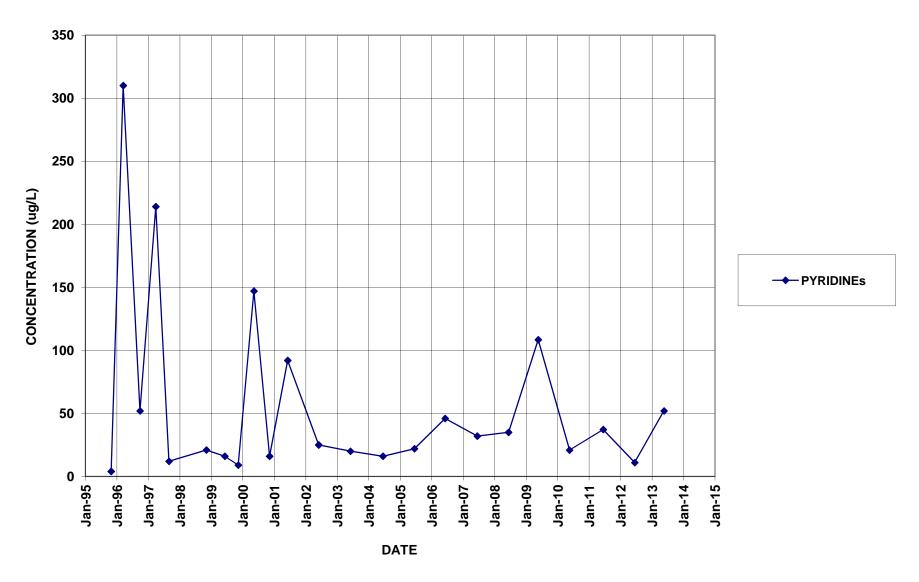




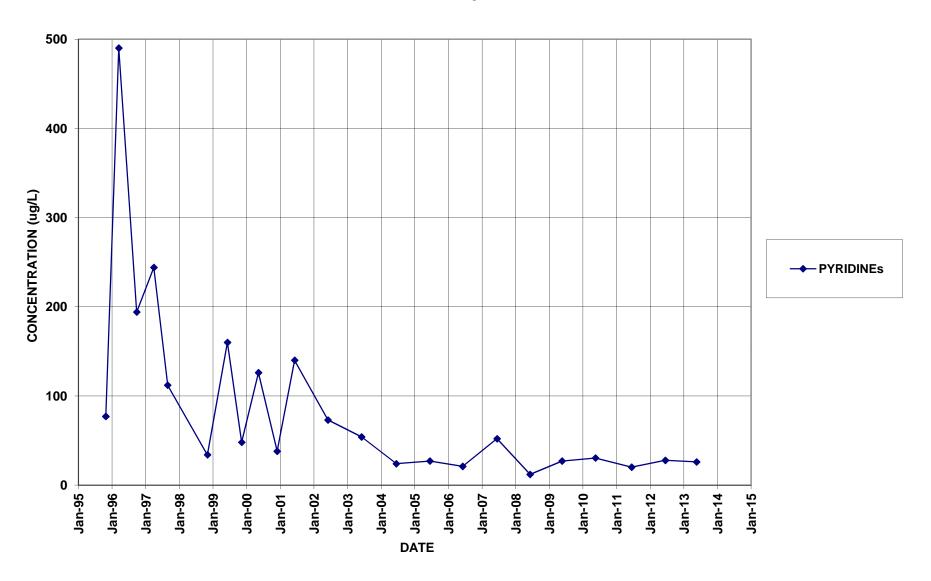




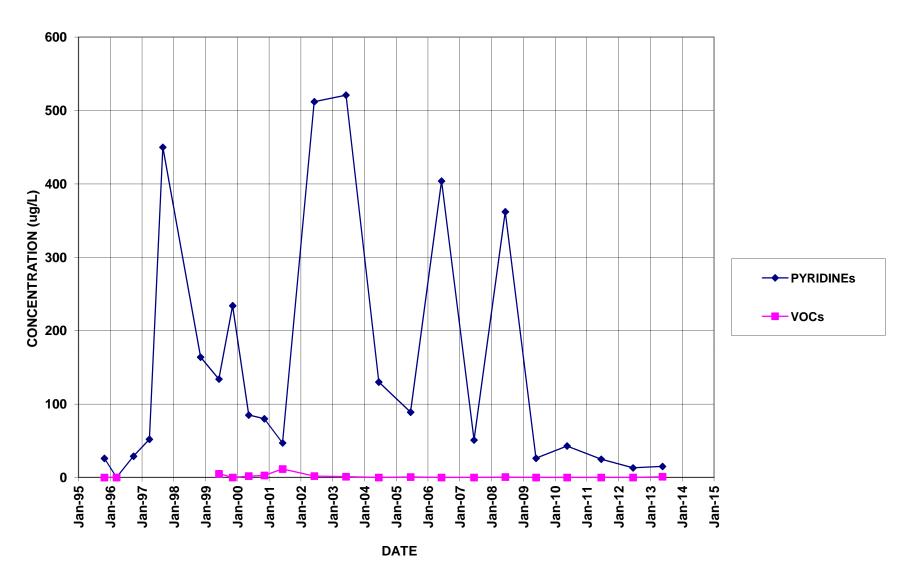




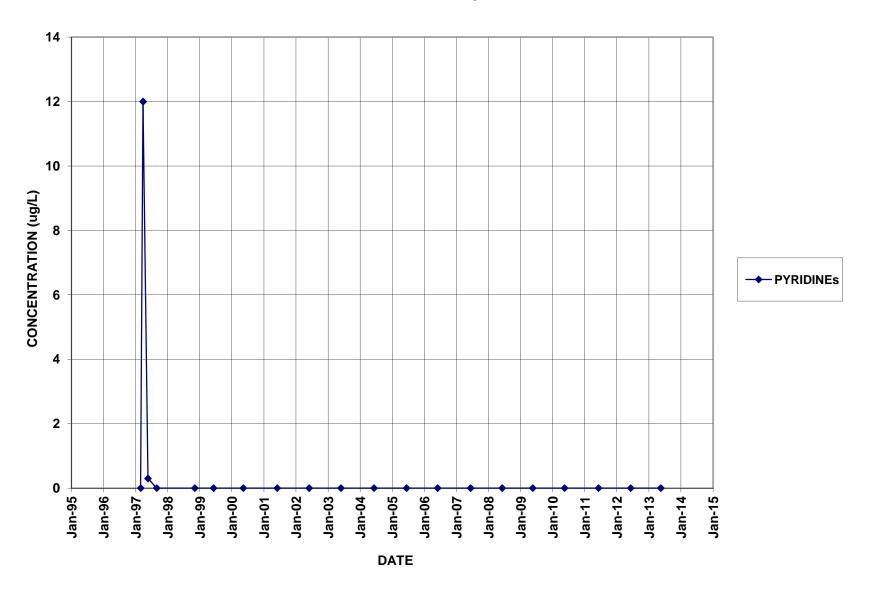
**BR-113D** 



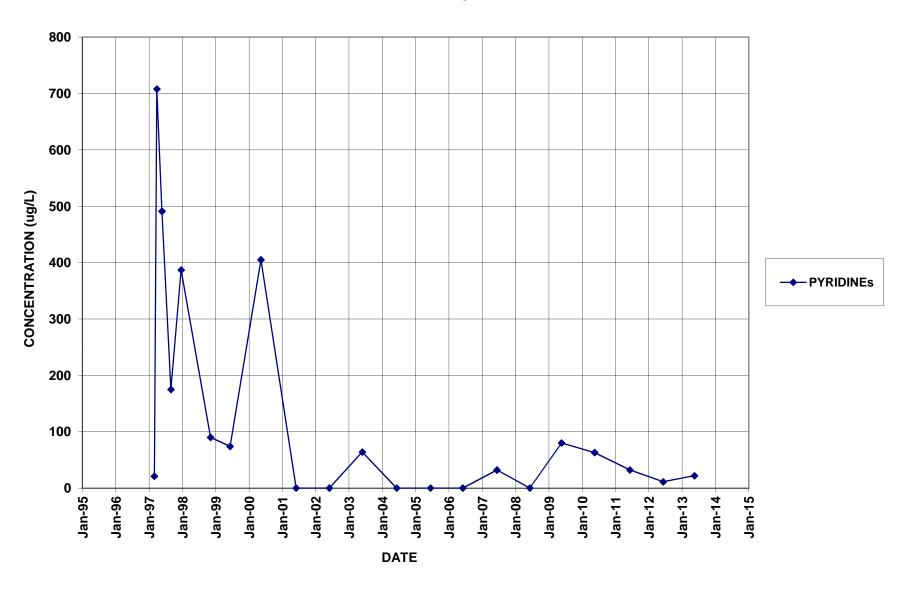




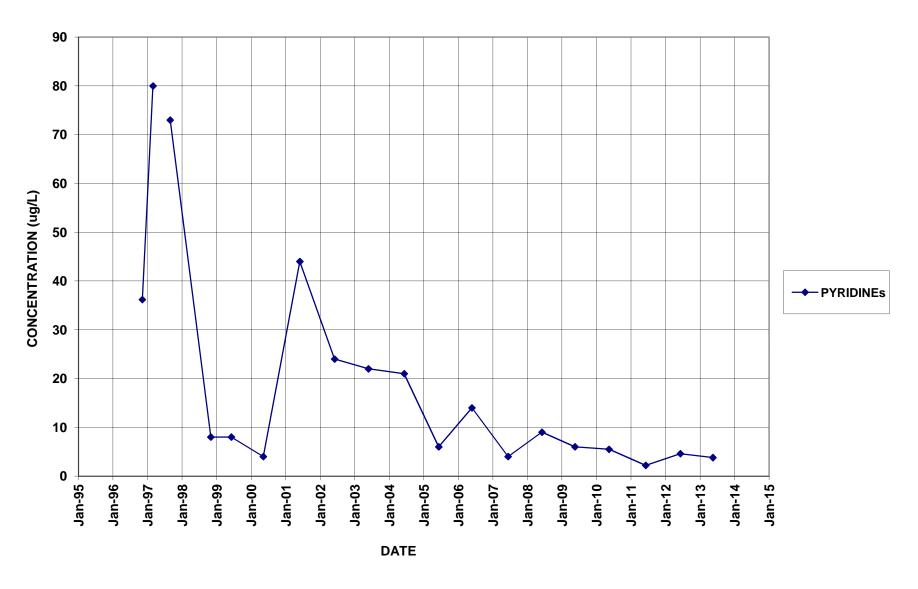




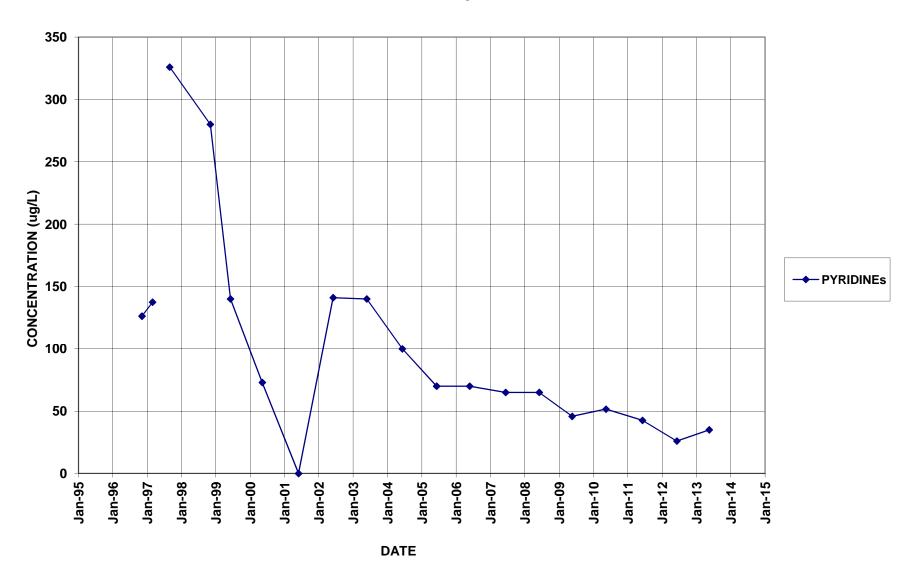
**BR-116D** 



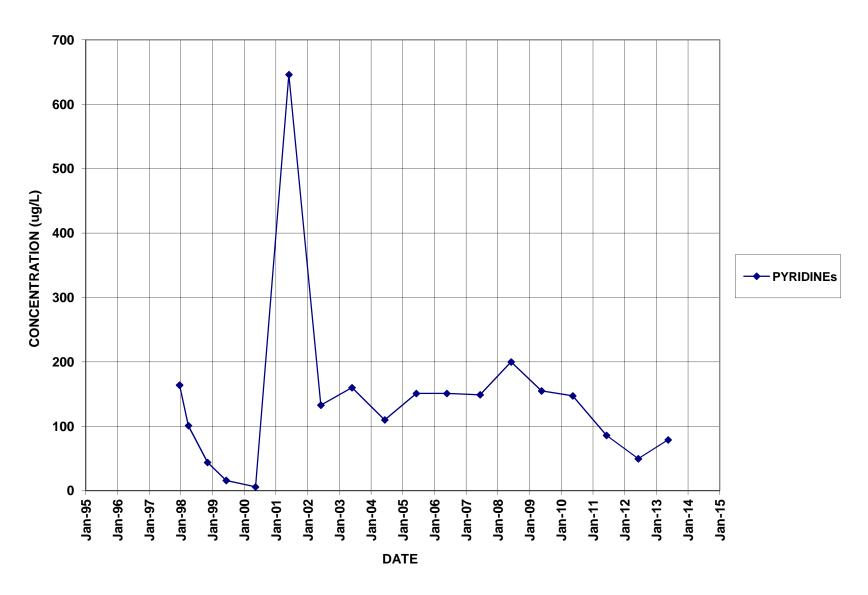
### **BR-117D**



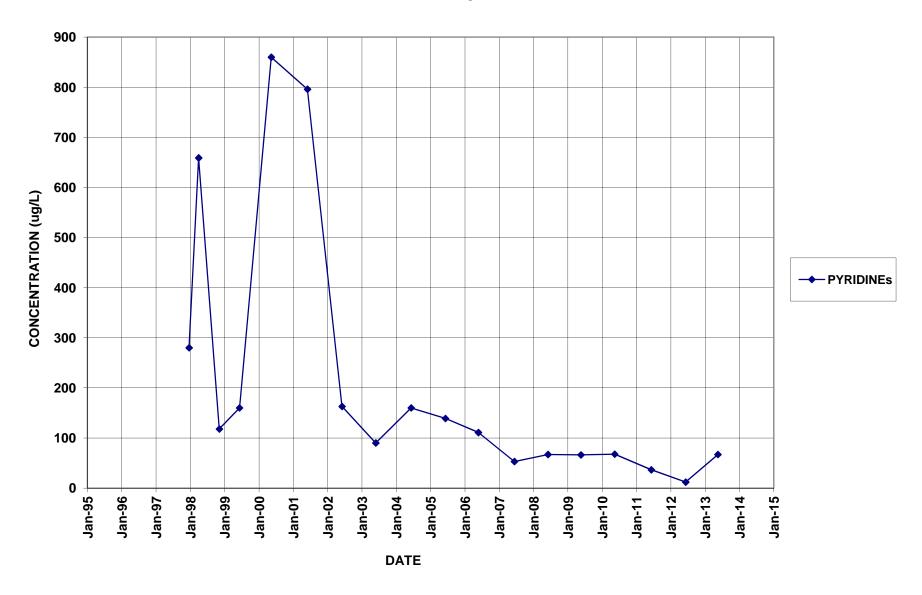
**BR-118D** 



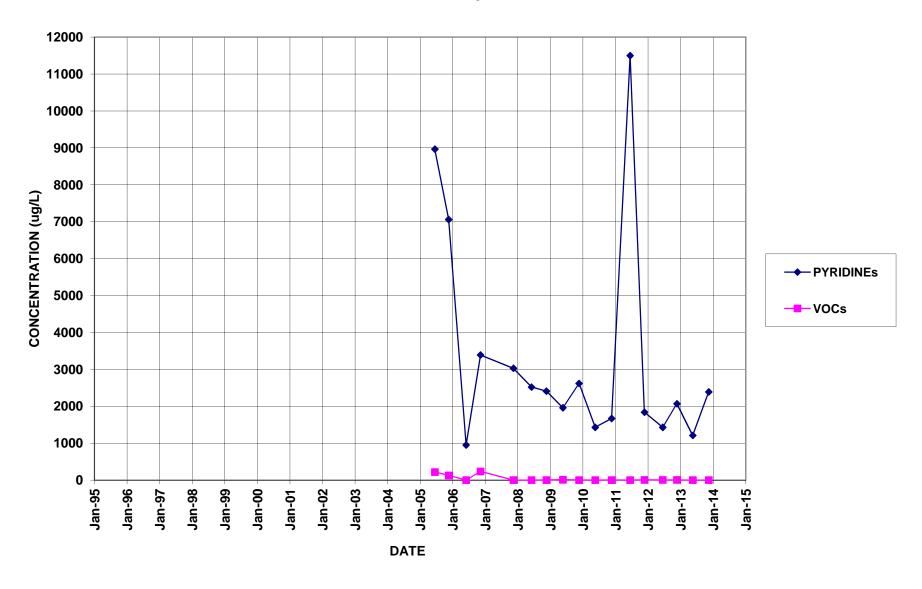
### **BR-122D**



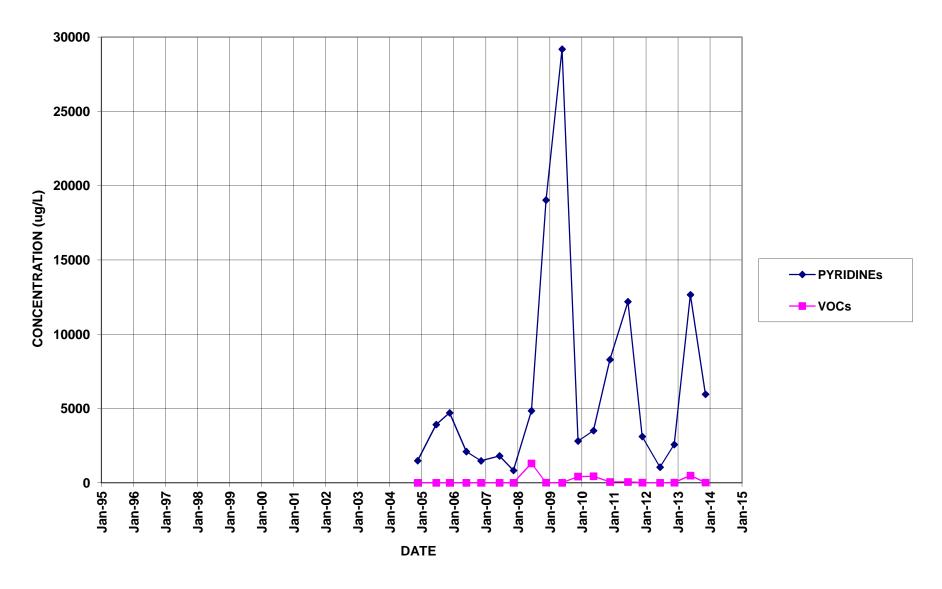
**BR-123D** 



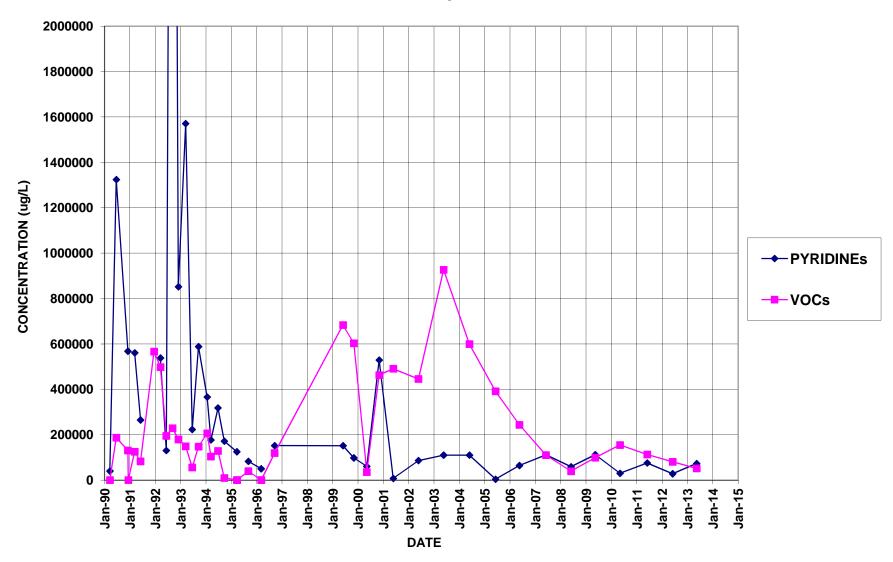
**BR-126** 



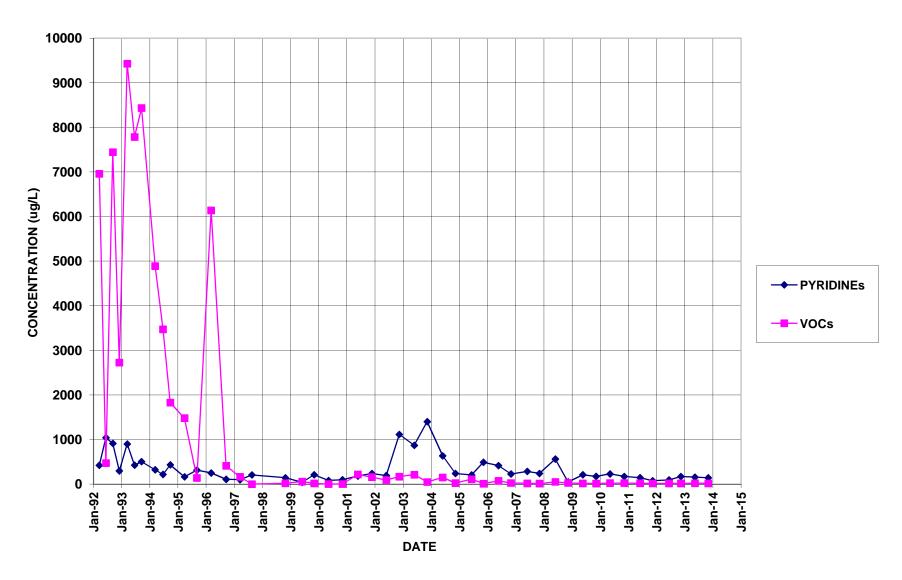
**BR-127** 



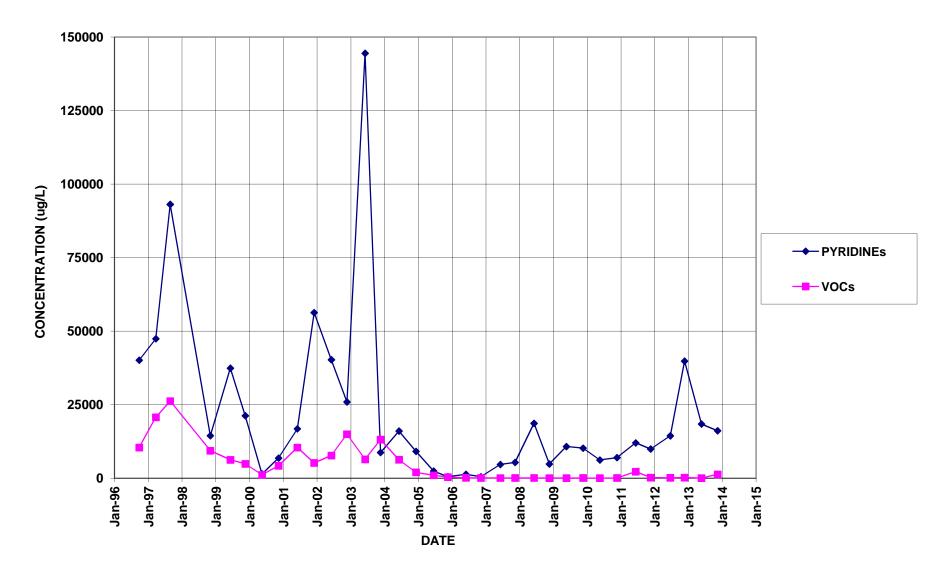


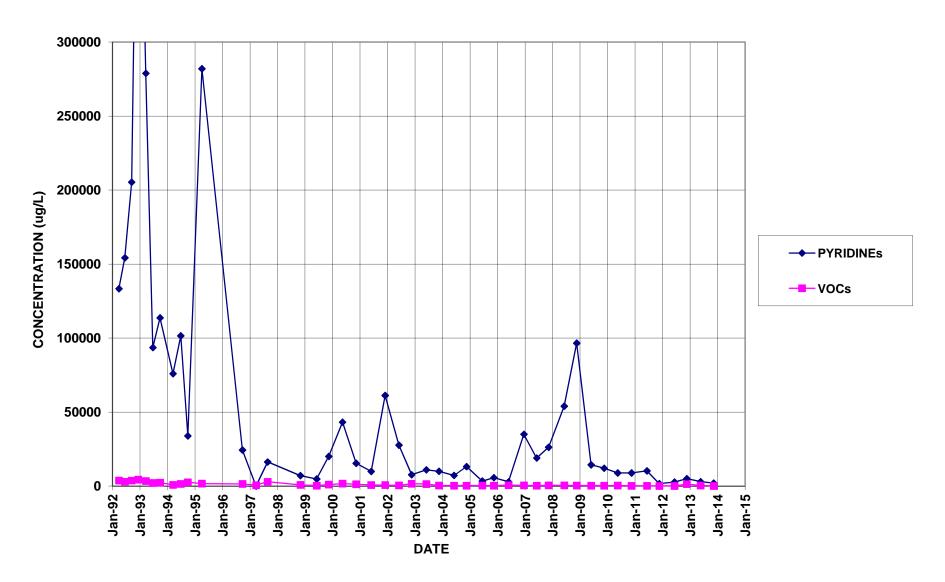


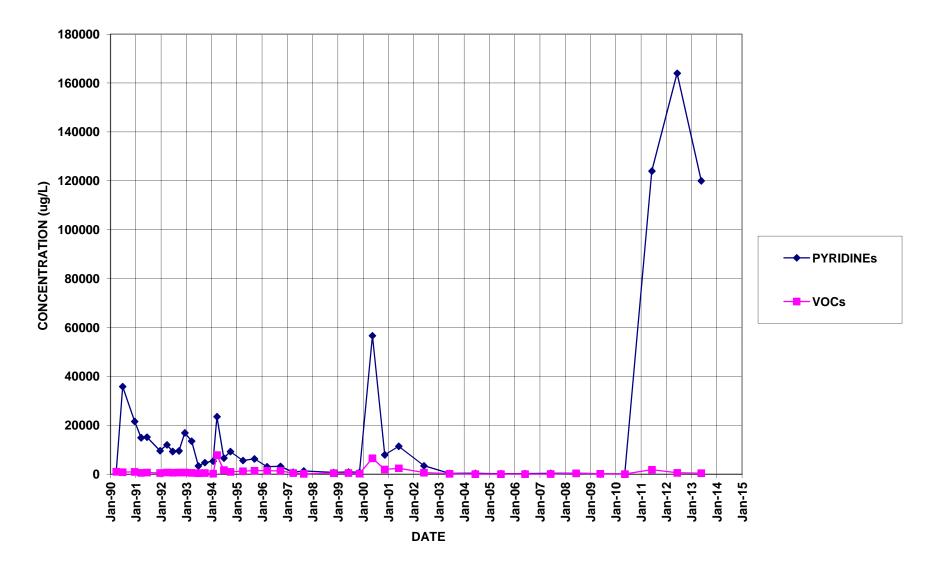


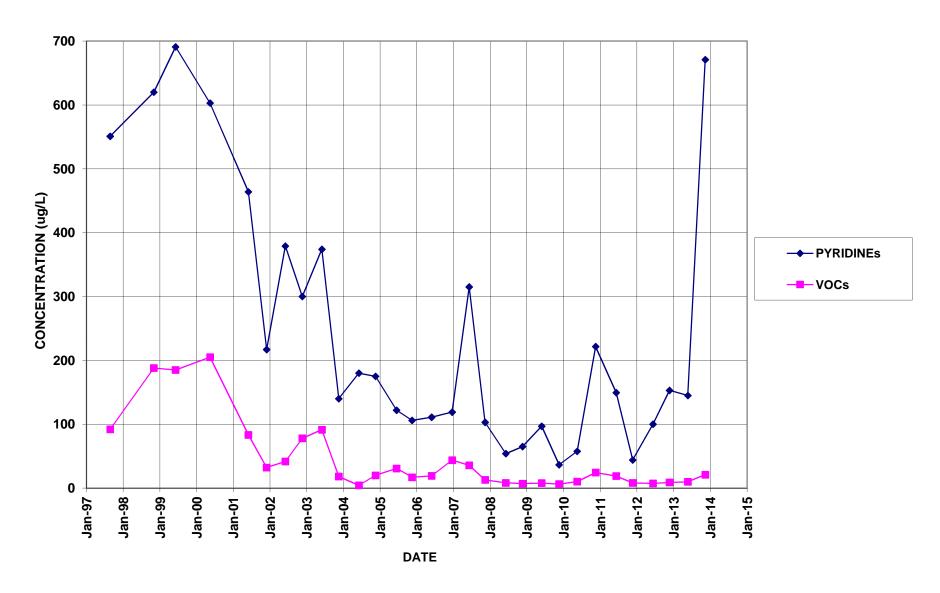




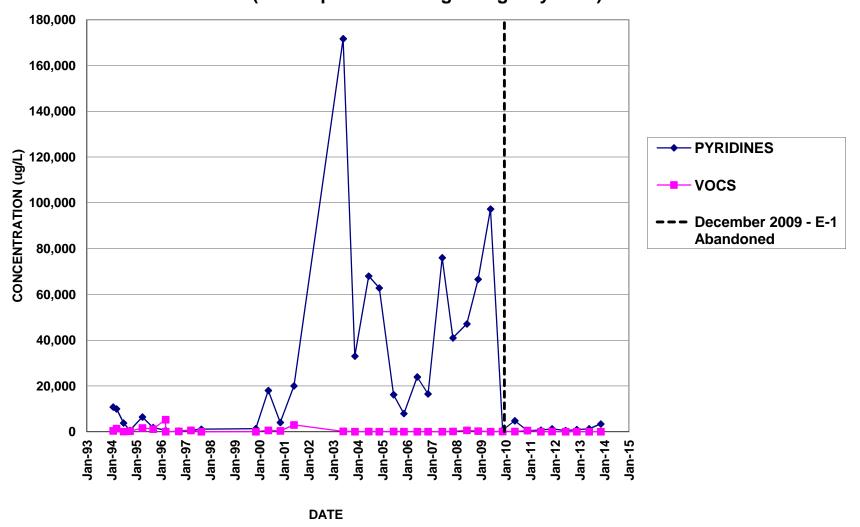


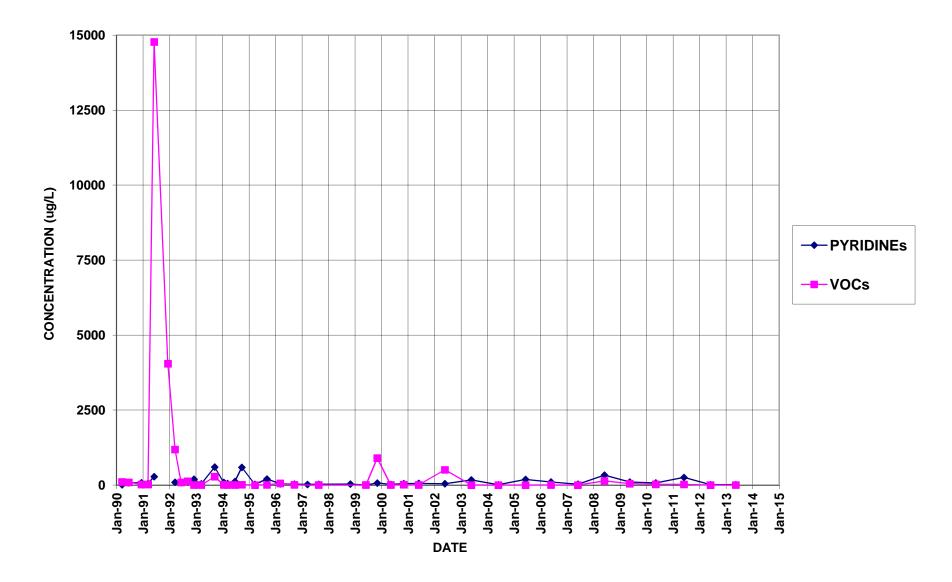




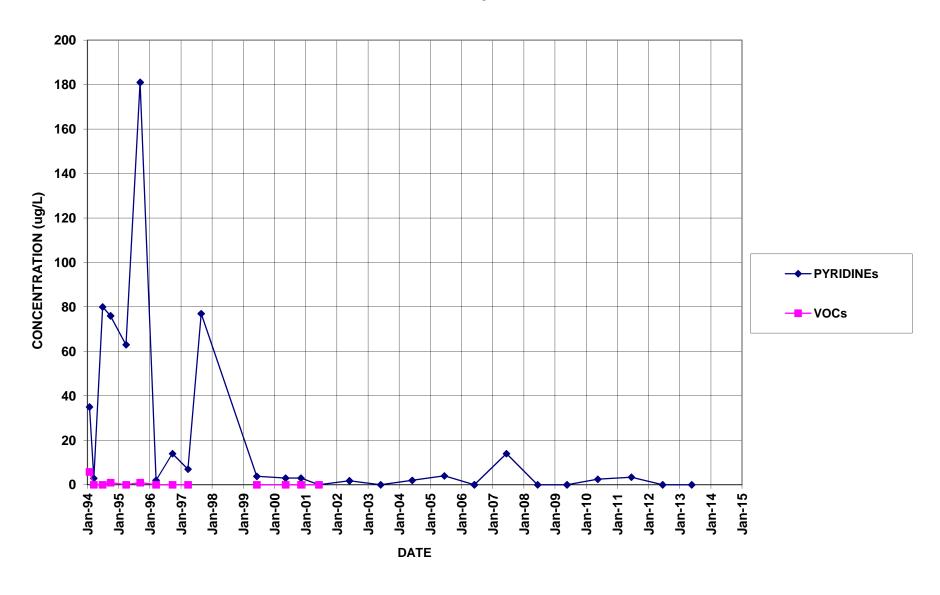


E-1 / B-11 (B-11 replaced E-1 beginning May 2010)

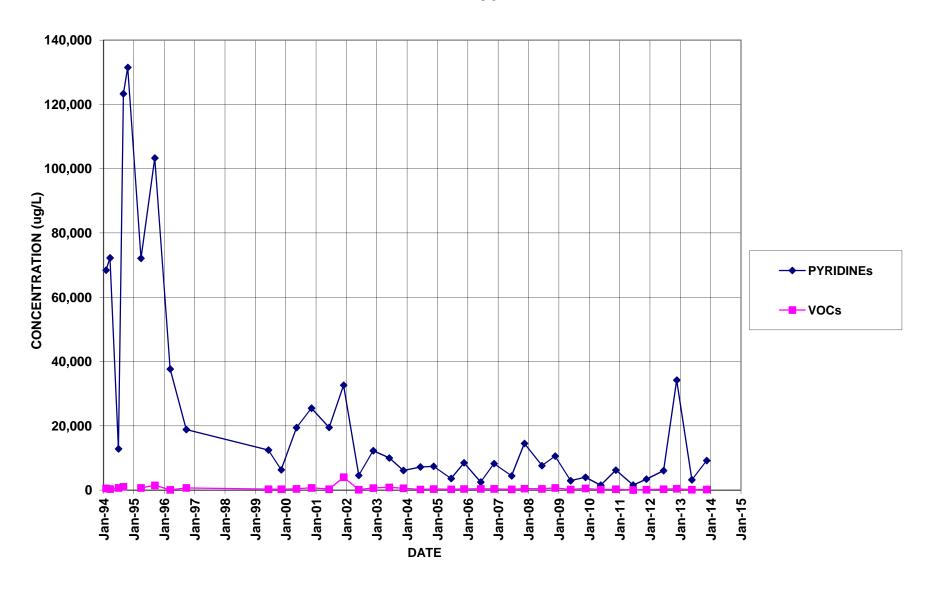




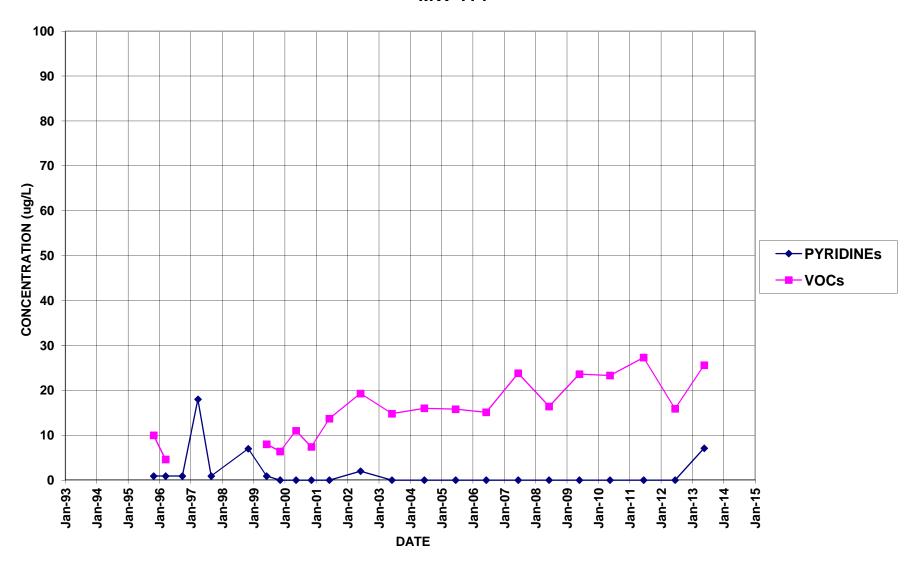
### **MW-104**



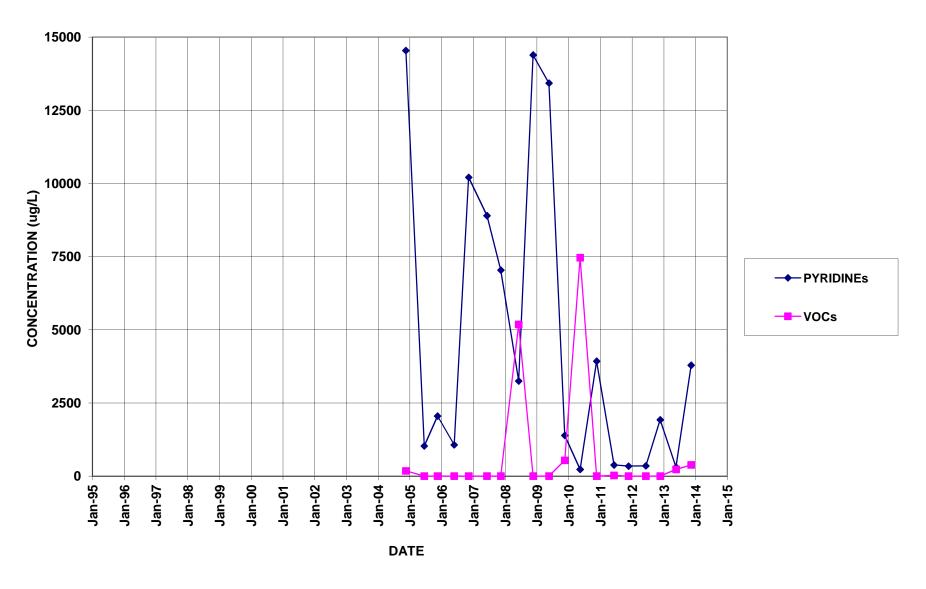
## **MW-106**



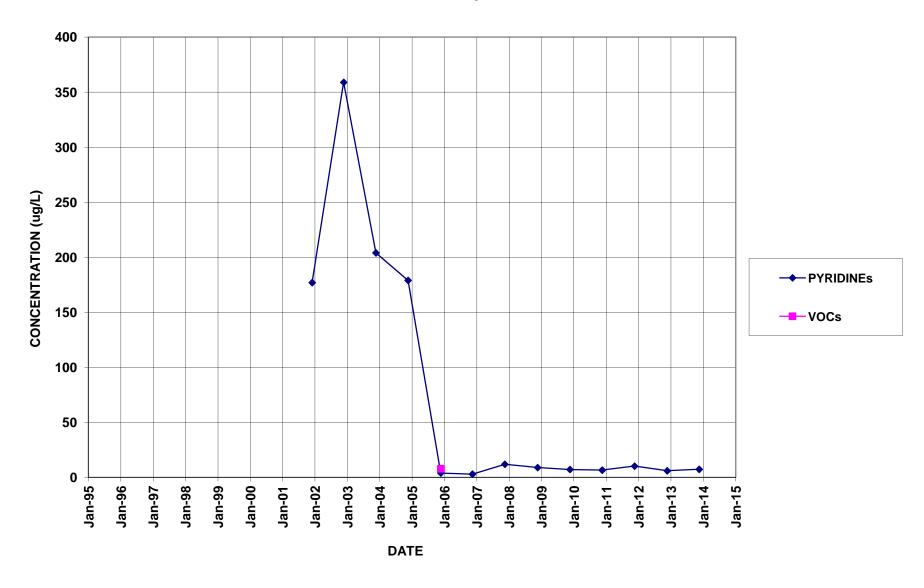
#### **MW-114**



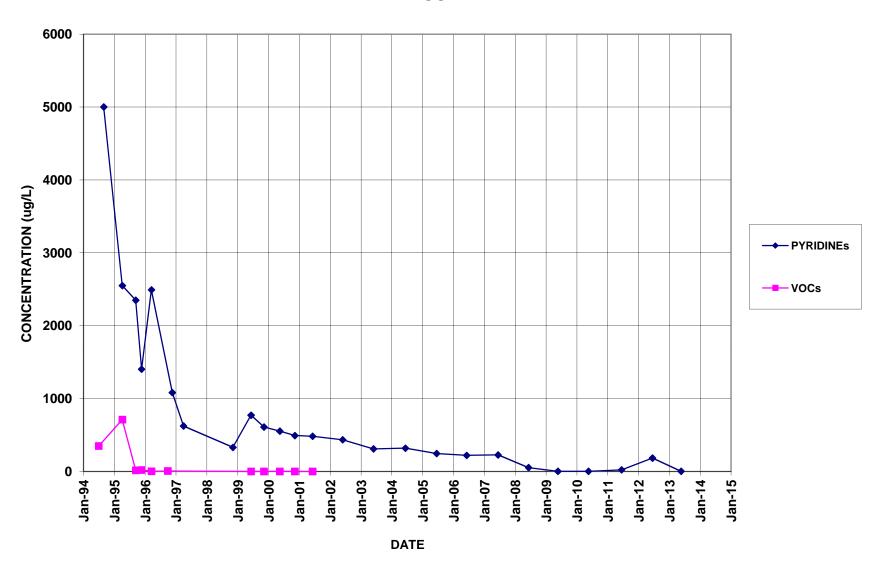
#### **MW-127**



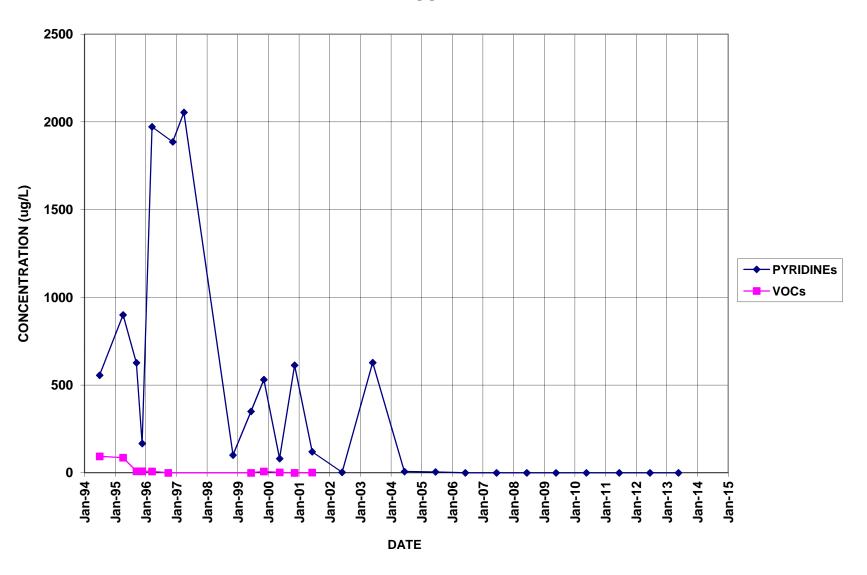




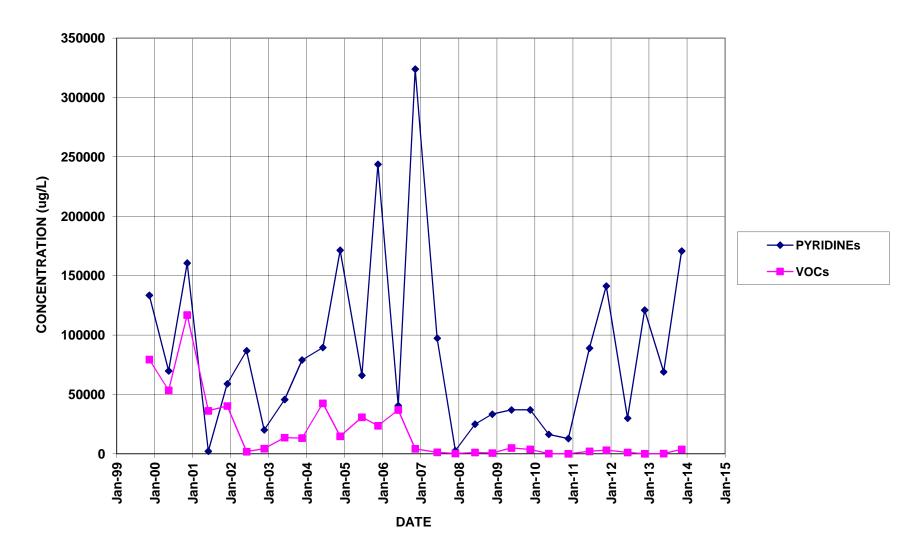
## **NESS-E**



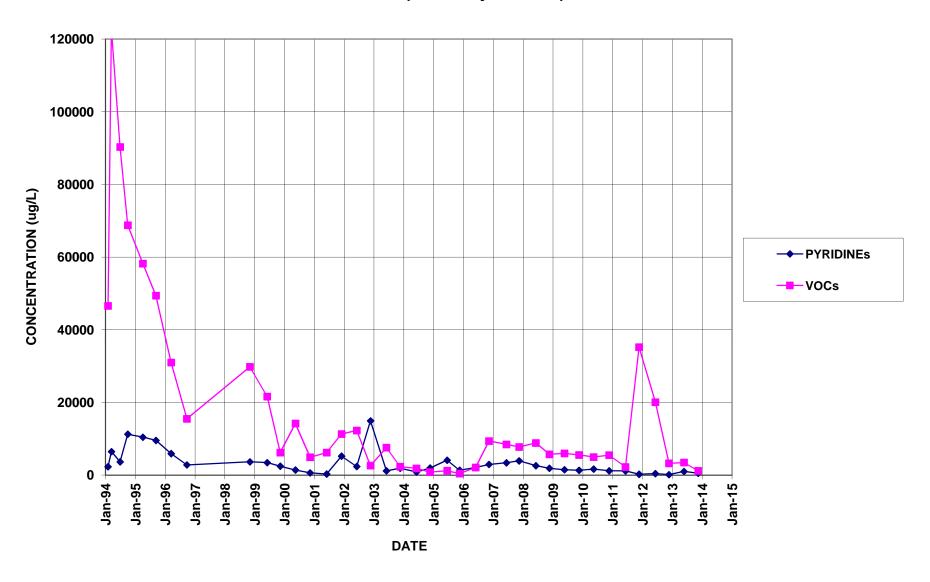
### **NESS-W**



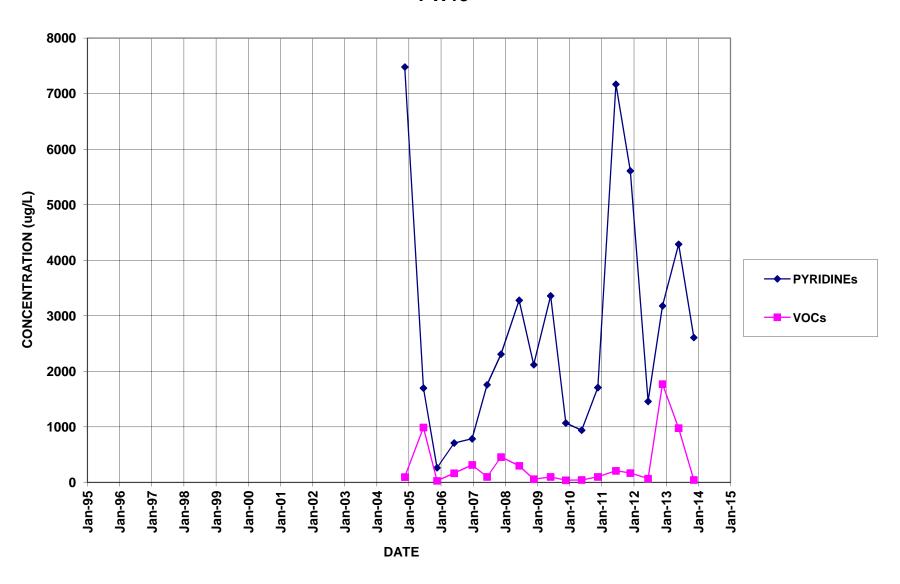
## PW10



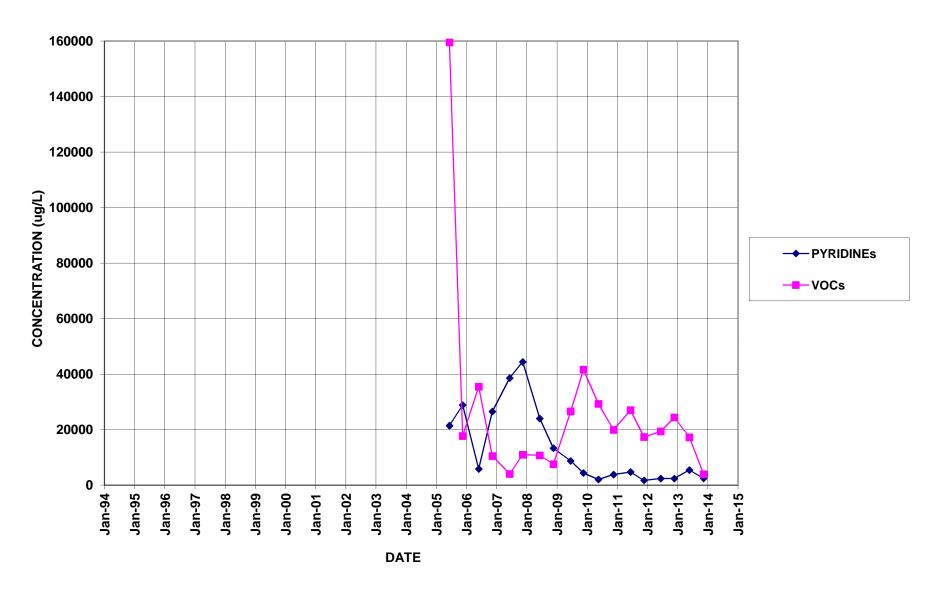
## PW12 (Formerly BR-101)



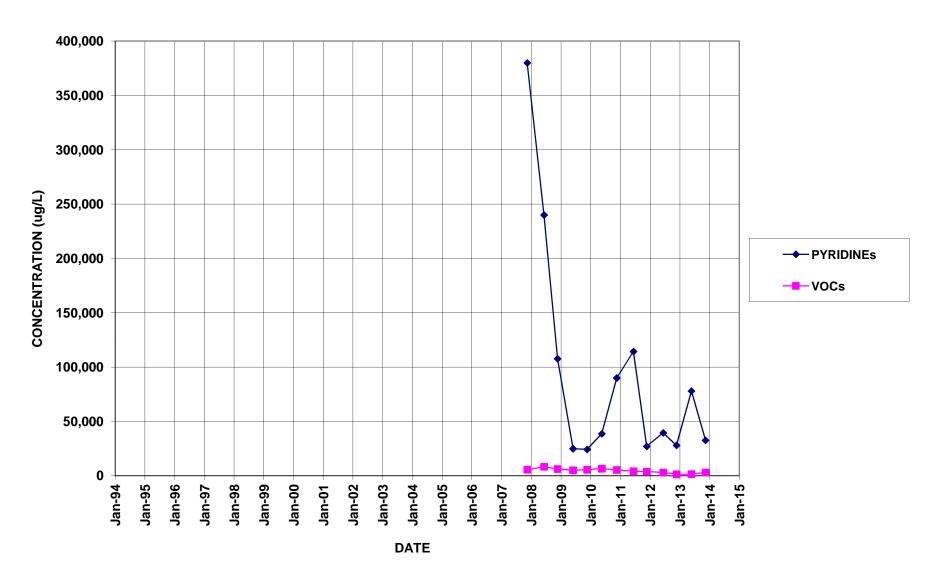
### **PW13**



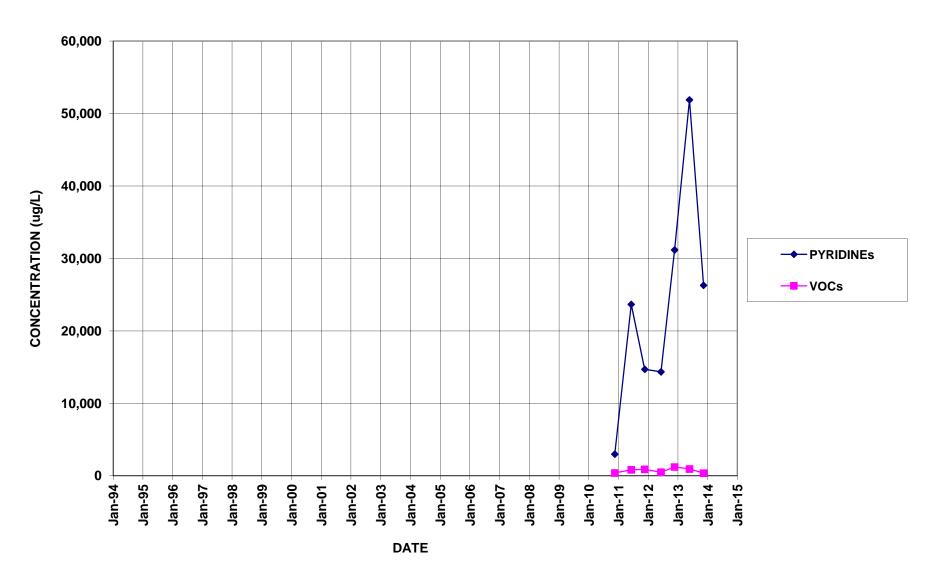


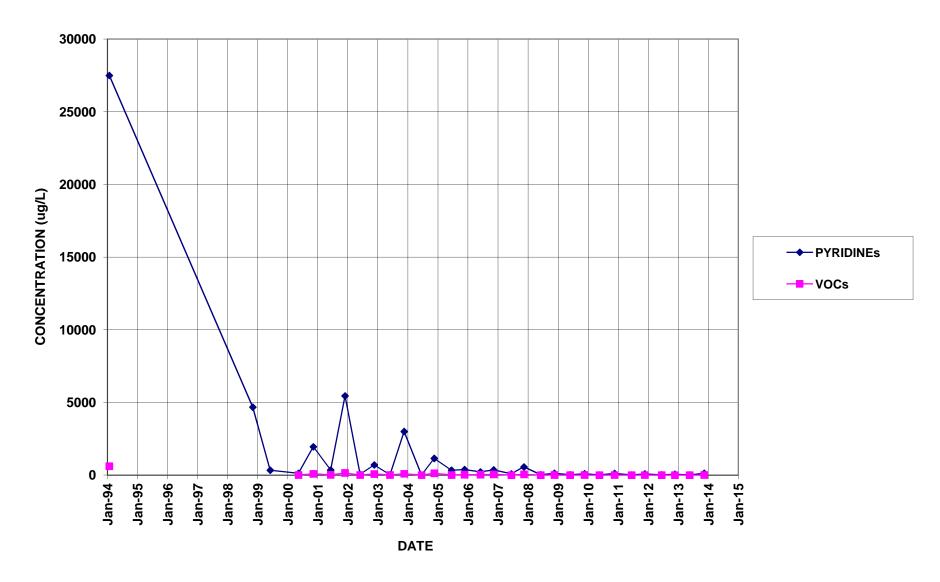


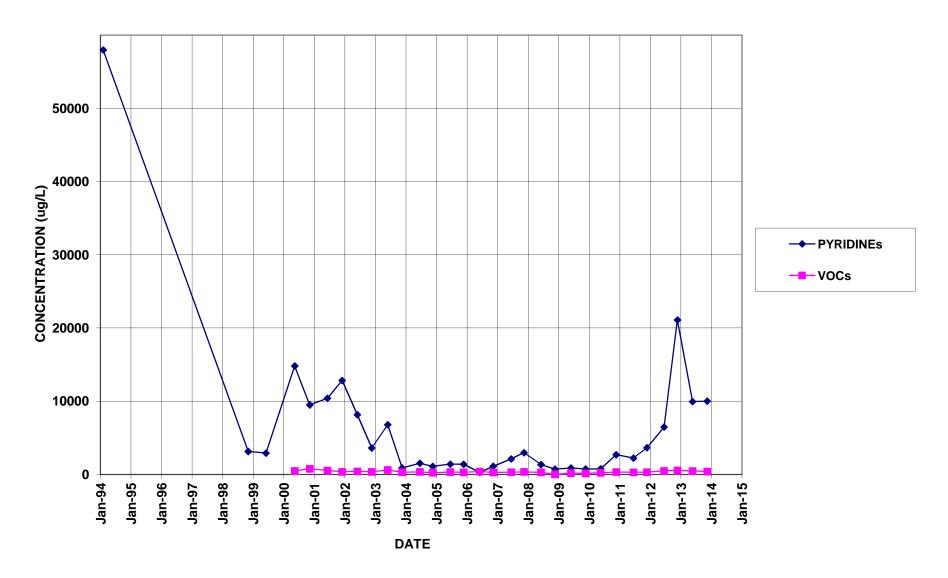
### PW15

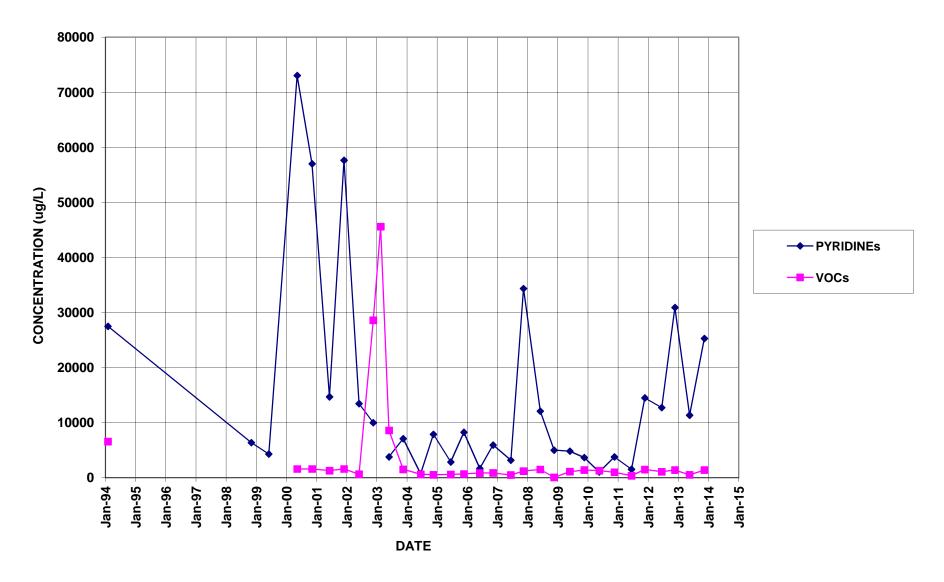


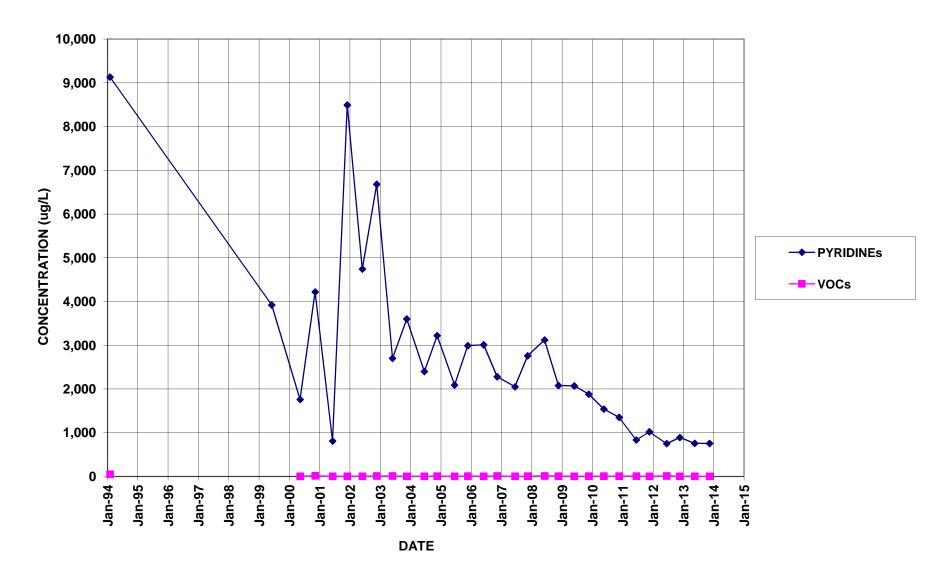


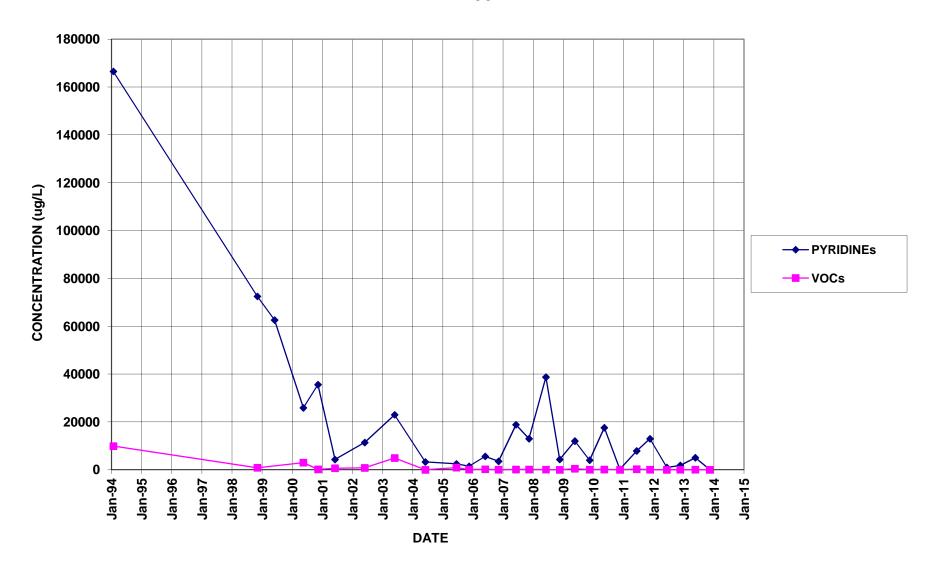


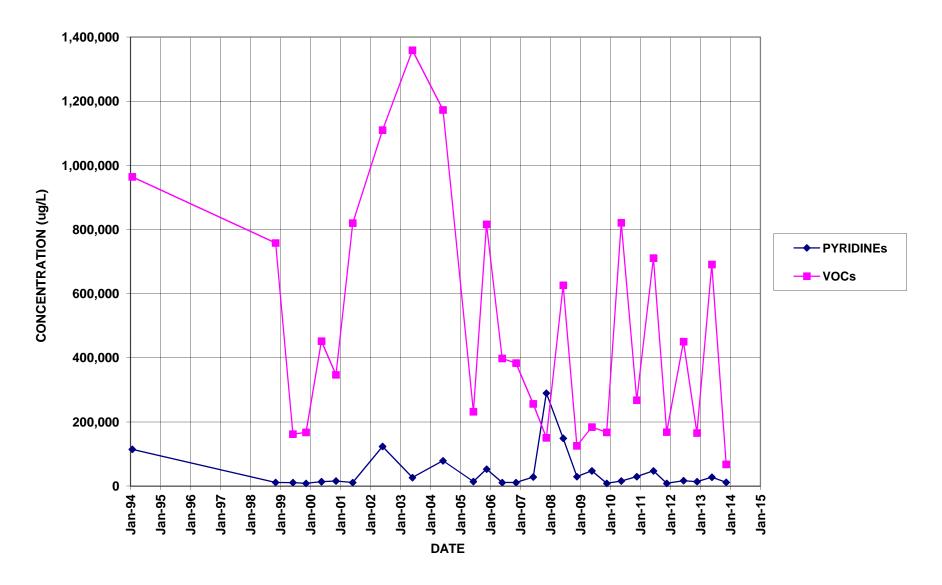


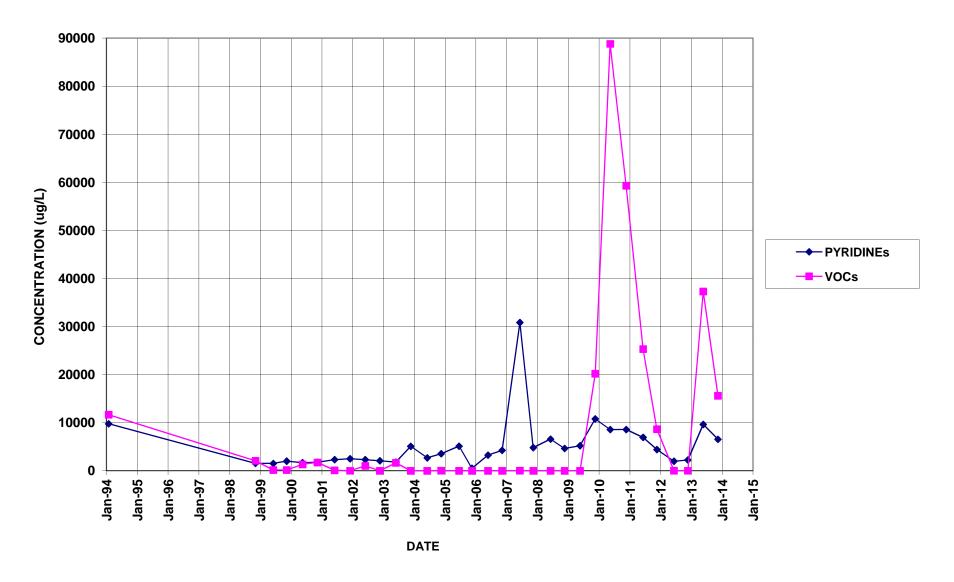




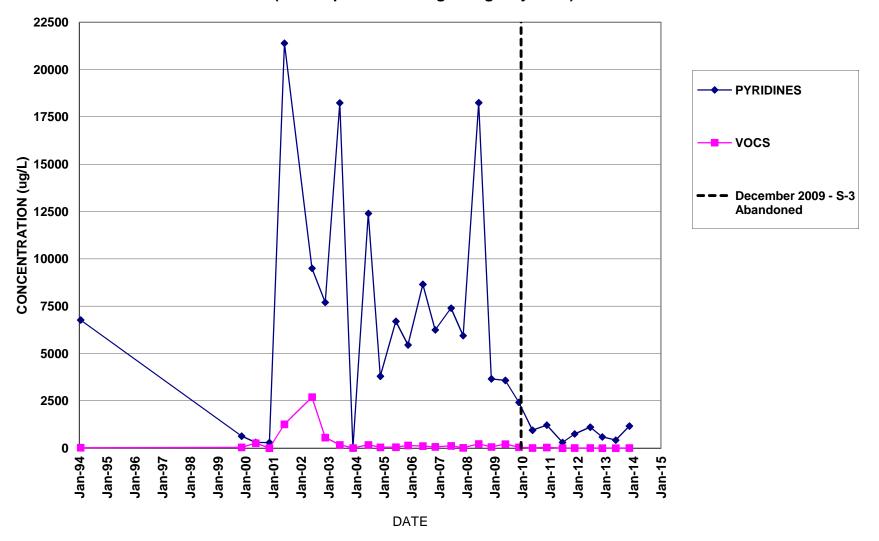




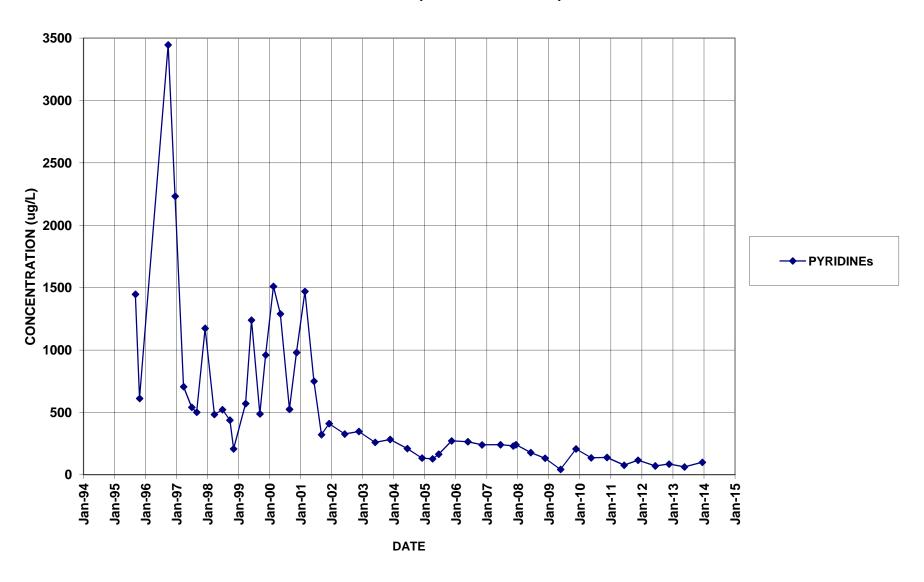




S-3 / B-16 (B-16 replaced S-3 beginning May 2010)



# QS-4 (QUARRY SEEP)



# **QO-2 (QUARRY OUTFALL)**

