

**Adelaide Avenue Environmental Justice Coalition  
60 Crescent Street  
Providence, Rhode Island 02907**

September 5, 2007

Mr. Joseph T. Martella II  
Senior Engineer, Office of Waste Management  
Rhode Island Department of Environmental Management  
235 Promenade Street  
Providence, Rhode Island 02908-5767

**Re: Textron's Park Parcel Remediation Plan  
Community Stake holder's Comments  
First Opportunity for Public Response**

Dear Mr. Martella:

As you are aware, our community group continues to struggle with objectively and systematically helping both regulatory as well as Primary Responsible Parties (PRP) revisit and clarify historical data and information concerning the Textron/Gorham Manufacturing Hazardous Waste Site located at 333 Adelaide Avenue, in Providence, Rhode Island. Textron's Plan for the Park Parcel has had numerous manifestations since first being publicly proposed by Textron in 1993. No less than four separate reports have declared the "Park Parcel" clean and safe for public use. Today the community is better informed and educated as to the real and perceived contaminations and hazards that line Mashapaug Pond and Cove along Textron's property shoreline, as well as the Park Parcel itself. The degree of contamination is significantly more widespread than initially represented by Textron and the Providence Redevelopment Agency, and extremely toxic substances, such as dioxin and furans have now been identified as being present on both the Park Parcel and in the Cove in concentrations significantly greater than typical background amounts.

The Park Parcel comprises almost a half a mile of the shoreline of Mashapaug Pond, and its impact and effects on the Pond are indisputable. Below are the issues and concerns the community hopes will be addressed by the Rhode Island Department of Environmental Management (RIDEM) in consideration of Textron's final cleanup proposals for Parcel D:

## Soil Bore Samples in the North Bank

The fill area between Parcel B's rear property line and the edge of the present day shoreline of the Cove has not been defined accurately or adequately (see figure-1). All responsible parties, and stakeholders acknowledge that this section of the property has been used as a waste site and industrial dump. The issues that continue to be in dispute are the actual parameters of this impacted area, which the community believes have not been delineated clearly or properly. The analytical sampling data for the north bank of the fill area identifying what contaminants are present and in what concentrations is still incomplete. When Building V, a secondary copper smelter, was constructed in 1915 it was erected directly on the shoreline of the cove. Since that time a vast area along the entire north bank has been filled with the industrial waste and debris generated by the entire silver and bronze manufacturing facility. Much of the cove itself has been filled, moving the shoreline approximately one hundred and twenty feet (120') to the north and northwest (figure-2) We know and have reason to believe that a significant portion of fill area is below the water table along this quadrant of the north bank. This condition creates an opportunity for the groundwater flowing into the cove to move directly through a large area of impacted fill material. It is inconceivable to the community that the RIDEM would not insist on a complete characterization of this fill area and all its contaminants prior to approval for capping, after which Textron and the City will never return to these potential issues, regardless of the RIDEM's or the community's position.

Much discussion has taken place concerning the potential and likelihood for these contaminants to leach from the soils within the fill area into the groundwater and ultimately the cove sediments and surface water. Volatile organic compounds (VOCs), dioxins and other unknowns deposited in the soil layers of the north bank fill area have not been a component of that dialog. We believe that the VOCs identified extensively throughout Textron's site are found in the North Bank's industrial waste in concentration, and need to be further investigated and identified. If VOCs are found in the soils of the fill both above and below the water table then there is a likelihood they are contributing to the significant VOC contamination found in the cove. To date there has not been a definitive explanation or Conceptual Site Model (CSM) designed for the high concentrations of VOCs deposited in the cove sediments and below. In the original SSIR for the park parcel Section 4.4.6 (Potential Groundwater/Sediment Interaction) Mactec stated:

- *"The June 2006 sediment sampling and analysis program in Mashapaug Cove did indicate that sediments at several sampling locations within the cove did contain a similar suite of VOCs as has been reported in groundwater...These data are suggestive of a link between groundwater discharge and sediment quality in Mashapaug Cove." And concludes that "If the VOC concentrations reported in sediments are associated with discharging groundwater, further study appears to be needed to fully understand the accumulation or retardation mechanisms that would explain the sediment concentrations". Mactec continues to state further, "Other explanations for the VOC concentrations reported in sediments may also need to be investigated."*



- In the RIDEM's review of the Supplemental Site Investigation for the Park Parcel and subsequent comments to Textron, the RIDEM highlighted Mactec's statement, "*The vertical hydraulic gradient along the southern shore of Mashapaug Cove is upward, indicating that groundwater discharges into Mashapaug Pond*" [Sec. 4.4.4]. They then commented, "The Department requires properly investigating groundwater migrating toward the cove. In addition to further study of the cove sediments, a representative number of new groundwater monitoring wells (shallow and deep) should be installed at appropriate locations within Parcel D, to properly assess and gauge (or conversely to definitively rule out) any on going impacts to cove sediments from the chlorinated solvent groundwater plume originating on Parcel A, **and/or to determine if there are any other previously unidentified groundwater contamination sources.**
- Regarding the original SSIR Mactec submitted for the Park Parcel and Cove, and specifically Section 4.4.5 (Groundwater quality and Potential Chemical Transport) Page 4-16, paragraph 3, a conclusion has been drawn that "*Analytical data for deep wells between the VOC plume and Mashapaug Cove indicate the deep plume does not extend to the cove.*" Both Textron and Mactec have consistently used the existing investigation data to distance any significant relationship or correlation between the identified site solvent sources and the volatile organic compounds found in the cove. Frankly, until April of 2006 Textron and their contractors unequivocally refused to acknowledge any contamination was even present in Mashapaug Cove. And, again, as they state frequently, investigations have been ongoing at this site for more than twenty years. We propose that the minimally investigated fill area of the southern shore of the cove is likely one possible source of the unexplained high concentrations of VOCs in the cove. The community insists that the responsible parties examine this potential source of contamination before it is capped and considered "In compliance".

We are requesting that Textron extract a series of soil borings from within the fill area surrounding the cove, at a depth of at least twelve (12) feet below the water table. Ideally these samples would profile the horizontal and vertical distribution of VOCs in the industrial waste and fill of the north bank and southern shore of the cove; within the groundwater zone and above. Soil samples would be collected every foot in depth until reaching the bottom of the industrial waste or soil deposited along the south edge of the cove. After recovering these initial samples, the borings could be continued to depth to help delineate the activity at the shallow and deeper aquifer, if any. Please utilize the EPA Method 5035 for collection of soil boring samples. The objective of this particular test is to minimize VOC loss from volatilization and biodegradation during sampling collection and handling. The community is requesting that Textron and their contractors collect at a minimum sixteen (16) soil boring samples from the area designated in figure-2, and sample for a complete suite of analytes.



## **Incomplete Sampling Data – Western Park Area**

For the sake of clarity the community is defining the western park area as that property bound by Mashapaug pond on the east, Parcel C, the future YMCA, on the west, Adelaide Avenue right-of-way (paper road) to the south and everything south of soil sample SS-SI001 to the north. By not incorporating the remainder of the park parcel located to the north on the western peninsula into our “western park quadrant”, does not mean we necessarily agree that section of the proposed park is in compliance either. As is mentioned frequently by Textron and their consultant Mactec engineering Inc.; the Textron/Gorham site has been extensively sampled and investigated since 1986, but the western park area has had only six surface soil samples, no soil borings and no groundwater investigations during the previous twenty years. Our logic for demarcating the park area as indicated above is because the entire eastern property line is comprised of the leading edge of an industrial waste landfill approximately sixteen (16’) feet deep which runs the entire length of the quadrant we are identifying as the western park area. The impacts from this open edge of the industrial waste site on this section of the site presents very different conditions and possibly unique consequences that may not exist elsewhere on site, and deserve a more complete and thorough investigation. The entire northern leading edge of Textron’s industrial landfill is being completely capped, why not this section as well? The YMCA is constructing a daycare facility directly adjacent to this open and unremediated section of the hazardous waste site.

As set forth in Section 8.10 of the Remediation Regulations, Textron declares that the soils outside of the footprint of the “Recreational Use” Cap are in compliance with the RDEC. Our test results indicate otherwise. Textron needs to retrieve sixteen additional surface soil samples from this quadrant of the park parcel. The original six samples previously retrieved from this section of the parcel can be combined with the sixteen (16) new samples, and together they will incorporate the twenty-two samples necessary to successfully utilize Section 8.10 of the Remediation Regulations to establish regulatory compliance, if in fact a statistical analysis option is supported by the more complete data set.

- In the spring of 2006 the community collected approximately fifty (50) surface soil samples from all of “Parcel D” as it was recently reconfigured in the March 29, 2006 consent order. Twelve of those samples were retrieved from the edge of the western park area. The exceedences and UCLs within the western park area are identified on the enclosed maps.
- Since Textron and the City of Providence implemented this “Showcase Brownfield” in 1995, there has always been clear language indicating a comprehensive and structurally engineered retaining system for the leading edge of the industrial waste landfill. Please explain how conditions have changed which would allow you to deviate from that concept. The original Order of Approval was based on your representation that a retaining barrier and cap would be utilized on both the north and western exposed landfill edges.



## **Hazardous Waste Drums along the Shore of the Park Parcel**

Textron has gone to great lengths to determine whether drums from their manufacturing facility, located upgradient from the Cove, were present in that part of the site (also part of the Park Parcel) called the Mashapaug Cove. Interestingly, there was never any record or indication that drums did exist, or were found in the Cove. Consequently none were identified; of course the equipment used was not able to penetrate further than 18 inches in depth because of interference from organic gases within the sediment of the cove.

On the other hand, there is extensive documentation; RIDEM reports, eyewitness accounts, and police reports clearly demarcating an area directly west of the Western Peninsula, in Mashapaug Pond, where many 55 gallon drums were discovered along the shore in various states of deterioration. According to both the RIDEM reports and eyewitness accounts the identical type of drums found in the pond sediment were located on the Textron/Gorham site. Please address the issue of when Textron would implement the same comprehensive investigation of the drums located off the western shore of the Park Parcel. By utilizing the same amazing array of technology that was used in the Cove, it should take very little time to locate and investigate the drums that were discharged into the pond from the shore of Textron's Park Parcel. The same "parcel D" that is now being scrutinized by the RIDEM for remediation closure. This question was raised at the public meeting of August 23<sup>rd</sup>, but was ignored by both Textron and Mactec Engineering.

## **Underground Storage Tanks – Building N**

The community is still of the belief that these two fifteen thousand gallon tanks were used at some time for the purpose of storing Naptha and/or other solvents. We are continuing to research this fact and are trying to verify this for future presentation. At the last public meeting Textron and Mactec implied that if proof were made available, they would implement comprehensive testing around and below the location of the underground tanks to satisfy the community's concerns.

## **Mr. Murphy's Dioxin Analysis**

Michael J. Murphy of Mactec Engineering and Consulting has promulgated values for the dioxin and furan contaminants in the Park Parcel because the RIDEM Remediation Regulations do not include soil criteria for dioxins. Calculation of the Method 2 DEC for dioxin was presented originally in Appendix F of the July 2006 Supplemental SSIR, and used again here for the purpose of establishing an opportunity to utilize the Section 8.10 of the Remediation Regulations; ultimately to show that the park parcel is in statistical compliance with the soil RDECs for dioxin.

There are two specific issues, which are confusing to the community, and when that involves dioxin we are deeply concerned.

Firstly, the RDEC value that Mr. Murphy has assigned to dioxin is 4.3 ppt. After further research on the community's part we were able to determine that the EPA- region 9 assigned level for dioxin is 3.9 ppt. Has Mr. Murphy included all relevant pathways in his Method 2 calculations? And if so, why are his values different? Also he calculated the I/CDEC for our site as 38 ppt, yet the EPA-region 9 I/C value is 16 ppt, please explain?

Secondly, it appears that different multiples of TEF values have been used on this site's analysis. Please explain why the dioxin and furan concentrations from the 2006 samples are computed differently from the samples you most recently collected. The samples collected in February of 2007 were done so without the appropriate notification to either the community, as a major stakeholder, or the RIDEM. If Textron believes this was acceptable, please explain why?

Sincerely,

## Adelaide Avenue Environmental Justice Coalition

**cc:**

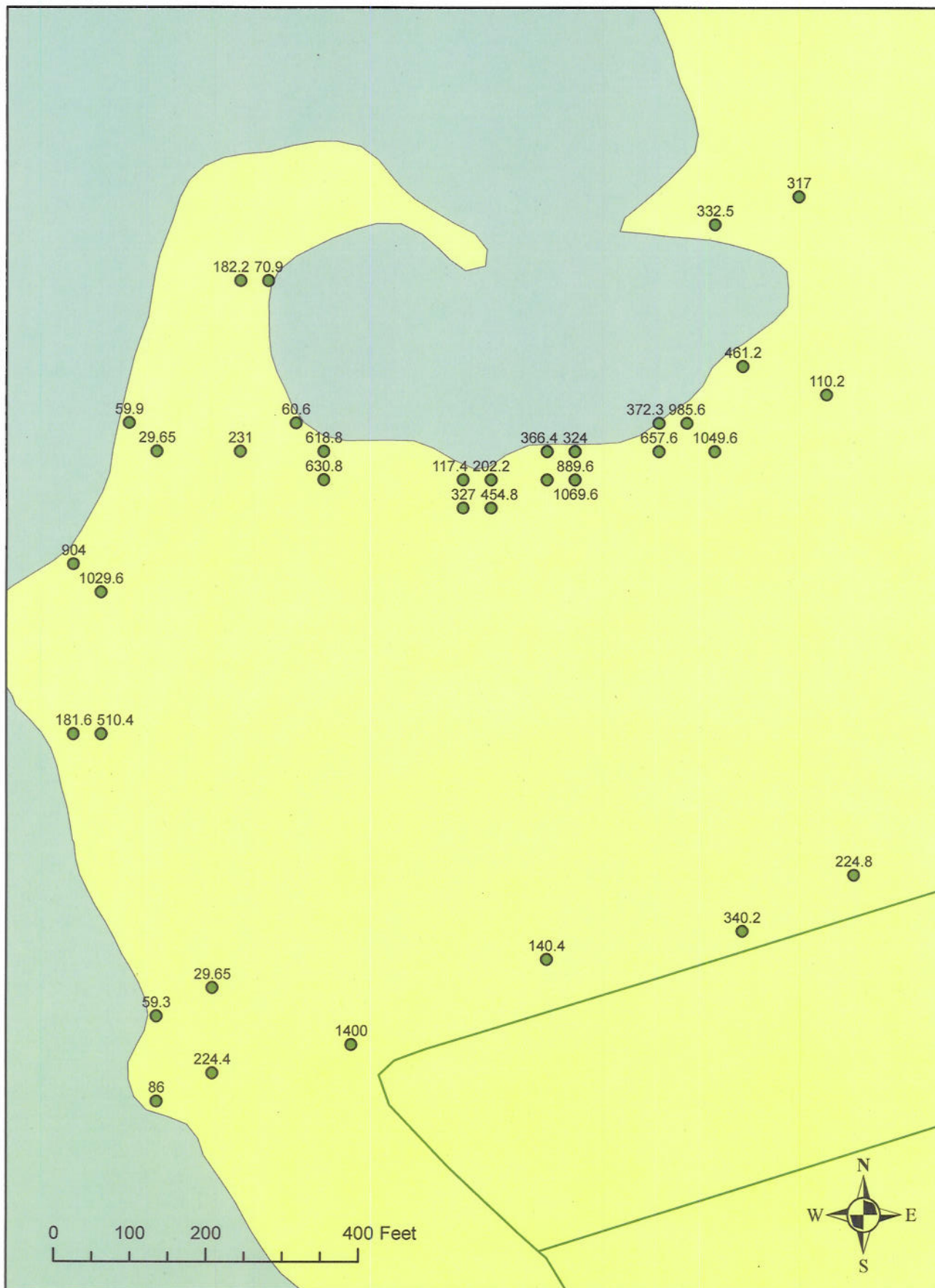
Terrence D. Gray, P.E., Assistant Director, RIDEM/AW&C  
John Langlois, Esq., RIDEM/LEGAL  
Leo Hellested, RIDEM/OWM  
Richard Enander, PhD, RIDEM/OTCA/Risk Assessment  
Karen Leslie, CEO, YMCA  
Scott K. Smith, District Executive, YMCA  
Senator Juan Pichardo, District 2  
Representative Thomas Slater  
Leon Tejada, Councilman  
Miguel Luna, Councilman  
John J. Lombardi, City of Providence  
Greg Simpson, Textron  
Dave Macabe, Textron  
James Ryan, Esq., Partridge, Snow, & Hahn  
Thomas Deller, City of Providence  
John Simmons, City of Providence  
Sara Rapport, Esq., City of Providence  
John Boehnert, Esq., Partridge, Snow, & Hahn  
Glenn Wilson, Kimco Realty  
Tammie A. McRae, ATSDR  
Richard A. Sullivan, ATSDR  
Peter M. Grivers, P.E., EA Engineering  
David Heislein, Mactec

# **Figure 1**

## **Soil Sample Locations for Metals**

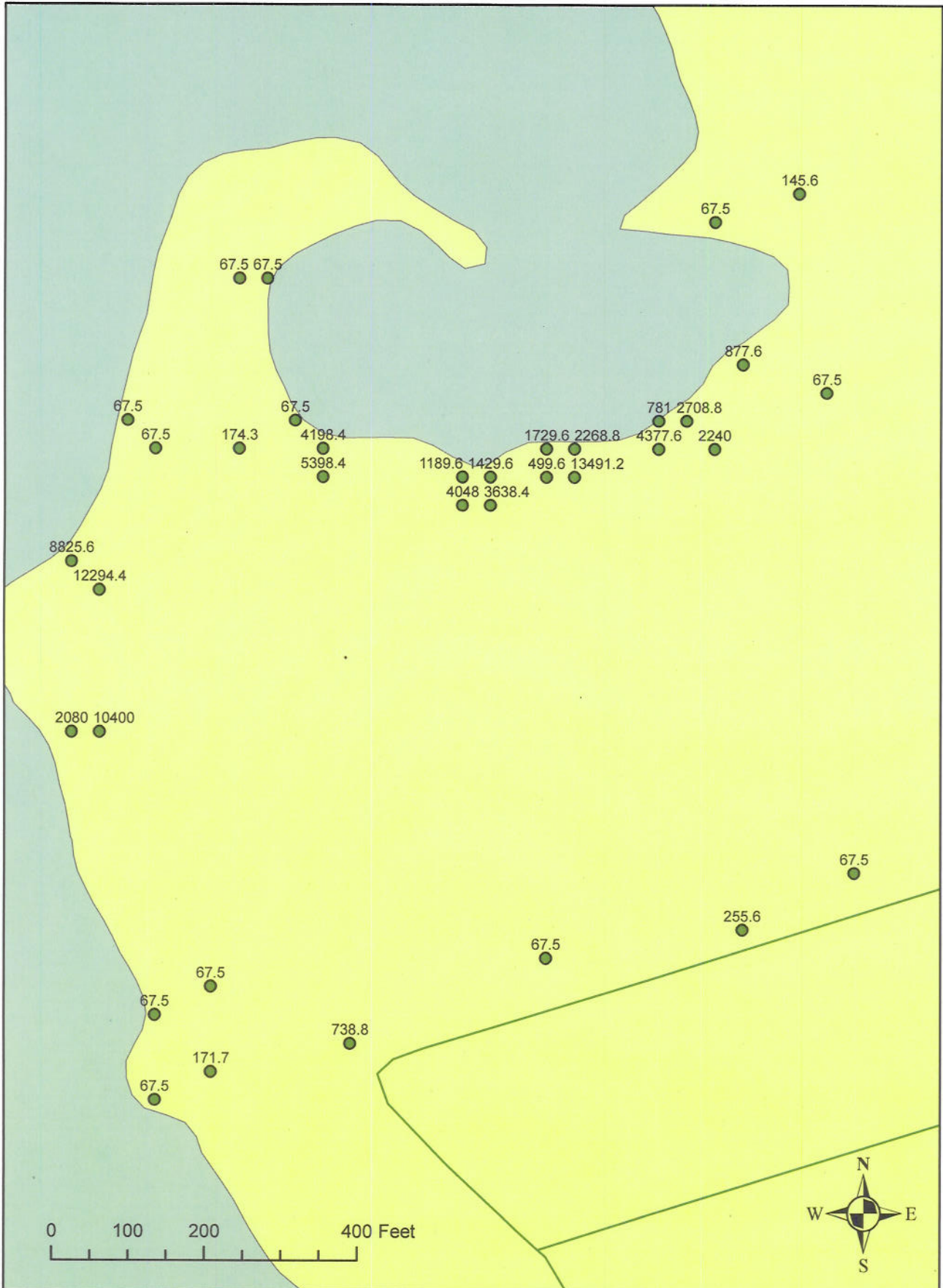


# Lead Samples, ppm





# Copper Samples, ppm



# Zinc Samples, ppm

