



New York State Department of Environmental Conservation

Site Number 7-38-033

Oswego Castings Site
Annual Monitoring Report

Third Quarter 2012

April 2013



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Site Number 7-38-033

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1 Introduction

The New York State Department of Environmental Conservation (NYSDEC) has issued a Work Assignment (# D007618-11) to ARCADIS, for Operation, Maintenance, and Monitoring at the Oswego Castings Site (NYSDEC site number 7-38-033) in New York State. ARCADIS has prepared this Annual Report to summarize the annual operation and maintenance (O&M) and groundwater sampling activities.



2 Site Description and Background

2.1 Description

The Oswego Castings site is located at 375 Mitchell Street, Oswego, Oswego County, New York (Figure 2-1). The site is approximately 10 acres and contains three former manufacturing buildings. A former cooling water pond is located west of the buildings. The site is currently zoned industrial and was most-recently the location of a saw mill operation. The site is listed as a Class 04 site on the NYSDEC Registry of Inactive Hazardous Waste Sites.

2.2 Background

The site was formerly owned by B and K Metals Inc. (B&K Metals). Oswego Castings Inc., a subsidiary of Oberdorfer Foundries, Inc. operated an aluminum die casting facility on the site from 1956 to1986. PCBs were detected on the site in core sands, foundry waste, and wastewater discharged to a process line/septic tank discharge line. The expected sources of the PCBs include leaks in hydraulic equipment and binders or coatings applied to core sand surfaces. In July 1993 B&K Metals entered into an Order on Consent with the NYSDEC for a Remedial Investigation/Feasibility Study (RI/FS). The RI/FS was conducted between July 1993 and February 1997. A Record of Decision (ROD) was issued for Operable Unit (OU)-1 in 1997. The OU-1 ROD called for excavation of approximately 4,100 cubic yards of soil, sediment, and foundry sand. In addition the ROD called for removal of the septic tank and placement of crushed stone over the existing on-site landfill. A ROD for OU-2 was issued in 2000, calling for construction of a concrete pad over the yard area and floor of the saw mill.

In May 2010 the stone buffer for the landfill was re-graded and landscape fabric and new stone were applied to the landfill cap. In April 2010, groundwater monitoring well MW-2 was replaced and three new monitoring wells were installed (MW-5, MW-6, and MW-7).

An Environmental Notice was placed on the site in November 2011. The purpose of the Notice was to limit the use of the site to industrial and/or commercial use; prevent owners from tampering with the remedial action; prevent use of on-site groundwater; and grant access to the NYSDEC and its' agents for purposes of maintaining the remedy.



3 Operation and Maintenance

O&M activities were performed on September 24, 2012 by ARCADIS and NYSDEC Staff and included inspection of the respective landfill and yard area protective covers (Figure 3-1.) An O&M Checklist (Appendix A) was used to document the findings of the inspection. Photographs taken during the inspections are provided in Appendix B. The NYSDEC prepared a Photograph Report documenting site activities. A copy of the Report is provided in Appendix C.

3.1 Landfill Cover

A visual inspection of the landfill cover was performed to assess the landfill for erosion, settlement, ponded water, burrowing rodents, and brush or woody vegetation. As shown in the O&M Checklist (Appendix A), wood chips, apparently from the former saw mill operation, were covering the landfill area but did not appear to be impacting the performance of the cover.

3.2 Concrete Cover

A visual inspection of the concrete cover was performed to inspect the integrity of the remedy. As shown in Appendix A, the concrete cap had minor cracks but did not contain evidence of settlement or other damage. As shown in Appendix A and B, debris (primarily wood chips and boards) were present on the concrete cap.



4 Groundwater Monitoring Program

Groundwater monitoring wells were sampled on September 24 and 25, 2012 by ARCADIS and NYSDEC Staff to provide information on groundwater quality, monitor contaminant migration in the groundwater at the site, and assess hydrogeologic site conditions, including groundwater flow direction. Groundwater monitoring well locations are shown on Figure 4-1.

4.1. Groundwater Monitoring Well Inspection

The integrity of each well was inspected and the results recorded on a groundwater monitoring well inspection form (Appendix D). As indicated in the inspection forms, the monitoring wells are in acceptable condition and no significant problems were reported.

4.2. Water Level Survey

Prior to collecting groundwater samples, water levels were measured to the nearest hundredth of a foot. A summary of these data are presented on the groundwater level data form in Appendix E.

Currently, the measuring point elevations of the groundwater monitoring wells are not known. On September 24, 2012, the NYSDEC recorded the location and elevation of the monitoring wells using a hand-held global positioning system (GPS); however, the elevations were not sufficient to accurately establish the measuring point elevations of the wells. Therefore, groundwater elevations cannot be calculated and a potentiometetric surface map could not be generated for this Report. However, based on site topography, historic hydrogeologic data, and the site's location with respect to Lake Ontario, it is expected that the general direction of groundwater flow in the vicinity of the site would be from south to north.

A survey of the well locations and measuring point elevations is scheduled to be completed before the 2013 groundwater monitoring event.



4.3. Groundwater Sampling

Groundwater samples were collected from seven groundwater monitoring wells (MW-1, MW-2R, MW-3, MW-4, MW-5, MW-6, and MW-7) using low-flow groundwater purging and sampling procedures.

Prior to collecting groundwater samples, pH, conductivity, turbidity, dissolved oxygen (DO), temperature, salinity, total dissolved solids (TDS), and oxidation-reduction potential (REDOX) were measured using a Horiba U-52 water quality meter and recorded on groundwater sampling purge logs. Groundwater sampling purge logs are presented in Appendix F

Groundwater samples collected were sent to Test America – Buffalo by chain-of-custody procedures and analyzed for PCBs by United States Environmental Protection Agency (USEPA) Method 8082. The laboratory analytical data are provided in Appendix G.

4.4. Groundwater Sampling Results

Groundwater sample results are summarized in Table 4-1. As shown in Table 4-1, the groundwater samples collected from MW-1 (MW-1 and DUP) contained concentrations of PCB Aroclor 1016 (54 micrograms per liter (ug/L) and 46 ug/L, respectively) that exceeded the corresponding NYSDEC Class GA Standard of 0.09 ug/L. Table 4-1 shows none of the other groundwater samples contained concentrations of PCB greater than the indicated quantitation limits.



5 Conclusions and Recommendations

5.1 Conclusions

The landfill and yard area protective covers are in acceptable condition and operating as intended. Although wood and/or other debris is present on each of the protective cover areas, it does not appear to be impacting the performance of the cover systems.

Groundwater elevation data cannot be determined due to insufficient measuring point elevation data.

The groundwater samples collected from groundwater monitoring well MW-1 contained PCBs at concentrations above the respective NYSDEC Class GA Standard. None of the other groundwater samples collected from the site contained detectable concentrations of PCBs.

5.2 Recommendations

A site survey should be completed to locate the position of groundwater monitoring wells and other site features.

Based on the concentrations of PCBs in groundwater, annual groundwater monitoring should continue to be conducted to evaluate the impacts to groundwater quality over time.



6. Summary

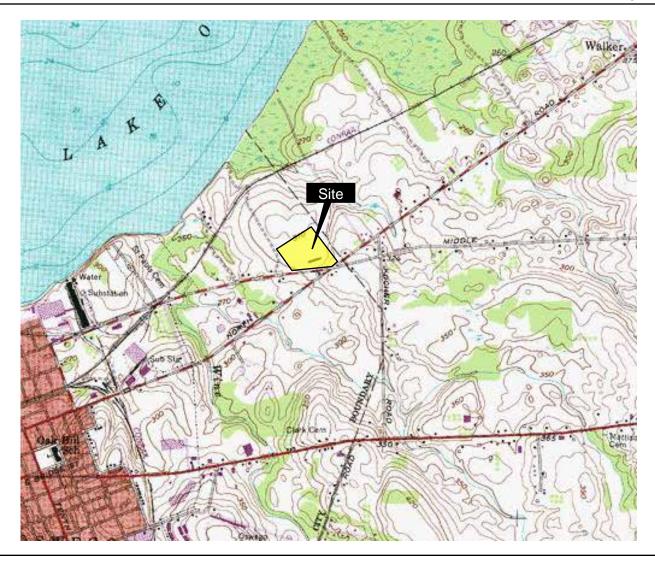
O&M activities were conducted in collaboration with NYSDEC Staff on September 24 and 25, 2012. The landfill and yard area protective covers were inspected and appear to be performing as intended. A potentiometric surface map could not be generated due to insufficient well elevation data. A survey of site features is scheduled to be performed before the 2013 monitoring event. Groundwater samples contained concentrations of PCB greater than the corresponding NYSDEC Standards at only one sampling location.



2,000 ft

Figure 2-1 Site Location Oswego Castings Site Oswego, New York NYSDEC Site 7-38-033



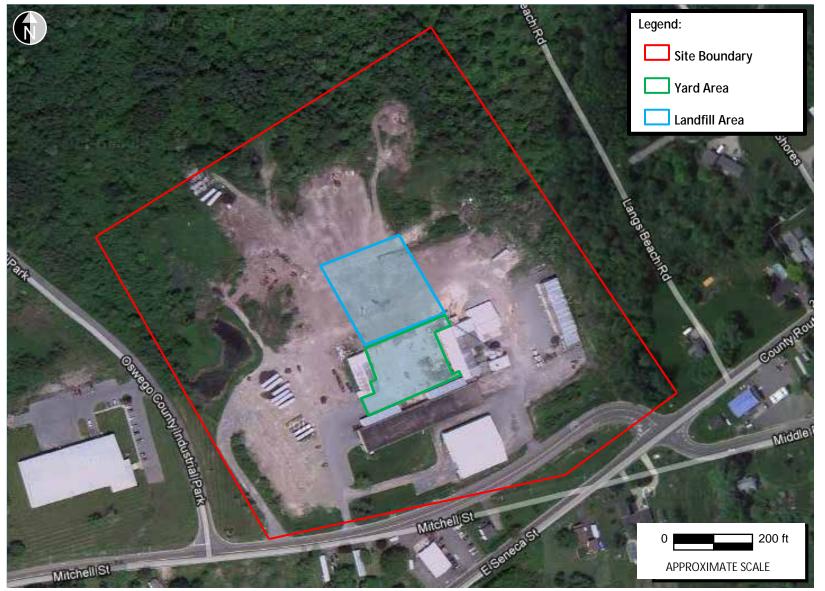


Source: USGS 7.5-minute Series Topographic Quadrangle, Oswego East



Figure 3-1 Engineering Control Areas

Oswego Castings Site Number 738033 Oswego, New York

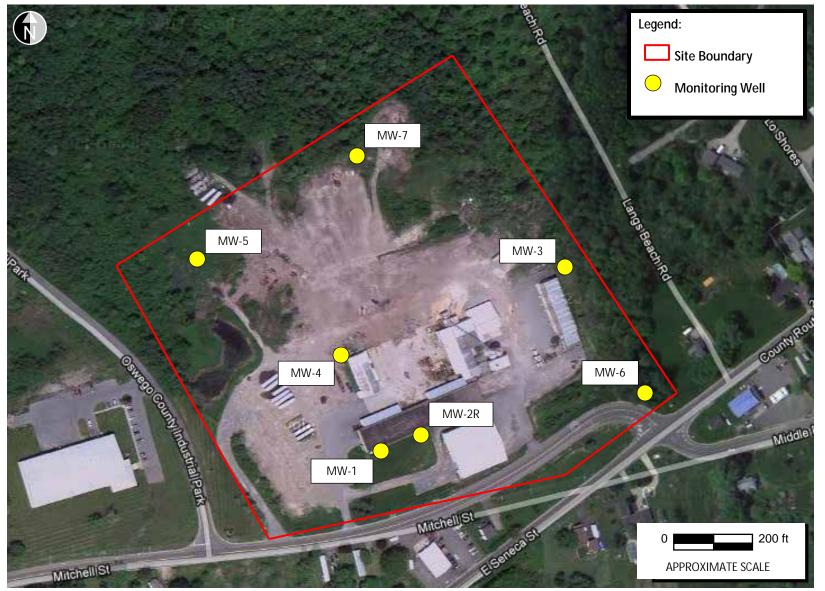


Source: Google Earth Image - 2/22/2013



Figure 4-1 Monitoring Well Locations

Oswego Castings Site Number 738033 Oswego, New York



Source: Google Earth Image - 2/22/2013

Table 4-1 **Summary of Groundwater Sampling Results (PCBs) Oswego Casting Site Site Number 7-38-033**

Well Date	NYSDEC Class GA	MW-1 9/25/2012	DUP* 9/25/2012	MW-2R 9/24/2012	MW-3 9/24/2012	MW-4 9/24/2012	MW-5 9/25/2012	MW-6 9/24/2012	MW-7 9/25/2012
I laite	Standards	/1		/1		/1			/!
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Aroclor-1016	0.09****	54	47 J	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Aroclor-1221	0.09****	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Aroclor-1232	0.09****	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Aroclor-1242	0.09****	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Aroclor-1248	0.09****	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Aroclor-1254	0.09****	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
Aroclor-1260	0.09****	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U

^{* -} Duplicate sample collected from MW-1
**** - Sum of these compounds can not exceed 0.09 ug/L.

J- Greater than the MDL but below the CRDL



Appendix A

O&M Checklists

OSWEGO CASTINGS SITE

Landfill and Concrete Cap Operation and Maintenance Checklist

Inspected by:		Jeremy Wyckoff							
Date:	9/24/2012		Time:	15:00					
Weather Conditions:		P. Cloudy ~50 degrees F.							
LANDFILL C	OVER SYST	<u>EM</u>							
	Erosion				YES	X	NO		
	Cap Settlem	ent			YES	X	NO		
	Ponded Wat	ter or Wet Areas			YES	X	NO		
	Burrowing R	odents			YES	X	NO		
	Brush or Oth	ner Woody Vegetation			YES	X	NO		
Comments:	Photographs	s taken of landfill area.	·		-				
	Layer of wo	od chips from former saw mill cove	ering land fi	ll area.					
CONCRETE COVER									
	Cracked Co	ncrete		X	YES		NO		
	Damaged C	oncrete			YES	X	NO		
*	Concrete Se	ettlement			YES	X	NO		
	Ponded War	ter or Wet Areas		<u></u>	YES	X	NO		
	Presence of	Vegetation		<u></u>	YES	X	NO		
Comments:	: Photographs taken of concrete cover area. Wood chip debris/trash on concrete.								
	Minor crack	s in concrete cap.							
INSPECTOR'S SIGNATURE LIMING MALL DATE 9/24/12									



Appendix B

O&M Photograph Log



O&M Photograph Log

Oswego Castings Site Number 738033 Oswego, New York



Yard Area, facing southeast.



Yard Area, facing northwest.



O&M Photograph Log

Oswego Castings Site Number 738033 Oswego, New York



Yard Area, facing north.



Minor cracking in concrete cover.



O&M Photograph Log

Oswego Castings Site Number 738033 Oswego, New York



Landfill area, facing northwest.



Landfill area, facing west.



Appendix C

NYSDEC Photograph Report

Oswego Casting Site Sampling

DER Site Management, 09/24/2012

Photos with Notes

Photo



Description

We arrived at the site at noon and set up for taking low-flow groundwater samples. Jeremy Wycoff from Malcolm Pirnie had rented the equipment for us and conducted a training session on how to set up the apparatus.



Report by Will Welling.



Panorama photo panning right, to the east and south.



Panorama photo



We set up at MW-2R monitoring well along the beige brick building, half-way down on the right.



Payson Long, left; Larry Thomas, right.



Our crew included Jeremy Wycoff on left, Val Woodward and Carl Hoffman.



Jeremy checks our setup.



Carl adjusts the equipment.



Location shifted next to MW-6.



Oswego police officers stopped by. One officer walked around the buildings with us to see if anything was locked. Nothing was. It was all wide open and a real headache for the police.

The last time I was here, the site hosted "Great Lakes Veneer, Inc.," a lumber mill with brand-new kilns, a log yard and everything necessary to operate successfully. Now The site is derelict.



Our DEC sampling van is here parked near MW-3. View looking across the former kiln area.



Setup on MW-4. Larry on left, Carl and Jeremy on right.





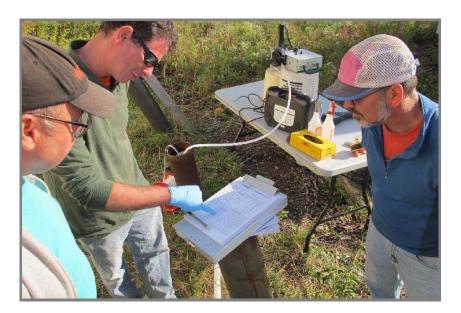
MW-4





MW-4. Jeremy Wycoff looks at the parameter values of pH, temperature, contuctivity, turbididt, etc.

When values do not fluctuate more than 10%, we conclude that native water is flowing from the aquifer through our equipment and it is time to take our samples.



MW-4, Carl, Jeremy and Larry review the parameter data taken from the "cell" instrument which monitors parameters.



Val Woodward packing up a sample.



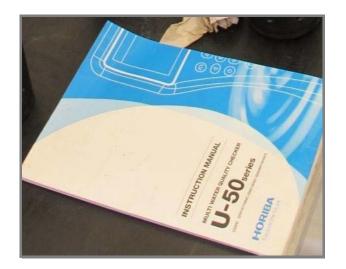
Preparation activity between sampling locations. Jeremy Wycoff



Our DER sampling van. Blue coolers for the samples, waste tubing in the waste basket.

Payson calibrates the Horiba U-50 "cell.





From the equipment manual:

The U-50 Series Multi Water Quality Checker features an integrated control unit and sensors. It is capable of making a maximum of eleven simultaneous measurements for various parameters, and is perfect for use in the field. The U-50 Series is designed with on-site ease-of-use in mind, provides a wide variety of functions, and can be used for water quality measurements and inspections of river water, groundwater, and waste water.



MW-7



Payson with his hand on the peristaltic sampling pump's on-off switch. Larry reviewing the tally sheets.



View of MW-7. Coming out of the well are the measuring tape to monitor depth to water and our sampling tubing.



Payson with the MW-7 setup.



Payson cleaning the tape used at the MW-5 setup.

At each location I wielded a scythe and cut grass and brush to give us a place to work. It was good excercise after a long car ride.



This location was a "jungle" until I hit it with the scythe!



The last well to sample was MW-1 near the apple tree along side of the beige brick building. This well is sampled last because it is heavily contaminated with PCB oil.



Organic vapors were 1257 ppb measured with the photoionization detector (PID).



The Great Lakes Veneer Company Inc. left behind waste oil in drums here and here around the derelict facility. Whoever owns this property will be liable for penalties and cleanup costs if it gets spilled.



Peering into the drum.



Waste in cans



Somebody painted "Area 51" on this door.



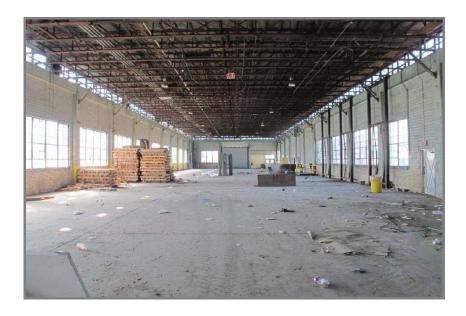
Payson and I continue our rounds documenting waste which poses concern.



Interior showing waste liquid in containers.



Interior



Interior shot. Stacked oak.



Interior, 180 degrees from the previous shot



Larry and Val at MW-1. Larry is filling one of two sampling bottles.





Disposing of the sampling tubing. This well has an oil sheen. The oil is heavier than water and rests at the bottom of the well.





Appendix D

Well Inspection Forms



SITE/PROJECT NAME:	Oswego Costa	PROJECT NUMBER:	738 <i>0</i> 3
DATE OF INSPECTION:	9/25/12	NSPECTOR:	L. Thomas
WELL DESIGNATION:	MW-1	2	
WELL LOCATION:	UTM 38065	3 48/445	52 Elev. 274
	(Payson's P	hone GPS)	
Outward Appearance	. /		
Flushmount Diameter	inches	N/A [X]	
Approximate Stickup Height	3_ feet	N/A []	00
Integrity of Protective Casing	Describe: Good	- nice ye	llow paint
Protective Casing Material	Steel [L]	Stainless Steel []	Other
Protective Casing Width or Dia.	inches	42	2
Weep Hole in Protective Casing	Yes []	No [4	
Surface Seal/Apron Material	Cement [2]	Bentonite []	Not apparent [] Other
Integrity of Surface Seal/Apron	Describe: good		not apparent [] Other
Surface Drainage	Away from Wellhead []	Toward Wellhead-[]	Q1 1
Bollards Present?	Yes []	No [Describe:	That
Well ID. Visible?	Yes [V]	No [] Describe:	12-0
Lock Present and Functional?	Yes M	No [] Describe:	and cap
Photograph Taken? Photo #	Yes [v]		D. C
graph remain trible ii	100[0]	No [] Describe:	on paysons amera
Inner Appearance	0		*
Integrity of Well Casing	Describe: Good	* s	
Integrity of Cap Seal	Describe: good		
Surface Water in Casing?	Yes []	No fe V Danii	
Well Casing Diameter	4 inches	No [Describe:	
Well Casing Material	PVC [V	Charle 1	
Inner Cap		Steel []	Stainless Steel []
Reference/Measuring Point	Threaded []	Slip []	Expansion Plug [None []
Evidence of Double Casing?	Groove []	Indelible Mark [None []
Evidence of Double Casing?	Yes []	No [Describe:	
Downhole			
Odor	V11/	and the second second	202??
	Yes [Y 57 ppm (Ppb)	No [] Describe:	KD-2
		ED SENTE ENGINEERS	
Depth to Water (to top of casing) Total Well Depth (to top of casing)	/ 0.85 feet (nearest 0.01)	Depth to LNAPL	feet (nearest 0.01) N/A []
Sediment (Hard/Soft Bottom)	30 S		
Sediment (Hard/Soft Bottom)	Describe:		
Additional Comments:			
Additional Comments:	South Sid	. 0 200	0 - 10
J. Trong	20012 110	6 100	lg-on road side
· · · · · · · · · · · · · · · · · · ·		0	()



SITE/PROJECT NAME: DATE OF INSPECTION: WELL LOGATION: WELL LOCATION: WELL LOCATION: WELL COATION: WELL CO			FO:	
DATE OF INSPECTION: WELL DESIGNATION: WELL LOCATION: WELL LOCATION: WELL LOCATION: WELL LOCATION: WELL LOCATION: WELL DESIGNATION: WELL LOCATION: WELL Casing Material Integrity of Well Casing Well Casing Material Integrity of Cap Seal Surface Water in Casing? Well Casing Material Integrity of Cap Seal Surface Water in Casing? Well Casing Material PVC [UV Steel [] Stainless Steel [] Expansion Plug [V None [] No [V Describe: Well Casing Material Inner Cap Reference/Measuring Point Well Casing Material PVC [UV Steel [] Stainless Steel [] None [] No [V Describe: Well Casing Material PVC [UV Steel [] Stainless Steel [] None [] Non	SITE/PROJECT NAME:	Oswego Casting	PROJECT NUMBER:	:_738033
Outward Appearance Flushmount Diameter Approximate Stickup Height Integrity of Protective Casing Weep Hote in Protective Casing Surface Seal/Apron Material Integrity of Surface Seal/Apron Surface Drainage Bollards Present? Well ID. Visible? Well ID. Visible? Yes [] No [] Describe: Inner Appearance Integrity of Well Casing Well Casing Diameter Well Casing Piotocy Well Casing Point Forective Casing Surface Seal/Apron Surface Seal/Apron Surface Seal/Apron Surface Seal/Apron Surface Drainage Surface Drainage Surface Protective Casing Surface Seal/Apron Surface Seal/Apron Surface Seal/Apron Surface Protective Casing Surface Seal/Apron Surface Seal/Apron Surface Protective Casing Surface Seal/Apron Surface Protective Casing Yes [] No [X] Describe: Describe: Descri	DATE OF INSPECTION:	9/24/12		L. Thomas
Outward Appearance Flushmount Diameter Approximate Stickup Height Integrity of Protective Casing Weep Hole in Hole in Protective Casing Weel In Indelible Mark Inches Weep Hole in Protective Casing Weep Hole in Protective Casing Weep Hole in Protective Casing Weep Hole in Hole in Protective Casing Weep Hole in Protective Casing Weep Hole in Indelible Mark Inches Weep Hole in Protective Casing Weep Hole in Protective Casing Weep Hole in Protective Casing Weep Hole in Indelible Mark Inches Weep Hole in Protective Casing Weep Hole in Protective Casing Weep Hole in Protective Casing Weep Hole in Indelible Mark Inches Weep Hole in Protective Casing Weep Hole in Indelible Mark Inches Weep Hole in Protective Casing Weep Hole in Indelible Mark Inches Weep Hole in Protective Casing Weep Hole in Protective Inches Weep Hole in Protective Casing Weep Hole in Protectiv	WELL DESIGNATION:	MW-ZR		V V
Flushmount Diameter	WELL LOCATION:	2 4' from S	· Side of	Bldg
Stainless Steel Other			4 6	Alt: 362'A
Inches N/A	Outward Appearance	Payson CP5/Phor		4462 at top
Integrity of Protective Casing Material Weep Hole in Protective Casing Surface Seal/Apron Material Integrity of Surface Seal/Apron Surface Dainage Bollards Present? Well ID. Visible? Well ID. Visible? Ves [] No [X] Describe: Payon will mark nen No [] Describe: Integrity of Well Casing Integrity of Well Casing Integrity of Well Casing Well Casing Diameter Well Casing Diameter Well Casing Material Integrity of Well Casing Well Casing PVC [V Steel [] Stainless Steel [] No [V Describe: Ves [] No [V Describe: V	Flushmount Diameter	inches		profect
Protective Casing Material Protective Casing Width or Dia. Weep Hole in Protective Casing Surface Seal/Apron Material Integrity of Surface Seal/Apron Surface Dash Bentonite [] Not apparent [] Other Describe: Good Melhead [] Flat - wef today May from Wellhead [] Toward Wellhead [] Flat - wef today May from Wellhead [] Toward Wellhead [] Flat - wef today May from Wellhead [] Describe: Well ID. Visible? Wes [] No [X] Describe: Well ID. Visible? Lock Present and Functional? Photograph Taken? Photo # Surface Water in Casing? Well Casing Diameter Well Casing Diameter Well Casing Material Inner Cap Reference/Measuring Point Evidence of Double Casing? Downhole Downhole Dodor Ves [] No [X] Describe: Stainless Steel [] Stainless Steel [] Expansion Plug [Y] None [] None [] No [Y] Describe: Downhole Dodor Ves [] No [Y] Describe: Describe: No [Y] Describe: Stainless Steel [] Describe: Describe: Stainless Steel [] Describe: Describe: Describe: Stainless Steel [] Describe: Describe: Describe: Stainless Steel [] Expansion Plug [Y] None [] None [] None [] None [] Describe: Downhole Dodor Ves [] No [Y] Describe: Des			N/Á[]	Ca
Protective Casing Width or Dia. Weep Hole in Protective Casing Surface Seal/Apron Material Integrity of Surface Seal/Apron Bollards Present? Well ID. Visible? Lock Present and Functional? Photograph Taken? Photo # Inner Appearance Integrity of Cap Seal Surface Water in Casing? Well Casing Diameter Well Casing Material PVC [J] Steel [] Stainless Steel [] Threaded [] Threaded [] Stainless Steel [] Expansion Plug [J] None [] Poscribe: Downhole Odor Yes [] No [J] Describe:	50			
Weep Hole in Protective Casing Yes [] No [] Bentonite [] Not apparent [] Other	Mark the mark of the property		Stainless Steel []	Other
Surface Seal/Apron Material Integrity of Surface Seal/Apron Surface Seal/Apron Surface Seal/Apron Describe: Good Grade Russiance Surface Seal/Apron Wellhead [] Toward Wellhead [] Flat - well today Describe: Good Russiance Russiance Surface Seal/Apron Surface Seal/Apron Seal Surface Seal/Apron Seal Describe: Good Russiance Surface Water in Casing? Surface Water in Casing? Surface Water in Casing? Steel [] Stainless Steel [] Surface Grade Russiance Seal Surface Seal Surface Seal Steel [] Stainless Steel [] Stai				
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Surface Drainage Away from Wellhead [] Toward Wellhead [] Flat - wet today Bollards Present? Yes [] No [X] Describe: Well ID. Visible? Yes [] No [X] Describe: Lock Present and Functional? Yes [X] No [] Describe: Photograph Taken? Photo # Yes [X] No [] Describe: Inner Appearance Integrity of Well Casing Integrity of Cap Seal Surface Water in Casing? Well Casing Diameter Well Casing Material Inner Cap Reference/Measuring Point Evidence of Double Casing? Pownhole Downhole Downhole Downhole Doynhole	USS THE RESERVE TO A STREET THE PROPERTY OF TH	//		Not apparent [] Other
Bollards Present? Well ID. Visible? Ves [] No [X] Describe: Describe:			Gride Rus	2000
Well ID. Visible? Yes [] No [X] Describe: Describe: Descri	AND		Toward Wellhead []	Flat - wet today
Lock Present and Functional? Yes [A] No [Bescribe: Describe: No [Bescribe: Mole Describe:			No [X] Describe:	
Lock Present and Functional? Yes [A No [] Describe: Whotograph Taken? Photo # Yes [A No [] Describe: Who [] Describe: Well Casing Diameter Well Casing Diameter Who [] Stainless Steel [] Stainless Steel [] Inner Cap Threaded [] Slip [] Expansion Plug [] None [] Reference/Measuring Point Groove [] Indelible Mark [] None [] Reference of Double Casing? Yes [] No [] Describe: Downhole Dodor Yes [] No [] Describe: De	EL IN MAN AN SECTION OF THE	Yes []	No [X] Describe:	Payson will mark name
Inner Appearance Integrity of Well Casing Describe: Good Integrity of Cap Seal Describe: J-Plug in place Surface Water in Casing? Yes [] No [I] Describe: Well Casing Diameter Describe: Steel [] Stainless Steel [] Inner Cap Threaded [] Slip [] Expansion Plug [I] None [] Reference/Measuring Point Groove [] Indelible Mark [I] None [] Evidence of Double Casing? Yes [] No [I] Describe: Downhole Odor Yes [] No	Lock Present and Functional?	Yes [XÍ	No [] Describe:	
Integrity of Well Casing Integrity of Cap Seal Integrity of Cap Seal Describe: Surface Water in Casing? Well Casing Diameter Well Casing Material PVC [] Steel [] Stainless Steel [] Inner Cap Threaded [] Slip [] Expansion Plug [] None [] Reference/Measuring Point Groove [] Indelible Mark [] None [] Evidence of Double Casing? Yes [] No [] Describe: Downhole Odor PID Reading Depth to Water (to top of casing) Depth to Water (to top of casing) Lot 1 Feet (nearest 0.01) Describe: Describe:	Photograph Taken? Photo #	Yes [X]	No [] Describe:	
Describe: J-Plus in place	Inner Appearance			
Integrity of Cap Seal Surface Water in Casing? Well Casing Diameter Well Casing Material Inner Cap Reference/Measuring Point Evidence of Double Casing? Pownhole Odor PID Reading Depth to Water (to top of casing) Describe: Describe	Integrity of Well Casing	Describe: good		
Surface Water in Casing? Well Casing Diameter Well Casing Material PVC [V Steel [] Stainless Steel [] Inner Cap Threaded [] Slip [] Expansion Plug [V None []] Reference/Measuring Point Groove [] Indelible Mark [V None []] Evidence of Double Casing? Yes [] No [V] Describe: Downhole Odor Yes [] No [V] Describe: PID Reading Depth to Water (to top of casing) Depth to Water (to top of casing) Joban Sediment (Hard/Soft Bottom) Describe: Hard Bo How	Integrity of Cap Seal	-0	in place	
Well Casing Diameter Well Casing Material PVC [V] Steel [] Stainless Steel [] Inner Cap Threaded [] Slip [] Expansion Plug [V] None [] Reference/Measuring Point Groove [] Indelible Mark [V] None [] Evidence of Double Casing? Yes [] No [V] Describe: Downhole Odor Yes [] No [V] Describe: PID Reading Depth to Water (to top of casing) Depth to Water (to top of casing) Depth (to top of casing) Sediment (Hard/Soft Bottom) Describe: Hard for Horn		10		
Well Casing Material PVC [V] Steel [] Stainless Steel [] Inner Cap Reference/Measuring Point Groove [] Indelible Mark [V] None [] Evidence of Double Casing? Yes [] No [V] Describe: Downhole Odor PID Reading Depth to Water (to top of casing) Depth to Water (to top of casing) Depth (to top of casing) Describe: Mo [V] Describe: Des	verse appropriate as a constant of		e[+] Describe.	
Inner Cap Threaded [] Slip [] Expansion Plug [] None [] Reference/Measuring Point Groove [] Indelible Mark [] None [] Evidence of Double Casing? Yes [] No [] Describe: Downhole Odor Yes [] No [] Describe: PID Reading Depth to Water (to top of casing) Depth to Water (to top of casing) Depth to Water (to top of casing) Describe: Hand be How	AN INDIGINAL TO THE PERSON OF	V	Steel []	Stainless Steel []
Reference/Measuring Point Groove [] Indelible Mark [] None [] Evidence of Double Casing? Yes [] No [] Describe: Downhole Odor Yes [] No [] Describe: PID Reading Depth to Water (to top of casing) Depth to Water (to top of casing) Depth (to top of casing) Describe: Mark [] None [] No [] Describe: Describe: Mark [] None [] Describe: Mark [] None []	, a see 17 m			이렇게 뭐 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그
Downhole Odor PID Reading Describe: Describe: No [Y Describe: Describe:	Reference/Measuring Point	0.72		
Downhole Odor Yes [] No [Y] Describe: PID Reading Depth to Water (to top of casing) Lot feet (nearest 0.01) Depth to LNAPL Jeet (nearest 0.01) Total Well Depth (to top of casing) Describe: Hand be Home	and the control of th	2/2/10/20/20/20/20/20/20/20/20/20/20/20/20/20		Notice []
Odor Yes [] No [Y Describe: O.110 ppm in Riser - Opph in breathing 2012 Depth to Water (to top of casing) Lot feet (nearest 0.01) Depth to LNAPL feet (nearest 0.01) Fotal Well Depth (to top of casing) Sediment (Hard/Soft Bottom) Describe: Hard bo How			No[-] Describe.	
PID Reading Depth to Water (to top of casing) Lotal Well Depth (to top of casing) Describe: Hard bo How Describe: Hard bo How	Downhole			
PID Reading Depth to Water (to top of casing) Lotal Well Depth (to top of casing) Describe: Hard bo How Describe: Hard bo How	Odor	Yes []	No fir Describe:	
Feet (nearest 0.01) Depth to LNAPL feet (nearest 0.01) N/A[-[-]] Fotal Well Depth (to top of casing) 5.5 Sfeet (nearest 0.1) - in sicke Casing Sediment (Hard/Soft Bottom) Describe: Hard bo How			no[] Describe.	1 466 2 2
Fotal Well Depth (to top of casing) 13.5 Sfeet (nearest 0.1) — in sicke Cusing Sediment (Hard/Soft Bottom) Describe: Hard to How	Be where the state of the state	6.67 feet (nearest 0.01)	Denth to I NAPI	foot (poorest 0.01) N/A 5 A
Sediment (Hard/Soft Bottom) Describe: Hard Bottom	Total Well Depth (to top of casing)	15.5 Sfeet (nearest 0.1)	- in siele Com	reer (nearest 0.01) N/A-[1]
Additional Comments:	Sediment (Hard/Soft Bottom)	Describe: Hard both	om	7
Additional Comments:	Additional Comments			1.
	Additional Comments:	61		
			<u></u>	
		4		



SITE/PROJECT NAME:	Oswego Orghing	PROJECT NUMBER:	738033
DATE OF INSPECTION:	9/14/12	INSPECTOR:	1. Thomas
WELL DESIGNATION:	M W-3		LIT WINES
WELL LOCATION: UTM	380800	4814589	A/4. 355 Ams
Outward Appearance Flushmount Diameter	Via Payso		ne
Approximate Stickup Height Integrity of Protective Casing	inches feet Describe:	N/A []	
Protective Casing Material Protective Casing Width or Dia.	Steel [V]	Stainless Steel []	Other
Weep Hole in Protective Casing	Yes[]	No [/]	
Surface Seal/Apron Material Integrity of Surface Seal/Apron	Cement [/] Describe:	Bentonite []	Not apparent [] Other
Surface Drainage Bollards Present?	Away from Wellhead [/] Yes []	Toward Wellhead [] No [] Describe:	
Well ID. Visible?	Yes [/]	No [] Describe:	
Lock Present and Functional?	Yes [V	No [] Describe:	
Photograph Taken? Photo #	Yes []	No [] Describe:	
Inner Appearance			
Integrity of Well Casing	Describe: Good		
Integrity of Cap Seal	Describe: Good		
Surface Water in Casing? Well Casing Diameter	Yes [] inches	No [L] Describe:	
Well Casing Material	PVC [c)	Steel []	Stainless Steel []
nner Cap	Threaded []	Slip []	Expansion Plug [] None []
Reference/Measuring Point	Groove []	Indelible Mark [ப]	None []
Evidence of Double Casing?	Yes []	No [Describe:	
Downhole			
Odor	Yes []	No [/] Describe:	
PID Reading	O.O ppho		
Depth to Water (to top of casing) Total Well Depth (to top of casing)	10.61 feet (nearest 0.01)	Depth to LNAPL	feet (nearest 0.01) N/A []
Sediment (Hard/Soft Bottom)	Describe:		
dditional Comments:	I Camo up	with tape	
WL- 10,61	6		



SITE/PROJECT NAME:	DSWEGO CASTIN	S PROJECT NUMBER	: 738033
DATE OF INSPECTION:	9/24/12	INSPECTOR:	Val
WELL DESIGNATION:	MW-4		
WELL LOCATION:	380627	4814510	7 333 elev
Outward Appearance	/	4814519	
Outward Appearance Flushmount Diameter	X.4		
Approximate Stickup Height	inches	N/A []	
Integrity of Protective Casing	Describe: OK w/	N/A[]	
Protective Casing Material	Steel [4]	1/2 BOLLARDS	
Protective Casing Width or Dia.	_6 inches	Stainless Steel []	Other
Weep Hole in Protective Casing	Yes []		
Surface Seal/Apron Material	Cement [No []	
Integrity of Surface Seal/Apron	Describe: gran- con	Bentonite []	Not apparent [] Other
Surface Drainage	Away from Wellhead []		
Bollards Present?	Yes []	Toward Wellhead []	
Well ID. Visible?	Yes []	No [] Describe:	
Lock Present and Functional?	Yes [No Describe:	we lifted of the alum. +
Photograph Taken? Photo #	Yes [V	No [] Describe:	we signed off me alin. +
	50 5.54	no[] Describe.	Section 1995
Inner Appearance	2		
Integrity of Well Casing	Describe: PUC		
Integrity of Cap Seal	Describe: Avigner		- Service Company
Surface Water in Casing?	Yes[]	No [Describe:	
Well Casing Diameter	4 inches	7	
Well Casing Material	PVC []	Steel []	Stainless Steel []
Inner Cap	Threaded []	Slip []	Expansion Plug [] None []
Reference/Measuring Point	Groove []	Indelible Mark [None []
Evidence of Double Casing?	Yes []	No [] Describe:	
Downhole			
Odor	Yes []	No [] Describe:	
PID Reading	O, O ppm		=
Depth to Water (to top of casing)	4.46 feet (nearest 0.01)	Depth to LNAPL	feet (nearest 0.01) N/A []
Total Well Depth (to top of casing)	16,16 feet (nearest 0.1)		,
Sediment (Hard/Soft Bottom)	Describe:	*	
Additional Comments:			
51 11 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15			
			1



SITE/PROJECT NAME:	Swego Castings	PROJECT NUMBER:	738033
DATE OF INSPECTION:	9/25/12	_INSPECTOR:	Hal Woodward
WELL DESIGNATION:	MW 5		V· · · · · · · · · · · · · · ·
WELL LOCATION:	380503 4	1814632	360 AMLS
		Via Pa	you Cell GPS
Outward Appearance			/ 20
Flushmount Diameter	inches	N/A 9-4	*
Approximate Stickup Height	3.5 feet	N/A []	
Integrity of Protective Casing	Describe: 9000	- Painted	Blue
Protective Casing Material	Steel []	Stainless Steel []	Other
Protective Casing Width or Dia.	_ 4 inches	20	
Weep Hole in Protective Casing	Yes[]	No [/]	
Surface Seal/Apron Material	Cement [/	Bentonite []	Not apparent [] Other
Integrity of Surface Seal/Apron	Describe: good		
Surface Drainage	Away from Wellhead [/]	Toward Wellhead []	
Bollards Present?	Yes[]	No [Describe:	
Well ID. Visible?	Yes[]	No [Describe:	
Lock Present and Functional?	Yes [i]	No [] Describe:	
Photograph Taken? Photo #	Yes [A	No [] Describe:	
Inner Appearance		2	
Integrity of Well Casing	Describe: 9000		
Integrity of Cap Seal	Describe: good		
Surface Water in Casing?	Yes []	No [] Describe:	
Well Casing Diameter	inches		
Well Casing Material	PVC [/	Steel []	Stainless Steel []
Inner Cap	Threaded []	Slip [Expansion Plug [] None []
Reference/Measuring Point	Groove []	Indelible Mark []	None [-]
Evidence of Double Casing?	Yes []	No [./] Describe:	
Downhole			
Odor	Yes[]	No [] Describe:	
PID Reading	230 ppm	No [] Describe.	
Depth to Water (to top of casing)		Depth to LNAPI	feet (nearest 0.01) N/A []
Total Well Depth (to top of casing)		Deptil to LIVAL L	leet (lieatest 0.01) N/A[]
Sediment (Hard/Soft Bottom)	Describe:	1/2	
	-		
Additional Comments:			
· ·			
			<u> </u>
	A.		



SITE/PROJECT NAME:	O ruego Casting	_PROJECT NUMBER:	738033
DATE OF INSPECTION:	9/24/12 8	INSPECTOR:	1/4/
WELL DESIGNATION:	MW-6		
WELL LOCATION:	UTMB8085	4 481	4491 372 AMLS
	Vra Pa	upon CellGPS	
Outward Appearance		Ø	
Flushmount Diameter	inches	N/A []	
Approximate Stickup Height	_3feet	N/A []	
Integrity of Protective Casing	Describe: good		
Protective Casing Material	Steel [/]	Stainless Steel []	Other
Protective Casing Width or Dia.	_4_ inches		
Weep Hole in Protective Casing	Yes []	No [/]	
Surface Seal/Apron Material	Cement [/]	Bentonite []	Not apparent [] Other
Integrity of Surface Seal/Apron	Describe: good		
Surface Drainage	Away from Wellhead []	Toward Wellhead [/]	===
Bollards Present?	Yes []	No [] Describe:	
Well ID. Visible?	Yes []	No [] Describe:	
Lock Present and Functional?	Yes [/]	No [] Describe:	
Photograph Taken? Photo #	Yes [No [] Describe:	
Inner Appearance			
Integrity of Well Casing	Dogariba: attack		
Integrity of Cap Seal	Describe: Good		
Surface Water in Casing?	Describe: Quoto		
Well Casing Diameter	Yes []	No [/] Describe:	
Well Casing Material		0. 17.3	
Inner Cap	PVC [/]	Steel []	Stainless Steel []
Reference/Measuring Point	Threaded []	Slip [/]	Expansion Plug [] None []
	Groove []	Indelible Mark []	None []
Evidence of Double Casing?	Yes []	No [] Describe:	S I
Downhole			
Odor	Yes[]	No [/] Describe:	
PID Reading	O.t ppn		9
Depth to Water (to top of casing)	1435 feet (nearest 0.01)	Depth to LNAPL	feet (nearest 0.01) N/A []
Total Well Depth (to top of casing)	36.60 feet (nearest 0.1)		
Sediment (Hard/Soft Bottom)	Describe: Soft		
Additional Comments:	1		
Coding Painter !	310		
Carry June 1			
71			



SITE/PROJECT NAME: DATE OF INSPECTION: WELL DESIGNATION: WELL LOCATION: WELL LOCATION: Outward Appearance Date of Inspect Number: 4/25/12 INSPECTOR: MW-7 WELL LOCATION: VIO Payson GPS Cell	738033 LiThornas 348 Ames
WELL DESIGNATION: MW-7 WELL LOCATION: 386638 4814663 VIO Pagson GPS Cell	LiThornas 348 Amis
WELL LOCATION: 380638 4814663	348 Ames
VIO Payson GPS COPP	348 Ames
Outward Appearance VIO- Payson GPS Cell	1
Outward Appearance	
Flushmount Diameter Approximate Stickup Height Integrity of Protective Casing Protective Casing Material Protective Casing Width or Dia. Weep Hole in Protective Casing Yes [] N/A [4] N/A [7] N/A [7] Stainless Steel [] Output No [4]	Other Not apparent [] Other
Photograph Taken? Photo # Yes [No [] Describe: _	
Inner Cap Threaded [] Slip []	Stainless Steel [] Expansion Plug [4] None [] None []
Downhole	
Odor Yes [] No [] Describe: _	
Depth to Water (to top of casing) 12,20 feet (nearest 0.01) Depth to LNAPL Total Well Depth (to top of casing) 15,00 feet (nearest 0.1)	feet (nearest 0.01) N/A []
Sediment (Hard/Soft Bottom) Describe:	
Additional Comments:	
	li de la companya de
	Towns and the second



Appendix E

Groundwater Level Data Form

GROUNDWATER LEVEL DATA FORM

PROJECT NAM PROJECT NUMBE	ME: Oswego Cast ER: 00266404.000	ings 00		DATE: NAME:		7/24/2012 JRW
WELL ID	Date	Time	Headspace VOCs (ppb)	Depth to Water (feet)	Total Depth (feet)	Reference Point
W-1	9/25/2012		1257	10.85	16.00	TOC
W-2R	9/24/2012		0.11	6.67	15.55	TOC
W-3	9/24/2012		0.0	10.61	14.36	TOC
W-4	9/24/2012		0.0	4.46	16.16	TOC
W-5	9/25/2012		230	14.91	16.69	TOC
W-6	9/24/2012		0.4	14.35	36.60	TOC
W-7	9/25/2012		5.0	12.2	15.00	TOC

Notes:			



Appendix F

Groundwater Sampling Purge Logs



WELL NUMBER: MW-/	DATE: 9/25/12
PROJECT NAME: Oswego Costing PROJECT NUMBER: 738033 SAMPLERS: Payson, Will, Larry	
A: Total Casing and Screen Length: 31/6.00	Vol. Well I.D. Gal./ft.
B: Casing Internal Diameter: 4"	1" 0.04 2" 0.17
C: Water Level Below Top of Casing:	3" 0.38 4" 0.66
D: Volume of Water in Casing: 3,399	5" 1.04 6" 1.50
$v = 0.0408 (B)^2 \times (A-C) = D$	8" 2.60
v = 0.0408 (4)2 x (16.00 - 10.85	3.399 (a) -53.79 (b) -53.79 (c) $-53.$

PARAMETER		ACCUMULATED VOLUME PURGED											
Time	12:15	12:20	12:25	12:30	1735	12:40	1245	1250	1255	13:00	1305	1310	1315
Gallons	9 0 2 2 2 2		0.5	0.75	1	1.25	115	1.75	2	275		3.5	4
Depth to Water	11.15	11.41	11:75	11.90	12,11	12,33	1242		12.78	-	13.11	13,30	1341
Temperature (°C)	20.59	18.77	18,00		17.90		17.90		18.03		1800		18.13
рН	7.39	7.31	7.29	7,27	7.25			7.24	7.24	フスフ	7.25		7.25
Redox (mV)	-7	714	-77	-59	-35	-24	-9	2	-5	-28	-32	-46	-54
Conductivity (mohm/cm	0.544	.566	,566	566	0,544	-	0565		0,540				
Turbidity (ntu)	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0	0
Disolved Oxygen (mg/l)	0.00	0.00	0.00	0.00	-			0.24	4.23			3,37	2,85
TDS	0,349	.363	1363	0.363	0.362				0.359			6342	
Salinity	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	03	THE RESERVE TO SERVE THE PARTY OF THE PARTY	0,361
										38			

Notes:	Tak	eng a	a Dup	leade	20 Sac	up O.	at the	Localion.
wil	Simpler	1315	With	APPROX	4 GALLONS	Purand		
- 11		.0.0		17 /	1	1		



WELL NUMBER: MW-2R	DATE: 9/24/12
PROJECT NAME: Oswego Castro PROJECT NUMBER: SAMPLERS: P. Long, L. Themas	, Jereny (Melcolmfirnic
A: Total Casing and Screen Length: 15,53	Vol. Well I.D. Gal./ft. 1" 0.04
B: Casing Internal Diameter: 2 (
C: Water Level Below Top of Casing:	4" 0.66
D: Volume of Water in Casing: 1. 50%	5" 1.04 _ 6" 1.50
$v = 0.0408 (B)^2 x (A-C) = D$	8" 2.60
V = 0.0408 () ² x (-)= ~ 1.7 gal

PARAMETER	1	2	3	4 1	ACCUM	1ULATE	D VOL	UME P	URGE)			
Time	1250	1255	1300	1305	1310	1315	1320	1325	1330				
Gallons Comulative						1	,	-2.0	_				
Depth to Water	6.93	7.08	7.09	7,41	7.69	8.13	8.31	8,65					
Temperature (°C)	203	1 19.79	19,86	19:11	19.41	19,64	19.7	19,66	19.71				
pН	8.7	7.68	7.51	7.45	7.27	7,22	7.20	7,2	7.21				
Redox (mV)	6.0	9.2	100	112	124	131	134	137	/38				
Conductivity (mohm/cm	714	.666	0,668	0.673	0.659	0.65	0,651	0.64	0,637	9.7	- 16	1	
Turbidity (ntu)	31.2	39.3	\$15	4.3	3.0	2.6	1.9	1,5	1,0				
Disolved Oxygen (mg/l)	10:25		10.07	4,37	6.18	7.12	7.52	7.75	7,68	-3			
TDS	0.453	0.42	0.427	0.43	4			0,413		7			
Salinity	0.3	0.3	0.3	0.3	0,3	0.3		0.3	0.3	Х.			

Perge: 1240; Reset take between 3rd + 4th readings, rate air bubble; 1330 - Stepilized readings - began filling PCB analysis - 2x / liter

7000% Toub 10%

PID = 0.0 pp PPBRay=110pp in riser Opph in breasling Zong



WI	ELL NUMBER: MW3	ATE:	9/24/12	
PF	ROJECT NAME: OSWEGE Cast ROJECT NUMBER: 938033 MPLERS: Fayson Long	Inq	S	
A:	Total Casing and Screen Length: 14.36		Well I.D.	Vol. Gal./ft. 0.04
B:	Casing Internal Diameter: 4"		2"	0.17
C:	Water Level Below Top of Casing:		3"	0.38 0.66
D:	Volume of Water in Casing: 2.475		5" 6"	1.04 1.50
	$v = 0.0408 (B)^2 x (A-C) = D$		8"	2.60
	v = 0.0408 () ² x (-) =	2.475	gal.

PARAMETER				,	ACCUMULA	TED VO	LUME F	PURGE	D			
Time	16:00	16:05	16:10	16:15	16:20		1					
Gallons					2						1	
Depth to Water	10:81	11.07	11.30	11.49	11.77				a-silvat	-		
Temperature (°C)					18.68							
рН	7.2			695								
Redox (mV)	118	118	115	113	115							
Conductivity (mohm/cm	0.755	01773	0.776	0.774	0.774							
Turbidity (ntu)		2125		8.3	6.4							
Disolved Oxygen (mg/l)	0	0	0	0	0							
TDS	0.487	0.495	0.497	0.495	0.496				harran anno a			
Salinity	0.4	0.4	0.4	0.4	0.4			- 17				
E												

otes: Well Sounded 1622		
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WELL NUMBER: MW - 4	DATE: 9/24/2012
PROJECT NAME: 05WETO CASTINGS PROJECT NUMBER: SAMPLERS: W. Welling, Hot V. Woodwan.	d
A: Total Casing and Screen Length: 16,16	Vol. Well I.D. Gal./ft. 1" 0.04
B: Casing Internal Diameter:	_ 2" 0.17 3" 0.38
C: Water Level Below Top of Casing: 4.48	_ 4" 0.66
D: Volume of Water in Casing: 7.7089	5" 1.04 6" 1.50
$v = 0.0408 (B)^2 \times (A-C) = D$	8" 2.60
v = 0.0408 () ² x (-)= 7.7088 gal.

PARAMETER		ACCUMULATED VOLUME PURGED									
Time	17:00	1705	17/0	17:15	17:20				1	1	
Gallons Comulative					1.50						
Depth to Water	4.46	4.81	5.31	5.72	6.16						
Temperature (°C)	21.33	2092			20.52						
pН	7.22	7.09	7.03	7.01	7.00						
Redox (mV)	141	138	133	130	128				3		
Conductivity (mohm/cm	0.647	1651	1654	.652	,653						
Turbidity (ntu)	4.1	19.8	2.6	2.6	2.8						
Disolved Oxygen (mg/l)	0.03	0	0	0	80						
TDS	0.44	.416	,418	,417	,418						
Salinity	0.3	0.3	,3	13	,3						
									100		

lotes: (LP)	Sanfied	1725	
	"		
			A



WELL NUMBER: MW-5	ATE: 9/25/R
PROJECT NAME: PROJECT NUMBER: SAMPLERS: Ogwego Caste 738033 Auy son	ings
A: Total Casing and Screen Length:	Vol. Well I.D. Gal./ft.
B: Casing Internal Diameter:	2" 0.04 0.17
C: Water Level Below Top of Casing:	3" 0.38 4" 0.66
D: Volume of Water in Casing: 0,3026	5" 1.04 6" 1.50
$v = 0.0408 (B)^2 \times (A-C) = D$	8" 2.60
v = 0.0408 () ² x (-)= 0.3026 gal.

PARAMETER		ACCUM	ULATED	VOLUME	PURGED)		
Time								
Gallons								
Depth to Water	 8							
Temperature (°C)								
pH								
Redox (mV)								
Conductivity (mohm/cm						- 1		
Turbidity (ntu)								
Disolved Oxygen (mg/l)								
TDS						11=		
Salinity	§							
U,							18	

	at	1125	1		- Lungering
*/ I		41		II	



WELL NUMBER: MU	J-6	DATE: 9/24/12	
PROJECT NAME:	Oswego Cas	sting	
PROJECT NUMBER:	738053		
SAMPLERS:	Payson		

A:	Total Casing and Screen Length:	36,60	
B:	Casing Internal Diameter:	2"	

C:	Water Level Below Top of Casing:	14.35
D:	Volume of Water in Casing:	3,7825

 $v = 0.0408 (B)^2 x (A-C) = D$

(=, , , (, , , ,)

v = 0.0408 (

(619-21)		
12	v	į
)-	X	١

)= 3.7825

gal.

Vol.

Gal./ft.

0.04

0.17

0.38

0.66 1.04

1.50 2.60

Well I.D.

1"

(2")

3"

PARAMETER		ACCUMULATED VOLUME PURGED											
Time	14:15	14:70	14.25	14:35	14:40	14:45	14:50	14.55	15:00	15:05	15:10	15:15	
Gallons					8			-					
Depth to Water	16.31	17.20	18.10	18.70	19.74	20,73	21.57	22.59	23.45	24.38	24.87	25.53	
Temperature (°C)	121.56	19.87	18.7	18.86	17.45	17.22	17.21	17.53				17.75	
рН	7.56	7.55	7.57	7.65		7.66		7.66	7.66	7.66	7.65	7.67	
Redox (mV)	102	102	100	102	84	53	40	28	17	4	ſ	2	
Conductivity (mohm/cm	0.44	0.45	.458	1452	.455	0.451	0.450	0,449	0,457	0.453	0.449	.448	
Turbidity (ntu)	4.7	1.05	23.8	23.6	23.9	14.9	6.5	D.7	00			15.5	
Disolved Oxygen (mg/l)	0.07	0.00	0.85	1.64	1.14	1.3/	1.38	1.46	4.34	1.60	1.82	1.56	
TDS	0.280	0,293	0,30 /	295	1295	,292	. 292	, 293	0.297	0.294	0.291	1291	
Salinity	0.2	0.2	0.2	0.2	0.2	.2	,2	12	0.2	0.2	0.2	0.2	
			-	A									
				1									
							-						

Notes: Well saysted 1520 tubing

PH +// 11

Redox +/- 10 MV

conduct 1/- 3%

the bidity 10%

Di 0, 1/- 10%

Sampled At 15:20

21/2 9AllONS Collected



WELL NUMBER: MW-7 DATE:	9/25/12	
PROJECT NAME: PROJECT NUMBER: SAMPLERS: L. Thermos, V. Woodwa	nd	
A: Total Casing and Screen Length: 15,00	Well I.D.	Vol. Gal./ft.
B: Casing Internal Diameter: 2 "	2"	0.04 0.17
C: Water Level Below Top of Casing: 12,20	3" 4"	0.38 0.66
D: Volume of Water in Casing:	5" 6"	1.04 1.50
$V = 0.0408 (B)^2 \times (A-C) = D$	8"	2.60
v = 0.0408 () ² x (-) = 6	7.706	gal

PARAMETER		ACCUMULATED VOLUME PURGED										
Time	10:20	1025	1030	1035	1040	10:45	1050	1055				
Gallons					1,25	1.5	1.75					
Depth to Water	12.66	13.0	13.25	13.5	13.8	14.0	14.25	14.35				
Temperature (°C)	18,79	18.31	18,76			18.98						
pН	6.87	7.21	7.27	7.33		7.22	7.26	2.19				
Redox (mV)	114	116	110	108		129	128	136				
Conductivity (mohm/cm	0.563	0,534	.551	0,548	0,549	0.546						
Turbidity (ntu)	0.0	0,0	0,0	0,0	0.0	0.0	ACCUSED FOR THE	0,0				
Disolved Oxygen (mg/l)	3.03	0,08	0.0	0.0	0.00		0.32					-
TDS	0.362	0,374	0.353	0.350	0,351	0.350	0,350					
Salinity	0.3	0,3	0.3	0.3	0.3	0.3	0,3	0.3				
								8				

Notes:	10:42	Removed	air Oubble	From tubing	and	Reset	tubing depth	
	Somple	V 1055		U				



Appendix G

Analytical Data Packages



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-25677-1

Client Project/Site: Oswego Castings #738033

For:

New York State D.E.C. 1150 North Westcott Road Schenectady, New York 12306

Attn: Carl Hoffman



Authorized for release by: 10/1/2012 12:23:07 PM Joe Giacomazza Project Administrator

joe.giacomazza@testamericainc.com

Designee for
Sally Hoffman
Project Manager II
sally.hoffman@testamericainc.com

·····LINKS ·······

Review your project results through
Total Access

Have a Question?



Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Project/Site: Oswego Castings #738033

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I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Joseph V. Girconoge

Joe Giacomazza
Project Administrator
10/1/2012 12:23:07 PM

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Client: New York State D.E.C. Project/Site: Oswego Castings #738033 TestAmerica Job ID: 480-25677-1

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Definitions/Glossary

Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 480-25677-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

TEQ

Abbreviation	These commonly used abbreviations may or may not be present in this report.
*	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

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Case Narrative

Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Job ID: 480-25677-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-25677-1

Receipt

The samples were received on 9/26/2012 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.1° C, 2.5° C and 2.6° C.

GC Semi VOA

Method 8082: The following samples were diluted due to the abundance of target analytes: DUP (480-25677-5), MW-1 92512 (480-25677-6). As such, surrogate recoveries are not representative, and elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-1

Matrix: Water

Client Sample ID: MW-2R 92412

Date Collected: 09/24/12 13:30 Date Received: 09/26/12 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:19	1
PCB-1221	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:19	1
PCB-1232	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:19	1
PCB-1242	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:19	1
PCB-1248	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:19	1
PCB-1254	ND		0.49	0.24	ug/L		09/27/12 14:11	09/28/12 17:19	1
PCB-1260	ND		0.49	0.24	ug/L		09/27/12 14:11	09/28/12 17:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	90		19 - 126				09/27/12 14:11	09/28/12 17:19	1
Tetrachloro-m-xylene	91		23 - 127				09/27/12 14:11	09/28/12 17:19	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

Client Sample ID: MW-6 92412

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-2

Matrix: Water

Date Collected: 09/24/12 15:20 Date Received: 09/26/12 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:35	1
PCB-1221	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:35	1
PCB-1232	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:35	1
PCB-1242	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:35	1
PCB-1248	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 17:35	1
PCB-1254	ND		0.49	0.25	ug/L		09/27/12 14:11	09/28/12 17:35	1
PCB-1260	ND		0.49	0.25	ug/L		09/27/12 14:11	09/28/12 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	82		19 - 126				09/27/12 14:11	09/28/12 17:35	1
Tetrachloro-m-xylene	87		23 - 127				09/27/12 14:11	09/28/12 17:35	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-3

Matrix: Water

Client Sample ID: MW-3 92412 Date Collected: 09/24/12 16:22

Date Received: 09/26/12 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50	0.17	ug/L		09/27/12 14:11	09/28/12 17:51	1
PCB-1221	ND		0.50	0.17	ug/L		09/27/12 14:11	09/28/12 17:51	1
PCB-1232	ND		0.50	0.17	ug/L		09/27/12 14:11	09/28/12 17:51	1
PCB-1242	ND		0.50	0.17	ug/L		09/27/12 14:11	09/28/12 17:51	1
PCB-1248	ND		0.50	0.17	ug/L		09/27/12 14:11	09/28/12 17:51	1
PCB-1254	ND		0.50	0.25	ug/L		09/27/12 14:11	09/28/12 17:51	1
PCB-1260	ND		0.50	0.25	ug/L		09/27/12 14:11	09/28/12 17:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	85		19 - 126				09/27/12 14:11	09/28/12 17:51	1
Tetrachloro-m-xylene	89		23 - 127				09/27/12 14:11	09/28/12 17:51	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Client Sample ID: MW-4 92412

Date Collected: 09/24/12 17:25 Date Received: 09/26/12 09:00 Lab Sample ID: 480-25677-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:07	1
PCB-1221	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:07	1
PCB-1232	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:07	1
PCB-1242	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:07	1
PCB-1248	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:07	1
PCB-1254	ND		0.49	0.25	ug/L		09/27/12 14:11	09/28/12 18:07	1
PCB-1260	ND		0.49	0.25	ug/L		09/27/12 14:11	09/28/12 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	88		19 - 126				09/27/12 14:11	09/28/12 18:07	1
Tetrachloro-m-xylene	88		23 - 127				09/27/12 14:11	09/28/12 18:07	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-5

Matrix: Water

Client Sample ID: DUP
Date Collected: 09/25/12 00:00

Date Received: 09/26/12 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	47	J	50	17	ug/L		09/27/12 14:11	09/28/12 18:23	100
PCB-1221	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:23	100
PCB-1232	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:23	100
PCB-1242	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:23	100
PCB-1248	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:23	100
PCB-1254	ND		50	25	ug/L		09/27/12 14:11	09/28/12 18:23	100
PCB-1260	ND		50	25	ug/L		09/27/12 14:11	09/28/12 18:23	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl		X	19 - 126				09/27/12 14:11	09/28/12 18:23	100
Tetrachloro-m-xylene	83		23 - 127				09/27/12 14:11	09/28/12 18:23	100

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-6

Matrix: Water

Client Sample ID: MW-1 92512 Date Collected: 09/25/12 13:15

Date Received: 09/26/12 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	54		50	17	ug/L		09/27/12 14:11	09/28/12 18:39	100
PCB-1221	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:39	100
PCB-1232	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:39	100
PCB-1242	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:39	100
PCB-1248	ND		50	17	ug/L		09/27/12 14:11	09/28/12 18:39	100
PCB-1254	ND		50	25	ug/L		09/27/12 14:11	09/28/12 18:39	100
PCB-1260	ND		50	25	ug/L		09/27/12 14:11	09/28/12 18:39	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl		X	19 - 126				09/27/12 14:11	09/28/12 18:39	100
Tetrachloro-m-xylene	96		23 - 127				09/27/12 14:11	09/28/12 18:39	100

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-7

Client Sample ID: EQUIPMENT BLANK PROBE

Date Collected: 09/25/12 13:47 Date Received: 09/26/12 09:00 Matrix: Water

Method: 8082 - Polychlori	inated Biphenyls (PCE	Bs) by Gas Ch	nromatograph	y					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:55	1
PCB-1221	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:55	1
PCB-1232	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:55	1
PCB-1242	ND		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:55	1
PCB-1248	0.53		0.49	0.17	ug/L		09/27/12 14:11	09/28/12 18:55	1
PCB-1254	ND		0.49	0.24	ug/L		09/27/12 14:11	09/28/12 18:55	1
PCB-1260	ND		0.49	0.24	ug/L		09/27/12 14:11	09/28/12 18:55	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	72	19 - 126	09/27/12 14:11	09/28/12 18:55	1
Tetrachloro-m-xvlene	90	23 - 127	09/27/12 14:11	09/28/12 18:55	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-8

Matrix: Water

Client Sample ID: MW-7 92512 Date Collected: 09/25/12 11:00

Date Received: 09/26/12 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.56	0.20	ug/L		09/27/12 14:11	09/28/12 19:10	1
PCB-1221	ND		0.56	0.20	ug/L		09/27/12 14:11	09/28/12 19:10	1
PCB-1232	ND		0.56	0.20	ug/L		09/27/12 14:11	09/28/12 19:10	1
PCB-1242	ND		0.56	0.20	ug/L		09/27/12 14:11	09/28/12 19:10	1
PCB-1248	ND		0.56	0.20	ug/L		09/27/12 14:11	09/28/12 19:10	1
PCB-1254	ND		0.56	0.28	ug/L		09/27/12 14:11	09/28/12 19:10	1
PCB-1260	ND		0.56	0.28	ug/L		09/27/12 14:11	09/28/12 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	88		19 - 126				09/27/12 14:11	09/28/12 19:10	1
Tetrachloro-m-xylene	91		23 - 127				09/27/12 14:11	09/28/12 19:10	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

Client Sample ID: MW-5 92512

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-9

Matrix: Water

Date Collected: 09/25/12 11:25 Date Received: 09/26/12 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.53	0.19	ug/L		09/27/12 14:11	09/28/12 19:26	1
PCB-1221	ND		0.53	0.19	ug/L		09/27/12 14:11	09/28/12 19:26	1
PCB-1232	ND		0.53	0.19	ug/L		09/27/12 14:11	09/28/12 19:26	1
PCB-1242	ND		0.53	0.19	ug/L		09/27/12 14:11	09/28/12 19:26	1
PCB-1248	ND		0.53	0.19	ug/L		09/27/12 14:11	09/28/12 19:26	1
PCB-1254	ND		0.53	0.26	ug/L		09/27/12 14:11	09/28/12 19:26	1
PCB-1260	ND		0.53	0.26	ug/L		09/27/12 14:11	09/28/12 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	58		19 - 126				09/27/12 14:11	09/28/12 19:26	1
Tetrachloro-m-xylene	87		23 - 127				09/27/12 14:11	09/28/12 19:26	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID: 480-25677-10

Matrix: Water

Date Collected: 09/25/12 11:50 Date Received: 09/26/12 09:00

Client Sample ID: EQUIPMENT BLANK CELL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47	0.17	ug/L		09/27/12 14:11	09/28/12 19:42	1
PCB-1221	ND		0.47	0.17	ug/L		09/27/12 14:11	09/28/12 19:42	1
PCB-1232	ND		0.47	0.17	ug/L		09/27/12 14:11	09/28/12 19:42	1
PCB-1242	ND		0.47	0.17	ug/L		09/27/12 14:11	09/28/12 19:42	1
PCB-1248	ND		0.47	0.17	ug/L		09/27/12 14:11	09/28/12 19:42	1
PCB-1254	ND		0.47	0.24	ug/L		09/27/12 14:11	09/28/12 19:42	1
PCB-1260	ND		0.47	0.24	ug/L		09/27/12 14:11	09/28/12 19:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	68		19 - 126				09/27/12 14:11	09/28/12 19:42	1
Tetrachloro-m-xylene	88		23 - 127				09/27/12 14:11	09/28/12 19:42	1

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Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

Client Sample ID: MW-2R 92412 Lab Sample ID: 480-25677-1 Date Collected: 09/24/12 13:30

Matrix: Water

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		1	82772	09/28/12 17:19	JM	TAL BUF

Client Sample ID: MW-6 92412 Lab Sample ID: 480-25677-2

Date Collected: 09/24/12 15:20 Matrix: Water

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		1	82772	09/28/12 17:35	JM	TAL BUF

Client Sample ID: MW-3 92412 Lab Sample ID: 480-25677-3

Date Collected: 09/24/12 16:22 **Matrix: Water**

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		1	82772	09/28/12 17:51	JM	TAL BUF

Lab Sample ID: 480-25677-4 Client Sample ID: MW-4 92412

Date Collected: 09/24/12 17:25

Date Received: 09/26/12 09:00

	=	Batch	Batch		Dilution	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
	Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
İ	Total/NA	Analysis	8082		1	82772	09/28/12 18:07	JM	TAL BUF

Client Sample ID: DUP Lab Sample ID: 480-25677-5

Date Collected: 09/25/12 00:00

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C		- <u></u>	82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		100	82772	09/28/12 18:23	JM	TAL BUF

Client Sample ID: MW-1 92512 Lab Sample ID: 480-25677-6

Date Collected: 09/25/12 13:15 Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		100	82772	09/28/12 18:39	JM	TAL BUF

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 480-25677-7

Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

Client Sample ID: EQUIPMENT BLANK PROBE

Date Collected: 09/25/12 13:47 Matrix: Water

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		1	82772	09/28/12 18:55	JM	TAL BUF

Client Sample ID: MW-7 92512 Lab Sample ID: 480-25677-8

Date Collected: 09/25/12 11:00 Matrix: Water

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C		- <u> </u>	82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		1	82772	09/28/12 19:10	JM	TAL BUF

Client Sample ID: MW-5 92512 Lab Sample ID: 480-25677-9

Date Collected: 09/25/12 11:25 Matrix: Water

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		1	82772	09/28/12 19:26	JM	TAL BUF

Client Sample ID: EQUIPMENT BLANK CELL Lab Sample ID: 480-25677-10

Date Collected: 09/25/12 11:50 Matrix: Water

Date Received: 09/26/12 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			82621	09/27/12 14:11	DE	TAL BUF
Total/NA	Analysis	8082		1	82772	09/28/12 19:42	JM	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13
California	NELAC	9	1169CA	09-30-12
Connecticut	State Program	1	PH-0568	09-30-12
Florida	NELAC	4	E87672	06-30-13
Georgia	State Program	4	N/A	03-31-13
Georgia	State Program	4	956	03-31-12
Ilinois	NELAC	5	200003	09-30-12
owa	State Program	7	374	03-01-13
Kansas	NELAC	7	E-10187	01-31-13
Kentucky	State Program	4	90029	12-31-12
Kentucky (UST)	State Program	4	30	04-01-13
_ouisiana	NELAC	6	02031	06-30-13
Maine	State Program	1	NY00044	12-04-12
Maryland	State Program	3	294	03-31-13
Massachusetts	State Program	1	M-NY044	06-30-13
Michigan	State Program	5	9937	04-01-13
Minnesota	NELAC	5	036-999-337	12-31-12
New Hampshire	NELAC	1	2973	09-11-13
New Hampshire	NELAC	1	2337	11-17-12
New Jersey	NELAC	2	NY455	06-30-13
New York	NELAC	2	10026	03-30-13
North Dakota	State Program	8	R-176	03-31-13
Oklahoma	State Program	6	9421	08-31-13
Oregon	NELAC	10	NY200003	06-09-13
Pennsylvania	NELAC	3	68-00281	07-31-13
Гennessee	State Program	4	TN02970	04-01-13
Texas	NELAC	6	T104704412-11-2	07-31-13
JSDA	Federal		P330-11-00386	11-22-14
/irginia	NELAC	3	460185	09-14-13
Vashington	State Program	10	C784	02-10-13
West Virginia DEP	State Program	3	252	09-30-12
Wisconsin	State Program	5	998310390	08-31-13

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Method Summary

Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Sample Summary

Client: New York State D.E.C.

Project/Site: Oswego Castings #738033

TestAmerica Job ID: 480-25677-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-25677-1	MW-2R 92412	Water	09/24/12 13:30	09/26/12 09:00
480-25677-2	MW-6 92412	Water	09/24/12 15:20	09/26/12 09:00
480-25677-3	MW-3 92412	Water	09/24/12 16:22	09/26/12 09:00
480-25677-4	MW-4 92412	Water	09/24/12 17:25	09/26/12 09:00
480-25677-5	DUP	Water	09/25/12 00:00	09/26/12 09:00
480-25677-6	MW-1 92512	Water	09/25/12 13:15	09/26/12 09:00
480-25677-7	EQUIPMENT BLANK PROBE	Water	09/25/12 13:47	09/26/12 09:00
480-25677-8	MW-7 92512	Water	09/25/12 11:00	09/26/12 09:00
480-25677-9	MW-5 92512	Water	09/25/12 11:25	09/26/12 09:00
480-25677-10	EQUIPMENT BLANK CELL	Water	09/25/12 11:50	09/26/12 09:00

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Flammable Skin imfant Poscon B Unknown Return to Citien Disposal By Lab Archive For Months (A fee may be assessed if samples are new posterior of the form	Table Cascor B Unknown Sample Disposal By Lab Archive For Months (A fee may be assessed if samples are red A Days 21 Days Other Date Time 2. Received By Date Time 3. Received By Date Time	4			
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	DISTRIBUTION: WHITE - Returned to Client with Report; CANVARY - Stays with the Sample; PRIK - Field Copy	Comments		は いし ンしいし	

Login Sample Receipt Checklist

Client: New York State D.E.C. Job Number: 480-25677-1

Login Number: 25677 List Source: TestAmerica Buffalo

List Number: 1

Creator: Robitaille, Zach L

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	NYSDEC
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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TestAmerica Buffalo