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NC Registered Engineering Firm F-1078

October 27, 2010

Mr. Peter Broadley Cape Fear Soccer Complex 6726 Netherlands Drive Wilmington, NC 28405

Reference: Annual Groundwater and Methane Monitoring Report Cape Fear Soccer Complex 211 Sutton Steam Plant Road Wilmington, New Hanover County, North Carolina ECS Carolinas, LLP Project No. 22-12830A1

Dear Mr. Broadley:

ECS Carolinas, LLP (ECS) is pleased to provide you with the results of our annual groundwater and methane monitoring for the referenced property. Our services were provided in general accordance with ECS Proposal No. 10702R dated October 25, 2007 and accepted December 1. 2007.

# PROJECT INFORMATION

The Cape Fear Soccer Complex was redeveloped under a Brownfields Agreement between the site developer and the North Carolina Department of Environment and Natural Resources (NCDENR). Per this agreement, annual groundwater monitoring and methane monitoring is required. The current Brownfields agreement has been included in Appendix I of this report. The previous monitoring wells at the site had either been destroyed during redevelopment activities or required relocation due to adjacent property operations. ECS re-installed seven groundwater monitoring wells and two methane monitoring wells at the site on February 21, 2007 with subsequent groundwater and methane gas sampling. Information pertaining to the well installations was included in the Annual Groundwater and Methane Monitoring Report dated March 19, 2007 and prepared by ECS.

# **METHANE MONITORING**

On September 16, 2010 ECS mobilized to the site to record methane readings from the two methane monitoring wells. ECS placed a plastic bag over each methane monitoring well casing and sealed the bag to the PVC with duct tape. The sampling probe was used to puncture the plastic bag to obtain the readings. A Foxboro TVA 1000 (flame ionizing detector) with a charcoal filter was used to measure the methane readings. Initial readings were recorded. The readings were allowed to stabilize (approximately 15 to 20 minutes). The stabilized readings were also recorded. The following table lists the methane readings.

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Monitoring Well	Date	Peak	Stabilized Reading (after 15-20 minutes)
	02/28/2007	6,000 ppm	650 ppm
M_1	07/02/2008	8,200 ppm	2,600 ppm
101-1	07/09/2009	2,000 ppm	1,697 ppm
	09/16/2010	>4.9%*	NA
	02/28/2007	1,000 ppm	500 ppm
MO	07/02/2008	10,000 ppm	2,800 ppm
101-2	07/09/2009	1,400 ppm	976 ppm
	09/16/2010	1.9%**	9,380 ppm

ppm = parts per million, 10,000 ppm = 1.0 %

1. 15

\*The Foxboro TVA 1000 does not record concentrations greater than 5.0%, which is the lower explosive limit (LEL) for gaseous methane (source www.msdsonline.com). The use of a flame ionizing detector with air samples containing greater than 5.0% methane is unsafe, due to the risk of explosion. Therefore, the FoxboroTVA automatically shuts off as concentration approach 5.0%.

\*\*The Foxboro TVA 1000 converts from ppm to percentage after the value exceeds 10,000 ppm.

The methane concentrations showed an increase from the 2009 sampling event.

# **GROUNDWATER MONITORING**

On September 16, 2010, ECS mobilized to the site to collect groundwater samples from the existing groundwater monitoring wells. ECS purged each well (three well volumes) prior to sampling using a monofilament line and disposable plastic bailer. Field measurements of temperature, pH, turbidity and specific conductance were recorded after each well volume. After purging the wells, a groundwater sample was collected from each well using the disposable plastic bailer. The samples were placed in laboratory prepared containers using a new pair of disposable nitrile gloves. The sample containers were labeled with the project name, sample location and the date and time that the sample was collected. The sample containers were then placed in two (2) separate coolers containing ice (4°C) and were delivered to Pace Analytical, Inc., a North Carolina certified laboratory located in Asheville, North Carolina under chain-of-custody. Both of the sample coolers were shipped to Pace Analytical via FedEx Express overnight shipping. It is critical that the samples ship to the laboratory within 24 hours, in order to maintain at temperature no greater than 4°C. However, Pace Analytical only received one of the sample coolers.

The initial groundwater samples were analyzed for volatile organic compounds (VOCs) using EPA Method 8260, Priority Pollutant Metals by EPA Method 6010B, nitrate-nitrite, ammonia, chloride, chemical oxygen demand (COD) and total organic carbon (TOC). Pace Analytical only received one cooler, therefore, the initial chemical testing was limited to nitrate-nitrite, ammonia and chemical oxygen demand. The initial chemical testing was performed on September 17, 2010.

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On October 5, 2010, ECS conducted a second sampling event, in order perform the remaining chemical analyses. The same sampling method, storage, and shipment, as referenced above, was conducted. The sample containers were delivered to Pace Analytical and analyzed for volatile organic compounds (VOCs) using EPA Method 8260, Priority Pollutant Metals by EPA Method 6010B, chloride, chemical oxygen demand (COD) and total organic carbon (TOC). The second round of chemical testing was performed on October 6, 2010.

The laboratory analytical results of the groundwater sampling have been summarized in the attached Table 1. Seventeen (17) target constituents were identified in the groundwater samples. Of these, five constituents (benzene, chlorobenzene, napthalene, lead, and zinc) were identified in at least one well at concentrations exceeding the State 15A NCAC 2L groundwater standards. One constituent (zinc) was identified in the site groundwater (GW-4) at approxiamtely nine times the 2L Standard.

Wells W-1, W-3 and W-5 showed a slight decrease in VOCs in the 2010 sampling event compared to the 2009 sampling event, with an exception of increased levels of naphthalene at well W-5. Wells GW-1, GW-2, GW-3 and GW-4 showed a slight increase in VOCs since last years sampling event. Benzene concentrations detected in wells GW-1, GW-2, GW-4 and W-5 were above the 15A NCAC 2L Standard. Additionally, detected concentrations of 4-isopropyltoluene and napthalene at GW-1, and chlorobenzene at GW-2 exceeded the 15A NCAC 2L Standard.

The site showed a general increase in concentrations of metals since the 2009 sampling event, but less than the 2008 sampling event. Concentrations of selenium have not changed since the 2009 sampling event. A measurable increase of arsenic, chromium, copper, nickel and mercury concentrations were detected throughout the site, however, none of detected levels exceeded the 2L Standard and the increase was minimal. Concentrations of lead increased since the previous sampling event, and concentrations of lead at GW-1, GW-2, GW-4 and W-5 exceed the 2L Standard. During the 2009 sampling event, concentrations of zinc at GW-3 were approximately eleven times greater than the 2L Standard. During the 2010 sampling event, concentrations of zinc at GW-3 were approximately nine times greater than the 2L Standard. Levels of zinc remain elevated, however, the concentration level has decreased since the 2009 sampling event.

Chemical oxygen demand and total organic carbon increased at each sampling well, and ranged from 25 mg/L to 364 mg/l, and 20.9 mg/L to 191.0 mg/L, respectively. The ammonia, chloride, and nitrate-nitrite concentrations appeared similar to the concentrations from the 2009 sampling event, except an ammonia increase in GW-3 and chloride increase in GW-2. Samples from each well contained pH readings of less than 6.5 standard units, and the pH reading at W-3 was 3.94 units. The turbidity readings from the groundwater samples were generally greater in the 2010 sampling event than the 2009 sampling event.

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# CONCLUSIONS AND RECOMMENDATIONS

In September 2010, ECS performed methane gas monitoring from two monitoring wells and collected groundwater samples from seven monitoring wells. The results of the methane monitoring showed an increase in methane gas concentrations since the 2009 sampling event, especially the methane concentrations in well MW-1 which exceeds the lower explosive limit for methane.

The 2010 results of the groundwater sampling showed a slight decrease in concentrations of VOCs along the southwest perimeter of the site (W-1, W-3,and W-5). Wells GW-1, GW-2, GW-3 and GW-4 showed a general increase in VOCs since last years sampling event.

The site showed a general increase in concentrations of metals since the 2009 sampling event, but less that the 2008 sampling event. This corresponds with the sample turbidity readings which were higher during the 2009 sampling event, and lower than the 2008 event. A high turbidity reading results from an increased number of suspended sediments. Suspended sediments can act as a boding agent for heavy metals, and in turn result in increased concentration of heavy metals in the groundwater samples.

Based on the results of the annual monitoring event, ECS recommends continued monitoring with the site's Brownfields Agreement with the next annual monitoring event slated for the fall of 2011. ECS recommends that a copy of this report be submitted to the NCDENR Brownfields Group for their review.

ECS is pleased to have the opportunity to offer our services. If you have any questions or comments concerning the contents of the enclosed documents or other related topics, please contact us at (910) 686-9114.

Respectfully submitted,

ECS CAROLINAS, LLP

C. Paul Pascarosa Project Scientist

035138 10-28-10 TANIN' Vice President

Enclosures: Figures Table 1 – Summary of Groundwater Data Laboratory Data Sheets Appendix 1 – Brownfields Agreement





# TABLE 1 - SUMMARY OF GROUNDWATER DATACAPE FEAR SOCCER COMPLEX211 SUTTON STEAM PLANT ROADWILMINGTON, NORTH CAROLINAECS PROJECT NO. 22-12830A1

	ECS PROJECT NO. 22-12830A1 Well Location										
				Wen Lu					15A NCAC		
Analyte	Date	GW-1	GW-2	GW-3	GW-4	W-1	W-3	W-5	2L Standard		
	02/23/2007	8.08	10.40	<1.00	2.26	<1.00	<1.00	11.00			
Ponzono (ug/L)	07/07/2008	6.43	6.43	<1.00	2.43	<1.00	<1.00	9.79	1.0		
Benzene (ug/L)	07/09/2009	7.09	7.32	<1.00	<1.00	2.53	<1.00	8.03	1.0		
	10/05/2010	8.5	8.6	<1.0	2.5	<1.0	<1.0	7.2			
	02/23/2007	14.30	58.10	<1.00	49.60	<1.00	3.77	13.40			
Chlorohonzono (ug/l)	07/07/2008	13.10	24.10	<1.00	40.50	1.59	2.46	13.10	50		
Chlorobenzene (ug/L)	07/09/2009	22.90	11.30	<1.00	<1.00	20.6	<1.00	36.80	50		
	10/05/2010	39.5	54.5	1.0	34.4	<1.0	<1.0	9.1			
	02/23/2007	<1.00	2.72	<1.00	5.38	<1.00	<1.00	<1.00			
1,2-Dichlorobenzene	07/07/2008	<1.00	1.82	<1.00	4.06	<1.00	<1.00	<1.00	NG		
(ug/L)	07/09/2009	1.10	<1.00	<1.00	<1.00	2.01	<1.00	2.33	NS		
	10/05/2010	1.3	6.6	<1.00	3.8	<1.0	<1.0	<1.0			
	02/23/2007	2.37	5.76	<1.00	6.52	<1.00	<1.00	1.82			
1,4-Dichlorobenzene	07/07/2008	2.71	5.08	<1.00	7.23	<1.00	<1.00	2.36	NG		
ug/L)	07/09/2009	3.60	1.72	<1.00	<1.00	4.72	<1.00	5.87	NS		
	10/05/2010	6.3	11.5	1.4	6.1	<1.00	<1.00	1.0			
	02/23/2007	1.48	<2.0	<1.00	<2.00	<1.00	<1.00	1.28			
Isopropylbenzene	07/07/2008	1.52	1.71	<1.00	1.07	<1.00	<1.00	1.37			
(ug/L)	07/09/2009	1.62	1.14	<1.00	<1.00	<1.00	<1.00	1.56	70		
	10/05/2010	NA									
	02/23/2007	3.61	<2.0	<1.00	<2.00	<1.00	<1.00	<1.00			
4-Isopropyltoluene	07/07/2008	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00			
(ua/L)	07/09/2009	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	NS		
( )	10/05/2010	2.30	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00			
	02/23/2007	7 84	<2.0	<1.00	<2.00	<1.00	<1.00	23.10			
	07/07/2008	7 70	<1.00	<1.00	1.35	<1.00	<1.00	21.50			
Naphthalene (ug/L)	07/09/2009	8 77	13.60	<1.00	<1.00	1.87	<1.00	<1.00	6		
	10/05/2010	25.3	15	<1.0	1.6	<1.0	<1.00	6.3			
	02/23/2007	<1.00	<2.0	<1.00	<2.00	<1.00	<1.00	<1.00			
n-Propylbenzene	07/07/2008	<1.00	1.37	<1.00	<1.00	<1.00	<1.00	<1.00			
(ug/L)	07/09/2009	1.37	<1.07	<1.00	<1.00	<1.00	<1.00	1 26	70		
(	10/05/2010	NA									
	02/23/2007	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100			
	07/07/2008	0.0139	<0.0100	0.0313	0.0627	0.0366	<0.0100	0.0234			
Arsenic (mg/L)	07/09/2009	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.0100		
	10/05/2010	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0108			
	02/23/2007	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100			
Chromium (ma/l)	07/07/2008	0.0446	0.0406	0.1340	0.2560	0.0963	0.0456	0.0916	0.0100		
Chromium (mg/L)	07/09/2009	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0100		
	10/05/2010	<0.0050	0.0137	0.0128	0.0229	0.0227	0.0178	0.0413			
	02/23/2007	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100			
Copper (mg/L)	07/07/2008	0.1050	0.0450	0.0523	0.2000	0.0610	0.0338	0.0840	0 1000		
Copper (mg/L)	07/09/2009	<0.0100	<0.0100	0.0160	<0.0100	<0.0100	<0.0100	<0.0100	0.1000		
	10/05/2010	0.0239	0.0185	0.0164	0.0141	0.0071	0.0098	0.0404			
	02/23/2007	0.0113	0.0193	0.1470	0.0450	0.0512	<0.0100	0.0106			
l ead (mg/l )	07/07/2008	0.0771	0.0465	0.0707	0.1870	0.0602	0.0346	0.113	0.0150		
Load (mg/L)	07/09/2009	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	0.0100		
	10/05/2010	0.0680	0.0194	0.0094	0.0196	0.0121	0.0136	0.0585			
	02/23/2007	<0.0100	<0.0100	0.0529	<0.0100	<0.0100	<0.0100	<0.0100			
Nickle (ma/L)	07/07/2008	0.1460	0.0366	0.0698	0.1560	0.263	0.0253	0.0477	0 1000		
NICKIE (IIIY/L)	07/09/2009	<0.0100	<0.0100	0.1130	<0.0100	<0.0100	<0.0100	<0.0100	0.1000		
	10/05/2010	0.0162	0.0127	0.0631	0.0209	0.0137	0.0117	0.0256			
	02/23/2007	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200			
Selenium (ma/L)	07/07/2008	0.0332	0.0251	0.0231	0.0385	<0.0200	<0.0200	0.0319	0.0200		
Selenium (mg/L)	07/09/2009	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	0.0200		
	10/05/2010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			

# TABLE 1 - SUMMARY OF GROUNDWATER DATA (continued)CAPE FEAR SOCCER COMPLEX211 SUTTON STEAM PLANT ROADWILMINGTON, NORTH CAROLINAECS PROJECT NO. 22-12830A1

				Well Lo	cation				
Analyte	Date	GW-1	GW-2	GW-3	GW-4	W-1	W-3	W-5	15A NCAC 2L Standard
	02/23/2007	0.0841	0.0447	5.1600	0.0482	<0.0200	<0.0200	0.0219	
Zinc (mg/L)	07/07/2008	0.5880	0.1960	0.1750	2.1900	22.0000	0.0680	0.422	1 0000
	07/09/2009	<0.0200	<0.0200	11.4000	<0.0200	<0.0200	<0.0200	<0.0200	1.0000
	10/05/2010	0.0120	0.0238	9.0500	0.1890	0.0205	0.0218	0.2000	
	02/23/2007	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	
Mercury (mg/L)	07/07/2008	0.000444	<0.000285	<0.000285	0.002040	0.000679	<0.000285	0.000892	0.001
	07/09/2009	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	0.001
	10/05/2010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.000430	
	02/23/2007	17.0	39.5	0.2	12.1	1.2	2.6	14.4	
Ammonia (ma/L)	07/07/2008	11.4	25.2	0.4	16.2	1.7	1.1	13.5	1500
Ammonia (mg/L)	07/09/2009	12.2	42.7	0.4	11.1	0.4	<0.25	11.0	1500
	09/16/2010	8.5	36.6	4.3	6.1	0.4	<0.1	8.9	
	02/23/2007	16.20	10.90	4.50	5.50	4.5	3.80	5.70	
Chlorido (ma/L)	07/07/2008	10.20	5.75	6.00	6.10	4.77	4.55	5.74	250
Chionae (mg/L)	07/09/2009	6.24	10.50	7.39	5.22	4.23	3.35	5.51	230
	10/05/2010	5.50	32.60	7.50	7.50	<5.00	<5.0	6.60	

Well Location	Date	GW-1	GW-2	GW-3	GW-4	W-1	W-3	W-5	15A NCAC 2L Standard	
	02/23/2007	74.0	107.0	12.0	60.0	10	11.0	44.0		
	07/07/2008	332.0	132.0	354.0	765.0	172	107.0	702.0	NS	
COD (IIIg/L)	07/09/2009	52.1	64.5	13.7	57.6	<12.5	<12.5	39.1	110	
	09/17/2010	124	121	100	364	109	25	354		
	02/23/2007	<0.02	<0.02	2.75	0.02	2.73	2.63	<0.02		
Nitroto/Nitrito (ma/L)	07/07/2008	0.07	0.07	0.90	0.09	5.34	2.70	0.06	NS	
minate/minite (mg/∟)	07/09/2009	<0.1	<0.1	2.15	<0.1	5.36	2.99	<0.1	113	
	09/17/2010	<0.10	<0.10	3.3	0.2	3.1	2.5	<0.1		
	02/23/2007	35.10	26.60	5.00	9.40	4.0	6.5	32.9		
	07/07/2008	29.80	19.00	37.70	80.80	11.0	5.39	40.6	NS	
TOC (IIIg/L)	07/09/2009	14.00	17.20	4.23	13.10	1.55	0.529	9.69	110	
	10/05/2010	42.20	183.00	30.70	42.60	20.90	16.10	191.00		
	02/23/2007	6.78	6.87	5.92	6.49 6.56 6.58 6.51					
pH (cu)	07/07/2008	5.95	6.28	4.78	5.85	4.78	4.79	7.05	65.85	
pri (su)	07/09/2009	6.09	6.28	6.20	5.89	5.00	6.05	5.80	0.5-6.5	
	10/05/2010	5.96	6.41	4.43	6.05	5.02	3.94	5.84		
	02/23/2007	18.2	21.0	17.8	18.4	17.9	17.9	20.0		
Temperature (°C)	07/07/2008	21.5	23.3	23.4	23.3	23.8	23.6	28.0	NS	
remperature ( O)	07/09/2009	22.2	22.9	25.1	26.4	33.0	23.2	30.7	110	
	10/05/2010	23.7	22.8	22.1	24.6	25.0	24.8	22.9		
	02/23/2007	0.948	1.05	0.235	0.657	0.340	0.308	0.648		
Conductivity (mS/cm)	07/07/2008	0.71	0.77	0.31	0.53	0.12	0.01	0.56	NS	
	07/09/2009	0.54	0.96	error	error	0.10	0.07	0.49	NO	
	10/05/2010	0.68	1.48	0.22	0.6	0.08	0.04	0.52		
	02/23/2007	131	134	143	114	162	120	122	NS	
Tubidity (NTU)	07/07/2008	3.14	358	49.7	error	2,242	1,115	27,000	145	
	07/09/2009	3.20	5	8.3	19.0	3.55	1.70	21.0		
	10/05/2010	20	104	276	196	721	201	1341		

NA = Not Analyzed

NS = No Standard

error = instrument error

Updated by: CPP 10/20/2010 Checked by: AG



Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

October 27, 2010

Ms. Amy Conchas ECS 7211 Ogden Business Park Suite 201 Wilmington, NC 28411

RE: Project: Groundwater Soccer Complex Pace Project No.: 9277837

Dear Ms. Conchas:

Enclosed are the analytical results for sample(s) received by the laboratory on September 17, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

askley Mying

Ashley Nifong ashley.nifong@pacelabs.com Project Manager

Enclosures

# **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

## CERTIFICATIONS

# Project: Groundwater Soccer Complex

Pace Project No.: 9277837

#### Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804 Connecticut Certification #: PH-0106 Florida/NELAP Certification #: E87648 Massachusetts Certification #: M-NC030 New Jersey Certification #: NC011 North Carolina Bioassay Certification #: 9 North Carolina Drinking Water Certification #: 37712 North Carolina Wastewater Certification #: 40 Pennsylvania Certification #: 68-03578 South Carolina Bioassay Certification #: 99030002 South Carolina Certification #: 99030001 Virginia Certification #: 00072

# **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

# SAMPLE ANALYTE COUNT

Project:Groundwater Soccer ComplexPace Project No.:9277837

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9277837001		EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A
9277837002	GW-2	EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A
9277837003	GW-3	EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A
9277837004	GW-4	EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A
9277837005	DUP	EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A
9277837006	W-1	EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A
9277837007	W-3	EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A
9277837008	W-5	EPA 350.1	EWS	1	PASI-A
		EPA 353.2	DMN	3	PASI-A
		SM 5220D	MLM	1	PASI-A

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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Sample: GW-1	Lab ID: 9277837	7 <b>001</b> Co	ollected: 09/16/	10 15:45	Received: 0	9/17/10 10:00 N	Aatrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical Method:	EPA 350.1						
Nitrogen, Ammonia	<b>8.5</b> mg/L		0.10	1		09/27/10 17:55	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method:	EPA 353.2						
Nitrogen, Nitrate	ND mg/L		0.10	1		09/17/10 23:09		
Nitrogen, Nitrite	<b>0.12</b> mg/L		0.10	1		09/17/10 23:09		
Nitrogen, NO2 plus NO3	ND mg/L		0.10	1		09/17/10 23:09		
5220D COD	Analytical Method:	SM 5220D						
Chemical Oxygen Demand	<b>124</b> mg/L		25.0	1		09/21/10 15:30		

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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Sample: GW-2	Lab ID: 9	277837002	Collected:	09/16/	10 09:45	Received: 0	9/17/10 10:00	Matrix: Water	
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical M	lethod: EPA 350.	1						
Nitrogen, Ammonia	36.6	mg/L		0.50	5		09/28/10 11:35	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical M	lethod: EPA 353.2	2						
Nitrogen, Nitrate	ND	mg/L		0.10	1		09/17/10 22:42		
Nitrogen, Nitrite	0.16	mg/L		0.10	1		09/17/10 22:42		M1
Nitrogen, NO2 plus NO3	ND	mg/L		0.10	1		09/17/10 22:42		
5220D COD	Analytical M	lethod: SM 5220[	D						
Chemical Oxygen Demand	121	mg/L		25.0	1		09/21/10 15:30		

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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Sample: GW-3	Lab ID: 9277837003	Collected: 09/16/10	11:15	Received: 0	9/17/10 10:00 M	atrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical Method: EPA 350.	1					
Nitrogen, Ammonia	<b>4.3</b> mg/L	0.10	1		09/27/10 17:59	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.	2					
Nitrogen, Nitrate	<b>3.2</b> mg/L	0.10	1		09/17/10 22:51		
Nitrogen, Nitrite	0.13 mg/L	0.10	1		09/17/10 22:51		
Nitrogen, NO2 plus NO3	3.3 mg/L	0.10	1		09/17/10 22:51		
5220D COD	Analytical Method: SM 5220I	D					
Chemical Oxygen Demand	<b>100</b> mg/L	25.0	1		09/21/10 15:30		

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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Sample: GW-4	Lab ID: 9277837004	Collected: 09/16/10 1	2:00 I	Received: 0	9/17/10 10:00 M	atrix: Water	
Parameters	Results Units	Report Limit	)F	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical Method: EPA 350.	1					
Nitrogen, Ammonia	<b>6.1</b> mg/L	0.10	1		09/27/10 18:01	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2	2					
Nitrogen, Nitrate	ND mg/L	0.10	1		09/17/10 22:53		
Nitrogen, Nitrite	0.16 mg/L	0.10	1		09/17/10 22:53		
Nitrogen, NO2 plus NO3	ND mg/L	0.10	1		09/17/10 22:53		
5220D COD	Analytical Method: SM 5220	D					
Chemical Oxygen Demand	<b>364</b> mg/L	50.0	1		09/21/10 15:30		

# **REPORT OF LABORATORY ANALYSIS**





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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Sample: DUP	Lab ID: 9	277837005	Collected:	09/16/	10 00:00	Received: 0	9/17/10 10:00 I	Matrix: Water	
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical M	lethod: EPA 350.	1						
Nitrogen, Ammonia	36.3	mg/L		0.50	5		09/28/10 11:40	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical M	lethod: EPA 353.	2						
Nitrogen, Nitrate	ND	mg/L		0.10	1		09/17/10 22:37	,	
Nitrogen, Nitrite	0.21	mg/L		0.10	1		09/17/10 22:37	•	M1
Nitrogen, NO2 plus NO3	ND	mg/L		0.10	1		09/17/10 22:37	,	
5220D COD	Analytical M	lethod: SM 5220	D						
Chemical Oxygen Demand	131	mg/L		25.0	1		09/21/10 15:30	)	

# **REPORT OF LABORATORY ANALYSIS**





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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Sample: W-1	Lab ID: 9277837006	Collected: 09/16/10 /	3:00 Red	ceived: 09/17/10 10:00	Matrix: Water	
Parameters	Results Units	Report Limit	DF P	repared Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical Method: EPA 350	.1				
Nitrogen, Ammonia	<b>0.37</b> mg/L	0.10	1	09/27/10 18:03	3 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353	.2				
Nitrogen, Nitrate	<b>3.1</b> mg/L	0.10	1	09/17/10 22:56	6	
Nitrogen, Nitrite	ND mg/L	0.10	1	09/17/10 22:56	5	
Nitrogen, NO2 plus NO3	<b>3.1</b> mg/L	0.10	1	09/17/10 22:56	6	
5220D COD	Analytical Method: SM 5220	)D				
Chemical Oxygen Demand	<b>109</b> mg/L	25.0	1	09/21/10 15:30	0	M1

# **REPORT OF LABORATORY ANALYSIS**

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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Sample: W-3	Lab ID: 9277837007	Collected: 09/16/10	14:00	Received: 0	9/17/10 10:00 Ma	atrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia	Analytical Method: EPA 350.	1					
Nitrogen, Ammonia	ND mg/L	0.10	1		09/27/10 18:04	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.	2					
Nitrogen, Nitrate	<b>2.5</b> mg/L	0.10	1		09/17/10 22:59		
Nitrogen, Nitrite	ND mg/L	0.10	1		09/17/10 22:59		
Nitrogen, NO2 plus NO3	2.5 mg/L	0.10	1		09/17/10 22:59		
5220D COD	Analytical Method: SM 5220	D					
Chemical Oxygen Demand	<b>25.0</b> mg/L	25.0	1		09/21/10 15:30		

# **REPORT OF LABORATORY ANALYSIS**

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# ANALYTICAL RESULTS

## Project: Groundwater Soccer Complex

Pace Project No.: 9277837

-				
Sample: W-5	Lab ID: 9277837008 Co	ollected: 09/16/10 14:30	Received: 09/17/10 10:00 Matrix: Water	
Parameters	Results Units	Report Limit DF	Prepared Analyzed CAS No.	Qual
350.1 Ammonia	Analytical Method: EPA 350.1			
Nitrogen, Ammonia	<b>8.9</b> mg/L	0.10 1	09/27/10 18:06 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2			
Nitrogen, Nitrate	ND mg/L	0.10 1	09/17/10 23:05	
Nitrogen, Nitrite	0.16 mg/L	0.10 1	09/17/10 23:05	
Nitrogen, NO2 plus NO3	ND mg/L	0.10 1	09/17/10 23:05	
5220D COD	Analytical Method: SM 5220D			
Chemical Oxygen Demand	<b>354</b> mg/L	50.0 1	09/21/10 15:30	

## **REPORT OF LABORATORY ANALYSIS**

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# **QUALITY CONTROL DATA**

Project:	Groundwater Soc	ccer Complex						
Pace Project No.:	9277837							
QC Batch:	WETA/8246		Analysis Meth	od: E	PA 350.1			
QC Batch Method:	EPA 350.1		Analysis Desc	ription: 3	50.1 Ammonia			
Associated Lab Sam	ples: 9277837	001, 9277837002, 9	9277837003, 92778	37004, 92778	337005, 927783	7006, 92778370	07, 9277837008	
METHOD BLANK:	503656		Matrix: \	Water				
Associated Lab Sam	ples: 9277837	001, 9277837002, 9	9277837003, 92778	37004, 92778	337005, 927783	7006, 92778370	07, 9277837008	
			Blank	Reporting				
Param	neter	Units	Result	Limit	Analyzed	Qualifier	S	
Nitrogen, Ammonia		mg/L	ND	0.10	09/27/10 17:	50		
LABORATORY CON	ITROL SAMPLE:	503657						
			Spike L	CS	LCS	% Rec		
Param	neter	Units	Conc. Re	esult	% Rec	Limits	Qualifiers	
Nitrogen, Ammonia		mg/L	5	5.4	109	90-110		
MATRIX SPIKE SAM	/IPLE:	503658						
			9277499001	Spike	MS	MS	% Rec	
Param	neter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Nitrogen, Ammonia		mg/L	NE	) 5	5.4	108	90-110	
MATRIX SPIKE SAM	/IPLE:	503660						
			9277837002	Spike	MS	MS	% Rec	
Param	neter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Nitrogen, Ammonia		mg/L	36.6	6 5	40.5	77	90-110	M1
SAMPLE DUPLICAT	E: 503659							
Param	neter	Units	9277837001 Result	Dup Result	RPD	Qualifiers		
Nitrogen, Ammonia		mg/L	8.5	8.5	5 (	0	_	
SAMPLE DUPLICAT	E: 503661							
			9277837003	Dup				
Param	neter	Units	Result	Result	RPD	Qualifiers		
Nitrogen, Ammonia		mg/L	4.3	4.3	3 2	2		

Date: 10/27/2010 11:47 AM

# **REPORT OF LABORATORY ANALYSIS**

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# **QUALITY CONTROL DATA**

Project: Gro	oundwater So	ccer Complex						
Pace Project No.: 927	77837							
QC Batch: W	/ETA/8176		Analysis Metho	od: E	EPA 353.2			
QC Batch Method: E	PA 353.2		Analysis Descr	ription: 3	353.2 Nitrate + N	litrite, Unpres.		
Associated Lab Sample	s: 9277837	001, 9277837002,	9277837003, 927783	37004, 9277	837005, 927783	7006, 9277837	007, 927783700	8
METHOD BLANK: 499	9346		Matrix: V	Vater				
Associated Lab Sample	s: 9277837	001, 9277837002,	9277837003, 927783	37004, 9277	837005, 927783	7006, 9277837	007, 927783700	8
Paramete	r	Units	Blank Result	Reporting Limit	Analyzed	Qualifie	ers	
Nitrogen Nitrate		 ma/l		0.1	09/17/10 22	34		
Nitrogen, Nitrite		mg/L	ND	0.10	09/17/10 22:	34		
Nitrogen, NO2 plus NO2	3	mg/L	ND	0.1	09/17/10 22:	34		
				0.11	5 00/11/10 <u>2</u> 2.			
LABORATORY CONTR	OL SAMPLE:	499347						
			Spike L0	CS	LCS	% Rec		
Paramete	r	Units	Conc. Re	sult	% Rec	Limits	Qualifiers	
Nitrogen, Nitrate		mg/L	5	4.9	98	90-110		
Nitrogen, Nitrite		mg/L	1	1.0	100	90-110		
Nitrogen, NO2 plus NO3	3	mg/L	5	4.9	98	90-110		
MATRIX SPIKE SAMPL	E:	499348						
			9277837005	Spike	MS	MS	% Rec	
Paramete	r	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Nitrogen, Nitrate		mg/L	ND	5	4.8	96	90-110	)
Nitrogen, Nitrite		mg/L	0.21	1	0.92	72	90-110	M1
Nitrogen, NO2 plus NO3	3	mg/L	ND	5	4.8	96	90-110	)
	<b>C</b> .	400250						
INATIA SFIRE SAME	L.	499550	0077007000	Spike	MC	Me	% Poo	
Paramete	r	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Nitrogen, Nitrate		 ma/l	ND	5	4.6	93		
Nitrogen, Nitrite		mg/L	0.16	1	0.93	77	<sup>'</sup> 90-110	M1
Nitrogen, NO2 plus NO3	3	mg/L	ND	5	4.6	93	90-110	1
	1000.10							
SAMPLE DUPLICATE:	499349		0077007005	D				
Paramete	r	Units	9277837005 Result	Dup Result	RPD	Qualifiers		
Nitrogen, Nitrate		 ma/L	ND	N	)		_	
Nitrogen, Nitrite		ma/L	0.21	NE	)			
Nitrogen, NO2 plus NO3	3	mg/L	ND	NE	)			
		5						

Date: 10/27/2010 11:47 AM

# **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA

Project: Groundwater Soccer Complex

Pace Project No.: 9277837

SAMPLE DUPLICATE: 499351					
		9277837002	Dup		
Parameter	Units	Result	Result	RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	ND		
Nitrogen, Nitrite	mg/L	0.16	0.16	1	
Nitrogen, NO2 plus NO3	mg/L	ND	ND		

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# QUALITY CONTROL DATA

Project:	Groundwat	er Soccer Complex						
Pace Project No.:	9277837							
QC Batch:	WETA/82	05	Analysis Meth	nod: S	SM 5220D			
QC Batch Method:	SM 52201	C	Analysis Des	cription: 5	220D COD			
Associated Lab Sar	mples: 92	77837001, 9277837002,	9277837003, 92778	837004, 92778	337005, 927783	7006, 927783	7007, 927783700	)8
METHOD BLANK:	500303		Matrix:	Water				
Associated Lab Sar	mples: 92	77837001, 9277837002,	9277837003, 92778	837004, 92778	337005, 927783	7006, 927783	7007, 927783700	)8
_			Blank	Reporting			-	
Parar	meter	Units	Result	Limit	Analyzed	Qualit	iers	
Chemical Oxygen E	Demand	mg/L	ND	25.0	0 09/21/10 15:	30		
LABORATORY CO	NTROL SAM	IPLE: 500304						
			Spike	LCS	LCS	% Rec		
Parar	meter	Units	Conc. R	lesult	% Rec	Limits	Qualifiers	
Chemical Oxygen E	Demand	mg/L	750	752	100	90-110		
MATRIX SPIKE SA	MPLE:	500305						
			9277885001	Spike	MS	MS	% Rec	
Parar	meter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chemical Oxygen E	Demand	mg/L	424	0 1500	4420	1	12 75-125	5 M1
MATRIX SPIKE SA	MPLE:	500310						
			9277837006	Spike	MS	MS	% Rec	
Parar	meter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chemical Oxygen E	Demand	mg/L	10	9 750	119		1 75-125	5 M1
SAMPLE DUPLICA	TE: 50030	9						
Parar	meter	Units	9277947001 Result	Dup Result	RPD	Qualifier	s	
Chemical Oxygen	Demand	mg/L	3160	3170	)	0		
SAMPLE DUPLICA	TE: 50031	1						
			9277837007	Dup				
Parar	meter	Units	Result	Result	RPD	Qualifier	S	
Chemical Oxygen	Demand	mg/L	25.0	30.0	) 1	8		

Date: 10/27/2010 11:47 AM

# **REPORT OF LABORATORY ANALYSIS**

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# QUALIFIERS

Project: Groundwater Soccer Complex

Pace Project No.: 9277837

## DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

**RPD** - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

## LABORATORIES

PASI-A Pace Analytical Services - Asheville

#### ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

# **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Groundwater Soccer Complex

Pace Project No.: 9277837

Analytical QC Batch Method Lab ID Sample ID QC Batch Batch **Analytical Method** 9277837001 GW-1 EPA 350.1 WETA/8246 9277837002 GW-2 EPA 350.1 WETA/8246 9277837003 GW-3 EPA 350.1 WETA/8246 9277837004 GW-4 EPA 350.1 WETA/8246 DUP 9277837005 EPA 350.1 WETA/8246 W-1 9277837006 EPA 350.1 WETA/8246 W-3 9277837007 EPA 350.1 WETA/8246 9277837008 W-5 EPA 350.1 WETA/8246 9277837001 GW-1 EPA 353.2 WETA/8176 9277837002 GW-2 EPA 353.2 WETA/8176 GW-3 9277837003 EPA 353.2 WETA/8176 9277837004 GW-4 EPA 353.2 WETA/8176 9277837005 DUP EPA 353.2 WETA/8176 9277837006 W-1 EPA 353.2 WETA/8176 9277837007 W-3 EPA 353.2 WETA/8176 9277837008 W-5 EPA 353.2 WETA/8176 9277837001 GW-1 SM 5220D WETA/8205 9277837002 GW-2 SM 5220D WETA/8205 9277837003 GW-3 SM 5220D WETA/8205 9277837004 GW-4 SM 5220D WETA/8205 9277837005 DUP SM 5220D WETA/8205 W-1 9277837006 SM 5220D WETA/8205 9277837007 W-3 SM 5220D WETA/8205 9277837008 W-5 SM 5220D WETA/8205

# **REPORT OF LABORATORY ANALYSIS**

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and the second	Sam	ple Con	ditior	n Upon Recei	ipt	
Face Analytical	Client Name	e:	5	<del>.</del>	Project :	# <u>9277837</u>
Where Received: 🛛 🕅	Huntersville	Asheville		Eden		
Courier: 🕅 Fed Ex 🔲 UPS [	USPS Client	Comr	nercial	Pace Other		Optional
Custody Seal on Cooler/Box P	r <b>esent:</b> 🔲 yes	no 🗹	Seals	s intact: 🗌 yes	s 🗌 no	Proj. Due Date: Proj. Name:
Packing Material: [] Bubble W	Vrap Bubble B	ags 🖾 N	lone	Other		i i oj. Nanic.
<b>Thermometer Used:</b> IR Gun : T8	809 -	Type of Ice	: (We	Blue None		on ice, cooling process has begun
Femp Correction Factor: Add	/ Subtract	0	C			11 1. 1. e J
Corrected Cooler Temp.:	<u>3.1</u> c	Biological	Tissue	is Frozen: Yes( Comments:	No Date a	the initials of person examining tents. $\underline{\int \mathcal{E} \frac{109}{11}}$
Chain of Custody Present:		□Yes □No	ZIN/A	1.		
Chain of Custody Filled Out:		□Yes □No	ĮZIN/A	2.		
Chain of Custody Relinquished:		□Yes □No	ZN/A	3.		
Sampler Name & Signature on C	COC:	□Yes □No	ZIN/A	4.		
Samples Arrived within Hold Time	e:	ØYes □No	□n/a	5.		
Short Hold Time Analysis (<72	hr):	ÍYes □No	□n/a	6		
Rush Turn Around Time Reque	ested:	□Yes ØNo	□N/A	7.		
Sufficient Volume:		ØYes □No	□n/a	8.		
Correct Containers Used:	ł	ØYes □No	□n/A	9.		
-Pace Containers Used:		ŹYes □No	□n/A	· · · · · · · · · · · · · · · · · · ·		
Containers Intact:		PYes □No	□N/A	10.		
iltered volume received for Diss	olved tests	□Yes □No	<u>/</u> 1N/A	11.		
ample Labels match COC:	ſ	□Yes □No	ØN/A	12 RACK-		·····
-Includes date/time/ID/Analysi Il containers needing preservation hav	s Matrix: re been checked.	Í Yes □No	 N/A	13.		
Il containers needing preservation ar qmpliance with EPA recommendatio	re found to be in	I ∏Yes □No	□n/A			
ceptions: VOA, coliform, TOC, O&G, WI	I-DRO (water)	□Yes □No		Initial when completed		, 
amples checked for dechlorinati	ion: [	IYes □No	□n/A	14. Recived	DechlorianT	10 Pottlus full of sape
leadspace in VOA Vials ( >6mm`	): [	⊡Yes ⊡No	ØN/A	15.		
rip Blank Present:	[	∃Yes □No	, ФЛ/А	16.		
rip Blank Custody Seals Present	t [	□Yes □No	ΠΩN/A			
ace Trip Blank Lot # (if purchase	ed):					
lient Notification/ Resolution:					Field Data	Required? Y / N
Person Contacted:			Date/	Гіте:		
Comments/ Resolution:			<u> </u>			
Project Manager Review:		EW			Da	ite: 9/17/10

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHN Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers) \_\_\_\_



Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

October 15, 2010

Ms. Amy Conchas ECS 7211 Ogden Business Park Suite 201 Wilmington, NC 28411

RE: Project: Soccer Complex 12830C Pace Project No.: 9279105

Dear Ms. Conchas:

Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

askley Mying

Ashley Nifong ashley.nifong@pacelabs.com Project Manager

Enclosures

# **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

## CERTIFICATIONS

Project: Soccer Complex 12830C

Pace Project No.: 9279105

#### **Charlotte Certification IDs**

9800 Kincey Ave. Ste 100, Huntersville, NC 28078 Louisiana/LELAP Certification #: 04034 New Jersey Certification #: NC012 North Carolina Drinking Water Certification #: 37706 North Carolina Field Services Certification #: 5342 North Carolina Wastewater Certification #: 12 Pennsylvania Certification #: 68-00784

#### Asheville Certification IDs

2225 Riverside Dr., Asheville, NC 28804 Connecticut Certification #: PH-0106 Florida/NELAP Certification #: E87648 Massachusetts Certification #: M-NC030 New Jersey Certification #: NC011 North Carolina Bioassay Certification #: 9 South Carolina Certification #: 99006001 South Carolina Drinking Water Cert. #: 99006003 Virginia Certification #: 00213 Connecticut Certification #: PH-0104 Florida/NELAP Certification #: E87627 Kentucky UST Certification #: 84 Louisiana DHH Drinking Water # LA 100031

North Carolina Drinking Water Certification #: 37712 North Carolina Wastewater Certification #: 40 Pennsylvania Certification #: 68-03578 South Carolina Bioassay Certification #: 99030002 South Carolina Certification #: 99030001 Virginia Certification #: 00072

## **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

# SAMPLE ANALYTE COUNT

Project: Soccer Complex 12830C Pace Project No.: 9279105

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9279105001	GW-1	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A
9279105002	GW-2	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A
9279105003	GW-4	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A
9279105004	W-1	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A
9279105005	W-3	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A
9279105006	W-5	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A
9279105007	GW-3	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A
9279105008	Duplicate	EPA 6010	SHB	12	PASI-A
		EPA 7470	JMW	1	PASI-A

# **REPORT OF LABORATORY ANALYSIS**

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# SAMPLE ANALYTE COUNT

Project:Soccer Complex 12830CPace Project No.:9279105

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260	MCK	63	PASI-C
		SM 4500-CI-E	SDH	1	PASI-A
		SM 5310B	RAB	1	PASI-A

# **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

## ANALYTICAL RESULTS

Project: Soccer Complex 12830C

Pace Project No.: 9279105

Lab ID: 9279105001 Received: 10/06/10 09:30 Sample: GW-1 Collected: 10/05/10 15:30 Matrix: Water Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual **6010 MET ICP** Analytical Method: EPA 6010 Preparation Method: EPA 3010 Antimony ND ug/L 5.0 1 10/07/10 12:30 10/10/10 03:33 7440-36-0 ND ug/L 10/07/10 12:30 10/10/10 03:33 7440-38-2 Arsenic 5.0 1 ND ug/L Beryllium 1.0 10/07/10 12:30 10/10/10 03:33 7440-41-7 1 Cadmium ND ug/L 10/07/10 12:30 10/10/10 03:33 7440-43-9 1.0 1 ND ug/L 10/07/10 12:30 10/10/10 03:33 7440-47-3 Chromium 5.0 1 Copper 23.9 ug/L 5.0 1 10/07/10 12:30 10/10/10 03:33 7440-50-8 Lead 6.8 ug/L 5.0 1 10/07/10 12:30 10/10/10 03:33 7439-92-1 Nickel 16.2 ug/L 5.0 10/07/10 12:30 10/10/10 03:33 7440-02-0 1 Selenium ND ug/L 10.0 1 10/07/10 12:30 10/10/10 03:33 7782-49-2 ND ug/L Silver 5.0 1 10/07/10 12:30 10/10/10 03:33 7440-22-4 Thallium ND ug/L 10.0 10/07/10 12:30 10/10/10 03:33 7440-28-0 1 12.0 ug/L 10.0 10/07/10 12:30 10/10/10 03:33 7440-66-6 Zinc 1 7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470 ND ug/L 0.20 10/07/10 20:20 10/13/10 15:54 7439-97-6 Mercurv 1 8260 MSV Low Level Analytical Method: EPA 8260 Acetone ND ua/L 25.0 1 10/07/10 05:14 67-64-1 8.5 ug/L 10/07/10 05:14 71-43-2 Benzene 10 1 ND ug/L 10/07/10 05:14 108-86-1 Bromobenzene 1.0 1 Bromochloromethane ND ug/L 10/07/10 05:14 74-97-5 1.0 1 Bromodichloromethane ND ug/L 1.0 10/07/10 05:14 75-27-4 1 Bromoform ND ug/L 1.0 1 10/07/10 05:14 75-25-2 Bromomethane ND ug/L 2.0 10/07/10 05:14 74-83-9 1 2-Butanone (MEK) ND ug/L 5.0 10/07/10 05:14 78-93-3 1 Carbon tetrachloride ND ug/L 1.0 1 10/07/10 05:14 56-23-5 Chlorobenzene 39.5 ug/L 10/07/10 05:14 108-90-7 1.0 1 Chloroethane ND ug/L 1.0 10/07/10 05:14 75-00-3 1 Chloroform ND ug/L 1.0 10/07/10 05:14 67-66-3 1 Chloromethane ND ug/L 1.0 10/07/10 05:14 74-87-3 1 2-Chlorotoluene 10/07/10 05:14 95-49-8 ND ug/L 1.0 1 10/07/10 05:14 106-43-4 4-Chlorotoluene ND ug/L 1.0 1 1,2-Dibromo-3-chloropropane ND ug/L 5.0 10/07/10 05:14 96-12-8 1 Dibromochloromethane ND ug/L 1.0 1 10/07/10 05:14 124-48-1 10/07/10 05:14 106-93-4 1,2-Dibromoethane (EDB) ND ug/L 1.0 1 Dibromomethane ND ug/L 1.0 1 10/07/10 05:14 74-95-3 1,2-Dichlorobenzene 1.3 ug/L 10/07/10 05:14 95-50-1 1.0 1 10/07/10 05:14 541-73-1 1,3-Dichlorobenzene 1.1 ug/L 1.0 1 1,4-Dichlorobenzene 6.3 ug/L 1.0 10/07/10 05:14 106-46-7 1 Dichlorodifluoromethane ND ug/L 1.0 10/07/10 05:14 75-71-8 1 1.1-Dichloroethane ND ug/L 1.0 1 10/07/10 05:14 75-34-3 1,2-Dichloroethane ND ug/L 10 10/07/10 05:14 107-06-2 1 ND ug/L 1,1-Dichloroethene 1.0 1 10/07/10 05:14 75-35-4 ND ug/L 10/07/10 05:14 156-59-2 cis-1,2-Dichloroethene 1.0 1 trans-1,2-Dichloroethene ND ug/L 1.0 1 10/07/10 05:14 156-60-5 1,2-Dichloropropane ND ug/L 1.0 1 10/07/10 05:14 78-87-5

Date: 10/15/2010 04:35 PM

## **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

# ANALYTICAL RESULTS

## Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: GW-1	Lab ID: 927910500	Collected: 10/05/10	15:30	Received: 10	0/06/10 09:30 N	latrix: Water	
Parameters	Results Un	its Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EP	PA 8260					
1,3-Dichloropropane	ND ug/L	1.0	1		10/07/10 05:14	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 05:14	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1		10/07/10 05:14	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 05:14	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 05:14	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1		10/07/10 05:14	108-20-3	
Ethylbenzene	ND ug/L	1.0	1		10/07/10 05:14	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		10/07/10 05:14	87-68-3	
2-Hexanone	ND ug/L	5.0	1		10/07/10 05:14	591-78-6	
p-Isopropyltoluene	<b>2.3</b> ug/L	1.0	1		10/07/10 05:14	99-87-6	
Methylene Chloride	ND ug/L	2.0	1		10/07/10 05:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1		10/07/10 05:14	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		10/07/10 05:14	1634-04-4	
Naphthalene	<b>25.3</b> ug/L	1.0	1		10/07/10 05:14	91-20-3	
Styrene	ND ug/L	1.0	1		10/07/10 05:14	100-42-5	
1.1.2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 05:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 05:14	79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		10/07/10 05:14	127-18-4	
Toluene	ND ug/L	1.0	1		10/07/10 05:14	108-88-3	
1.2.3-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 05:14	87-61-6	
1.2.4-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 05:14	120-82-1	
1.1.1-Trichloroethane	ND ug/L	1.0	1		10/07/10 05:14	71-55-6	
1.1.2-Trichloroethane	ND ug/L	1.0	1		10/07/10 05:14	79-00-5	
Trichloroethene	ND ug/l	1.0	1		10/07/10 05:14	79-01-6	
Trichlorofluoromethane		10	1		10/07/10 05:14	75-69-4	
1 2 3-Trichloropropane		1.0	1		10/07/10 05:14	96-18-4	
Vinyl acetate		20	1		10/07/10 05:14	108-05-4	
Vinyl chloride		1.0	1		10/07/10 05:14	75-01-4	
m&p-Xylene		2.0	1		10/07/10 05:14	179601-23-1	
o-Xvlene	2.1 ug/l	1.0	1		10/07/10 05:14	95-47-6	
4-Bromofluorobenzene (S)	95 %	70-130	1		10/07/10 05:14	460-00-4	
Dibromofluoromethane (S)	96 %	70-130	1		10/07/10 05:14	1868-53-7	
1 2-Dichloroethane-d4 (S)	98 %	70-130	1		10/07/10 05:14	17060-07-0	
Toluene-d8 (S)	100 %	70-130	1		10/07/10 05:14	2037-26-5	
4500 Chlorido	Applytical Mathad: SN	4500 CLE	'		10/01/10 03.14	2007 20 0	
		F 0	1		10/14/10 12:20	16997 00 6	
	5.5 mg/L	5.0	I		10/14/10 13:20	0007-00-0	
5310B TOC	Analytical Method: SM	15310B					
Total Organic Carbon	<b>42.2</b> mg/L	1.0	1		10/12/10 16:59	7440-44-0	

# **REPORT OF LABORATORY ANALYSIS**





Received: 10/06/10 09:30

Analyzed

Prepared

Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

Matrix: Water

CAS No.

Qual

# **ANALYTICAL RESULTS**

Collected: 10/05/10 16:45

Report Limit

DF

Project: r Complex 12830C Soc

Pace Project No.: 9279105

cer	Complex	120300

ID: 9279105002

Units

Sample: GW-2	Lab ID
Parameters	Results
	Applytics

6010 MET ICP	Analytical Method: EPA 6010 Prep	aration Metho	od: EP	PA 3010		
Antimony	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:36	7440-36-0
Arsenic	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:36	7440-38-2
Beryllium	ND ug/L	1.0	1	10/07/10 12:30	10/10/10 03:36	7440-41-7
Cadmium	ND ug/L	1.0	1	10/07/10 12:30	10/10/10 03:36	7440-43-9
Chromium	<b>13.7</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:36	7440-47-3
Copper	<b>18.5</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:36	7440-50-8
Lead	<b>19.4</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:36	7439-92-1
Nickel	<b>12.7</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:36	7440-02-0
Selenium	ND ug/L	10.0	1	10/07/10 12:30	10/10/10 03:36	7782-49-2
Silver	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:36	7440-22-4
Thallium	ND ug/L	10.0	1	10/07/10 12:30	10/10/10 03:36	7440-28-0
Zinc	<b>23.8</b> ug/L	10.0	1	10/07/10 12:30	10/10/10 03:36	7440-66-6
7470 Mercury	Analytical Method: EPA 7470 Prep	aration Metho	od: EP	PA 7470		
Mercury	ND ug/L	0.20	1	10/07/10 20:20	10/13/10 15:56	7439-97-6
8260 MSV Low Level	Analytical Method: EPA 8260					
Acetone	ND ug/L	25.0	1		10/07/10 05:39	67-64-1
Benzene	<b>8.6</b> ug/L	1.0	1		10/07/10 05:39	71-43-2
Bromobenzene	ND ug/L	1.0	1		10/07/10 05:39	108-86-1
Bromochloromethane	ND ug/L	1.0	1		10/07/10 05:39	74-97-5
Bromodichloromethane	ND ug/L	1.0	1		10/07/10 05:39	75-27-4
Bromoform	ND ug/L	1.0	1		10/07/10 05:39	75-25-2
Bromomethane	ND ug/L	2.0	1		10/07/10 05:39	74-83-9
2-Butanone (MEK)	ND ug/L	5.0	1		10/07/10 05:39	78-93-3
Carbon tetrachloride	ND ug/L	1.0	1		10/07/10 05:39	56-23-5
Chlorobenzene	54.5 ug/L	1.0	1		10/07/10 05:39	108-90-7
Chloroethane	ND ug/L	1.0	1		10/07/10 05:39	75-00-3
Chloroform	ND ug/L	1.0	1		10/07/10 05:39	67-66-3
Chloromethane	ND ug/L	1.0	1		10/07/10 05:39	74-87-3
2-Chlorotoluene	ND ug/L	1.0	1		10/07/10 05:39	95-49-8
4-Chlorotoluene	ND ug/L	1.0	1		10/07/10 05:39	106-43-4
1,2-Dibromo-3-chloropropane	ND ug/L	5.0	1		10/07/10 05:39	96-12-8
Dibromochloromethane	ND ug/L	1.0	1		10/07/10 05:39	124-48-1
1,2-Dibromoethane (EDB)	ND ug/L	1.0	1		10/07/10 05:39	106-93-4
Dibromomethane	ND ug/L	1.0	1		10/07/10 05:39	74-95-3
1,2-Dichlorobenzene	6.6 ug/L	1.0	1		10/07/10 05:39	95-50-1
1,3-Dichlorobenzene	ND ug/L	1.0	1		10/07/10 05:39	541-73-1
1,4-Dichlorobenzene	<b>11.5</b> ug/L	1.0	1		10/07/10 05:39	106-46-7
Dichlorodifluoromethane	ND ug/L	1.0	1		10/07/10 05:39	75-71-8
1,1-Dichloroethane	ND ug/L	1.0	1		10/07/10 05:39	75-34-3
1,2-Dichloroethane	ND ug/L	1.0	1		10/07/10 05:39	107-06-2
1.1-Dichloroethene	ND ug/L	1.0	1		10/07/10 05:39	75-35-4
cis-1.2-Dichloroethene	ND ug/L	1.0	1		10/07/10 05:39	156-59-2
trans-1,2-Dichloroethene	ND ug/L	1.0	1		10/07/10 05:39	156-60-5
1,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 05:39	78-87-5

Date: 10/15/2010 04:35 PM

# **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

# ANALYTICAL RESULTS

## Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: GW-2	Lab ID: 9279105	Collected: 10/05/1	Collected: 10/05/10 16:45		0 09:30 N	latrix: Water	
Parameters	ResultsL	Inits Report Limit	DF	Prepared A	nalyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: E						
1,3-Dichloropropane	ND ug/L	1.0	1	10/0	7/10 05:39	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1	10/0	7/10 05:39	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1	10/0	7/10 05:39	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1	10/0	7/10 05:39	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1	10/0	7/10 05:39	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1	10/0	7/10 05:39	108-20-3	
Ethylbenzene	ND ug/L	1.0	1	10/0	7/10 05:39	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1	10/0	7/10 05:39	87-68-3	
2-Hexanone	ND ug/L	5.0	1	10/0	7/10 05:39	591-78-6	
p-Isopropyltoluene	ND ug/L	1.0	1	10/0	7/10 05:39	99-87-6	
Methylene Chloride	ND ug/L	2.0	1	10/0	7/10 05:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1	10/0	7/10 05:39	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1	10/0	7/10 05:39	1634-04-4	
Naphthalene	<b>1.5</b> ug/L	1.0	1	10/0	7/10 05:39	91-20-3	
Styrene	ND ua/L	1.0	1	10/0	7/10 05:39	100-42-5	
1.1.1.2-Tetrachloroethane	ND ua/L	1.0	1	10/0	7/10 05:39	630-20-6	
1.1.2.2-Tetrachloroethane	ND ua/L	1.0	1	10/0	7/10 05:39	79-34-5	
Tetrachloroethene	ND ua/L	1.0	1	10/0	7/10 05:39	127-18-4	
Toluene	ND ug/L	1.0	1	10/0	7/10 05:39	108-88-3	
1.2.3-Trichlorobenzene	ND ug/L	1.0	1	10/0	7/10 05:39	87-61-6	
1.2.4-Trichlorobenzene	ND ug/l	1.0	1	10/0	7/10 05:39	120-82-1	
1.1.1-Trichloroethane	ND ug/l	1.0	1	10/0	7/10 05:39	71-55-6	
1 1 2-Trichloroethane	ND ug/L	1.0	1	10/0	7/10 05:39	79-00-5	
Trichloroethene	ND ug/L	1.0	1	10/0	7/10 05:39	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1	10/0	7/10 05:39	75-69-4	
1 2 3-Trichloropropane	ND ug/L	1.0	1	10/0	7/10 00:00	96-18-4	
Vinyl acetate	ND ug/L	2.0	1	10/0	7/10 05:30	108-05-4	
Vinyl chloride	ND ug/L	1.0	1	10/0	7/10 05:39	75-01-4	
m&p-Xylene	ND ug/L	2.0	1	10/0	7/10 05:39	179601-23-1	
o-Xylene	ND ug/L	1.0	1	10/0	7/10 05:39	95-47-6	
4-Bromofluorobenzene (S)	101 %	70-130	1	10/0	7/10 05:30	460-00-4	
Dibromofluoromethane (S)	101 %	70-130	1	10/0	7/10 05:30	1868-53-7	
1 2-Dichloroethane-d4 (S)	101 %	70-130	1	10/0	7/10 05:30	17060-07-0	
Toluene-d8 (S)	102 %	70-130	1	10/0	7/10 05:39	2037-26-5	
4500 Chlorido	Apolytical Mathedy	70-130		10/0	7/10/05.59	2037-20-3	
					140.40.00	40007 00 0	
Chioride	<b>32.6</b> mg/L	5.0	1	10/1	4/10 13:20	16887-00-6	
5310B TOC	Analytical Method: S	SM 5310B					
Total Organic Carbon	<b>183</b> mg/L	3.0	3	10/1	2/10 09:59	7440-44-0	

# **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

## ANALYTICAL RESULTS

Project: Soccer Complex 12830C

Pace Project No.: 9279105

Lab ID: 9279105003 Received: 10/06/10 09:30 Sample: GW-4 Collected: 10/05/10 11:30 Matrix: Water Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual **6010 MET ICP** Analytical Method: EPA 6010 Preparation Method: EPA 3010 Antimony ND ug/L 5.0 1 10/07/10 12:30 10/10/10 03:39 7440-36-0 ND ug/L 10/07/10 12:30 10/10/10 03:39 7440-38-2 Arsenic 5.0 1 ND ug/L Beryllium 1.0 10/07/10 12:30 10/10/10 03:39 7440-41-7 1 Cadmium ND ug/L 10/07/10 12:30 10/10/10 03:39 7440-43-9 1.0 1 22.9 ug/L Chromium 5.0 1 10/07/10 12:30 10/10/10 03:39 7440-47-3 Copper 14.1 ug/L 5.0 1 10/07/10 12:30 10/10/10 03:39 7440-50-8 Lead 19.6 ug/L 5.0 1 10/07/10 12:30 10/10/10 03:39 7439-92-1 Nickel 20.9 ug/L 5.0 10/07/10 12:30 10/10/10 03:39 7440-02-0 1 Selenium ND ug/L 10.0 1 10/07/10 12:30 10/10/10 03:39 7782-49-2 ND ug/L Silver 5.0 1 10/07/10 12:30 10/10/10 03:39 7440-22-4 Thallium ND ug/L 10.0 10/07/10 12:30 10/10/10 03:39 7440-28-0 1 189 ug/L 10.0 10/07/10 12:30 10/10/10 03:39 7440-66-6 Zinc 1 7470 Mercury Analytical Method: EPA 7470 Preparation Method: EPA 7470 ND ug/L 0.20 10/12/10 14:30 10/13/10 16:20 7439-97-6 Mercurv 1 8260 MSV Low Level Analytical Method: EPA 8260 Acetone ND ua/L 25.0 1 10/07/10 06:05 67-64-1 2.5 ug/L 10/07/10 06:05 71-43-2 Benzene 10 1 ND ug/L 10/07/10 06:05 108-86-1 Bromobenzene 1.0 1 Bromochloromethane ND ug/L 10/07/10 06:05 74-97-5 1.0 1 Bromodichloromethane ND ug/L 1.0 10/07/10 06:05 75-27-4 1 Bromoform ND ug/L 1.0 1 10/07/10 06:05 75-25-2 Bromomethane ND ug/L 2.0 10/07/10 06:05 74-83-9 1 2-Butanone (MEK) ND ug/L 5.0 10/07/10 06:05 78-93-3 1 Carbon tetrachloride ND ug/L 1.0 1 10/07/10 06:05 56-23-5 Chlorobenzene 10/07/10 06:05 108-90-7 34.4 ug/L 1.0 1 Chloroethane ND ug/L 1.0 10/07/10 06:05 75-00-3 1 Chloroform ND ug/L 1.0 10/07/10 06:05 67-66-3 1 Chloromethane ND ug/L 1.0 10/07/10 06:05 74-87-3 1 2-Chlorotoluene 10/07/10 06:05 95-49-8 ND ug/L 1.0 1 10/07/10 06:05 106-43-4 4-Chlorotoluene ND ug/L 1.0 1 1,2-Dibromo-3-chloropropane ND ug/L 5.0 10/07/10 06:05 96-12-8 1 Dibromochloromethane ND ug/L 1.0 1 10/07/10 06:05 124-48-1 10/07/10 06:05 106-93-4 1,2-Dibromoethane (EDB) ND ug/L 1.0 1 Dibromomethane ND ug/L 1.0 1 10/07/10 06:05 74-95-3 1,2-Dichlorobenzene 3.8 ug/L 10/07/10 06:05 95-50-1 1.0 1 ND ug/L 1,3-Dichlorobenzene 1.0 1 10/07/10 06:05 541-73-1 1,4-Dichlorobenzene 6.1 ug/L 1.0 10/07/10 06:05 106-46-7 1 Dichlorodifluoromethane ND ug/L 1.0 10/07/10 06:05 75-71-8 1 1.1-Dichloroethane ND ug/L 1.0 1 10/07/10 06:05 75-34-3 1,2-Dichloroethane ND ug/L 10 10/07/10 06:05 107-06-2 1 ND ug/L 10/07/10 06:05 75-35-4 1,1-Dichloroethene 1.0 1 ND ug/L cis-1,2-Dichloroethene 1.0 1 10/07/10 06:05 156-59-2 trans-1,2-Dichloroethene ND ug/L 1.0 1 10/07/10 06:05 156-60-5 1,2-Dichloropropane ND ug/L 1.0 1 10/07/10 06:05 78-87-5

Date: 10/15/2010 04:35 PM

## **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

# ANALYTICAL RESULTS

## Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: GW-4	Lab ID: 927910500	3 Collected: 10/05/1	Collected: 10/05/10 11:30		Received: 10/06/10 09:30 Matrix: Water		
Parameters	ResultsUni	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EP	A 8260					
1,3-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:05	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:05	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:05	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:05	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:05	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1		10/07/10 06:05	108-20-3	
Ethylbenzene	ND ug/L	1.0	1		10/07/10 06:05	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		10/07/10 06:05	87-68-3	
2-Hexanone	ND ug/L	5.0	1		10/07/10 06:05	591-78-6	
p-Isopropyltoluene	ND ug/L	1.0	1		10/07/10 06:05	99-87-6	
Methylene Chloride	ND ug/L	2.0	1		10/07/10 06:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1		10/07/10 06:05	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		10/07/10 06:05	1634-04-4	
Naphthalene	<b>1.6</b> ug/L	1.0	1		10/07/10 06:05	91-20-3	
Styrene	ND ug/L	1.0	1		10/07/10 06:05	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 06:05	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 06:05	79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		10/07/10 06:05	127-18-4	
Toluene	ND ug/L	1.0	1		10/07/10 06:05	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 06:05	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 06:05	120-82-1	
1,1,1-Trichloroethane	ND ug/L	1.0	1		10/07/10 06:05	71-55-6	
1,1,2-Trichloroethane	ND ug/L	1.0	1		10/07/10 06:05	79-00-5	
Trichloroethene	ND ug/L	1.0	1		10/07/10 06:05	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		10/07/10 06:05	75-69-4	
1,2,3-Trichloropropane	ND ug/L	1.0	1		10/07/10 06:05	96-18-4	
Vinyl acetate	ND ug/L	2.0	1		10/07/10 06:05	108-05-4	
Vinyl chloride	ND ug/L	1.0	1		10/07/10 06:05	75-01-4	
m&p-Xylene	ND ug/L	2.0	1		10/07/10 06:05	179601-23-1	
o-Xylene	<b>2.2</b> ug/L	1.0	1		10/07/10 06:05	95-47-6	
4-Bromofluorobenzene (S)	95 %	70-130	1		10/07/10 06:05	460-00-4	
Dibromofluoromethane (S)	98 %	70-130	1		10/07/10 06:05	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %	70-130	1		10/07/10 06:05	17060-07-0	
Toluene-d8 (S)	102 %	70-130	1		10/07/10 06:05	2037-26-5	
4500 Chloride	Analytical Method: SM	1 4500-CI-E					
Chloride	<b>7.5</b> mg/L	5.0	1		10/14/10 13:26	16887-00-6	
5310B TOC	Analytical Method: SN	I 5310B					
Total Organic Carbon	<b>42.6</b> mg/L	1.0	1		10/12/10 17:20	7440-44-0	

# **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### **ANALYTICAL RESULTS**

Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: W-1	Lab ID: 92791050	004 Collected: 10/05/	Collected: 10/05/10 12:30		Received: 10/06/10 09:30 Matrix: Water			
Parameters	Results U	nits Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010 MET ICP	Analytical Method: E	PA 6010 Preparation Me	thod: EP	A 3010				
Antimony	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:42	7440-36-0		
Arsenic	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:42	7440-38-2		
Beryllium	ND ug/L	1.0	1	10/07/10 12:30	10/10/10 03:42	7440-41-7		
Cadmium	ND ug/L	1.0	1	10/07/10 12:30	10/10/10 03:42	7440-43-9		
Chromium	<b>22.7</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:42	7440-47-3		
Copper	<b>7.1</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:42	7440-50-8		
Lead	<b>12.1</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:42	7439-92-1		
Nickel	<b>13.7</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:42	7440-02-0		
Selenium	ND ug/L	10.0	1	10/07/10 12:30	10/10/10 03:42	7782-49-2		
Silver	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:42	7440-22-4		
Thallium	ND ug/L	10.0	1	10/07/10 12:30	10/10/10 03:42	7440-28-0		
Zinc	<b>20.5</b> ug/L	10.0	1	10/07/10 12:30	10/10/10 03:42	7440-66-6		
7470 Mercury	Analytical Method: E	PA 7470 Preparation Me	thod: EP	A 7470				
Mercury	ND ug/L	0.20	1	10/12/10 14:30	10/13/10 16:28	7439-97-6		
8260 MSV Low Level	Analytical Method: E	PA 8260						
Acetone	ND ug/L	25.0	1		10/07/10 06:30	67-64-1		
Benzene	ND ug/L	1.0	1		10/07/10 06:30	71-43-2		
Bromobenzene	ND ug/L	1.0	1		10/07/10 06:30	108-86-1		
Bromochloromethane	ND ug/L	1.0	1		10/07/10 06:30	74-97-5		
Bromodichloromethane	ND ug/L	1.0	1		10/07/10 06:30	75-27-4		
Bromoform	ND ug/L	1.0	1		10/07/10 06:30	75-25-2		
Bromomethane	ND ug/L	2.0	1		10/07/10 06:30	74-83-9		
2-Butanone (MEK)	ND ug/L	5.0	1		10/07/10 06:30	78-93-3		
Carbon tetrachloride	ND ug/L	1.0	1		10/07/10 06:30	56-23-5		
Chlorobenzene	ND ug/L	1.0	1		10/07/10 06:30	108-90-7		
Chloroethane	ND ug/L	1.0	1		10/07/10 06:30	75-00-3		
Chloroform	ND ug/L	1.0	1		10/07/10 06:30	67-66-3		
Chloromethane	ND ug/L	1.0	1		10/07/10 06:30	74-87-3		
2-Chlorotoluene	ND ug/L	1.0	1		10/07/10 06:30	95-49-8		
4-Chlorotoluene	ND ug/L	1.0	1		10/07/10 06:30	106-43-4		
1,2-Dibromo-3-chloropropane	ND ug/L	5.0	1		10/07/10 06:30	96-12-8		
Dibromochloromethane	ND ug/L	1.0	1		10/07/10 06:30	124-48-1		
1,2-Dibromoethane (EDB)	ND ug/L	1.0	1		10/07/10 06:30	106-93-4		
Dibromomethane	ND ug/L	1.0	1		10/07/10 06:30	74-95-3		
1,2-Dichlorobenzene	ND ug/L	1.0	1		10/07/10 06:30	95-50-1		
1,3-Dichlorobenzene	ND ug/L	1.0	1		10/07/10 06:30	541-73-1		
1,4-Dichlorobenzene	ND ug/L	1.0	1		10/07/10 06:30	106-46-7		
Dichlorodifluoromethane	ND ug/L	1.0	1		10/07/10 06:30	75-71-8		
1,1-Dichloroethane	ND ug/L	1.0	1		10/07/10 06:30	75-34-3		
1,2-Dichloroethane	ND ug/L	1.0	1		10/07/10 06:30	107-06-2		
1,1-Dichloroethene	ND ug/L	1.0	1		10/07/10 06:30	75-35-4		
cis-1,2-Dichloroethene	ND ug/L	1.0	1		10/07/10 06:30	156-59-2		
trans-1,2-Dichloroethene	ND ug/L	1.0	1		10/07/10 06:30	156-60-5		
1,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:30	78-87-5		

Date: 10/15/2010 04:35 PM

### **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### ANALYTICAL RESULTS

#### Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: W-1	Lab ID: 927910500	04 Collected: 10/05/1	0 12:30	Received: 10	0/06/10 09:30 N	latrix: Water	
Parameters	Results Ur	nits Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EF	PA 8260					
1,3-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:30	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:30	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:30	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:30	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:30	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1		10/07/10 06:30	108-20-3	
Ethylbenzene	ND ug/L	1.0	1		10/07/10 06:30	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		10/07/10 06:30	87-68-3	
2-Hexanone	ND ug/L	5.0	1		10/07/10 06:30	591-78-6	
p-Isopropyltoluene	ND ug/L	1.0	1		10/07/10 06:30	99-87-6	
Methylene Chloride	ND ug/L	2.0	1		10/07/10 06:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1		10/07/10 06:30	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		10/07/10 06:30	1634-04-4	
Naphthalene	ND ug/L	1.0	1		10/07/10 06:30	91-20-3	
Styrene	ND ug/L	1.0	1		10/07/10 06:30	100-42-5	
1,1,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 06:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 06:30	79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		10/07/10 06:30	127-18-4	
Toluene	ND ug/L	1.0	1		10/07/10 06:30	108-88-3	
1.2.3-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 06:30	87-61-6	
1.2.4-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 06:30	120-82-1	
1.1.1-Trichloroethane	ND ug/L	1.0	1		10/07/10 06:30	71-55-6	
1.1.2-Trichloroethane	ND ug/L	1.0	1		10/07/10 06:30	79-00-5	
Trichloroethene	ND ug/L	1.0	1		10/07/10 06:30	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		10/07/10 06:30	75-69-4	
1.2.3-Trichloropropane		1.0	1		10/07/10 06:30	96-18-4	
Vinvl acetate	ND ug/L	2.0	1		10/07/10 06:30	108-05-4	
Vinvl chloride	ND ug/L	1.0	1		10/07/10 06:30	75-01-4	
m&p-Xvlene	ND ug/L	2.0	1		10/07/10 06:30	179601-23-1	
o-Xvlene	ND ug/L	1.0	1		10/07/10 06:30	95-47-6	
4-Bromofluorobenzene (S)	97 %	70-130	1		10/07/10 06:30	460-00-4	
Dibromofluoromethane (S)	97 %	70-130	1		10/07/10 06:30	1868-53-7	
1 2-Dichloroethane-d4 (S)	98 %	70-130	1		10/07/10 06:30	17060-07-0	
Toluene-d8 (S)	100 %	70-130	1		10/07/10 06:30	2037-26-5	
4500 Chloride	Analytical Method: SN	4 4500-CLE	·		10/01/10 00.00	2001 20 0	
Chlorido		νι τουυ-υι-∟ <i>Ε</i> Λ	1		10/14/10 12:20	16997 00 6	
		5.0	I		10/14/10 13.20	0007-00-0	
D310B TOC	Analytical Method: SI	VI 5310B					
Total Organic Carbon	<b>20.9</b> mg/L	1.0	1		10/11/10 17:50	7440-44-0	

### **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### **ANALYTICAL RESULTS**

Project: er Complex 12830C Soc

Pace Project No.: 9279105

cer	Complex	120300	

Sample: W-3	Lab ID: 9279105005	Collected: 10/05/10	Collected: 10/05/10 13:00		/06/10 09:30 N	latrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 60	010 Preparation Meth	od: EF	PA 3010			
Antimony	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:46	7440-36-0	
Arsenic	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:46	7440-38-2	
Beryllium	ND ug/L	1.0	1	10/07/10 12:30	10/10/10 03:46	7440-41-7	
Cadmium	ND ug/L	1.0	1	10/07/10 12:30	10/10/10 03:46	7440-43-9	
Chromium	<b>17.8</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:46	7440-47-3	
Copper	<b>9.8</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:46	7440-50-8	
Lead	<b>13.6</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:46	7439-92-1	
Nickel	<b>11.7</b> ug/L	5.0	1	10/07/10 12:30	10/10/10 03:46	7440-02-0	
Selenium	ND ug/L	10.0	1	10/07/10 12:30	10/10/10 03:46	7782-49-2	
Silver	ND ug/L	5.0	1	10/07/10 12:30	10/10/10 03:46	7440-22-4	
Thallium	ND ug/L	10.0	1	10/07/10 12:30	10/10/10 03:46	7440-28-0	
Zinc	<b>21.8</b> ug/L	10.0	1	10/07/10 12:30	10/10/10 03:46	7440-66-6	
7470 Mercury	Analytical Method: EPA 74	170 Preparation Methe	od: EF	PA 7470			
Mercury	ND ug/L	0.20	1	10/12/10 14:30	10/13/10 16:31	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 82	260					
Acetone	ND ug/L	25.0	1		10/07/10 06:56	67-64-1	
Benzene	ND ug/L	1.0	1		10/07/10 06:56	71-43-2	
Bromobenzene	ND ug/L	1.0	1		10/07/10 06:56	108-86-1	
Bromochloromethane	ND ug/L	1.0	1		10/07/10 06:56	74-97-5	
Bromodichloromethane	ND ug/L	1.0	1		10/07/10 06:56	75-27-4	
Bromoform	ND ug/L	1.0	1		10/07/10 06:56	75-25-2	
Bromomethane	ND ug/L	2.0	1		10/07/10 06:56	74-83-9	
2-Butanone (MEK)	ND ug/L	5.0	1		10/07/10 06:56	78-93-3	
Carbon tetrachloride	ND ug/L	1.0	1		10/07/10 06:56	56-23-5	
Chlorobenzene	ND ug/L	1.0	1		10/07/10 06:56	108-90-7	
Chloroethane	ND ug/L	1.0	1		10/07/10 06:56	75-00-3	
Chloroform	ND ug/L	1.0	1		10/07/10 06:56	67-66-3	
Chloromethane	ND ug/L	1.0	1		10/07/10 06:56	74-87-3	
2-Chlorotoluene	ND ug/L	1.0	1		10/07/10 06:56	95-49-8	
4-Chlorotoluene	ND ug/L	1.0	1		10/07/10 06:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L	5.0	1		10/07/10 06:56	96-12-8	
Dibromochloromethane	ND ug/L	1.0	1		10/07/10 06:56	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L	1.0	1		10/07/10 06:56	106-93-4	
Dibromomethane	ND ug/L	1.0	1		10/07/10 06:56	74-95-3	
1,2-Dichlorobenzene	ND ug/L	1.0	1		10/07/10 06:56	95-50-1	
1,3-Dichlorobenzene	ND ug/L	1.0	1		10/07/10 06:56	541-73-1	
1,4-Dichlorobenzene	ND ug/L	1.0	1		10/07/10 06:56	106-46-7	
Dichlorodifluoromethane	ND ug/L	1.0	1		10/07/10 06:56	75-71-8	
1,1-Dichloroethane	ND ug/L	1.0	1		10/07/10 06:56	75-34-3	
1,2-Dichloroethane	ND ug/L	1.0	1		10/07/10 06:56	107-06-2	
1,1-Dichloroethene	ND ug/L	1.0	1		10/07/10 06:56	75-35-4	
cis-1,2-Dichloroethene	ND ug/L	1.0	1		10/07/10 06:56	156-59-2	
trans-1,2-Dichloroethene	ND ug/L	1.0	1		10/07/10 06:56	156-60-5	
1,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:56	78-87-5	

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# **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### ANALYTICAL RESULTS

#### Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: W-3	Lab ID: 927910500	5 Collected: 10/05/10	13:00	Received: 10	0/06/10 09:30 N	latrix: Water	
Parameters	ResultsUni	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EP	A 8260					
1,3-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:56	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 06:56	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:56	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:56	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 06:56	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1		10/07/10 06:56	108-20-3	
Ethylbenzene	ND ug/L	1.0	1		10/07/10 06:56	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		10/07/10 06:56	87-68-3	
2-Hexanone	ND ug/L	5.0	1		10/07/10 06:56	591-78-6	
p-Isopropyltoluene	ND ug/L	1.0	1		10/07/10 06:56	99-87-6	
Methylene Chloride	ND ug/L	2.0	1		10/07/10 06:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1		10/07/10 06:56	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		10/07/10 06:56	1634-04-4	
Naphthalene	ND ug/L	1.0	1		10/07/10 06:56	91-20-3	
Styrene	ND ug/L	1.0	1		10/07/10 06:56	100-42-5	
1,1,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 06:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 06:56	79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		10/07/10 06:56	127-18-4	
Toluene	ND ug/L	1.0	1		10/07/10 06:56	108-88-3	
1.2.3-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 06:56	87-61-6	
1.2.4-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 06:56	120-82-1	
1.1.1-Trichloroethane	ND ug/L	1.0	1		10/07/10 06:56	71-55-6	
1.1.2-Trichloroethane	ND ug/L	1.0	1		10/07/10 06:56	79-00-5	
Trichloroethene	ND ug/L	1.0	1		10/07/10 06:56	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		10/07/10 06:56	75-69-4	
1.2.3-Trichloropropane	ND ug/l	1.0	1		10/07/10 06:56	96-18-4	
Vinvl acetate	ND ug/L	2.0	1		10/07/10 06:56	108-05-4	
Vinvl chloride	ND ug/L	1.0	1		10/07/10 06:56	75-01-4	
m&p-Xvlene	ND ug/L	2.0	1		10/07/10 06:56	179601-23-1	
o-Xvlene	ND ug/L	1.0	1		10/07/10 06:56	95-47-6	
4-Bromofluorobenzene (S)	95 %	70-130	1		10/07/10 06:56	460-00-4	
Dibromofluoromethane (S)	99 %	70-130	1		10/07/10 06:56	1868-53-7	
1.2-Dichloroethane-d4 (S)	97 %	70-130	1		10/07/10 06:56	17060-07-0	
Toluene-d8 (S)	101 %	70-130	1		10/07/10 06:56	2037-26-5	
4500 Chloride	Analytical Method: SM	14500-CI-E			10,01,10 00.00	2007 20 0	
Chloride		5 0	1		10/11/10 12:26	16887.00 6	
	Apolytical Mathed: 01	5.0 1.5210P	I		10/14/10 13.20	10007-00-0	
	Analytical Method: SN	1 33 IUB					
Total Organic Carbon	<b>16.1</b> mg/L	1.0	1		10/11/10 17:59	7440-44-0	

### **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### **ANALYTICAL RESULTS**

Project: Soccer Compl	lex 12830C							
Pace Project No.: 9279105								
Sample: W-5	Lab ID: 92791	05006	Collected: 10/05/1	0 13:45	Received: 10	/06/10 09:30 N	latrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method	d: EPA 60	10 Preparation Met	hod: EPA	A 3010			-
Antimony	ND ug/L		5.0	1	10/07/10 12:30	10/10/10 03:49	7440-36-0	
Arsenic	<b>10.8</b> ug/L		5.0	1	10/07/10 12:30	10/10/10 03:49	7440-38-2	
Beryllium	ND ug/L		1.0	1	10/07/10 12:30	10/10/10 03:49	7440-41-7	
Cadmium	ND ug/L		1.0	1	10/07/10 12:30	10/10/10 03:49	7440-43-9	
Chromium	<b>41.3</b> ug/L		5.0	1	10/07/10 12:30	10/10/10 03:49	7440-47-3	
Copper	<b>40.4</b> ug/L		5.0	1	10/07/10 12:30	10/10/10 03:49	7440-50-8	
Lead	<b>58.5</b> ug/L		5.0	1	10/07/10 12:30	10/10/10 03:49	7439-92-1	
Nickel	<b>25.6</b> ug/L		5.0	1	10/07/10 12:30	10/10/10 03:49	7440-02-0	
Selenium	ND ug/L		10.0	1	10/07/10 12:30	10/10/10 03:49	7782-49-2	
Silver	ND ug/L		5.0	1	10/07/10 12:30	10/10/10 03:49	7440-22-4	
Thallium	ND ug/L		10.0	1	10/07/10 12:30	10/10/10 03:49	7440-28-0	
Zinc	<b>200</b> ug/L		10.0	1	10/07/10 12:30	10/10/10 03:49	7440-66-6	
7470 Mercury	Analytical Method	: EPA 74	70 Preparation Met	hod: EPA	7470			
Mercury	<b>0.43</b> ug/L		0.20	1	10/12/10 14:30	10/13/10 16:39	7439-97-6	
8260 MSV Low Level	Analytical Method	1: EPA 82	60					
Acetone	ND ug/L		25.0	1		10/07/10 07:21	67-64-1	
Benzene	<b>7.2</b> ug/L		1.0	1		10/07/10 07:21	71-43-2	
Bromobenzene	ND ug/L		1.0	1		10/07/10 07:21	108-86-1	
Bromochloromethane	ND ug/L		1.0	1		10/07/10 07:21	74-97-5	
Bromodichloromethane	ND ug/L		1.0	1		10/07/10 07:21	75-27-4	
Bromoform	ND ug/L		1.0	1		10/07/10 07:21	75-25-2	
Bromomethane	ND ug/L		2.0	1		10/07/10 07:21	74-83-9	
2-Butanone (MEK)	ND ug/L		5.0	1		10/07/10 07:21	78-93-3	
Carbon tetrachloride	ND ug/L		1.0	1		10/07/10 07:21	56-23-5	
Chlorobenzene	<b>9.1</b> ug/L		1.0	1		10/07/10 07:21	108-90-7	
Chloroethane	ND ug/L		1.0	1		10/07/10 07:21	75-00-3	
Chloroform	ND ug/L		1.0	1		10/07/10 07:21	67-66-3	
Chloromethane	ND ug/L		1.0	1		10/07/10 07:21	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	1		10/07/10 07:21	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	1		10/07/10 07:21	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		5.0	1		10/07/10 07:21	96-12-8	
Dibromochloromethane	ND ug/L		1.0	1		10/07/10 07:21	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	1		10/07/10 07:21	106-93-4	
Dibromomethane	ND ug/L		1.0	1		10/07/10 07:21	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	1		10/07/10 07:21	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	1		10/07/10 07:21	541-73-1	
1,4-Dichlorobenzene	<b>1.0</b> ug/L		1.0	1		10/07/10 07:21	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	1		10/07/10 07:21	75-71-8	
1,1-Dichloroethane	ND ug/L		1.0	1		10/07/10 07:21	75-34-3	

1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene 1,2-Dichloropropane

1,2-Dichloroethane

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### **REPORT OF LABORATORY ANALYSIS**

1.0

1.0

1.0

1.0

1.0

1

1

1

1

1

ND ug/L

ND ug/L

ND ug/L

ND ug/L

ND ug/L

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10/07/10 07:21 107-06-2

10/07/10 07:21 75-35-4

10/07/10 07:21 156-59-2

10/07/10 07:21 156-60-5

10/07/10 07:21 78-87-5





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### ANALYTICAL RESULTS

#### Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: W-5	Lab ID: 92791050	06 Collected: 10/05/1	0 13:45	Received: 1	0/06/10 09:30 N	latrix: Water	
Parameters	Results U	nits Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: E	PA 8260					
1,3-Dichloropropane	ND ug/L	1.0	1		10/07/10 07:21	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 07:21	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1		10/07/10 07:21	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 07:21	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 07:21	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1		10/07/10 07:21	108-20-3	
Ethylbenzene	ND ug/L	1.0	1		10/07/10 07:21	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		10/07/10 07:21	87-68-3	
2-Hexanone	ND ug/L	5.0	1		10/07/10 07:21	591-78-6	
p-Isopropyltoluene	ND ug/L	1.0	1		10/07/10 07:21	99-87-6	
Methylene Chloride	ND ug/L	2.0	1		10/07/10 07:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1		10/07/10 07:21	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		10/07/10 07:21	1634-04-4	
Naphthalene	6.3 ug/L	1.0	1		10/07/10 07:21	91-20-3	
Styrene	ND ug/L	1.0	1		10/07/10 07:21	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 07:21	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 07:21	79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		10/07/10 07:21	127-18-4	
Toluene	ND ug/L	1.0	1		10/07/10 07:21	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 07:21	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 07:21	120-82-1	
1,1,1-Trichloroethane	ND ug/L	1.0	1		10/07/10 07:21	71-55-6	
1,1,2-Trichloroethane	ND ug/L	1.0	1		10/07/10 07:21	79-00-5	
Trichloroethene	ND ug/L	1.0	1		10/07/10 07:21	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		10/07/10 07:21	75-69-4	
1,2,3-Trichloropropane	ND ug/L	1.0	1		10/07/10 07:21	96-18-4	
Vinyl acetate	ND ug/L	2.0	1		10/07/10 07:21	108-05-4	
Vinyl chloride	ND ug/L	1.0	1		10/07/10 07:21	75-01-4	
m&p-Xylene	ND ug/L	2.0	1		10/07/10 07:21	179601-23-1	
o-Xylene	ND ug/L	1.0	1		10/07/10 07:21	95-47-6	
4-Bromofluorobenzene (S)	96 %	70-130	1		10/07/10 07:21	460-00-4	
Dibromofluoromethane (S)	99 %	70-130	1		10/07/10 07:21	1868-53-7	
1,2-Dichloroethane-d4 (S)	98 %	70-130	1		10/07/10 07:21	17060-07-0	
Toluene-d8 (S)	99 %	70-130	1		10/07/10 07:21	2037-26-5	
4500 Chloride	Analytical Method: S	M 4500-CI-E					
Chloride	<b>6.6</b> mg/L	5.0	1		10/14/10 13:26	16887-00-6	
5310B TOC	Analytical Method: S	M 5310B					
Total Organic Carbon	<b>191</b> mg/L	2.0	2		10/12/10 10:26	7440-44-0	

### **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### **ANALYTICAL RESULTS**

Project: Soccer Complex 12830C

Pace Project No.: 9279105

CEI	Complex	120300

Sample: GW-3	Lab ID: 927	9105007	Collected:	10/05/1	0 10:00	Received: 10	0/06/10 09:30 N	Aatrix: Water	
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Met	hod: EPA 6	010 Preparat	tion Meth	nod: EPA	3010			
Antimony	ND ug	g/L		5.0	1	10/07/10 12:30	10/10/10 03:52	7440-36-0	
Arsenic	ND ug	j/L		5.0	1	10/07/10 12:30	10/10/10 03:52	7440-38-2	
Beryllium	ND uç	, g/L		1.0	1	10/07/10 12:30	10/10/10 03:52	7440-41-7	
Cadmium	ND ug	, a/L		1.0	1	10/07/10 12:30	10/10/10 03:52	7440-43-9	
Chromium	12.8 ug	, a/L		5.0	1	10/07/10 12:30	10/10/10 03:52	7440-47-3	
Copper	<b>16.4</b> uc	, a/L		5.0	1	10/07/10 12:30	10/10/10 03:52	7440-50-8	
Lead	<b>9.4</b> uc	, a/L		5.0	1	10/07/10 12:30	10/10/10 03:52	7439-92-1	
Nickel	63.1 uc	, a/L		5.0	1	10/07/10 12:30	10/10/10 03:52	7440-02-0	
Selenium	ND uc	, a/L		10.0	1	10/07/10 12:30	10/10/10 03:52	7782-49-2	
Silver	ND uc	у л/L		5.0	1	10/07/10 12:30	10/10/10 03:52	7440-22-4	
Thallium	ND uc	». — ⊅∕L		10.0	1	10/07/10 12:30	10/10/10 03:52	7440-28-0	
Zinc	9050 ug	,, g∕L		10.0	1	10/07/10 12:30	10/10/10 03:52	7440-66-6	
7470 Mercury	Analytical Met	hod: EPA 74	470 Preparat	tion Meth	nod: EPA	7470			
Mercury	ND ug	g/L		0.20	1	10/12/10 14:30	10/13/10 16:42	7439-97-6	
8260 MSV Low Level	Analytical Met	hod: EPA 8	260						
Acetone	ND ug	g/L		25.0	1		10/07/10 07:46	67-64-1	
Benzene	ND ug	g/L		1.0	1		10/07/10 07:46	71-43-2	
Bromobenzene	ND ug	g/L		1.0	1		10/07/10 07:46	108-86-1	
Bromochloromethane	ND ug	g/L		1.0	1		10/07/10 07:46	74-97-5	
Bromodichloromethane	ND ug	g/L		1.0	1		10/07/10 07:46	75-27-4	
Bromoform	ND ug	g/L		1.0	1		10/07/10 07:46	75-25-2	
Bromomethane	ND ug	g/L		2.0	1		10/07/10 07:46	74-83-9	
2-Butanone (MEK)	ND ug	g/L		5.0	1		10/07/10 07:46	78-93-3	
Carbon tetrachloride	ND ug	g/L		1.0	1		10/07/10 07:46	56-23-5	
Chlorobenzene	<b>1.0</b> ug	g/L		1.0	1		10/07/10 07:46	108-90-7	
Chloroethane	ND ug	g/L		1.0	1		10/07/10 07:46	75-00-3	
Chloroform	ND ug	g/L		1.0	1		10/07/10 07:46	67-66-3	
Chloromethane	ND ug	g/L		1.0	1		10/07/10 07:46	74-87-3	
2-Chlorotoluene	ND ug	g/L		1.0	1		10/07/10 07:46	95-49-8	
4-Chlorotoluene	ND ug	g/L		1.0	1		10/07/10 07:46	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug	g/L		5.0	1		10/07/10 07:46	96-12-8	
Dibromochloromethane	ND ug	g/L		1.0	1		10/07/10 07:46	124-48-1	
1,2-Dibromoethane (EDB)	ND ug	g/L		1.0	1		10/07/10 07:46	106-93-4	
Dibromomethane	ND ug	g/L		1.0	1		10/07/10 07:46	74-95-3	
1,2-Dichlorobenzene	ND ug	g/L		1.0	1		10/07/10 07:46	95-50-1	
1,3-Dichlorobenzene	ND ug	g/L		1.0	1		10/07/10 07:46	541-73-1	
1,4-Dichlorobenzene	<b>1.4</b> ug	g/L		1.0	1		10/07/10 07:46	106-46-7	
Dichlorodifluoromethane	ND ug	g/L		1.0	1		10/07/10 07:46	75-71-8	
1,1-Dichloroethane	ND ug	g/L		1.0	1		10/07/10 07:46	75-34-3	
1,2-Dichloroethane	ND uç	g/L		1.0	1		10/07/10 07:46	107-06-2	
1,1-Dichloroethene	ND uç	g/L		1.0	1		10/07/10 07:46	75-35-4	
cis-1,2-Dichloroethene	ND ug	g/L		1.0	1		10/07/10 07:46	156-59-2	
trans-1,2-Dichloroethene	ND uç	g/L		1.0	1		10/07/10 07:46	156-60-5	
1,2-Dichloropropane	ND ug	g/L		1.0	1		10/07/10 07:46	78-87-5	

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### **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### ANALYTICAL RESULTS

#### Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: GW-3	Lab ID: 927910500	07 Collected: 10/05/1	0 10:00	Received: 10	0/06/10 09:30 N	latrix: Water	
Parameters	Results Un	its Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EF	PA 8260					
1,3-Dichloropropane	ND ug/L	1.0	1		10/07/10 07:46	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 07:46	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1		10/07/10 07:46	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 07:46	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 07:46	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1		10/07/10 07:46	108-20-3	
Ethylbenzene	ND ug/L	1.0	1		10/07/10 07:46	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		10/07/10 07:46	87-68-3	
2-Hexanone	ND ug/L	5.0	1		10/07/10 07:46	591-78-6	
p-Isopropyltoluene	ND ug/L	1.0	1		10/07/10 07:46	99-87-6	
Methylene Chloride	ND ug/L	2.0	1		10/07/10 07:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1		10/07/10 07:46	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		10/07/10 07:46	1634-04-4	
Naphthalene	ND ug/L	1.0	1		10/07/10 07:46	91-20-3	
Styrene	ND ug/L	1.0	1		10/07/10 07:46	100-42-5	
1,1,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 07:46	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 07:46	79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		10/07/10 07:46	127-18-4	
Toluene	ND ug/L	1.0	1		10/07/10 07:46	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 07:46	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 07:46	120-82-1	
1,1,1-Trichloroethane	ND ug/L	1.0	1		10/07/10 07:46	71-55-6	
1,1,2-Trichloroethane	ND ug/L	1.0	1		10/07/10 07:46	79-00-5	
Trichloroethene	ND ug/L	1.0	1		10/07/10 07:46	79-01-6	
Trichlorofluoromethane	ND ug/L	1.0	1		10/07/10 07:46	75-69-4	
1,2,3-Trichloropropane	ND ug/L	1.0	1		10/07/10 07:46	96-18-4	
Vinyl acetate	ND ug/L	2.0	1		10/07/10 07:46	108-05-4	
Vinyl chloride	ND ug/L	1.0	1		10/07/10 07:46	75-01-4	
m&p-Xylene	ND ug/L	2.0	1		10/07/10 07:46	179601-23-1	
o-Xylene	ND ug/L	1.0	1		10/07/10 07:46	95-47-6	
4-Bromofluorobenzene (S)	96 %	70-130	1		10/07/10 07:46	460-00-4	
Dibromofluoromethane (S)	99 %	70-130	1		10/07/10 07:46	1868-53-7	
1,2-Dichloroethane-d4 (S)	100 %	70-130	1		10/07/10 07:46	17060-07-0	
Toluene-d8 (S)	100 %	70-130	1		10/07/10 07:46	2037-26-5	
4500 Chloride	Analytical Method: SN	/I 4500-CI-E					
Chloride	ND mg/L	5.0	1		10/14/10 13:26	16887-00-6	
5310B TOC	Analytical Method: SM	/I 5310B					
Total Organic Carbon	<b>30.7</b> mg/L	1.0	1		10/11/10 18:20	7440-44-0	

### **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### ANALYTICAL RESULTS

#### Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: Duplicate	Lab ID: 9279	105008	Collected:	10/05/1	0 10:30	Received: 10	/06/10 09:30 N	latrix: Water	
Parameters	Results	Units	Report	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Metho	od: EPA 6	010 Preparat	ion Meth	od: EPA	3010			
Antimony	ND ug/l	_		5.0	1	10/07/10 12:30	10/10/10 03:56	7440-36-0	
Arsenic	<b>5.7</b> ug/l	_		5.0	1	10/07/10 12:30	10/10/10 03:56	7440-38-2	
Beryllium	ND ug/l	_		1.0	1	10/07/10 12:30	10/10/10 03:56	7440-41-7	
Cadmium	<b>1.1</b> ug/l	_		1.0	1	10/07/10 12:30	10/10/10 03:56	7440-43-9	
Chromium	<b>15.4</b> ug/l	_		5.0	1	10/07/10 12:30	10/10/10 03:56	7440-47-3	
Copper	<b>20.8</b> ug/l	_		5.0	1	10/07/10 12:30	10/10/10 03:56	7440-50-8	
Lead	<b>11.9</b> ug/l	_		5.0	1	10/07/10 12:30	10/10/10 03:56	7439-92-1	
Nickel	<b>67.9</b> ug/l	_		5.0	1	10/07/10 12:30	10/10/10 03:56	7440-02-0	
Selenium	ND ug/l	_		10.0	1	10/07/10 12:30	10/10/10 03:56	7782-49-2	
Silver	ND ug/l	_		5.0	1	10/07/10 12:30	10/10/10 03:56	7440-22-4	
Thallium	ND ug/l	_		10.0	1	10/07/10 12:30	10/10/10 03:56	7440-28-0	
Zinc	<b>8240</b> ug/l	_		10.0	1	10/07/10 12:30	10/10/10 03:56	7440-66-6	
7470 Mercury	Analytical Metho	od: EPA 7	470 Preparat	tion Meth	od: EPA	7470			
Mercury	ND ug/l	_		0.20	1	10/12/10 14:30	10/13/10 16:44	7439-97-6	
8260 MSV Low Level	Analytical Metho	od: EPA 8	260						
Acetone	ND ug/l	_		25.0	1		10/07/10 08:12	67-64-1	
Benzene	ND ug/l	_		1.0	1		10/07/10 08:12	71-43-2	
Bromobenzene	ND ug/l	_		1.0	1		10/07/10 08:12	108-86-1	
Bromochloromethane	ND ug/l	_		1.0	1		10/07/10 08:12	74-97-5	
Bromodichloromethane	ND ug/l	_		1.0	1		10/07/10 08:12	75-27-4	
Bromoform	ND ug/l	_		1.0	1		10/07/10 08:12	75-25-2	
Bromomethane	ND ug/l	_		2.0	1		10/07/10 08:12	74-83-9	
2-Butanone (MEK)	ND ug/l	_		5.0	1		10/07/10 08:12	78-93-3	
Carbon tetrachloride	ND ug/l	_		1.0	1		10/07/10 08:12	56-23-5	
Chlorobenzene	ND ug/l	_		1.0	1		10/07/10 08:12	108-90-7	
Chloroethane	ND ug/l	_		1.0	1		10/07/10 08:12	75-00-3	
Chloroform	ND ug/l	_		1.0	1		10/07/10 08:12	67-66-3	
Chloromethane	ND ug/l	_		1.0	1		10/07/10 08:12	74-87-3	
2-Chlorotoluene	ND ug/l	_		1.0	1		10/07/10 08:12	95-49-8	
4-Chlorotoluene	ND ug/l	_		1.0	1		10/07/10 08:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/l	_		5.0	1		10/07/10 08:12	96-12-8	
Dibromochloromethane	ND ug/l	_		1.0	1		10/07/10 08:12	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/l	_		1.0	1		10/07/10 08:12	106-93-4	
Dibromomethane	ND ug/l	_		1.0	1		10/07/10 08:12	74-95-3	
1,2-Dichlorobenzene	ND ug/l	_		1.0	1		10/07/10 08:12	95-50-1	
1,3-Dichlorobenzene	ND ug/l	_		1.0	1		10/07/10 08:12	541-73-1	
1,4-Dichlorobenzene	<b>1.2</b> ug/l	_		1.0	1		10/07/10 08:12	106-46-7	
Dichlorodifluoromethane	ND ug/l	_		1.0	1		10/07/10 08:12	75-71-8	
1,1-Dichloroethane	ND ug/l	_		1.0	1		10/07/10 08:12	75-34-3	
1,2-Dichloroethane	ND ug/l	_		1.0	1		10/07/10 08:12	107-06-2	
1,1-Dichloroethene	ND ug/l	_		1.0	1		10/07/10 08:12	75-35-4	
cis-1,2-Dichloroethene	ND ug/l	_		1.0	1		10/07/10 08:12	156-59-2	
trans-1,2-Dichloroethene	ND ug/l	_		1.0	1		10/07/10 08:12	156-60-5	
1,2-Dichloropropane	ND ug/l	_		1.0	1		10/07/10 08:12	78-87-5	

Date: 10/15/2010 04:35 PM

### **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### ANALYTICAL RESULTS

#### Project: Soccer Complex 12830C

Pace Project No.: 9279105

Sample: Duplicate	Lab ID: 9279105008	Collected: 10/05/1	0 10:30	Received: 1	0/06/10 09:30 N	latrix: Water	
Parameters	Results Unit	s Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA	8260					
1,3-Dichloropropane	ND ug/L	1.0	1		10/07/10 08:12	142-28-9	
2,2-Dichloropropane	ND ug/L	1.0	1		10/07/10 08:12	594-20-7	
1,1-Dichloropropene	ND ug/L	1.0	1		10/07/10 08:12	563-58-6	
cis-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 08:12	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		10/07/10 08:12	10061-02-6	
Diisopropyl ether	ND ug/L	1.0	1		10/07/10 08:12	108-20-3	
Ethylbenzene	ND ug/L	1.0	1		10/07/10 08:12	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L	1.0	1		10/07/10 08:12	87-68-3	
2-Hexanone	ND ug/L	5.0	1		10/07/10 08:12	591-78-6	
p-Isopropyltoluene	ND ug/L	1.0	1		10/07/10 08:12	99-87-6	
Methylene Chloride	ND ug/L	2.0	1		10/07/10 08:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	5.0	1		10/07/10 08:12	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		10/07/10 08:12	1634-04-4	
Naphthalene	ND ug/L	1.0	1		10/07/10 08:12	91-20-3	
Styrene	ND ug/L	1.0	1		10/07/10 08:12	100-42-5	
1.1.2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 08:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L	1.0	1		10/07/10 08:12	79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		10/07/10 08:12	127-18-4	
Toluene	ND ug/L	1.0	1		10/07/10 08:12	108-88-3	
1.2.3-Trichlorobenzene	ND ug/L	1.0	1		10/07/10 08:12	87-61-6	
1.2.4-Trichlorobenzene	ND ug/l	1.0	1		10/07/10 08:12	120-82-1	
1.1.1-Trichloroethane	ND ug/L	1.0	1		10/07/10 08:12	71-55-6	
1 1 2-Trichloroethane		1.0	1		10/07/10 08:12	79-00-5	
Trichloroethene		1.0	1		10/07/10 08:12	79-01-6	
Trichlorofluoromethane		1.0	1		10/07/10 08:12	75-69-4	
1 2 3-Trichloropropage		1.0	1		10/07/10 08:12	96-18-4	
Vinyl acetate	ND ug/L	2.0	1		10/07/10 08:12	108-05-4	
Vinyl chloride		1.0	1		10/07/10 08:12	75-01-4	
m&n-Xylene		2.0	1		10/07/10 08:12	179601-23-1	
o-Xylene	ND ug/L	1.0	1		10/07/10 08:12	95-47-6	
4-Bromofluorobenzene (S)	93 %	70-130	1		10/07/10 08:12	460-00-4	
Dibromofluoromethane (S)	98 %	70 100	1		10/07/10 08:12	1868-53-7	
1.2-Dichloroethane-d4 (S)	96 %	70-130	1		10/07/10 08:12	17060-07-0	
Toluene-d8 (S)	99 %	70-130	1		10/07/10 08:12	2037-26-5	
4500 Chlorido	Applytical Mathad: SM	4500 CLE	1		10/01/10 00.12	2007 20 0	
		4000-01-E	4		10/11/10 10 00	40007 00 0	
	5.1 mg/L	5.0	1		10/14/10 13:26	16887-00-6	
5310B TOC	Analytical Method: SM	5310B					
Total Organic Carbon	<b>30.1</b> mg/L	1.0	1		10/11/10 18:30	7440-44-0	

### **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

#### **QUALITY CONTROL DATA**

Project: Soccer Complex 12830C

Pace Project No.: 9279105

QC Batch:	MPRF	9/7193	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3	010	Analysis Description:	6010 MET
Associated Lab Samp	les:	9279105001, 9279105002, 9279	105003, 9279105004, 9279	9105005, 9279105006, 9279105007, 9279105008

Matrix: Water

#### METHOD BLANK: 508488

Associated Lab Samples: 9279105001, 9279105002, 9279105003, 9279105004, 9279105005, 9279105006, 9279105007, 9279105008

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	10/10/10 02:44	
Arsenic	ug/L	ND	5.0	10/10/10 02:44	
Beryllium	ug/L	ND	1.0	10/10/10 02:44	
Cadmium	ug/L	ND	1.0	10/10/10 02:44	
Chromium	ug/L	ND	5.0	10/10/10 02:44	
Copper	ug/L	ND	5.0	10/10/10 02:44	
Lead	ug/L	ND	5.0	10/10/10 02:44	
Nickel	ug/L	ND	5.0	10/10/10 02:44	
Selenium	ug/L	ND	10.0	10/10/10 02:44	
Silver	ug/L	ND	5.0	10/10/10 02:44	
Thallium	ug/L	ND	10.0	10/10/10 02:44	
Zinc	ug/L	ND	10.0	10/10/10 02:44	

#### LABORATORY CONTROL SAMPLE: 508489

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	ug/L	500	527	105	80-120	
Arsenic	ug/L	500	530	106	80-120	
Beryllium	ug/L	500	527	105	80-120	
Cadmium	ug/L	500	528	106	80-120	
Chromium	ug/L	500	528	106	80-120	
Copper	ug/L	500	525	105	80-120	
Lead	ug/L	500	536	107	80-120	
Nickel	ug/L	500	529	106	80-120	
Selenium	ug/L	500	523	105	80-120	
Silver	ug/L	250	245	98	80-120	
Thallium	ug/L	500	524	105	80-120	
Zinc	ug/L	500	533	107	80-120	

MATRIX SPIKE SAMPLE:

508490

Ρ	arameter	Units	9279170001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L		11.9	500	301	58	75-125	MO
Arsenic	ug/L		ND	500	370	74	75-125	MO
Beryllium	ug/L		3.6	500	416	82	75-125	
Cadmium	ug/L		1.0	500	399	80	75-125	
Chromium	ug/L		343	500	769	85	75-125	
Copper	ug/L		184	500	633	90	75-125	
Lead	ug/L		359	500	740	76	75-125	
Nickel	ug/L		110	500	512	80	75-125	

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### QUALITY CONTROL DATA

Project: Soccer Complex 12830C

### Pace Project No.: 9279105

MATRIX SPIKE SAMPLE:	508490						
		9279170001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Selenium	ug/L	ND	500	345	69	75-125	MO
Silver	ug/L	ND	250	195	78	75-125	
Thallium	ug/L	ND	500	367	73	75-125	MO
Zinc	ug/L	416	500	853	87	75-125	

#### SAMPLE DUPLICATE: 508491

Parameter	Units	9279170002 Result	Dup Result	RPD	Qualifiers
Antimony	ug/L		3.4J		
Arsenic	ug/L	ND	ND		
Beryllium	ug/L	1.0	.9J		
Cadmium	ug/L	ND	ND		
Chromium	ug/L	89.3	86.3	3	
Copper	ug/L	32.5	31.5	3	
Lead	ug/L	5.1	ND		
Nickel	ug/L	24.1	23.5	3	
Selenium	ug/L	ND	ND		
Silver	ug/L	ND	ND		
Thallium	ug/L	ND	ND		
Zinc	ug/L	41.6	39.6	5	

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### **QUALITY CONTROL DATA**

Project:	Soccer Compl	ex 12830C										
Pace Project No.:	9279105											
QC Batch:	MERP/3055			Analys	sis Method:	E	EPA 7470					
QC Batch Method:	EPA 7470			Analys	sis Descript	ion: 7	7470 Mercury	/				
Associated Lab Sar	nples: 92791	05001, 927	9105002									
METHOD BLANK:	508585			Ν	Matrix: Wat	ter						
Associated Lab Sar	nples: 92791	05001, 927	9105002									
				Blank	K R	eporting						
Paran	neter	I	Units	Resul	t	Limit	Analyz	ed	Qualifiers			
Mercury		ug/L			ND	0.20	0 10/13/10	14:39				
LABORATORY COI	NTROL SAMPL	E: 50858	6									
				Spike	LCS	;	LCS	% Rec	>			
Parar	neter	ı	Units	Conc.	Resu	lt	% Rec	Limits	a Qu	ualifiers		
Mercury		ug/L		2.5		2.3	91	80	-120		-	
MATRIX SPIKE & M	ATRIX SPIKE I		- 50858	7		508588						
				MS	MSD	000000						
		92	78860002	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Paramet	ter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Mercury	l	ıg/L	ND	2.5	2.5	2.1	2.1	84	83	75-125	1	
MATRIX SPIKE & M	IATRIX SPIKE I		50858	9		508590						
				MS	MSD							
		92 <sup>-</sup>	78860003	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parame	ter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Mercury		ug/L	ND	2.5	2.5	2.1	2.4	85	94	75-125	10	

### **REPORT OF LABORATORY ANALYSIS**





Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

## **QUALITY CONTROL DATA**

Project:	Soccer Com	plex 128300	;									
Pace Project No.:	9279105											
QC Batch:	MERP/306	3		Analys	is Method:	E	PA 7470					
QC Batch Method:	EPA 7470			Analys	is Descript	ion: 74	470 Mercury	/				
Associated Lab Sar	mples: 9279	9105003, 927	79105004, 9	279105005	, 92791050	006, 92791	05007, 9279	9105008				
METHOD BLANK:	510461			Ν	Aatrix: Wat	er						
Associated Lab Sar	nples: 9279	9105003, 927	79105004, 9	279105005	, 92791050	006, 92791	05007, 9279	9105008				
				Blank	K R	eporting						
Parar	neter		Units	Resul	t	Limit	Analyz	ed	Qualifiers			
Mercury		ug/L			ND	0.20	10/13/10	16:07				
LABORATORY CO	NTROL SAMF	PLE: 51046	62									
				Spike	LCS		LCS	% Re	с			
Parar	neter		Units	Conc.	Resu	lt	% Rec	Limits	s Qu	ualifiers		
Mercury		ug/L		2.5		2.2	88	80	0-120		-	
MATRIX SPIKE & N			F: 51046	3		510464						
				MS	MSD	010101						
		92	79303001	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parame	ter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Mercury		ug/L	ND	2.5	2.5	2.2	2.2	87	88	75-125	0	
MATRIX SPIKE & N	ATRIX SPIKE		E· 51046	5		510466						
			0.040	MS	MSD	010100						
		92	79105003	Spike	Spike	MS	MSD	MS	MSD	% Rec		
Parame	ter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	Qual
Mercury		ug/L	ND	2.5	2.5	2.2	2.3	82	84	75-125	2	

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# **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical Services, Inc. 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 (704)875-9092

### **QUALITY CONTROL DATA**

Project: Soccer Complex 12830C

Pace Project No.: 9279105

QC Batch:	MSV/1	2562	Analysis Method:	EPA 8260
QC Batch Method:	EPA 82	260	Analysis Description:	8260 MSV Low Level
Associated Lab Samp	oles:	9279105001, 9279105002, 9279 <sup>4</sup>	05003, 9279105004, 9279	9105005, 9279105006, 9279105007, 9279105008
METHOD BLANK: 5	507943		Matrix: Water	

METHOD BLANK: 507943

Associated Lab Samples: 9279105001, 9279105002, 9279105003, 9279105004, 9279105005, 9279105006, 9279105007, 9279105008

Parameter	Lipito	Blank	Reporting	Applyzod	Qualifiara
		- <u></u> -			Quaimers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	10/07/10 00:08	
1,1,1-Irichloroethane	ug/L	ND	1.0	10/07/10 00:08	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/07/10 00:08	
1,1,2-Trichloroethane	ug/L	ND	1.0	10/07/10 00:08	
1,1-Dichloroethane	ug/L	ND	1.0	10/07/10 00:08	
1,1-Dichloroethene	ug/L	ND	1.0	10/07/10 00:08	
1,1-Dichloropropene	ug/L	ND	1.0	10/07/10 00:08	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	10/07/10 00:08	
1,2,3-Trichloropropane	ug/L	ND	1.0	10/07/10 00:08	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	10/07/10 00:08	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	10/07/10 00:08	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	10/07/10 00:08	
1,2-Dichlorobenzene	ug/L	ND	1.0	10/07/10 00:08	
1,2-Dichloroethane	ug/L	ND	1.0	10/07/10 00:08	
1,2-Dichloropropane	ug/L	ND	1.0	10/07/10 00:08	
1,3-Dichlorobenzene	ug/L	ND	1.0	10/07/10 00:08	
1,3-Dichloropropane	ug/L	ND	1.0	10/07/10 00:08	
1,4-Dichlorobenzene	ug/L	ND	1.0	10/07/10 00:08	
2,2-Dichloropropane	ug/L	ND	1.0	10/07/10 00:08	
2-Butanone (MEK)	ug/L	ND	5.0	10/07/10 00:08	
2-Chlorotoluene	ug/L	ND	1.0	10/07/10 00:08	
2-Hexanone	ug/L	ND	5.0	10/07/10 00:08	
4-Chlorotoluene	ug/L	ND	1.0	10/07/10 00:08	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	10/07/10 00:08	
Acetone	ug/L	ND	25.0	10/07/10 00:08	
Benzene	ug/L	ND	1.0	10/07/10 00:08	
Bromobenzene	ug/L	ND	1.0	10/07/10 00:08	
Bromochloromethane	ug/L	ND	1.0	10/07/10 00:08	
Bromodichloromethane	ug/L	ND	1.0	10/07/10 00:08	
Bromoform	ug/L	ND	1.0	10/07/10 00:08	
Bromomethane	ug/L	ND	2.0	10/07/10 00:08	
Carbon tetrachloride	ug/L	ND	1.0	10/07/10 00:08	
Chlorobenzene	ug/L	ND	1.0	10/07/10 00:08	
Chloroethane	ug/L	ND	1.0	10/07/10 00:08	
Chloroform	ug/L	ND	1.0	10/07/10 00:08	
Chloromethane	ug/L	ND	1.0	10/07/10 00:08	
cis-1,2-Dichloroethene	ug/L	ND	1.0	10/07/10 00:08	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/07/10 00:08	
Dibromochloromethane	ug/L	ND	1.0	10/07/10 00:08	
Dibromomethane	ug/L	ND	1.0	10/07/10 00:08	
Dichlorodifluoromethane	ug/L	ND	1.0	10/07/10 00:08	
Diisopropyl ether	ug/L	ND	1.0	10/07/10 00:08	
Ethylbenzene	ug/L	ND	1.0	10/07/10 00:08	

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#### **REPORT OF LABORATORY ANALYSIS**

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#### QUALITY CONTROL DATA

Matrix: Water

Project: Soccer Complex 12830C

507943

Pace Project No.: 9279105

METHOD BLANK:

Associated Lab Samples: 9279105001, 9279105002, 9279105003, 9279105004, 9279105005, 9279105006, 9279105007, 9279105008

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	ND	1.0	10/07/10 00:08	
m&p-Xylene	ug/L	ND	2.0	10/07/10 00:08	
Methyl-tert-butyl ether	ug/L	ND	1.0	10/07/10 00:08	
Methylene Chloride	ug/L	ND	2.0	10/07/10 00:08	
Naphthalene	ug/L	ND	1.0	10/07/10 00:08	
o-Xylene	ug/L	ND	1.0	10/07/10 00:08	
p-Isopropyltoluene	ug/L	ND	1.0	10/07/10 00:08	
Styrene	ug/L	ND	1.0	10/07/10 00:08	
Tetrachloroethene	ug/L	ND	1.0	10/07/10 00:08	
Toluene	ug/L	ND	1.0	10/07/10 00:08	
trans-1,2-Dichloroethene	ug/L	ND	1.0	10/07/10 00:08	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/07/10 00:08	
Trichloroethene	ug/L	ND	1.0	10/07/10 00:08	
Trichlorofluoromethane	ug/L	ND	1.0	10/07/10 00:08	
Vinyl acetate	ug/L	ND	2.0	10/07/10 00:08	
Vinyl chloride	ug/L	ND	1.0	10/07/10 00:08	
1,2-Dichloroethane-d4 (S)	%	98	70-130	10/07/10 00:08	
4-Bromofluorobenzene (S)	%	97	70-130	10/07/10 00:08	
Dibromofluoromethane (S)	%	100	70-130	10/07/10 00:08	
Toluene-d8 (S)	%	96	70-130	10/07/10 00:08	

#### LABORATORY CONTROL SAMPLE: 507944

Descentes	11-26-	Spike	LCS	LCS	% Rec	0
Parameter		Conc	Result	% Rec	Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.6	99	70-130	
1,1,1-Trichloroethane	ug/L	50	49.1	98	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	50.3	101	70-130	
1,1,2-Trichloroethane	ug/L	50	47.9	96	70-130	
1,1-Dichloroethane	ug/L	50	48.5	97	70-130	
1,1-Dichloroethene	ug/L	50	46.5	93	70-132	
1,1-Dichloropropene	ug/L	50	42.7	85	70-130	
1,2,3-Trichlorobenzene	ug/L	50	55.0	110	70-135	
1,2,3-Trichloropropane	ug/L	50	43.2	86	70-130	
1,2,4-Trichlorobenzene	ug/L	50	51.7	103	70-134	
1,2-Dibromo-3-chloropropane	ug/L	50	53.2	106	70-130	
1,2-Dibromoethane (EDB)	ug/L	50	49.9	100	70-130	
1,2-Dichlorobenzene	ug/L	50	49.8	100	70-130	
1,2-Dichloroethane	ug/L	50	48.9	98	70-130	
1,2-Dichloropropane	ug/L	50	47.1	94	70-130	
1,3-Dichlorobenzene	ug/L	50	50.2	100	70-130	
1,3-Dichloropropane	ug/L	50	46.6	93	70-130	
1,4-Dichlorobenzene	ug/L	50	49.5	99	70-130	
2,2-Dichloropropane	ug/L	50	42.5	85	58-145	
2-Butanone (MEK)	ug/L	100	94.4	94	70-145	
2-Chlorotoluene	ug/l	50	50.6	101	70-130	

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#### **REPORT OF LABORATORY ANALYSIS**

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### **QUALITY CONTROL DATA**

### Project: Soccer Complex 12830C

Pace Project No.: 9279105

#### LABORATORY CONTROL SAMPLE: 507944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Hexanone			108	108	70-144	
4-Chlorotoluene	ug/L	50	52.5	105	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	100	105	105	70-140	
Acetone	ug/L	100	92.8	93	50-175	
Benzene	ug/L	50	54.8	110	70-130	
Bromobenzene	ug/L	50	47.6	.15	70-130	
Bromochloromethane	ug/L	50	46.3	93	70-130	
Bromodichloromethane	ug/L	50	48.9	98	70-130	
Bromoform	ug/L	50	52.7	105	70-130	
Bromomethane	ua/L	50	44.5	89	54-130	
Carbon tetrachloride	ug/L	50	54.7	109	70-132	
Chlorobenzene	ua/L	50	50.2	100	70-130	
Chloroethane	ua/L	50	45.2	90	64-134	
Chloroform	ua/L	50	47.0	94	70-130	
Chloromethane	ua/L	50	38.0	76	64-130	
cis-1.2-Dichloroethene	ua/L	50	47.7	95	70-131	
cis-1.3-Dichloropropene	ua/L	50	46.1	92	70-130	
Dibromochloromethane	ug/L	50	49.0	98	70-130	
Dibromomethane	ua/L	50	50.2	100	70-131	
Dichlorodifluoromethane	ug/L	50	33.4	67	56-130	
Diisopropyl ether	ug/L	50	47.2	94	70-130	
Ethylbenzene	ug/L	50	50.3	101	70-130	
Hexachloro-1,3-butadiene	ug/L	50	50.6	101	70-130	
m&p-Xylene	ug/L	100	105	105	70-130	
Methyl-tert-butyl ether	ug/L	50	48.9	98	70-130	
Methylene Chloride	ug/L	50	41.5	83	63-130	
Naphthalene	ug/L	50	55.6	111	70-138	
o-Xylene	ug/L	50	47.5	95	70-130	
p-Isopropyltoluene	ug/L	50	47.1	94	70-130	
Styrene	ug/L	50	48.1	96	70-130	
Tetrachloroethene	ug/L	50	49.5	99	70-130	
Toluene	ug/L	50	49.7	99	70-130	
trans-1,2-Dichloroethene	ug/L	50	46.5	93	70-130	
trans-1,3-Dichloropropene	ug/L	50	49.3	99	70-132	
Trichloroethene	ug/L	50	51.9	104	70-130	
Trichlorofluoromethane	ug/L	50	45.3	91	62-133	
Vinyl acetate	ug/L	100	95.2	95	66-157	
Vinyl chloride	ug/L	50	43.3	87	69-130	
1,2-Dichloroethane-d4 (S)	%			98	70-130	
4-Bromofluorobenzene (S)	%			105	70-130	
Dibromofluoromethane (S)	%			90	70-130	
Toluene-d8 (S)	%			98	70-130	

### **REPORT OF LABORATORY ANALYSIS**

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# **QUALITY CONTROL DATA**

Project:	Soccer Complex	12830C						
Pace Project No.:	9279105							
QC Batch:	WETA/8361		Analysis Meth	od: S	M 4500-CI-E			
QC Batch Method:	SM 4500-CI-E		Analysis Desc	ription: 4	500 Chloride			
Associated Lab Sar	mples: 92791050	001, 9279105002, 9	9279105003, 92791	05004, 92791	05005, 927910	5006, 92791050	007, 9279105008	
METHOD BLANK:	511979		Matrix:	Water				
Associated Lab Sar	mples: 92791050	001, 9279105002, 9	9279105003, 92791	05004, 92791	05005, 927910	5006, 92791050	007, 9279105008	
Paran	neter	Linits	Blank Result	Reporting Limit	Analyzed	Qualifie	rs	
Chloride		mg/l		50	$- \frac{10/14/10}{13^{\circ}}$	20		
Chionae		iiig/L		0.0	10/14/10 10.	20		
LABORATORY CON	NTROL SAMPLE:	511980						
			Spike L	CS	LCS	% Rec		
Parar	neter	Units	Conc. R	esult	% Rec	Limits	Qualifiers	
Chloride		mg/L	20	21.3	107	90-110		
MATRIX SPIKE SAI	MPLE:	511982						
			9279105001	Spike	MS	MS	% Rec	
Parar	neter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chloride		mg/L	5.8	5 20	26.7	106	75-125	
MATRIX SPIKE SAI	MPLE:	511989						
			9279105002	Spike	MS	MS	% Rec	
Paran	neter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Chloride		mg/L	32.0	6 20	49.6	85	75-125	
SAMPLE DUPLICA	TE: 511981							
Parar	neter	Units	9279105001 Result	Dup Result	RPD	Qualifiers		
Chloride		mg/L	5.5	5.5		0	_	
SAMPLE DUPLICA	TE: 511990							
			9279105002	Dup				
Parar	neter	Units	Result	Result	RPD	Qualifiers		
Chloride		mg/L	32.6	32.7		0		

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# **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA

Project:	Soccer Complex	12830C						
Pace Project No.:	9279105							
QC Batch:	WETA/8343		Analysis Metho	od: S	SM 5310B			
QC Batch Method:	SM 5310B		Analysis Descr	iption: 5	5310B TOC			
Associated Lab Sar	mples: 9279105	001, 9279105002, 9	9279105003, 927910	)5004, 9279 <sup>,</sup>	105005, 927910	5006, 92791050	007, 9279105008	
METHOD BLANK:	510033		Matrix: W	Vater				
Associated Lab Sar	mples: 9279105	001, 9279105002, 9	9279105003, 927910	)5004, 9279 <sup>2</sup>	105005, 927910	5006, 92791050	007, 9279105008	
Parar	neter	Units	Blank Result	Reporting Limit	Analyzed	Qualifie	rs	
Total Organic Carbo	on	mg/L		1.(	0 10/11/10 14:	40		
LABORATORY CO	NTROL SAMPLE:	510034						
Parar	neter	Units	Spike LC	CS sult	LCS % Rec	% Rec Limits	Qualifiers	
Total Organic Carbo				24.6				
Iotal Organic Carbo		ilig/L	25	24.0	33	30-110		
MATRIX SPIKE SA	MPLE:	510035						
			9279334001	Spike	MS	MS	% Rec	
Parar	neter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Total Organic Carbo	on	mg/L	20.1	25	48.4	113	75-125	
MATRIX SPIKE SA	MPLE:	510036						
			9279334002	Spike	MS	MS	% Rec	
Parar	neter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Total Organic Carbo	on	mg/L	14.8	25	42.3	110	75-125	
SAMPLE DUPLICA	TE: 510037							
			9279334003	Dup				
Parar	neter	Units	Result	Result	RPD	Qualifiers	_	
Total Organic Carbo	n	mg/L	24.6	24.2	2	2		
SAMPLE DUPLICA	TE: 510038							
			9279334004	Dup				
Parar	neter	Units	Result	Result	RPD	Qualifiers	_	
Total Organic Carbo	on	mg/L	ND	NE	)			

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# **REPORT OF LABORATORY ANALYSIS**

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### QUALIFIERS

Project: Soccer Complex 12830C

Pace Project No.: 9279105

#### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

**RPD** - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

#### LABORATORIES

PASI-A Pace Analytical Services - Asheville

PASI-C Pace Analytical Services - Charlotte

#### ANALYTE QUALIFIERS

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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#### **REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Soccer Complex 12830C 279105

Pace I	Project	No.:	92
--------	---------	------	----

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
9279105001	GW-1	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105002	GW-2	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105003	GW-4	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105004	W-1	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105005	W-3	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105006	W-5	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105007	GW-3	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105008	Duplicate	EPA 3010	MPRP/7193	EPA 6010	ICP/6636
9279105001	GW-1	EPA 7470	MERP/3055	EPA 7470	MERC/3013
9279105002	GW-2	EPA 7470	MERP/3055	EPA 7470	MERC/3013
9279105003	GW-4	EPA 7470	MERP/3063	EPA 7470	MERC/3021
9279105004	W-1	EPA 7470	MERP/3063	EPA 7470	MERC/3021
9279105005	W-3	EPA 7470	MERP/3063	EPA 7470	MERC/3021
9279105006	W-5	EPA 7470	MERP/3063	EPA 7470	MERC/3021
9279105007	GW-3	EPA 7470	MERP/3063	EPA 7470	MERC/3021
9279105008	Duplicate	EPA 7470	MERP/3063	EPA 7470	MERC/3021
9279105001	GW-1	EPA 8260	MSV/12562		
9279105002	GW-2	EPA 8260	MSV/12562		
9279105003	GW-4	EPA 8260	MSV/12562		
9279105004	W-1	EPA 8260	MSV/12562		
9279105005	W-3	EPA 8260	MSV/12562		
9279105006	W-5	EPA 8260	MSV/12562		
9279105007	GW-3	EPA 8260	MSV/12562		
9279105008	Duplicate	EPA 8260	MSV/12562		
9279105001	GW-1	SM 4500-CI-E	WETA/8361		
9279105002	GW-2	SM 4500-CI-E	WETA/8361		
9279105003	GW-4	SM 4500-CI-E	WETA/8361		
9279105004	W-1	SM 4500-CI-E	WETA/8361		
9279105005	W-3	SM 4500-CI-E	WETA/8361		
9279105006	W-5	SM 4500-CI-E	WETA/8361		
9279105007	GW-3	SM 4500-CI-E	WETA/8361		
9279105008	Duplicate	SM 4500-CI-E	WETA/8361		
9279105001	GW-1	SM 5310B	WETA/8343		
9279105002	GW-2	SM 5310B	WETA/8343		
9279105003	GW-4	SM 5310B	WETA/8343		
9279105004	W-1	SM 5310B	WETA/8343		
9279105005	W-3	SM 5310B	WETA/8343		
9279105006	W-5	SM 5310B	WETA/8343		
9279105007	GW-3	SM 5310B	WETA/8343		
9279105008	Duplicate	SM 5310B	WETA/8343		

# **REPORT OF LABORATORY ANALYSIS**



F-ALL-Q-020rev.08, 12-Oct-2007

"Important Note: By signing this form you are eccepting Pace's NET 30 day payment terms and agreeing to table charges of 1.5% per month for any invoices not paid within 30 days.

							12	=	5	ø	•	7	0	u,	-	ω	2	-	ITEM#		]	Request	Phone:	Email To:		Address:	Company	Section Required
						ADDITIONAL COMMENTS					Duplicate	GN HW3	W-5	W-3	W-1	GW-4	GW-2	GW-1	SAMPLE ID (AZ, 0.9 /.) Sample IDs MUST BE UNIQUE	Section D Valid Matrix Required Clert Information MATRIX		ed Due Date/TAT:	Fax	aconchas@ecslimited.com	Wilmington, NC 28411	724 Ogden Business Park, 201	c ECS Carolinas	A   Client Information:
																			⋧⋸⋧⋖⋴⋳⋧⋦⋸⋩	Codes		Project Num	Project Nam	Purchase O		Copy To:	Report To:	Section B Required P
						RELING		-					ļ			<b> </b>	<b> </b>	<u> </u>	MATRIX CODE (see valid codes	to left)		iber 1	ة در	rder No			Amy C	roject In
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**APPENDIX 1** 

# NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

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IN THE MATTER OF: Cape Fear Soccerplex, LLC

UNDER THE AUTHORITY OF THE BROWNFIELDS PROPERTY REUSE ACT OF 1997, 130A-310.30, <u>et seq.</u> BROWNFIELDS AGREEMENT re: Former Flemington Landfill Flemington Street Wilmington, New Hanover County

# I. <u>INTRODUCTION</u>

This Brownfields Agreement (this "Agreement") is made and entered into by and between the North Carolina Department of Environment and Natural Resources ("DENR") and Cape Fear Soccerplex, LLC (collectively the "Parties") pursuant to the Brownfields Property Reuse Act of 1997, N.C.G.S. § 130A-310.30, <u>et seq</u>. (the "Act").

Cape Fear Soccerplex, LLC is a North Carolina limited liability company whose business address is 6726 Netherlands Drive, #700, Wilmington, NC 28405. Cape Fear Soccerplex, LLC is a wholly owned subsidiary of Cape Fear Soccer Association, Inc. Cape Fear Soccerplex, LLC owns approximately 65.47 acres of land located at the western terminus of Flemington Drive, just west of US Highway 421, in Wilmington, New Hanover County, North Carolina, which it intends to redevelop as a recreational and competition level soccer complex. The subject property is the site of the former Flemington Landfill, a state/county permitted sanitary landfill that was operated by Waste Industries, Inc. between August 1973 and June 1979. A legal description and a location map of the property which is the subject of this Agreement (the "Property") are attached hereto as Exhibit 1. The Parties agree to undertake all actions required by the terms and conditions of this Agreement. The purpose of this Agreement is to settle and resolve, subject to reservations and limitations contained in Section VIII (Certification), Section IX (DENR's Covenant Not to Sue and Reservation of Rights) and Section X (Prospective Developer's Covenant Not to Sue), the potential liability of Cape Fear Soccerplex, LLC for contaminants at the property which is the subject of this Agreement.

The Parties agree that Cape Fear Soccerplex, LLC's entry into this Agreement, and the actions undertaken by Cape Fear Soccerplex, LLC in accordance with this Agreement, do not constitute an admission of any liability by Cape Fear Soccerplex, LLC.

The resolution of this potential liability, in exchange for the benefit Cape Fear Soccerplex, LLC shall provide to DENR, is in the public interest.

# II. <u>DEFINITIONS</u>

Unless otherwise expressly provided herein, terms used in this Agreement which are defined in the Act or elsewhere in N.C.G.S. 130A, Article 9 shall have the meaning assigned to them in those statutory provisions, including any amendments thereto.

1. "Property" shall mean the Brownfields property which is the subject of this Agreement, and which is described and depicted in Exhibit 1 of this Agreement.

2. "Prospective Developer" shall mean Cape Fear Soccerplex, LLC.

# III. STATEMENT OF FACTS

3. Prospective Developer has acquired the Property, which consists of 65.47 acres of land located at the western terminus of Flemington Drive, in Wilmington, New Hanover County, North

Carolina. Prospective Developer intends to redevelop the Property as the Cape Fear Soccerplex, a recreational and competition level soccer complex.

4. For purposes of this Agreement, DENR relies on information regarding Flemington Landfill contained in DENR files and on representations by the Prospective Developer as to the prior and current use of the Property and of the adjoining area. The representations by the Prospective Developer are based on information contained in Prospective Developer's Brownfields Letter of Intent, dated December 18, 2000, and on information contained in various documents and reports either obtained or commissioned by Prospective Developer including the following: Statistical Analysis Report, Old Flemington Landfill, dated August 20, 1998, and prepared by Environmental Investigations, Inc.; letter report concerning permeability of existing site soils, and letter report concerning the use of lysimeters at the Property, both prepared by Dr. A. R. Rubin, North Carolina State University; Summary of Permeability Testing, Proposed SoccerPlex, Report of Soil and Groundwater Testing, Wilmington Materials Site; reports of groundwater testing dated July 25, 2001, and November 29, 2001, respectively, each prepared by TerraTech Engineers, Inc.; and Report of Methane Sampling dated December 11, 2001, prepared by TerraTech Engineers, Inc. Collectively, the information regarding the Flemington Landfill contained in DENR files and the above documents and reports cited in this paragraph are referred to hereinafter as the "environmental reports."

a. Prior to its development as a landfill, the Property was used as a sand mine and borrow pit.

b. The Property was developed as a solid waste landfill in August 1973 by Waste Industries, Inc. under a lease from the Royal family, the property owner. Waste Industries, Inc. operated the landfill under permits issued by New Hanover County and the State of North Carolina. It is known that the landfill received both domestic and industrial solid waste, but the exact types and volumes of waste deposited at the Property are not known. Waste Industries, Inc. closed the landfill in June 1979.

c. Subsequent to the identification of groundwater quality problems by analytical data in an April 1978 report on groundwater sampling of monitoring wells located between the landfill and the nearby community of Flemington, the State of North Carolina ("State") conducted a groundwater study to determine what impact the landfill was having on local groundwater quality. The State study concluded that leachate from the landfill had affected groundwater quality in the area, including private water supply wells.

d. In response to complaints from the community of Flemington, the United States Environmental Protection Agency ("EPA") conducted three groundwater investigations in the area of the landfill during 1979. The EPA investigations also concluded that landfill leachate had affected groundwater quality in the area of the landfill.

e. Based on the results of the State and EPA groundwater studies, the United States on behalf of the EPA filed a civil lawsuit in January 1980 alleging that operation of the landfill had contaminated groundwater beneath the landfill and that the migration of this contaminated water posed an imminent and substantial endangerment to human health and the environment in the area of the landfill. In January 1981, EPA's lawsuit was dismissed by the U.S. District Court. f. In May 1984, the U.S. Court of Appeals for the Fourth Circuit reversed the lower District Court's decision and remanded the case to the U.S. District Court, and in August 1987, the defendants entered a Partial Consent Decree with EPA in which defendants agreed, among other requirements, to provide an alternative water supply for groundwater users in the projected path of the contaminant plume, and to perform a groundwater investigation in the vicinity of the landfill. Following its review of the data generated by the required investigation, its request for public comment on its preliminary decision on remedial action for the site, and a public meeting regarding the site, EPA issued a Final Agency Decision in June 1995 that groundwater remedial action would not be required at this site.

g. In April 1996, the United States (on behalf of EPA) and the defendants entered into a Final Consent Decree in which defendants agreed to conduct annual groundwater sampling of selected monitoring wells for three years. The final groundwater sampling of site monitoring wells was conducted in July 1998 and the results indicated the presence of benzene in concentrations exceeding North Carolina groundwater standards. In accordance with terms of the Final Consent Decree, because a statistical analysis of the analytical results indicated that a significant increase in groundwater contamination had not occurred at the landfill site during the three years of monitoring, groundwater monitoring at the site was discontinued and all site monitoring wells were subsequently abandoned.

h. As an institutional control on the use of groundwater in the area of the landfill, on
August 21, 1995 New Hanover County enacted an ordinance (County Code, Chapter 12, Article
VIII, Sections 12-67 et seq.; recodified at Chapter 56, Article III, Sections 56-181 et seq.) that

requires permitting of all new well construction in the area of the landfill.

i. The ownership and use of land adjoining the Property is as follows: land to the north, south and west is owned by Riverfront Company, LLC and is used for sand mining; to the east are railroad tracks on property owned by the CSX Railroad (formerly Seaboard Coast Railroad).

5. For purposes of this Agreement DENR relies on Prospective Developer's representations that Prospective Developer's involvement with the Property has been limited to the following:

a. Prospective Developer submitted a Letter of Intent, dated December 18, 2000, and prepared by Sungate Design Group, P.A., Prospective Developer's lead consultant, seeking entry into the North Carolina Brownfields Program and a Brownfields Agreement for the Property;

b. Prospective Developer's lead consultant worked with DENR to discuss and identify the technical problems that must be resolved to ensure that the Property is or can be made safe for the use committed to by Prospective Developer in its Letter of Intent, and to identify the specific environmental data and other information that Prospective Developer would be required to submit to DENR in order to demonstrate, to DENR's satisfaction, that the technical problems could be and had been resolved;

c. Prospective Developer has worked with City of Wilmington, New Hanover County, State agencies, and private consultants, contractors, and design professionals to identify and resolve the technical and permitting requirements related to the safe redevelopment of the Property;

d. Prospective Developer has commissioned investigations, referenced above in paragraph 4 of this Agreement, of groundwater quality in areas outside of the footprint of the waste cells at the Property and of air quality and soil permeability at the Property to establish preconstruction baseline environmental conditions at the Property, to aid in defining design parameters for the proposed soccer complex, and to provide the basis for risk identification and risk management decisions for the Property; and

e. Prospective Developer acquired the Property on June 5, 2001.

6. The environmental reports include the following information regarding groundwater contamination at the Property (in micrograms per kilogram, the equivalent of parts per billion), outside the footprint of the waste cells:

Groundwater Contaminant	Maximum Concentration
Diesel-Range Organics	200
Gasoline-Range Organics	350
Chromium	360
Lead	78
Mercury	1.4

7. Prospective Developer has provided DENR with information, or sworn certifications regarding that information on which DENR relies for purposes of this Agreement, necessary to demonstrate that:

a. Prospective Developer and any parent, subsidiary, or other affiliate has substantially complied with federal and State laws, regulations and rules for protection of the environment, and with the other agreements and requirements cited at N.C.G.S. § 130A-310.32(a)(1);

b. As a result of the implementation of this Agreement, the Property will be suitable for the uses specified in this Agreement while fully protecting public health and the environment;

c. Prospective Developer's reuse of the Property will produce a public benefit commensurate with the liability protection provided Prospective Developer hereunder;

d. Prospective Developer has or can obtain the financial, managerial and technical means to fully implement this Agreement and assure the safe use of the Property; and

e. Prospective Developer has complied with all applicable procedural

requirements.

8. Prospective Developer has paid the \$2,000 fee to seek a brownfields agreement required by N.C.G.S. § 130A-310.39(a)(1). Pursuant to N.C.G.S. § 130A-310.39(a)(2), the procedure upon which Prospective Developer and DENR have agreed for payment of the full cost to DENR and the North Carolina Department of Justice ("DOJ") of all activities related to this Agreement is that Prospective Developer shall pay any amount by which DOJ's hours multiplied by \$36.24 per hour exceeds the \$2,000 fee (DENR has incurred no costs).

# IV. BENEFIT TO COMMUNITY

9. Prospective Developer believes that its development of the Property will provide the following public benefits:

a. Conversion of the former landfill site, currently an abandoned, idled, and underused community eyesore into an attractive, maintained, and useful green space;

b. A long and greatly needed playing space for 6,000 youth and adults as well as a soccer tournament hosting facility for southeastern North Carolina with its ancillary benefits;

c. An example of quality redevelopment in the community that may lead to additional redevelopment in the surrounding area;

d. An economic boost to area hotel, food services, and other segments of the local economy through an increased demand for these services realized during regional soccer tournaments; and

e. A stable, low permeability cap across the landfill that will further reduce the potential for risk/threat to public health and the environment.

# V. WORK TO BE PERFORMED

10. Based on the information in the environmental reports, and subject to imposition of and compliance with the land use restrictions (the "Land Use Restrictions") cited below in paragraph 10.a., and except as may be required pursuant to Section IX of this Agreement (Reservation of Rights and DENR's Covenant Not to Sue and Reservation of Rights), active remediation at the Property shall be unnecessary.

a. Based on the information revealed in the environmental reports, DENR has determined that it is necessary for the Prospective Developer to impose the following Land Use Restrictions, which will run with the land, to make the Property safe for the uses specified in this Agreement while fully protecting public health and the environment:

i. No water supply wells may be installed or used at the Property.

ii. No mining activities may be conducted on the Property.
iii. Except as provided in paragraph 10.i. below, no disturbance, displacement or removal of soil in areas of the Property denominated "PROHIBITED" on the plat component of the Notice of Brownfields Property filed in connection with this Agreement is permitted without prior notification to and approval of DENR or its successor in function, any sampling of such waste material required by DENR, and submittal to DENR or its successor in function of analyses of such sampling along with plans and procedures to protect human health and the environment during the proposed activities. In the event such activities are approved by DENR or its successor in function, the activities shall be conducted in strict accordance with all local, state and federal legal provisions concerning sampling, characterization, handling, transportation and disposal of waste material, and anyone conducting such activities shall provide to DENR a report of such activities as required below in subparagraph 10.i. If any existing landfill waste material at the Property is disturbed other than pursuant to this subparagraph 10.a.iii., the owner of any affected portion of the Property shall effect sampling, characterization, handling, transportation and disposal of such waste material in strict accordance with local, State, and federal legal provisions, except that such waste material may not be disposed of on the Property even if to do so would otherwise be in compliance with law, and shall, no later than seven (7) days following discovery of the disturbance, report the disturbance to DENR in writing. Thereafter, the owner of any affected portion of the Property shall report when and as required by DENR regarding the disturbance, which reporting shall include, at a minimum, a written report that describes the nature and extent of the disturbance, the sampling, characterization, and handling of the waste material, and its transportation and disposal.

iv. No activities which result in direct exposure to or removal of groundwater (for example, construction or excavation activities which encounter or expose groundwater) may be conducted on the Property without prior sampling and analysis of groundwater in the area where such activities are to be conducted, submittal of the analytical results to DENR or its successor in function along with plans and procedures to protect human health and the environment during those activities, and approval of those activities by DENR or its successor in function.

v. No basements and no fountains, ponds, lakes, swimming pools or other items which are supplied, in whole or in part, by groundwater under the Property may be constructed on the Property. Reservoirs and ponds used exclusively for irrigation purposes and supplied by groundwater originating other than on the Property (e.g., groundwater from adjoining properties and water from the City of Wilmington) may be constructed in areas of the Property not denominated "PROHIBITED" on the plat component of the Notice of Brownfields Property filed in connection with this Agreement if: (A) any such reservoir or pond's base is at least two (2) feet above the top of the shallowest groundwater at the location of such reservoir or pond; and (B) the testing and use requirements set forth in subparagraph 10.f below are complied with in connection with any such reservoir or pond.

vi. No groundwater derived from adjoining properties may be used at the Property unless, prior to its initial use and no less frequently than once every six months thereafter, the owner of any portion of the Property where such groundwater is proposed to be used satisfies DENR that such groundwater does not exceed the groundwater standards contained in the North Carolina Administrative Code, Title 15A, Subchapter 2L, Rule .0202; and vi. Within seven (7) days of each anniversary of the effective date of this Agreement, the owner(s) of the Property shall each submit a notarized Land Use Restrictions Update to DENR certifying that (A) the Notice of Brownfields Property containing the Land Use Restrictions remains recorded at the New Hanover County Register of Deeds office; (B) the New Hanover County Ordinance referenced above in Paragraph 4.h. remains in effect; (C) the air, groundwater quality, infiltration and pond water monitoring activities required pursuant to subparagraphs 10.c., 10.d., 10.e. and 10.f. below, respectively, are being conducted; (D) the Land Use Restrictions are being complied with; and (E) all caps installed at the Property in accordance with paragraph 10.b. of this Agreement are in place and in good repair. Each Land Use Restrictions Update shall also include a complete record of any erosion, erosion repairs or other activities affecting the Land Use Restrictions or integrity of the cap.

b. Prior to the Property's use as a soccer complex, Prospective Developer shall submit to DENR sufficient data and other information to satisfy DENR that the cap at the Property has been enhanced such that:

i. its thickness extends at least two feet above the shallowest waste material at the Property, as demonstrated by a report of cap thickness and soil borings;

ii. it reduces the infiltration that occurred under the prior cap by at least two orders of magnitude (i.e., one hundred-fold) through any combination of soil depth, permeability, texture, artificial liners, or vegetation slope; and

iii. through grading, vegetation and maintenance it directs runoff only to stormwater infiltration basins along the perimeter of the Property, outside the boundary of the waste

material, in areas of high permeability sands.

c. The following conditions regarding capping shall also apply at the Property, compliance with which shall be determined by DENR:

i. All elements of the irrigation system shall be installed, operated and maintained in a manner that ensures the integrity and functionality of the cap;

ii. Unless otherwise approved by DENR, driveway and parking surfaces shall not be paved with asphalt or concrete or other impervious materials. Driveway and parking surfaces shall be constructed of marl or other pervious medium, and shall allow methane venting. Any impervious surfaces, including but not limited to building slabs, shall also allow methane venting. The design plans for pervious driving and parking surfaces and for any impervious surface covering shall be subject to DENR pre-construction approval. The Property may not be used as a soccer complex until DENR has approved a report submitted by Prospective Developer on postconstruction methane sampling at the sites of pervious driveway and parking surfaces, and in the vicinity of any impervious surface covering installed at the Property.

iii. Prospective Developer shall manage and maintain all vegetative matter on the Property in a manner that minimizes erosion, and shall promptly repair any erosion that occurs. Should erosion result in the exposure of waste material, Prospective Developer shall (A) immediately upon becoming aware of such occurrence prevent public access to the exposed waste material until the cap is re-installed; (B) within three (3) days of becoming aware of such occurrence notify DENR of the occurrence and re-install a cap that extends at least two feet above the shallowest waste material at the Property; and (D) notify DENR of the re-installation of the cap within three (3) days of its re-installation. d. Within the thirty (30) days prior to each anniversary of the effective date of this Agreement, Prospective Developer shall document to DENR the results of methane monitoring in monitoring wells M-1 and M-2, or in an equal number of replacement wells satisfactory to DENR or its successor in function. Prior to recreational use of each portion of the soccer complex, Prospective Developer shall document to DENR procedures used for, and analyses of, methane monitoring in that portion. In its annual Land Use Restrictions Update referenced above in subparagraph 10.a.vi., Prospective Developer shall set forth the procedures used for, and analyses of, all methane sampling that has occurred since the previous Update. In the event any sampling indicates the presence of sufficient methane to pose an imminent threat to public health, as determined by DENR, Prospective Developer shall take any actions DENR requires to eliminate that threat that are within DENR's authority to compel.

e. Within the thirty (30) days prior to each anniversary of the effective date of this Agreement, in conformance with groundwater sampling procedures described in the most recent edition of the Guidelines for Assessment and Cleanup of the Inactive Hazardous Sites Branch of DENR's Superfund Section, Prospective Developer shall sample monitoring wells GW-1, GW-2, GW-3, GW-4, W-1, W-3 and W-5, or an equal number of replacement wells satisfactory to DENR or its successor in function, for pH, specific conductance, turbidity and temperature, have the groundwater samples analyzed by approved EPA methods for volatile organic compounds (VOCs), priority pollutant metals, nitrate-nitrite, ammonia, chloride, chemical oxygen demand (COD), and total organic compounds (TOC) at a North Carolina-certified laboratory, and submit the sampling analyses to DENR. Prior to recreational use of each portion of the soccer complex, Prospective Developer shall document to DENR procedures used for, and analyses of, groundwater sampling in the monitoring well(s) nearest to that portion. In its annual Land Use Restrictions Update referenced above in subparagraph 10.a.vi., Prospective Developer shall set forth the procedures used for, and analyses of, all groundwater sampling that has occurred since the previous Update. In the event any sampling indicates to DENR a significant increase in contaminants attributable to landfill leachate, Prospective Developer shall amend its schedules and/or methods of irrigation and nutrient application, re-sample any site monitoring well that showed such an increase in contaminants within sixty (60) days of the observed increase, submit to DENR the analyses of such re-sampling within thirty (30) days of such re-sampling, and take any other action DENR requires to minimize the likelihood of infiltration of moisture into the former landfill waste cells.

f. Subject to DENR approval, Prospective Developer shall install pan lysimeters or similar devices in irrigated areas at the Property, use these devices to monitor the depth of irrigation moisture and nutrient infiltration into the turf and the top eighteen (18) inches of soil of the cap described above in subparagraph 10.b., and maintain a log of irrigation schedules and lysimeter monitoring results in order to establish the relationship between irrigation and infiltration rates. Prior to recreational use of each portion of the soccer complex, Prospective Developer shall document to DENR procedures and analyses of infiltration monitoring regarding that portion. In its annual Land Use Restrictions Update referenced above in subparagraph 10.a.vi., Prospective Developer shall set forth the procedures used for, and analyses of, all infiltration monitoring that has occurred since the previous Update. The target depth of moisture infiltration at the Property shall be eighteen (18) inches below the ground surface. Within three (3) days after becoming aware of any moisture infiltration exceeding the target depth, Prospective Developer shall notify DENR of such exceedance and either (A) amend the schedules and/or methods of irrigation and nutrient application used at affected portions of the Property and provide to DENR, within sixty (60) days after becoming aware of such exceedance, new data that demonstrates the target depth has been reestablished; or (B) cease recreational use of affected portions of the Property until such time as new data demonstrates the target infiltration depth has been re-established.

g. Within the thirty (30) days prior to each anniversary of the effective date of this Agreement, and in conformance with sampling procedures described in the guidelines published in the most recent edition of the *Guidelines for Assessment and Cleanup* of the Inactive Hazardous Sites Branch of DENR's Superfund Section, Prospective Developer shall sample the water from any pond used as a source of irrigation water for the Property, have the samples analyzed by approved EPA methods for VOCs, priority pollutant metals and nitrate-nitrite at a North Carolina-certified laboratory, and submit the sampling analyses to DENR. In addition to the pond sampling schedule cited above in this subparagraph, prior to the use of any pond for irrigation purposes at the Property, Prospective Developer shall submit to DENR the procedures used for sampling and an analysis of the pond water. The analytical results must demonstrate that the pond water does not contain an exceedance of the groundwater standards contained in the North Carolina Administrative Code, Title 15A, Subchapter 2L, Rule .0202. In its annual Land Use Restrictions Update referenced above in paragraph 10.a.vi., Prospective Developer shall set forth the procedures used for, and analyses of, all pond sampling that has occurred since the previous Update. In the event pond sampling indicates any exceedances of the groundwater standards contained in the North Carolina Administrative Code, Title 15A, Subchapter 2L, Prospective Developer shall discontinue the use of the relevant pond(s). Any re-use of such pond(s) will be subject to prior DENR approval based on pond re-sampling results indicating no such exceedances.

h. DENR may extend the intervals between methane, groundwater, lysimeter and pond sampling events referenced above in subparagraphs 10.c.-f. upon the written request of Prospective Developer. In evaluating such a request, DENR may consider factors related to protection of public health and the environment such as data from past sampling events and schedule of land use.

i. If water supply wells or other points of groundwater access, other than the groundwater monitoring wells referenced above in subparagraph 10.d., are discovered on the Property during redevelopment, Prospective Developer shall effect their proper abandonment in accordance with Title 15A of the North Carolina Administrative Code, Subchapter 2C, and shall submit to DENR a report of the abandonment activities and results within thirty (30) days of conducting such activities.

j. Prospective Developer shall maintain a sign at the Property indicating that the site has previously been used as a landfill.

k. Simultaneously with Prospective Developer's notification of the public, pursuant to N.C.G.S. § 130A-310.34, of its planned redevelopment activities at the Property, Prospective Developer shall send a copy of such notification to each of the Settling Defendants in <u>United States</u> <u>of America v. Waste Industries, Inc., et al.</u>, 80-4-CIV-7 (Eastern District of North Carolina) at the addresses provided for them on Exhibit 2 hereto.

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1. The desired result of the above-referenced Land Use Restrictions, requirements for air, groundwater, infiltration, and surface water monitoring and reporting, cap installation and maintenance, abandonment of certain groundwater access points, and landfill waste disposal are to make the Property suitable for the uses specified in this Agreement while fully protecting public health and the environment.

m. The guidelines, including parameters, principles and policies, within which the desired results are to be accomplished are those embodied in the current version of the *Guidelines for Assessment and Cleanup* of the Inactive Hazardous Sites Branch of DENR's Superfund Section.

n. The consequences of achieving or not achieving the desired results will be a site that is suitable or is not suitable for the uses specified in this Agreement while fully protecting public health and the environment.

## VI. ACCESS/NOTICE TO SUCCESSORS IN INTEREST

11. Commencing upon the effective date of this Agreement, Prospective Developer agrees to provide to DENR, its authorized officers, employees, representatives, and all other persons performing response actions under DENR oversight, an irrevocable right of access at all reasonable times to the Property and to any other property to which access is required for the implementation of response actions at the Property, to the extent access to such other property is controlled by the Prospective Developer, for the purposes of performing or overseeing response actions at the Property under applicable law. DENR agrees to provide reasonable notice to the Prospective Developer of the timing of response actions to be undertaken at the Property. Notwithstanding any provision of this Agreement, DENR retains all of its authorities and rights, including enforcement

authorities related thereto, under the Act and any other applicable statute or regulation, including any amendments thereto.

12. DENR has approved, pursuant to N.C.G.S. § 130A-310.35, a Notice of Brownfields Property for the Property containing, <u>inter alia</u>, the Land Use Restrictions set forth in Section V (Work to Be Performed) of this Agreement. Pursuant to N.C.G.S. § 130A-310.35(b), within 15 days of the effective date of this Agreement Prospective Developer shall file the Notice of Brownfields Property in the New Hanover County, North Carolina register of deeds' office, and within three (3) days thereafter shall furnish DENR a copy containing a certification by the register of deeds that the Notice has been recorded and the book and page number where recorded.

13. This Agreement shall be attached as Exhibit A to the Notice of Brownfields Property. Subsequent to recordation of said Notice, any deed or other instrument conveying an interest in the Property shall contain the following notice: "The property which is the subject of this instrument is subject to the Brownfields Agreement attached as Exhibit A to the Notice of Brownfields Property recorded in the New Hanover County land records, Book \_\_\_\_\_, Page \_\_\_\_." A copy of any such instrument shall be sent to the persons listed in Section XV (Notices and Submissions), though financial figures related to the conveyance may be redacted.

14. The Prospective Developer shall ensure that assignees, successors in interest, lessees, and sublessees of the Property shall provide the same access and cooperation. The Prospective Developer shall ensure that a copy of this Agreement is provided to any current lessee or sublessee on the Property as of the effective date of this Agreement and shall ensure that any subsequent leases, subleases, assignments or transfers of the Property or an interest in the Property are consistent with this Section, Section V (Work to be Performed) and Section XI (Parties Bound/Transfer of Covenant) of this Agreement.

#### VII. <u>DUE CARE/COOPERATION</u>

15. The Prospective Developer shall exercise due care at the Property with respect to regulated substances and shall comply with all applicable local, State, and federal laws and regulations, including, without limitation, laws and regulations requiring notification of actual or threatened contaminant releases such as N.C.G.S. 130A-310.1 and 143-215.84, and Section 103 of CERCLA, 42 U.S.C. § 9603. The Prospective Developer recognizes that remediation at the Property may interfere with the Prospective Developer's use of the Property, and may require closure of its operations or a part thereof. Prospective Developer agrees to cooperate fully with any remediation of the Property by DENR and further agrees not to interfere with any such remediation. DENR agrees, consistent with its responsibilities under applicable law, to use reasonable efforts to minimize any interference with the Prospective Developer's operations by any such remediation.

## VIII. CERTIFICATION

16. By entering into this Agreement, the Prospective Developer certifies that, without DENR approval, it will make no use of the Property other than that committed to in the Letter of Intent dated December 18, 2000 by which it applied for this Agreement. That use is as a soccer complex for youth and adult recreational soccer. Prospective Developer also certifies that to the best of its knowledge and belief it has fully and accurately disclosed to DENR all information known to Prospective Developer and all information in the possession or control of its officers, directors, employees, contractors and agents which relates in any way to any regulated substances at the Property and to its qualification for this Agreement, including the requirement that it not have caused or contributed to the contamination at the Property. If DENR determines that certifications provided by Prospective Developer have been violated, or that information provided by Prospective Developer to current standards by Prospective Developer pursuant to the following paragraph.

#### IX. <u>DENR'S COVENANT NOT TO SUE AND RESERVATION OF RIGHTS</u>

17. The Prospective Developer shall not be liable to DENR, and DENR covenants not to sue Prospective Developer, for remediation of the Property except as specified in this Agreement, unless:

a. The Prospective Developer fails to comply with this Agreement and, within any period that DENR provides for curing noncompliance, Prospective Developer fails to so cure.

b. The activities conducted on the Property by or under the control or direction of the Prospective Developer increase the risk of harm to public health or the environment, in which case Prospective Developer shall be liable for remediation of the areas of the Property, remediation of which is required by this Agreement, to the extent necessary to eliminate such risk of harm to public health or the environment. c. A land use restriction set out in the Notice of Brownfields Property required under N.C.G.S. 130A-310.35 is violated while the Prospective Developer owns the Property, in which case the Prospective Developer shall be responsible for remediation of the Property to current standards.

d. The Prospective Developer knowingly or recklessly provided false information that formed a basis for this Agreement or knowingly or recklessly offers false information to demonstrate compliance with this Agreement or fails to disclose relevant information about contamination at the Property.

e. New information indicates the existence of previously unreported contaminants or an area of previously unreported contamination on or associated with the Property that has not been remediated to current standards, unless this Agreement is amended to include any previously unreported contaminants and any additional areas of contamination. If this Agreement sets maximum concentrations for contaminants, and new information indicates the existence of previously unreported areas of these contaminants, further remediation shall be required only if the areas of previously unreported contaminants raise the risk of the contamination to public health or the environment to a level less protective of public health and the environment than that required by this Agreement.

f. The level of risk to public health or the environment from contaminants is unacceptable at or in the vicinity of the Property due to changes in exposure conditions, including (i) a change in land use that increases the probability of exposure to contaminants at or in the vicinity of the Property or (ii) the failure of remediation to mitigate risks to the extent required to make the Property fully protective of public health and the environment as planned in this Agreement. g. The Department obtains new information about a contaminant associated with the Property or exposures at or around the Property that raises the risk to public health or the environment associated with the Property beyond an acceptable range and in a manner or to a degree not anticipated in this Agreement.

h. The Prospective Developer fails to file a timely and proper Notice of Brownfields Property under N.C.G.S. 130A-310.35. 18. After Prospective Developer has filed the Notice of Brownfields Property referenced above in paragraph 12 and has performed the work required under Section V (Work To Be Performed) of this Agreement involving installation of a cap and construction of a recreational and competition level soccer complex at the Property, Prospective Developer may, within sixty (60) days after receiving from DENR an order to perform additional work at the Property, notify DENR in writing that it intends to cease its use of the Property by a date subject to DENR's reasonable approval in lieu of performing the additional work, unless DENR has ordered the additional work pursuant to any of the following provisions of this Agreement: Section VII (Due Care/Cooperation), subparagraphs 17.c. or 17.d., or subparagraph 17.f.(i) if the subject change in land use occurs at the Property while Prospective Developer owns it.

19. Except as may be provided herein, DENR reserves its rights against Prospective Developer as to liabilities beyond the scope of the Act, including those regarding petroleum underground storage tanks pursuant to Part 2A of Chapter 143 of the General Statutes.

20. This Agreement does not waive any applicable requirement to obtain a permit, license or certification.

#### X. <u>PROSPECTIVE DEVELOPER'S COVENANT NOT TO SUE</u>

21. In consideration of DENR's Covenant Not To Sue in Section IX of this Agreement and in recognition of the absolute State immunity provided in N.C.G.S. § 130A-310.37(b), the Prospective Developer hereby covenants not to sue and not institute any proceedings for any injury or claim arising from negotiating, entering, monitoring or enforcing this Agreement or the Notice of Brownfields Property referenced above in paragraph 12 or any other action implementing the Act.

# XI. PARTIES BOUND/TRANSFER OF COVENANT

22. This Agreement shall apply to and be binding upon DENR, and on the Prospective Developer, its officers, directors, employees, and agents. Each signatory of a Party to this Agreement represents that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party.

23. Except for N.C.G.S. § 130A-310.33(a)(1)-(5)'s provision of the Act's liability protection to certain persons to the same extent as to a prospective developer, no rights, benefits or obligations conferred upon Prospective Developer under this Agreement may be assigned or transferred to any person without the prior consent of DENR, in its sole discretion.

24. Prospective Developer agrees to pay the reasonable costs incurred by DENR to review any request by Prospective Developer for consent to assign or transfer the rights, benefits or obligations conferred upon Prospective Developer under this Agreement.

25. In the event of an assignment or transfer of the Property or an assignment or transfer of an interest in the Property, the assignor or transferor shall continue to be bound by all the terms and conditions, and receive all the benefits, of this Agreement except as DENR and the assignor or transferor agree otherwise and modify this Agreement, in writing, accordingly. Moreover, prior to or simultaneous with any assignment or transfer of the Property, the assignee or transferee must consent in writing to be bound by the terms of this Agreement including but not limited to the certification requirement in Section VIII of this Agreement.

#### XII. DISCLAIMER

26. This Agreement in no way constitutes a finding by DENR as to the risks to public health and the environment which may be posed by regulated substances at the Property, a representation by DENR that the Property is fit for any particular purpose, nor a waiver of Prospective Developer's duty to seek applicable permits or of the provisions of N.C.G.S. § 130A-310.37.

#### XIII. DOCUMENT RETENTION

27. The Prospective Developer agrees to retain and make available to DENR all business and operating records, contracts, site studies and investigations, and documents relating to operations at the Property, for ten years following the effective date of this Agreement or until Prospective Developer's completion of the work to be performed at the Property to the satisfaction of DENR, whichever is longer, unless otherwise agreed to in writing by the Parties. At the end of ten years, the Prospective Developer shall notify DENR of the location of such documents and shall provide DENR with an opportunity to copy any documents at the expense of DENR.

#### XIV. PAYMENT OF ENFORCEMENT COSTS

28. If the Prospective Developer fails to comply with the terms of this Agreement, including, but not limited to, the provisions of Section V (Work to be Performed), it shall be liable for all reasonable litigation and other enforcement costs incurred by DENR to enforce this Agreement or otherwise obtain compliance.

## XV. NOTICES AND SUBMISSIONS

29. Unless otherwise required by DENR, all notices and submissions pursuant to this Agreement may be sent by prepaid first class U.S. mail, as follows:

a. for DENR:

Mr. Tony Duque Brownfields Project Manager Superfund Branch, DWM Department of Environment and Natural Resources 1646 Mail Service Center

#### Raleigh, NC 27699-1646

b. for Prospective Developer:

Mr. Mason Hawfield Manager Cape Fear Soccerplex, LLC 6726 Netherlands Drive, #700 Wilmington, NC 28405

Notices and submissions sent by prepaid first class U.S. mail shall be effective on the third day following postmarking. Notices and submissions sent by hand or by other means affording written evidence of date of receipt shall be effective on such date.

#### XVI. <u>EFFECTIVE DATE</u>

30. The effective date of this Agreement shall be the earlier of the third day after DENR sends notice to Prospective Developer by prepaid first class U.S. mail, or the day DENR notifies Prospective Developer by facsimile, if DENR does so, that DENR has fully executed this Agreement after review of and response to any public comments received.

## XVII. TERMINATION OF CERTAIN PROVISIONS

31. If any Party believes that any or all of the obligations under Section VI (Access/Notice to Successors in Interest) are no longer necessary to ensure compliance with the requirements of this Agreement, that Party may request in writing that the other Party agree to terminate the provision(s) establishing such obligations; provided, however, that the provision(s) in question shall continue in force unless and until the Party requesting such termination receives written agreement from the

other Party to terminate such provision(s).

#### XVIII. CONTRIBUTION PROTECTION

32. With regard to claims for contribution against Prospective Developer in relation to the subject matter of this Agreement, the Parties hereto agree that the Prospective Developer is entitled to protection from such claims to the extent provided by N.C.G.S. § 130A-310.37(a)(5)-(6). The subject matter of this Agreement is all remediation taken or to be taken and response costs incurred or to be incurred by DENR or any other person in relation to the Property.

33. The Prospective Developer agrees that, with respect to any suit or claim for contribution brought by it in relation to the subject matter of this Agreement, it will notify DENR in writing no later than 60 days prior to the initiation of such suit or claim.

34. The Prospective Developer also agrees that, with respect to any suit or claim for contribution brought against it in relation to the subject matter of this Agreement, it will notify DENR in writing within 10 days of service of the complaint on it.

## XIX. PUBLIC COMMENT

35. This Agreement shall be subject to a sixty-day public comment period dating from publication of the approved summary of the Notice of Intent to Redevelop a Brownfields Property required by N.C.G.S. § 130A-310.34 in the North Carolina Register or a newspaper of general circulation serving the area in which the Property is located, whichever shall occur later. After expiration of that period, or following a public meeting if DENR holds one pursuant to N.C.G.S. § 130A-310.34(c), DENR may modify or withdraw its consent to this Agreement if comments received disclose facts or considerations which indicate that this Agreement is inappropriate, improper or inadequate.

# IT IS SO AGREED: North Carolina Department of Environment and Natural Resources By:

Dexter R. Matthews, Director, Division of Waste Management

IT IS SO AGREED: CAPE FEAR SOCCERPLEX, LLC By:

Mason Hawfield, Manager

Date

Date

## EXHIBIT 1

## Legal Description

Beginning at a new iron pipe in the westerly right-of-way line of the CSX Transportation Company Railroad (130 foot right-of-way), formerly known as SCL Railroad. Said beginning pipe being located South 25 degrees 26 minutes 35 seconds West 2,481.30 feet, from NC Grid Station "Queensboro" said station having coordinates of North 194537.11 feet and East 2313797.78 feet, NAD 83. Said beginning pipe also being located South 79 degrees 51 minutes 34 seconds West 65.00 feet, from a point on the center-line of said CSX Transportation Company Railroad. Said point on said center-line being located South 10 degrees 08 minutes 26 seconds East 858.98 feet, from the intersection of said center-line with the center-line of Flemington Street, formerly known as Fayetteville Avenue (60 foot right-of-way) as shown on a map of "Flemington" recorded in Map Book 4 at Page 64 of the New Hanover County Registry. Said beginning pipe also being located 1,266.97 feet, as measured in a northerly direction along said westerly right-of-way line of Sampson Street (70 foot right-of-way) as shown on a Map of Survey of Oak Grove Cemetery recorded in Map Book 8 at Page 68 of said Registry. Running thence from said beginning pipe.

- 1. North 83 degrees 43 minutes 30 seconds West 1,220.03 feet, passing through a new iron pipe 406.68 feet, and 815.36 feet, to a new iron pipe; thence
- 2. North 21 degrees 01 minute 04 seconds West 2,124.93 feet, passing through a new iron pipe AT 531.23 feet, 1,062.46 feet, and 1,593.70 feet, to a new iron pipe. Last said pipe being a southerly corner of a 20.52 acre tract shown on a map recorded in Map Book 39 at Page 210 of said Registry; thence
- 3. North 06 degrees 16 minutes 54 seconds East 98.39 feet, along an easterly line of said 20.52 acre tract to a new iron pipe; thence
- 4. South 83 degrees 43 minutes 06 seconds East 1566.97 feet, along a southerly line of 20.52 acre tract, to an old iron pipe on the westerly right-of-way line of said CSX Transportation Company Railroad. Last said point being on a curve having a radius of 2,770.70 feet; thence
- 5. With arc of said curve and with the westerly right-of-way line of said CSX Transportation Company Railroad, as it curves to the west, to a new iron pipe at the southerly end of said curve that is South 15 degrees 02 minutes 24 seconds East a chord distance of 473.29 feet, from the preceding point; thence
- 6. South 10 degrees 08 minutes 26 seconds East 1,611.35 feet, along said westerly right-of-way line, to the point of beginning.

The above described tract contains  $65.47\pm$  acres. The same being a portion of the Fleming and Royal Tract. Being also the same property described in that "Map of a Survey for Cape Fear Soccer Association, Inc." dated November 22, 2000, by Sherwin D. Cribb, PLS.

## EXHIBIT 2 Settling Defendants and Their Notice Addresses

## WASTE INDUSTRIES, INC. WASTE INDUSTRIES OF NEW HANOVER, INC.

c/o Marshal, Williams, & Gorham, L.L.P. P. O. Drawer 2088 Wilmington, NC 28402

#### NEW HANOVER COUNTY

New Hanover County Administration Building 320 Chestnut Street, Room 309 Wilmington, NC 28401

#### STATE OF NORTH CAROLINA

Department of Environment, Health and Natural Resources 1601 Mail Service Center Raleigh, NC 27699-1601

A. D. Royal Carmen M. Butler Charles A. Royal, Jr. Eloise R. Piexotto Mildred R. Simpson Stephen D. Royal Mildred Fleming Powell c/o Hogue, Hill, Jones, Nash & Lynch P. O. Drawer 2178 Wilmington, NC 28402

## CITY OF WILMINGTON

P. O. Box 1810 Wilmington, NC 28402

## TRASH REMOVAL SERVICES, INC.

c/o Waste Management of Carolinas, Inc. 2600 Delk Road Marietta, GA 30067-8835

#### JERRY SAUNDERS t/a A & M SANITATION

c/o Stevens, McGhee, Morgan, Lennon & O'Quinn P. O. Drawer 59 Wilmington, NC 28402

#### A-1 SANITATION SERVICES, INC.

c/o Stevens, McGhee, Morgan, Lennon & O'Quinn P. O. Drawer 59 Wilmington, NC 28402