ALTAMONT ENVIRONMENTAL, INC.
ENGINEERING & HYDROGEOLOGY
50 COLLEGE STREET, ASHEVILLE, NC 28801
TEL. 828.281.3350 FAC. 828.281.3351
www.altamontenvironmental.com

August 30, 2007

Mr. Mark Poindexter
NC DENR
Solid Waste Section
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

Subject: International Paper – Canton Landfill No. 5
Canton, North Carolina
Permit No. 44-01
Annual Groundwater and Surface Water Sampling Results – July 2007

Dear Mr. Poindexter:

On July 27, 2007, Altamont Environmental, Inc. (Altamont) conducted annual groundwater and surface water sampling at the International Paper Company (IP) – Canton Landfill No. 5 (Landfill). Low-flow sampling techniques were used to collect groundwater samples from all monitoring wells at the site. A Site Location Map is included as Figure 1.

Altamont personnel collected six groundwater samples from monitoring wells: MW-5B1, MW-5B2, MW-5B3, MW-5C1, MW-5C2, and MW-5C3 and two surface water samples (BD-UP and BD-DOWN) from Beaverdam Creek by Altamont. Sampling locations are shown on Figure 2.

In accordance with the letter dated July 18, 2003 from the North Carolina Department of Environment and Natural Resources (DENR) to IP, Altamont is reporting the following list of analytes for this annual sampling event:

1. Cadmium;
2. Chloride;
3. Iron;
4. Sulfate; and
5. Total Dissolved Solids (TDS)

In addition, field parameters including: depth to water, temperature, pH, specific conductivity, oxygen reduction potential, dissolved oxygen, and turbidity were measured and recorded for each sample. These measurements are shown in Table 1. Table 2 presents the current and historical groundwater data for pH and the five analytes analyzed by the laboratory. Table 3 presents the current and historical surface water data.

A blind duplication (DUP-1) of MW-5C1 was conducted. The values of the results are slightly different for the iron and total dissolved solids concentrations. The variation between the groundwater sample for MW-5C1 and DUP-1 is minimal and none of the results exceeded the 2L Standard.

The following information summarizes the results of the water quality monitoring:

Groundwater:

- Groundwater samples from all six monitoring wells had a pH below 6.5 which is the lower limit of the *Title 15A, North Carolina Administrative Code (NCAC), Subchapter 2L Groundwater Quality Standard* (2L Standard). Please note that pH was measured in the field.
- Cadmium was not detected in the groundwater samples collected from the referenced monitoring wells. For each sample, the method reporting limit was lower than the 2L Standard.
- All detected chloride concentrations were less than the respective 2L Standards in groundwater samples collected from all monitoring wells.
- Iron concentrations of 16, 33, and 36 milligrams per liter (mg/L), were detected in groundwater samples collected from monitoring wells MW-5B1, MW-5B2, and MW-5B3, respectively which exceeded the 2L Standard.
- All detected sulfate concentrations in groundwater samples were below the 2L Standard of 250 mg/L.
- All detected TDS concentrations in groundwater samples were below the 2L Standard of 500 mg/L.

Surface Water:

- The pH value for BD-UP was 5.31, which is below the lower limit of the *Title 15A, North Carolina Administrative Code (NCAC), Subchapter 2B Surface Water and Wetland Standards* (2B Standard). The pH value for BD-DOWN was within the limits of the 2B Standard.
- Cadmium, chloride, and sulfate were not detected in either of the two surface water samples at concentrations lower than the respective 2B Standard.
- Iron was detected in BD-UP and BD-DOWN at concentrations below the respective 2B Standard.
- TDS were detected in BD-UP and BD-DOWN at concentrations below the respective 2B Standard.

A comparison of current analytical results to results recorded since 1991, signify that no noteworthy changes in water quality have occurred during this sampling event. The next sampling event is scheduled for July 2008.

Please call if you have any questions or need additional information. Thank you for your assistance with this project.

Sincerely,

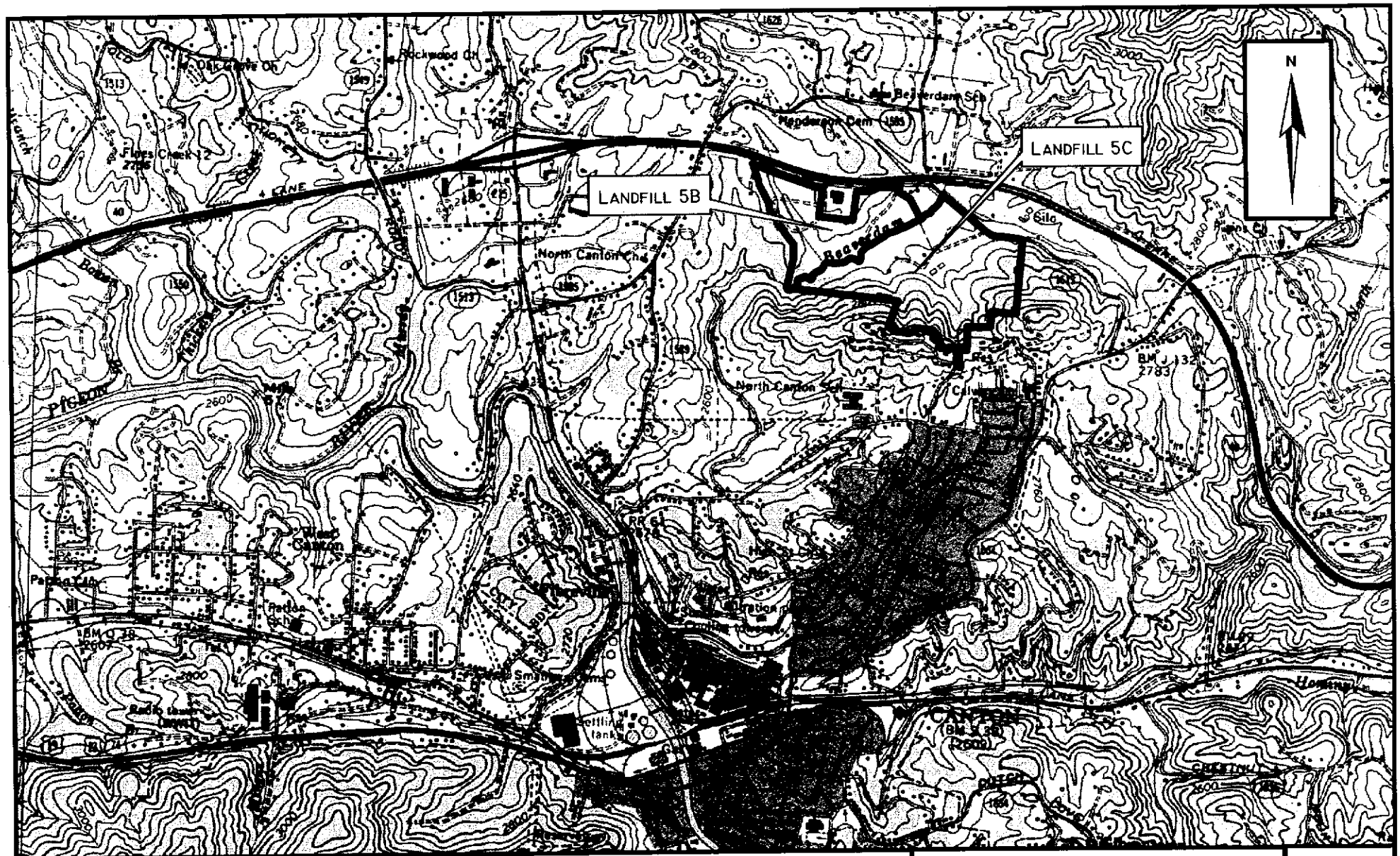
Altamont Environmental, Inc.

Joel D. Lenk, P.G.

cc: Mr. Tom Richardson, International Paper

enclosures:
Figure 1 – Site Location Map
Figure 2 – Water Quality Sampling Locations
Table 1 – Water Quality Field Parameters; International Paper Landfill Five
Table 2 – Groundwater Quality Results; International Paper Landfill Five
Table 3 – Surface Water Quality Results; International Paper Landfill Five
Analytical Laboratory Results

FIGURES



SOURCE:
TOPOGRAPHIC MAP
USGS CANTON QUADRANGLE
CREATED: 1967 REVISED: 1990

LEGEND

LF 5 PARCEL BOUNDARY

ALTAMONT ENVIRONMENTAL, INC.

50 COLLEGE STREET, ASHEVILLE, NC 28801
Tel. 828.281.3350 Fac. 828.281.3351
www.altamontenvironmental.com

DRAWN BY: ANNA SAYLOR
PROJECT MANAGER: JIM MCELDUFF
CLIENT: INTERNATIONAL PAPER CO.
DATE: 8/8/2007

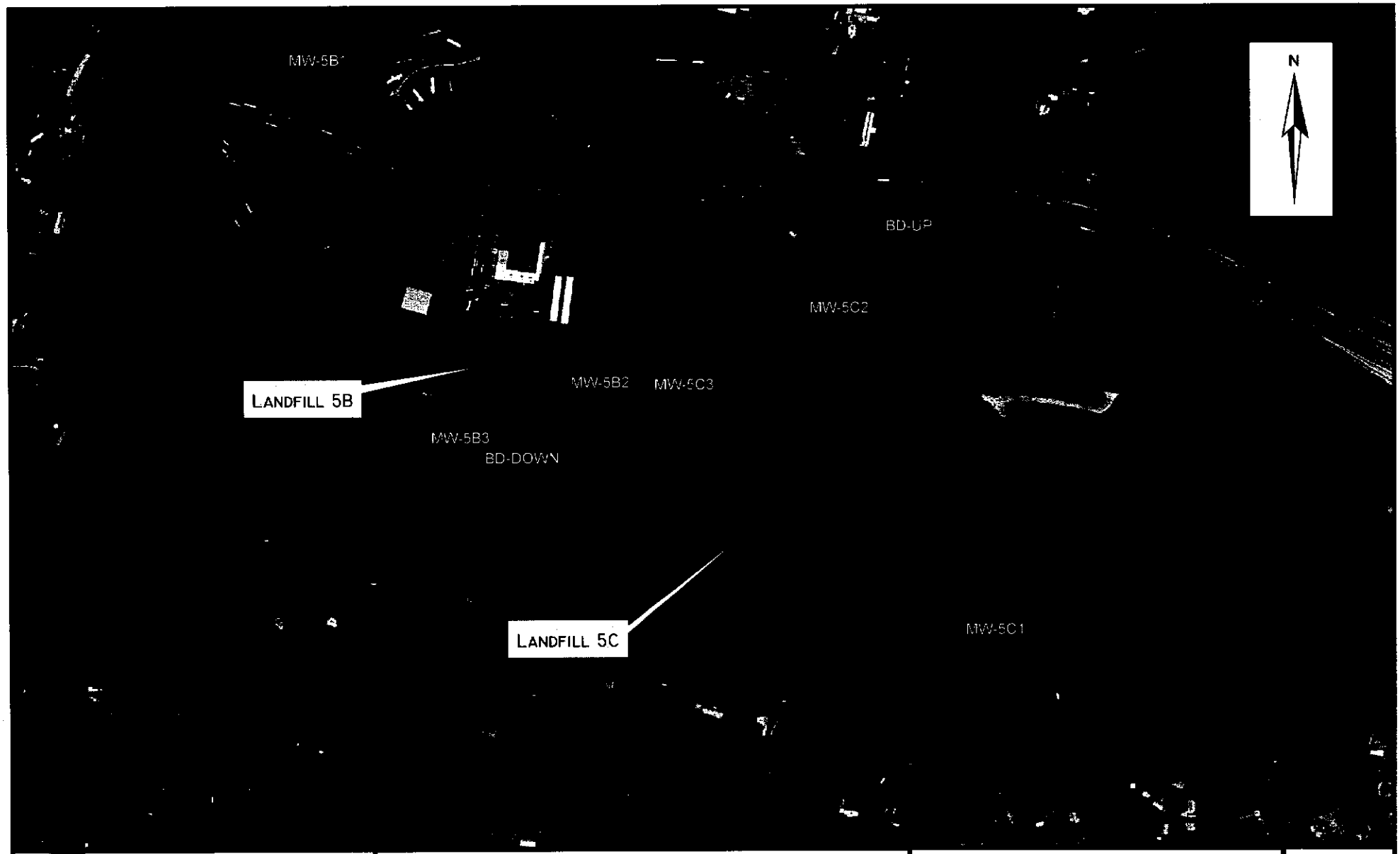
SCALE
0 500 1,000 2,000
FEET

LANDFILL 5
SITE LOCATION MAP

CLOSED INTERNATIONAL PAPER LANDFILL
CANTON, NORTH CAROLINA

FIGURE
1

P:\IP\LF 5\LOW FLOW SAMPLING\GIS 2007\LF5 SITE LOCATION MAP.MXD



SOURCE:
HAYWOOD COUNTY COLOR ORTHOPHOTOGRAPHY
APRIL 6, 2004

LEGEND

- ● LF 5 MONITORING WELLS
- ——— LF 5 PARCEL BOUNDARY
- ● SURFACE WATER LOCATIONS

ALTAMONT ENVIRONMENTAL, INC.
50 COLLEGE STREET, ASHEVILLE, NC 28801
Tel. 828.281.3350 Fax. 828.281.3351
www.altamontenvironmental.com

DRAWN BY: ANNA SAYLOR
PROJECT MANAGER: JIM MCELDUFF
CLIENT: INTERNATIONAL PAPER CO.
DATE: 8/8/2007

SCALE
0 150 300 600 FEET

LANDFILL 5 LOW-FLOW GROUNDWATER AND SURFACE WATER SAMPLE LOCATIONS

CLOSED INTERNATIONAL PAPER LANDFILL
CANTON, NORTH CAROLINA

FIGURE
2

P:\IP\LF 5\LOW FLOW SAMPLING\GIS 2007\LF5 GW SAMPLE LOCATIONS.MXD

TABLES

Table 1
Water Quality Field Parameters
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Well ID	Sample Date	Total Well Depth	Depth to Water (feet)	Temperature (°C)	pH	Specific Conductivity (mS)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
MW-5B1	7/27/2007	40.71	10.30	14.24	3.87	0.041	210.2	3.48	144.0
MW-5B2	7/27/2007	20.40	4.20	15.09	5.69	0.603	-14.8	0.43	39.8
MW-5B3	7/27/2007	65.56	7.00	17.71	6.29	0.236	-46.7	1.49	96.9
MW-5C1	7/27/2007	29.55	15.08	13.31	5.38	0.123	189.1	8.61	0.92
DUP-1	7/27/2007	29.55	15.08	13.31	5.38	0.123	189.1	8.61	0.92
MW-5C2	7/27/2007	25.92	6.60	21.33	6.26	0.199	71.9	4.45	0.21
MW-5C3	7/27/2007	23.80	3.40	20.22	5.57	0.416	88.0	4.34	0.68
BD-UP	7/27/2007	N/A	N/A	18.43	5.31	0.073	138.6	10.13	15.0
BD-DOWN	7/27/2007	N/A	N/A	18.40	7.03	0.080	44.5	9.98	14.8

Notes:

1. µS means microsiemens.
2. Depth to water measured from top of casing.
3. pH is measured in Standard Units.
4. DUP-1 was a duplicate sample of MW-5C1

Table 2
Groundwater Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2L Standards		*6.5 - 8.5*	*0.00175*	*250*	*0.3*	*250*	*500*
MW-5B1	05/01/91	6.73	ND	0.62	**19**	ND	20
	05/01/92	**6.40**	ND	1.5	**15**	3.2	26
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	**6.11**	ND	2.3	**3.1**	3.2	25
	05/01/94	**6.42**	ND	ND	**2.5**	ND	29
	11/01/94	7.20	0.001	1.1	**10.6**	1.4	35
	05/01/95	6.60	ND	1.2	**5.85**	0.24	32
	11/01/95	**5.80**	0.001	1.2	**7.808**	1.3	45
	05/01/96	**6.30**	ND	0.9	**12.77**	ND	27
	11/01/96	6.80	0.001	2.4	**10.43**	ND	34
	05/01/97	6.60	ND	ND	**4.4**	ND	43
	11/01/97	7.20	ND	1.5	**44**	ND	49
	05/01/98	6.60	ND	ND	**2.5**	ND	85
	11/01/98	7.20	ND	2.1	**2.6**	ND	44
	05/01/99	6.70	ND	ND	**2.8**	ND	98
	11/01/99	**6.40**	ND	1	**14**	10.8	38
	05/01/00	**5.80**	**0.0026**	ND	**10**	2.3	41
	11/01/00	6.50	ND	ND	**2.8**	ND	52
	05/01/01	**6.40**	ND	1.4	**1.2**	ND	ND
	11/05/01	**5.79**	ND	ND	**5.2**	1.7	35
	05/28/02	6.55	ND	ND	**1.5**	ND	32
	12/02/02	**5.12**	ND	1.3	**1.6**	ND	38
	12/03/03	**6.39**	ND	1.2	**1.6**	ND	90
	07/20/04	**6.27**	ND	ND	**10**	ND	56
	07/13/05	**5.57**	ND	ND	**20**	ND	48
	07/10/06	**6.02**	ND	ND	**17**	ND	28
	07/27/07	**3.87**	ND	ND	**16**	ND	42

Table 2
Groundwater Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2L Standards		*6.5 - 8.5*	*0.00175*	*250*	*0.3*	*250*	*500*
MW-5B2	05/01/91	6.57	ND	40.3	**35.9**	12.5	192
	05/01/92	6.60	ND	31	**70**	18	210
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	**5.96**	ND	33	**28**	ND	190
	05/01/94	**6.30**	ND	42.8	**25.001**	7.3	215
	11/01/94	**6.30**	**0.004**	66.3	**22.2**	8.8	257
	05/01/95	6.70	**0.005**	15.3	**50.277**	38.3	187
	11/01/95	**6.10**	**0.004**	49.5	**27.63**	38.8	263
	05/01/96	**6.20**	ND	65.3	**49**	21.6	298
	11/01/96	6.60	**0.002**	95.4	**19.415**	7	327
	05/01/97	6.60	ND	85	**36**	2.7	280
	11/01/97	**6.30**	ND	110	**12**	7.1	290
	05/01/98	**6.30**	ND	99	0.12	5.1	350
	11/01/98	**6.40**	ND	96	**47**	3.3	330
	05/01/99	6.60	ND	81	**170**	9.13	360
	11/01/99	**6.00**	**0.0022**	110	**32**	132	410
	05/01/00	**6.10**	**0.0041**	97	**39**	13.3	350
	11/01/00	**6.10**	**0.0039**	120	**29**	11	360
	05/01/01	**6.30**	**0.007**	100	**49**	6.8	500
	11/05/01	**6.25**	**0.003**	120	**23**	6.9	160
	05/28/02	**6.36**	**0.034**	87	**89**	**540**	390
	12/02/02	**5.33**	**0.0025**	91	**35**	13	400
	12/03/03	6.57	ND	67	**22**	10	320
	07/19/04	**6.21**	ND	50	**25**	9.9	256
	07/13/05	**4.42**	ND	5.5	**28**	14	170
	07/11/06	6.63	ND	ND	**34**	28	160
	07/27/07	**5.69**	ND	65	**33**	6.9	330

Table 2
Groundwater Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2L Standards		*6.5 - 8.5*	*0.00175*	*250*	*0.3*	*250*	*500*
MW-5B3	05/01/91	6.76	ND	9.73	**26.4**	11.7	102
	05/01/92	6.50	ND	9.8	**46**	ND	90
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	**6.14**	ND	20	**13**	23	140
	05/01/94	**6.40**	ND	21.4	**12.661**	18.1	153
	11/01/94	6.70	**0.004**	27.1	**23.705**	11.2	142
	05/01/95	6.60	**0.004**	26.5	**18.392**	10.9	169
	11/01/95	**5.90**	**0.004**	30.3	**16.407**	7.8	158
	05/01/96	**6.20**	ND	31.5	**15.9**	9.3	157
	11/01/96	6.50	0.001	26.7	**16.03**	9.9	161
	05/01/97	6.50	**0.003**	30	**16**	7.9	180
	11/01/97	**6.30**	ND	31	**26**	8.9	160
	05/01/98	**6.40**	ND	39	**38**	7.4	170
	11/01/98	6.60	ND	36	**17**	9	200
	05/01/99	6.60	ND	38	**17**	7.06	190
	11/01/99	**6.20**	ND	34	**19**	3.1	180
	05/01/00	**6.20**	**0.002**	36	**16**	12.8	190
	11/01/00	**6.30**	**0.0021**	35	**17**	24	190
	05/01/01	**6.20**	**0.0068**	34	**18**	9.4	220
	11/05/01	6.78	**0.0022**	42	**18**	9.4	21
	05/28/02	**6.41**	**0.015**	34	**91**	85	180
	12/02/02	**6.45**	0.0014	31	**13**	15	56
	12/03/03	**6.49**	ND	50	**15**	11	180
	07/20/04	**6.36**	ND	20	**35**	12	124
	07/12/05	**5.86**	ND	19	**33**	17	160
	07/10/06	**6.37**	0.0011	17	**45**	15	120
	07/27/07	**6.29**	ND	17	**36**	12	140

Table 2
Groundwater Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2L Standards		*6.5 - 8.5*	*0.00175*	*250*	*0.3*	*250*	*500*
MW-5C1	05/01/91	**6.26**	ND	7.66	**31.3**	12.7	71
	05/01/92	**6.10**	ND	7.7	0.3	9.4	79
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	**5.52**	ND	8.1	0.14	5.9	63
	05/01/94	**5.60**	ND	7.4	0.078	9.2	76
	11/01/94	6.50	ND	7.7	0.262	10.9	27
	05/01/95	**6.00**	**0.002**	7.5	0.074	8.5	84
	11/01/95	**5.50**	ND	7.9	0.044	8.4	95
	05/01/96	**5.90**	ND	6.8	**765.32**	8.6	51.5
	11/01/96	**6.30**	ND	7.8	ND	9.9	79.5
	05/01/97	**6.00**	ND	7.4	0.27	8.6	85
	11/01/97	**6.00**	ND	7.4	0.11	8.6	94
	05/01/98	**5.60**	ND	5.2	ND	10	75
	11/01/98	**6.00**	NA	NA	NA	NA	NA
	05/01/99	**5.20**	ND	7.7	ND	4	77
	11/01/99	**5.50**	ND	7.2	0.12	7.45	82
	05/01/00	**6.30**	ND	9.1	0.069	10	91
	11/01/00	**6.20**	ND	7.4	0.094	11	77
	05/01/01	**5.40**	ND	7.2	0.064	6.7	140
	11/05/01	**5.46**	ND	8.3	0.18	7.9	96
	05/28/02	**6.07**	ND	9.3	0.083	8.5	76
	12/02/02	**6.20**	ND	6.8	ND	12	100
	12/03/03	**6.02**	ND	8.4	ND	10	60
	07/19/04	**5.80**	ND	6.8	ND	10	76
	07/12/05	**5.00**	ND	7.6	ND	8.5	110
	07/11/06	**5.37**	ND	7.1	ND	6.8	90
	07/27/07	**5.38**	ND	8.8	0.13	5.3	120
DUP-1	07/27/07	**5.38**	ND	8.8	ND	5.2	98

Table 2
Groundwater Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2L Standards		*6.5 - 8.5*	*0.00175*	*250*	*0.3*	*250*	*500*
MW-5C2	05/01/91	7.56	ND	7.30	**0.41**	ND	**1607**
	05/01/92	6.90	ND	25	**100**	16	140
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	**6.18**	ND	11	**2.3**	8.6	97
	05/01/94	6.58	ND	12.5	0.157	2.2	99
	11/01/94	7.20	ND	15	**0.598**	17.3	99.5
	05/01/95	6.70	ND	13.7	**11.19**	2.1	96
	11/01/95	**6.10**	ND	14.5	**3.123**	2.1	103
	05/01/96	**6.40**	ND	12.6	**6.029**	2.2	83
	11/01/96	**6.40**	**0.002**	16.2	NA	3.3	104
	05/01/97	6.80	ND	14	**3.2**	ND	90
	11/01/97	7.20	ND	13	**1.6**	1.6	86
	05/01/98	6.50	ND	14	**24**	1.4	100
	11/01/98	**5.70**	NA	NA	NA	NA	NA
	05/01/99	6.60	ND	13	**7.6**	ND	100
	11/01/99	**5.80**	ND	11	**0.32**	ND	96
	05/01/00	**5.80**	ND	16	**0.51**	ND	120
	11/01/00	6.80	0.0016	14	**16**	6.9	110
	05/01/01	**6.40**	ND	13	**1.2**	1.2	140
	11/05/01	**6.21**	ND	15	**2**	2.8	97
	05/28/02	6.75	0.0014	15	**4.1**	ND	88
	12/02/02	**4.98**	ND	15	**1.9**	5.5	110
	12/03/03	6.61	ND	27	**0.58**	ND	92
	07/19/04	**6.24**	ND	24	ND	ND	106
	07/12/05	**5.89**	ND	28	0.26	ND	170
	07/11/06	**6.12**	ND	30	0.14	ND	420
	07/27/07	**6.26**	ND	37	0.076	ND	210

Table 2
Groundwater Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2L Standards		*6.5 - 8.5*	*0.00175*	*250*	*0.3*	*250*	*500*
MW- 5C3	05/01/91	**6.18**	ND	23.9	**11.3**	2.3	315
	05/01/92	6.60	ND	40	**89**	5.1	430
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	**5.66**	ND	46	**0.39**	ND	170
	05/01/94	**5.82**	ND	52.2	0.171	1.8	186
	11/01/94	**6.30**	ND	55.7	**0.597**	2	187
	05/01/95	**6.40**	**0.005**	63.9	**31.08**	32.2	374
	11/01/95	**5.50**	**0.003**	70.2	**15.28**	1.9	272.5
	05/01/96	**5.70**	ND	75.6	**1.45**	1.9	242
	11/01/96	**6.00**	**0.003**	95.5	**12.5**	2.6	223
	05/01/97	6.90	ND	83	**2.9**	ND	310
	11/01/97	7.00	ND	20	**2.4**	8.4	350
	05/01/98	**5.80**	ND	86	0.06	1.7	350
	11/01/98	**5.70**	ND	92	**0.32**	2.2	380
	05/01/99	**5.80**	ND	94	**1.7**	7.42	330
	11/01/99	**5.80**	ND	96	**0.79**	3.1	310
	05/01/00	**5.50**	ND	98	**0.86**	ND	280
	11/01/00	**6.00**	ND	93	**6.6**	ND	280
	05/01/01	**5.90**	ND	93	**2.7**	1.1	360
	11/05/01	**5.83**	0.0017	100	**1.5**	2.6	290
	05/28/02	**5.90**	ND	96	**2**	ND	400
	12/02/02	**5.31**	ND	99	**1.2**	6.7	340
	12/03/03	**5.64**	ND	130	0.12	ND	280
	07/19/04	**5.50**	ND	97	0.072	ND	312
	07/13/05	**5.20**	ND	100	0.10	ND	490
	07/11/06	**5.47**	ND	88	ND	ND	**980**
	07/27/07	**5.57**	ND	85	ND	ND	410

Notes:

1. 2L Standard values were taken from Title 15A, North Carolina Administrative Code (NCAC), Subchapter 2L Groundwater Quality Standards.
2. **Bold** indicates exceedance of 2L Standard in monitoring wells.
3. pH is measured in Standard Units.
4. Concentrations are in milligrams per liter (mg/L).
5. ND signifies that the parameter was not detected at or above the laboratory reporting limit.
6. NA signifies that analytical data is not present or available.

Table 3
Surface Water Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2B Standards		*6.0 - 9.0*	*2.0*	*230*	*1.0*	*250*	*500*
BD-UP	05/01/91	7.47	ND	1.56	0.96	ND	37
	05/01/92	NA	NA	NA	**1.6**	NA	NA
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	7.50	ND	2.9	0.41	4.1	75
	05/01/94	7.10	ND	1.9	0.24	4.3	37
	11/01/94	7.40	ND	3.3	**1.179**	3.7	56
	05/01/95	7.90	ND	2.5	**1.125**	4.1	49
	11/01/95	6.20	ND	4.2	0.192	4.9	72
	05/01/96	6.20	ND	2.6	**1.316**	5.9	34
	11/01/96	7.10	ND	2.9	**1.099**	3.7	43
	05/01/97	7.30	ND	1.5	0.64	3.1	62
	11/01/97	7.40	ND	3.4	0.3	3.8	38
	05/01/98	7.60	ND	ND	ND	3	36
	11/01/98	NA	NA	NA	NA	NA	NA
	05/01/99	6.70	ND	2.0	0.81	4.1	76
	11/01/99	6.60	ND	1.5	0.28	2.63	75
	05/01/00	6.70	ND	2.4	0.39	6.1	68
	11/01/00	7.20	ND	3.2	0.29	7.7	55
	05/01/01	6.90	ND	3.9	0.46	ND	86
	11/05/01	7.80	ND	2.9	0.44	3.7	64
	05/28/02	7.20	ND	3.2	0.56	ND	62
	12/02/02	6.62	ND	3.2	**2.9**	9.1	66
	12/03/03	7.32	ND	3.6	0.53	ND	50
	07/19/04	6.86	ND	ND	0.88	ND	50
	07/12/05	NA	ND	ND	0.60	ND	86
	07/11/06	7.7	ND	ND	0.29	ND	36
	07/27/07	**5.31**	ND	ND	0.70	ND	72

Table 3
Surface Water Quality Results
International Paper Landfill 5
Canton, North Carolina

July 27, 2007

Sample Location	Date	pH	Cadmium	Chloride	Iron	Sulfate	Total Dissolved Solids
2B Standards		*6.0 - 9.0*	*2.0*	*230*	*1.0*	*250*	*500*
BD-DOWN	05/01/91	7.47	ND	2.41	0.67	ND	46
	05/01/92	NA	NA	NA	**1.7**	NA	NA
	05/01/93	NA	NA	NA	NA	NA	NA
	11/01/93	7.45	ND	5.2	0.51	9.6	110
	05/01/94	7.04	ND	3.2	0.343	4	42
	11/01/94	7.30	ND	4.4	0.89	3.3	34
	05/01/95	7.20	ND	3.0	**1.495**	3.9	48
	11/01/95	6.40	ND	4.4	0.241	5.1	52
	05/01/96	6.70	ND	3.4	**1.513**	7	41
	11/01/96	7.20	ND	4.2	0.264	3.9	49
	05/01/97	6.80	ND	3.9	**1.3**	3.6	65
	11/01/97	7.00	ND	3.7	0.19	3.1	51
	05/01/98	7.20	ND	2.6	0.51	3.1	48
	11/01/98	NA	NA	NA	NA	NA	NA
	05/01/99	6.60	ND	4.7	0.9	3.54	75
	11/01/99	6.90	ND	2.6	0.36	2.63	60
	05/01/00	6.60	ND	3.1	0.27	6.9	59
	11/01/00	6.90	ND	4.2	0.3	8.1	87
	05/01/01	6.90	ND	4.2	0.62	2.8	**2600**
	11/05/01	7.98	ND	4.7	0.33	3.8	ND
	05/28/02	7.20	ND	4.4	0.63	ND	66
	12/02/02	6.19	ND	6.0	**7.0**	10	88
	12/03/03	7.32	ND	5.0	0.57	ND	50
	07/19/04	6.92	ND	ND	**1.5**	ND	62
	07/12/05	NA	ND	ND	0.84	ND	84
	07/10/06	7.58	ND	ND	0.28	ND	44
	07/27/07	7.03	ND	ND	1.0	ND	66

Notes:

1. 2B Standard values were taken from Title 15A, North Carolina Administrative Code (NCAC), Subchapter 2B Surface Water and Wetland Standards.
2. **Bold** indicates exceedance of 2B Standard in monitoring wells.
3. pH is measured in Standard Units.
4. Concentrations are in milligrams per liter (mg/L).
5. ND signifies that the parameter was not detected at or above the laboratory reporting limit.
6. NA signifies that analytical data is not present or available.

ANALYTICAL LABORATORY RESULTS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

RECEIVED
AUG 0 8 2007

August 03, 2007

Mr. Joel Lenk
Altamont Environmental
50 College Street
Asheville, NC 28801

RE: Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Dear Mr. Lenk:

Enclosed are the analytical results for sample(s) received by the laboratory on July 27, 2007. 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 Charlotte laboratory unless otherwise footnoted.

The results relate only to samples in this report.

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

Sincerely,

Lorri Patton

Lorri Patton
lorri.patton@pacelabs.com
(828) 254-7176
Project Manager

Enclosures

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700095 | Project Sample Number: 92149848-001 | Date Collected: 07/27/07 15:54
Client Sample ID: MW-5C2 | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:13	EWS	7440-43-9		
Iron	76.	ug/l	50.	08/02/07 16:13	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	210	mg/l	20.	07/31/07 10:45	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	37.	mg/l	5.0	07/31/07 17:27	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	ND	mg/l	5.0	07/30/07 17:13	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700103 | Project Sample Number: 92149848-002 | Date Collected: 07/27/07 16:29
Client Sample ID: MW-5B2 | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:17	EWS	7440-43-9		
Iron	33000	ug/l	50.	08/02/07 16:17	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	330	mg/l	20.	07/31/07 10:45	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	65.	mg/l	10.	07/31/07 17:36	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	6.9	mg/l	5.0	07/30/07 17:16	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700111 | Project Sample Number: 92149848-003 | Date Collected: 07/27/07 12:55
Client Sample ID: BD-DOWN | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:21	EWS	7440-43-9		
Iron	1000	ug/l	50.	08/02/07 16:21	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	66.	mg/l	20.	07/31/07 10:46	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	ND	mg/l	5.0	07/31/07 17:27	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	ND	mg/l	5.0	07/30/07 17:16	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700129 | Project Sample Number: 92149848-004 | Date Collected: 07/27/07 13:10
Client Sample ID: BD-UP | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:25	EWS	7440-43-9		
Iron	700	ug/l	50.	08/02/07 16:25	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	72.	mg/l	20.	07/31/07 10:46	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	ND	mg/l	5.0	07/31/07 17:27	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	ND	mg/l	5.0	07/30/07 17:16	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700178 | Project Sample Number: 92149848-005 | Date Collected: 07/27/07 11:59
Client Sample ID: MW-5B3 | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:28	EWS	7440-43-9		
Iron	36000	ug/l	50.	08/02/07 16:28	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	140	mg/l	20.	07/31/07 10:46	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	17.	mg/l	5.0	07/31/07 17:29	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	12.	mg/l	5.0	07/30/07 17:16	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700228 | Project Sample Number: 92149848-006 | Date Collected: 07/27/07 13:16
Client Sample ID: MW-5C3 | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:40	EWS	7440-43-9		
Iron	ND	ug/l	50.	08/02/07 16:40	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	410	mg/l	20.	07/31/07 10:47	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	85.	mg/l	15.	07/31/07 17:55	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	ND	mg/l	5.0	07/30/07 17:18	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700277 | Project Sample Number: 92149848-007 | Date Collected: 07/27/07 10:40
Client Sample ID: MW-5C1 | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:44	EWS	7440-43-9		
Iron	130	ug/l	50.	08/02/07 16:44	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	120	mg/l	20.	07/31/07 10:47	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	8.8	mg/l	5.0	07/31/07 17:29	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	5.3	mg/l	5.0	07/30/07 17:21	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700335 | Project Sample Number: 92149848-008 | Date Collected: 07/27/07 00:00
Client Sample ID: DUP-1 | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:48	EWS	7440-43-9		
Iron	ND	ug/l	50.	08/02/07 16:48	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	98.	mg/l	20.	07/31/07 10:47	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	8.8	mg/l	5.0	07/31/07 17:29	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	5.2	mg/l	5.0	07/30/07 17:21	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

Lab Sample No: 928700343 | Project Sample Number: 92149848-009 | Date Collected: 07/27/07 14:31
Client Sample ID: MW-5B1 | Matrix: Water | Date Received: 07/27/07 17:43

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Trace ICP Metals	Prep/Method: EPA 200.7 / EPA 200.7							
Cadmium	ND	ug/l	1.0	08/02/07 16:52	EWS	7440-43-9		
Iron	16000	ug/l	50.	08/02/07 16:52	EWS	7439-89-6		
Date Digested	07/31/07 16:45			07/31/07 16:45				
Wet Chemistry								
Total Dissolved Solids	Method: SM 2540C							
Total Dissolved Solids	42.	mg/l	20.	07/31/07 10:53	ALV			
Chloride (Mercuric Nitrate)	Method: SM 4500-Cl E							
Chloride	ND	mg/l	5.0	07/31/07 17:29	SAJ	16887-00-6		
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	ND	mg/l	5.0	07/30/07 17:21	SAJ			

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

PARAMETER FOOTNOTES

Method 9071B modified to use ASE.

All pH, Free Chlorine, Total Chlorine and Ferrous Iron analyses conducted outside of EPA recommended immediate hold time.

Depending on the moisture content the PRLs can be elevated for all soil samples reported on a dry weight basis.

2-Chloroethyl vinyl ether has been shown to degrade in the presence of acid.

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

QUALITY CONTROL DATA

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

QC Batch: 195853 — Analysis Method: EPA 200.7
QC Batch Method: EPA 200.7 — Analysis Description: Trace ICP Metals
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178 928700228 928700277 928700335 928700343

METHOD BLANK: 928703644
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178 928700228 928700277 928700335 928700343

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Cadmium	ug/l	ND	1.0	
Iron	ug/l	ND	50.	

LABORATORY CONTROL SAMPLE: 928703651

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Cadmium	ug/l	500.00	525.0	105	
Iron	ug/l	5000.00	5188	104	

MATRIX SPIKE: 928703669

Parameter	Units	928700095 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Cadmium	ug/l	0.00200	500.00	546.0	109	
Iron	ug/l	75.60	5000.00	5490	108	

SAMPLE DUPLICATE: 928703677

Parameter	Units	928700103 Result	DUP Result	RPD	Footnotes
Cadmium	ug/l	ND	ND	NC	
Iron	ug/l	33000	31000	8	

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

QUALITY CONTROL DATA

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

QC Batch: 195758 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: Total Dissolved Solids
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178 928700228 928700277 928700335 928700343

METHOD BLANK: 928701184
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178 928700228 928700277 928700335 928700343

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Total Dissolved Solids	mg/l	ND	20.	

LABORATORY CONTROL SAMPLE: 928701192

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Total Dissolved Solids	mg/l	250.00	252.0	101	

SAMPLE DUPLICATE: 928701200

Parameter	Units	928687722 Result	DUP Result	RPD	Footnotes
Total Dissolved Solids	mg/l	100.0	100.0	2	

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

QUALITY CONTROL DATA

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

QC Batch: 195726 — Analysis Method: EPA 375.4
QC Batch Method: EPA 375.4 — Analysis Description: Sulfate,Turbidimetric
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178

METHOD BLANK: 928700434
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Sulfate	mg/l	ND	5.0	

LABORATORY CONTROL SAMPLE: 928700442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Sulfate	mg/l	20.00	18.81	94	

MATRIX SPIKE: 928700459

Parameter	Units	928684257 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Sulfate	mg/l	60.37	20.00	18.89	0	1

SAMPLE DUPLICATE: 928700467

Parameter	Units	928642644 Result	DUP Result	RPD	Footnotes
Sulfate	mg/l	1100	1100	2	

Date: 08/03/07

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

QUALITY CONTROL DATA

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

QC Batch: 195727 — Analysis Method: EPA 375.4
QC Batch Method: EPA 375.4 — Analysis Description: Sulfate,Turbidimetric
Associated Lab Samples: 928700228 928700277 928700335 928700343

METHOD BLANK: 928700475
Associated Lab Samples: 928700228 928700277 928700335 928700343

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Sulfate	mg/l	ND	5.0	

LABORATORY CONTROL SAMPLE: 928700483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Sulfate	mg/l	20.00	18.27	91	

MATRIX SPIKE: 928700491

Parameter	Units	928700228 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Sulfate	mg/l	1.251	20.00	21.65	102	

SAMPLE DUPLICATE: 928700509

Parameter	Units	928700277 Result	DUP Result	RPD	Footnotes
Sulfate	mg/l	5.300	5.600	5	

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

QUALITY CONTROL DATA

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

QC Batch: 195875 — Analysis Method: SM 4500-Cl E
QC Batch Method: SM 4500-Cl E — Analysis Description: Chloride (Mercuric Nitrate)
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178 928700228 928700277 928700335 928700343

METHOD BLANK: 928704253
Associated Lab Samples: 928700095 928700103 928700111 928700129 928700178 928700228 928700277 928700335 928700343

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Chloride	mg/l	ND	5.0	

LABORATORY CONTROL SAMPLE: 928704261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Chloride	mg/l	20.00	21.74	109	

MATRIX SPIKE: 928704279

Parameter	Units	928672179 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Chloride	mg/l	260.2	20.00	278.6	92	

SAMPLE DUPLICATE: 928704287

Parameter	Units	928674019 Result	DUP Result	RPD	Footnotes
Chloride	mg/l	54.00	54.00	1	

Date: 08/03/07

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Pace Analytical Services, Inc.
2225 Riverside Drive
Asheville, NC 28804
Phone: 828.254.7176
Fax: 828.252.4618

Lab Project Number: 92149848
Client Project ID: IP LF5 LOW-FLOW 2055.05

QUALITY CONTROL DATA PARAMETER FOOTNOTES

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

LCS(D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
DUP	Sample Duplicate
ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
RPD	Relative Percent Difference
[1]	The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC 99030
FL NELAP E87648

REPORT OF LABORATORY ANALYSIS
This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc.

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of

1067444

Section A Required Client Information:

Company: Altamont Environmental
Address: 50 College St
Asheville, NC 28801
Email To: apriest@altamontenvironmental.com
Phone: 281-3350 Fax: 281-3351
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Joel Lenk
Copy To:
Purchase Order No.: 2055.05
Project Name: IP LF5 Low-Flow
Project Number: 2055.05

Section C Invoice Information:

Attention: Judith Robertson
Company Name: Altamont
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW WT; WATER WW P; WASTE WATER SL; PRODUCT OL; SOIL/SOLID WP; OIL AR; WIPE OT; AIR TS; OTHER; TISSUE

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: Iron	Cadmium	Chloride	Sulfate	TDS	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. (92149848)
1	MW-5C2	WT	G			7/27	1554	21	2	1		1						X	X	X	X	X		928700095
2	MW-5B2	WT	G			7/27	1629	15	2	1		1						X	X	X	X	X		928700103
3	BD-DOWN	WT	G			7/27	1255	18	2	1		1						X	X	X	X	X		928700111
4	BD-UP	WT	G			7/27	1310	18	2	1		1						X	X	X	X	X		928700129
5	MW-5B3	WT	G			7/27	1159	18	2	1		1						X	X	X	X	X		928700178
6	MW-5C3	WT	G			7/27	1316	20	2	1		1						X	X	X	X	X		928700228
7	MW-5C1	WT	G			7/27	1040	13	2	1		1						X	X	X	X	X		928700277
8	DUP 1	WT	G			7/27	—	—	2	1		1						X	X	X	X	X		928700335
9	MW-5B1	WT	G			7/27	1431	14	2	1		1						X	X	X	X	X		928700343
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Anna Saylor	7/27/07		[signature]	7/27/07	17:43	5.7	X	N	X

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jon Hazinski
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM/DD/YY): 7/27/07

ORIGINAL

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