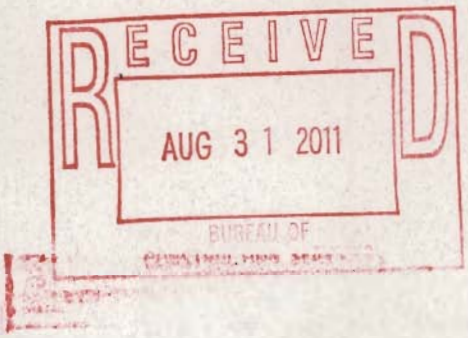
SHUMAKER
Consulting Engineering & Land Surveying, P.C.



August 22, 2011

Mr. Payson Long
New York State Department of Environmental Conservation
Division of Environmental Remediation
525 Broadway
Albany, NY 12233

Re: Review of Landfill Operations – Calendar Year 2010
Town of Conklin Landfill
Conklin, New York
SCE No. R09357.02

Dear Mr. Long:

Shumaker Consulting Engineering & Land Surveying, P.C. (SCE) has been contracted by the Town of Conklin (Town) to assist, monitor, and report on the ongoing Operations and Maintenance activities at the Town of Conklin Landfill site.

The current Operations and Maintenance Plan for the Landfill was prepared by Rust Environment and Infrastructure, and presented in the document entitled *Operation, Maintenance and Monitoring Plan, Conklin Landfill, Conklin, New York* dated June 27, 1996 (O&M Plan). The plan calls for submission of an annual report summarizing activities at the landfill within the past year. According to the O&M Plan the annual report is to include:

- The results of all groundwater, surface water, and leachate quality data acquired in the past year.
- The amount of leachate from the landfill that was collected from the leachate collection trench and recovery wells.
- The results of leachate analytical results and the amount of leachate discharged to the sanitary sewer.
- Any alterations from the approved report, plans, and specifications or permit conditions, including justification for the change.

This report has been prepared by SCE on behalf of the Town in support of the annual report commitment promulgated by the O&M Plan. The data collected as part of this study is presented herein.

UTICA OFFICE
430 Court Street, Suite 200
Utica, NY 13502
315-724-0100 • Fax 724-3715

BINGHAMTON OFFICE
143 Court Street
Binghamton, NY 13901
607-798-8081 • Fax 798-8186

ALBANY OFFICE
1510 Central Avenue, Suite 330
Albany, NY 12205
518-452-5730 • Fax 452-9230

WBE/DBE Certified

shumaker@shumakerengineering.com www.shumakerengineering.com

1.0 SITE HISTORY

Two (2) landfill areas originally existed at the "Conklin Dumps Site". The areas, referred to as the upper and lower landfills, operated during the 1960s and 1970s. The areas were studied extensively in the 1980s and were subsequently nominated to the National Priorities List (NPL). A remedial action plan was selected for the site. The plan ultimately called for excavating the lower landfill and placing it on top of the upper landfill. The combined landfill was then capped and a leachate collection system was installed.

Since the remedial activities at the landfill were completed in the mid-1990s, post-closure monitoring and maintenance has been conducted under the O&M Plan, which has been in effect since that date. To date, the O&M Plan has received no authorized modifications.

2.0 ANNUAL INSPECTION OF LANDFILL

SCE technicians performed a visual inspection of the entire landfill site on May 6, 2011. In addition, the former landfill site to the east of Broome Parkway was also assessed as part of our evaluation for potential site re-use.

The landfill was inspected for:

- Condition of the perimeter fence and access roads.
- Brief inspection of the leachate collection system (trench manholes, pump station, storage tank, treatment building).
- Condition of the landfill cover for areas of instability, subsidence, erosion, discoloration, etc…
- Inspection of surface water drainage features for washouts, excessive sediment or debris in ditches, dislodged rip-rap, erosion, etc…
- Observed the gas venting system to determine if the vents have been damaged or disturbed.
- Condition of the monitoring and leachate recovery wells.

Overall, the site and landfill cap appears to be in good condition. Visual Inspections and Maintenance at the landfill has been performed at least monthly by Town forces; however, a formal record of inspections and repair work performed is not maintained. Town forces mow the landfill area approximately twice a year. The mowing schedule appears to be maintaining the integrity of the short rooted vegetative cover. Access roads were noted to be slightly overgrown but easily traversable. The site entrance was maintained and accessible. The security fence was observed to be in good condition; however, off-site trees are impinging the fence in several locations. Surface drainage features appear to be in good condition and functioning as designed.

Monitoring wells and gas vents appeared to be in generally good repair. All monitoring wells are equipped with dedicated bailers and covers that are locked. A tree was noted to be growing close to MW-12 and should be removed when practical. Furthermore, MW-12 is difficult to access due to thick vegetative growth along the north side of the landfill security fence. MW-2, a well used for groundwater depth measurements only, is reported to have a

blockage at 19-feet below the top. The blockage at MW-2 does not seem to be impacting the overall quality of data collected from the site.

The leachate recovery system was observed and tested during this field visit. Based on control panel observations, the pumps, level monitors, and controls appeared to be functioning normally. The system was tested in automatic and in manual, and system response was verified.

The leachate handling system was also inspected in support of this report. The exterior of the building that houses the leachate handling system was noted to be in good condition and no major structural or plumbing deficiencies were noted on the interior components. The leachate collection tank appears to have been recently painted, and is in improved condition. However, it was observed that the secondary containment for the leachate tank has accumulated some stormwater due to a failed containment skirt. It is recommended that the secondary containment skirt be replaced, and that the containment dike be drained periodically during the monthly visual inspection by the Town.

The building is equipped with a sump pit as a form of containment. The pit contained several inches of accumulated water, and it was apparent that the sump pump was not functioning as designed. It is recommended that the sump pump be repaired or replaced during the CY 2011 maintenance period.

3.0 LEACHATE DISCHARGES

The Site is equipped with a leachate collection system that includes leachate recovery wells and trenches. Leachate is temporarily stored in a pump station prior to being transferred to a 30,000 gallon aboveground storage tank (AST). The leachate is stored in the tank until it is sampled and submitted for laboratory analysis. After analytical results are received the leachate is discharged to the sewer system. As previously noted, the discharge of the leachate is regulated through an IWPP Permit with the Binghamton-Johnson City Joint Sewage Board (BJCJSTB). The permit was most recently updated in September 2009.

Leachate is generally discharged once a year. The Town has coordinated discharge of the leachate with the annual inspection of the facility conducted by the BJCJSTB. The Town utilizes the analytical data gathered by the BJCJSTB to determine if the leachate is within their permitted effluent limitations prior to discharging to the sewer system. The Town then reports to the BJCJSTB when they discharge the leachate.

The BJCJSB completed an inspection of the Conklin Landfill Leachate Collection System on October 11, 2010, and collected laboratory samples to document the leachate analytical parameters. On December 9, 2010, a total of 17,913 gallons of leachate was discharged into the sanitary sewer system. Documentation of the BJCJSB inspection, analytical data, and the discharge report from the Town are included as an attachment herein as Appendix A.

At this time, the Town does not track the amount of leachate recovered from each of the three (3) recovery wells. However, the Town does regularly monitor the leachate level in the storage tank to ensure that the tank is not in danger overflow. A tank level detector has been installed and is part of the tank level monitoring system.

4.0 GROUNDWATER AND SURFACE WATER QUALITY ASSESSMENT

The landfill is required to sample a selection of monitoring wells and a surface water (Carlin Creek) every quarter. One (1) round each year must be analyzed for Part 360 baseline parameters. Since an approved modification to the landfill sampling frequency has not been received, sampling in 2010 was conducted in accordance with the O&M Plan.

The Town has contracted with Benchmark Analytics, Inc. (Benchmark) to perform the quarterly sampling. The site was assessed and sampled by a representative from Test Assured Network, a subcontractor to Benchmark, on:

- March 10, 2010
- June 2, 2010
- September 20, 2010
- December 28, 2010

The laboratory narratives for the sampling events do not indicate any problems with the sampling or analysis. A summary of laboratory analytical data and full laboratory reports for 2010-2011 are attached as Appendix B.

4.1. GROUNDWATER QUALITY ASSESSMENT

None of the wells sampled during the Benchmark Sampling Events on June 24, 2008, or August 19, 2009, indicated that concentrations of the identified leachate marker compounds Chloroethane, 1,2-Dichloropropane, Methylene Chloride, or Xylenes were present above detection limits in any of the samples.

The upgradient well, MW-1, continues to exhibit periodic excursions in detected concentrations of Phenol, Manganese, and Sodium. These sporadic exceedances complicate the evaluation of the downgradient monitoring well data, and no cause for these excursions has been identified.

All of the downgradient wells contained elevated levels of inorganics including Iron, Manganese, Lead, and Thallium. In many instances, the concentrations exceed the New York State Department of Environmental Conservation (NYSDEC) drinking water standards. Since very few of these contaminants are present in the upgradient well MW-1, and none of the contaminants have been detected in the downgradient surface water samples at Carlin Creek, it may be suspected that the increased concentrations are caused by the chemical reduction zone under the landfill, or by the acidification of silt in the water sample during preservation. During the upcoming sampling rounds, it is recommended that the sample be field filtered if the turbidity exceeds 50 NTUs. Field filtering may greatly reduce the potential impact of silt on the analytical results.

Throughout the year, the well containing the most parameters in excess of NYSDEC drinking water standards was MW-38D. MW-38D was found to contain consistently high levels of Cadmium, Chromium, Copper, Iron, Magnesium, Manganese, Sodium, Lead, and Thallium throughout the year. There are no

- Repair or replace the sump pump in the leachate collection building.
- Repair the rain skirt from the leachate tank secondary containment structure. Periodically inspect and drain the accumulated stormwater from the secondary containment structure.

Very Truly Yours

SHUMAKER CONSULTING ENGINEERING & LAND SURVEYING, P.C.

W. Curtis Nichols, P.E., LEED-AP
Managing Engineer

WCN/krf

Enclosures

cc: Debbie Preston, Town of Conklin
Tom Delamarter, Town of Conklin

APPENDIX A

TOWN OF CONKLIN

TOWN OF CONKLIN

1271 Conklin Road • P.O. Box 182 • Conklin, New York 13748
Phone (607) 775-4114 • Fax (607) 775-1434

January 5, 2011

Binghamton-Johnson City Joint Sewage Board
4480 Old Vestal Road
Vestal, New York 13850

Attn: Catherine Aingworth

Dear Ms. Aingworth:

The Town of Conklin on December 9th, 2010 discharged approximately 17,913 gallons of leachate from the Town of Conklin Landfill into the sewage System. Time of discharge was 10:00 A.M.

Very truly yours,

Thomas P. DeLamarter
Water & Sewer Superintendent

Binghamton-Johnson City
JOINT SEWAGE BOARD

November 18, 2010

Mr. Thomas Delmarta
Water Department, Town of Conklin
P.O. Box 182
Conklin, NY 13748

Re: Binghamton-Johnson City Joint Sewage Board
Industrial Wastewater Pretreatment Program
Annual Inspection

Dear Mr. Delmarta:

The Annual Industrial Wastewater Pretreatment Program inspection and sampling completed on October 11, 2010 at the Town of Conklin Landfill indicates that your facility is satisfactorily meeting the conditions established in your Industrial Wastewater Discharge Permit (Permit No. 0311). A copy of the laboratory report is attached for your review.

The Joint Sewage Board appreciates your cooperation in the pretreatment program. If you have any questions or concerns, please feel free to contact me.

Sincerely,

Catherine P. Aingworth
Superintendent

Enclosure

CPA/jas

cc: Jason Greene, P.E., Stearns & Wheler, LLC (w/o enc.)

Catherine P. Aingworth, Superintendent
Binghamton-Johnson City Joint Sewage Treatment Facilities
4480 Old Vestal Road, Vestal, New York 13850
Phone: 607-729-2975 Fax: 607-729-0110
Email: bjcwwtp@stny.rr.com

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stearns & Wheler, LLC
One Remington Park Dr.
Cazenovia, NY 13035-
Attn: Mr. Jason Greene

PROJECT NAME: IWPP-BJCJSTP Conklin Landfill
DATE: 10/25/2010

SAMPLE NUMBER- 600347 SAMPLE ID- Conklin Landfill Discharge SAMPLE MATRIX- WW
DATE SAMPLED- 10/11/10 TIME SAMPLED- 1350
DATE RECEIVED- 10/12/10 SAMPLER- Nicholas Lee RECEIVED BY- RS
TIME RECEIVED- 1350 DELIVERED BY- Ben Murphy TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				10/12/10		RS	1.2	Degrees C
PCB'S IN WATER	EPA 8082	10/15/10	KSH	10/20/10		BLD		
AROCLOR 1221	EPA 8082	10/15/10	KSH	10/20/10		BLD	< 0.065	ug/L
AROCLOR 1232	EPA 8082	10/15/10	KSH	10/20/10		BLD	< 0.065	ug/L
AROCLOR 1242/1016	EPA 8082	10/15/10	KSH	10/20/10		BLD	< 0.065	ug/L
AROCLOR 1248	EPA 8082	10/15/10	KSH	10/20/10		BLD	< 0.065	ug/L
AROCLOR 1254	EPA 8082	10/15/10	KSH	10/20/10		BLD	< 0.065	ug/L
AROCLOR 1260	EPA 8082	10/15/10	KSH	10/20/10		BLD	< 0.065	ug/L

NYSDOH LAB ID NO. 11246 APPROVED BY: (Terms and Conditions on Reverse Side)

Patrick A. Leone, Jr.
Laboratory Director

The analytical results on this sample are representative of the sample received by the Laboratory.

CES Certified Environmental Services, Inc.

1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

CONTINUATION OF DATA FOR SAMPLE NUMBER 600348

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
2-Chloroethylvinyl Ether	EPA 624	10/18/10		RRB	< 5.0	ug/L
4-Methyl-2-Pentanone (MIBK)	EPA 624	10/18/10		RRB	< 5.0	ug/L
cis-1,3-Dichloropropene	EPA 624	10/18/10		RRB	< 1.0	ug/L
Toluene	EPA 624	10/18/10		RRB	< 1.0	ug/L
trans-1,3-Dichloropropene	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,1,2-Trichloroethane	EPA 624	10/18/10		RRB	< 1.0	ug/L
Tetrachloroethene	EPA 624	10/18/10		RRB	< 1.0	ug/L
Dibromochloromethane	EPA 624	10/18/10		RRB	< 1.0	ug/L
Chlorobenzene	EPA 624	10/18/10		RRB	< 1.0	ug/L
Ethylbenzene	EPA 624	10/18/10		RRB	< 1.0	ug/L
m & p-Xylene	EPA 624	10/18/10		RRB	< 1.0	ug/L
o-Xylene	EPA 624	10/18/10		RRB	< 1.0	ug/L
Bromoform	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,1,2,2-Tetrachloroethane	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,3-Dichlorobenzene	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,4-Dichlorobenzene	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,2-Dichlorobenzene	EPA 624	10/18/10		RRB	< 1.0	ug/L

NYSDOH LAB ID NO. 11246 APPROVED BY: (Terms and Conditions on Reverse Side)

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Laboratory Director

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Fax 315-478-2107

REPORT OF ANALYSES

Stearns & Wheler, LLC
One Remington Park Dr.
Cazenovia, NY 13035-
Attn: Mr. Jason Greene

PROJECT NAME: IWPP-BJCJSTP Conklin Landfill
DATE: 10/25/2010

SAMPLE NUMBER- 600350 SAMPLE ID- Conklin Landfill Discharge SAMPLE MATRIX- WW
DATE SAMPLED- 10/11/10 TIME SAMPLED- 1350
DATE RECEIVED- 10/12/10 SAMPLER- Nicholas Lee RECEIVED BY- RS
TIME RECEIVED- 1350 DELIVERED BY- Ben Murphy TYPE SAMPLE- Grab

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature		10/12/10		RS	1.2	Degrees C
AMMONIA AS N	SM18 4500F	10/20/10	0955	JDC	0.02	mg/L
TOTAL KJELDAHL NITROGEN	SM18-4500F	10/15/10	1610	JDC	0.52	mg/L

NYSDOH LAB ID NO. 11246 APPROVED BY: (Terms and Conditions on Reverse Side)

Patrick A. Leone, Jr.
Laboratory Director

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1401 Erie Blvd. East
Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stearns & Wheler, LLC
One Remington Park Dr.
Cazenovia, NY 13035-
Attn: Mr. Jason Greene

PROJECT NAME: IWPP-BJCJSTP Conklin Landfill
DATE: 10/25/2010

SAMPLE NUMBER- 600352 SAMPLE ID- Conklin Landfill Discharge SAMPLE MATRIX- WW
DATE SAMPLED- 10/11/10 TIME SAMPLED- 1350
DATE RECEIVED- 10/12/10 SAMPLER- Nicholas Lee RECEIVED BY- RS
TIME RECEIVED- 1350 DELIVERED BY- Ben Murphy TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Cadmium, Total (Cd)	EPA 200.7	10/13/10	AG	10/15/10		AG	< 0.02	mg/L
Chromium, Total (Cr)	EPA 200.7	10/13/10	AG	10/15/10		AG	< 0.02	mg/L
Copper, Total (Cu)	EPA 200.7	10/13/10	AG	10/15/10		AG	0.02	mg/L
Iron, Total (Fe)	EPA 200.7	10/13/10	AG	10/15/10		AG	0.21	mg/L
Lead, Total (Pb)	EPA 200.7	10/13/10	AG	10/15/10		AG	< 0.02	mg/L
MERCURY, TOTAL (HG)	EPA 245.1			10/20/10	0830	DG	< 0.001	mg/L
Nickel, Total (Ni)	EPA 200.7	10/13/10	AG	10/15/10		AG	< 0.02	mg/L
Zinc, Total (Zn)	EPA 200.7	10/13/10	AG	10/15/10		AG	< 0.02	mg/L

NYSDOH LAB ID NO. 11246 APPROVED BY: (Terms and Conditions on Reverse Side)

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Laboratory Director

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Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stearns & Wheler, LLC
One Remington Park Dr.
Cazenovia, NY 13035-
Attn: Mr. Jason Greene

PROJECT NAME: IWPP-BJCJSTP Conklin Landfill
DATE: 10/25/2010

SAMPLE NUMBER- 600349 SAMPLE ID- Conklin Landfill Discharge SAMPLE MATRIX- WW
DATE SAMPLED- 10/11/10 TIME SAMPLED- 1350
DATE RECEIVED- 10/12/10 SAMPLER- Nicholas Lee RECEIVED BY- RS
TIME RECEIVED- 1350 DELIVERED BY- Ben Murphy TYPE SAMPLE- Grab

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature		10/12/10		RS	1.2	Degrees C
Sample Receipt Temperature		10/12/10		RS	Sample Rec.On Ice	
Oil & Grease (LLE)	EPA 1664A	10/22/10	0830	RRB	< 5.0	mg/L

NYSDOH LAB ID NO. 11246 APPROVED BY: (Terms and Conditions on Reverse Side)

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Laboratory Director

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Syracuse, NY 13210
Phone 315-478-2374
Fax 315-478-2107

REPORT OF ANALYSES

Stearns & Wheler, LLC
One Remington Park Dr.
Cazenovia, NY 13035-
Attn: Mr. Jason Greene

PROJECT NAME: IWPP-BJCJSTP Conklin Landfill
DATE: 10/25/2010

SAMPLE NUMBER- 600351 SAMPLE ID- Conklin Landfill Discharge SAMPLE MATRIX- WW
DATE SAMPLED- 10/11/10 TIME SAMPLED- 1350
DATE RECEIVED- 10/12/10 SAMPLER- Nicholas Lee RECEIVED BY- RS
TIME RECEIVED- 1350 DELIVERED BY- Ben Murphy TYPE SAMPLE- Grab

Page 1 of 1

ANALYSIS	METHOD	SAMPLE PREP DATE	BY	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature				10/12/10		RS	1.2	Degrees C
Total Cyanide	SM18-4500E	10/14/10	PIO	10/14/10	2025	JDC	< 0.005	mg/L

NYSDOH LAB ID NO. 11246 APPROVED BY: _____
(Terms and Conditions on Reverse Side)

Patrick A. Leone, Jr.
Laboratory Director

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REPORT OF ANALYSES

Stearns & Wheler, LLC
One Remington Park Dr.
Cazenovia, NY 13035-
Attn: Mr. Jason Greene

PROJECT NAME: IWPP-BJCJSTP Conklin Landfill
DATE: 10/25/2010

SAMPLE NUMBER- 600348 SAMPLE ID- Conklin Landfill Discharge SAMPLE MATRIX- WW
DATE SAMPLED- 10/11/10 TIME SAMPLED- 1350
DATE RECEIVED- 10/12/10 SAMPLER- Nicholas Lee RECEIVED BY- RS
TIME RECEIVED- 1350 DELIVERED BY- Ben Murphy TYPE SAMPLE- Grab

ANALYSIS	METHOD	ANALYSIS DATE	TIME	BY	RESULT	UNITS
Sample Receipt Temperature		10/12/10		RS	1.2	Degrees C
EPA 624 Volatiles	EPA 624	10/18/10		RRB		
Dichlorodifluoromethane	EPA 624	10/18/10		RRB	< 2.0	ug/L
Chloromethane	EPA 624	10/18/10		RRB	< 5.0	ug/L
Vinyl Chloride	EPA 624	10/18/10		RRB	< 2.0	ug/L
Bromomethane	EPA 624	10/18/10		RRB	< 5.0	ug/L
Chloroethane	EPA 624	10/18/10		RRB	< 5.0	ug/L
Trichlorofluoromethane	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,1-Dichloroethene	EPA 624	10/18/10		RRB	< 1.0	ug/L
Methylene Chloride	EPA 624	10/18/10		RRB	< 5.0	ug/L
trans-1,2-Dichloroethene	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,1-Dichloroethane	EPA 624	10/18/10		RRB	< 1.0	ug/L
2-Butanone (MEK)	EPA 624	10/18/10		RRB	< 5.0	ug/L
Chloroform	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,1,1-Trichloroethane	EPA 624	10/18/10		RRB	< 1.0	ug/L
Carbon Tetrachloride	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,2-Dichloroethane	EPA 624	10/18/10		RRB	< 1.0	ug/L
Benzene	EPA 624	10/18/10		RRB	< 1.0	ug/L
Trichloroethene	EPA 624	10/18/10		RRB	< 1.0	ug/L
1,2-Dichloropropane	EPA 624	10/18/10		RRB	< 1.0	ug/L
Bromodichloromethane	EPA 624	10/18/10		RRB	< 1.0	ug/L

The analytical results on this sample are representative of the sample received by the Laboratory.

CHAIN OF CUSTODY RECORD

CES
Certified Environmental Services, Inc.
1401 Erie Blvd. East
Syracuse, NY 13210
Phone: 315-478-2374 Fax: 315-478-2107

BATCH NO: B7859

Page 1 of 1

Turn-Around Time:
- [x] Standard
- [ ] 1 Week
- [ ] 72 Hours
- [ ] 48 Hours
- [ ] 24 Hours

CLIENT NAME: Stearns & Wheler / GHD
ADDRESS: 1 Remington Park Drive. Cazenovia, NY
PHONE: 315-655-8161
FAX:
CONTACT NAME: Jason Groome

PROJECT NUMBER/NAME: TWPP-BJCJSTP
Conklin Landfill
PURCHASE ORDER NO:

Sampler's Name: Nicholas Lee Signature:

LAB USE ONLY CES Sample Numbers	Collected Date	Collected Time	TYPE Comp.	TYPE Grab	MATRIX Aqueous	MATRIX Soil	MATRIX Other	CLIENT ID/SAMPLE LOCATION	TOTAL NUMBER OF CONTAINERS	PARAMETERS FOR ANALYSIS: PCBs	TTO	O/G 6	NH3, TKN	Cyanide	Metals				
600347	10/1/10	1350		x	x			Conklin-1, Tank Discharge	2	x									
600348	10/1/10	1350		x	x			Conklin-2, Tank Discharge	2		x								
600349	10/1/10	1350		x	x			Conklin-3, Tank Discharge	1			x							
600350	10/1/10	1350		x	x			Conklin-4, Tank Discharge	1				x						
600351	10/1/10	1350		x	x			Conklin-5, Tank Discharge	1					x					
600352	10/1/10	1350		x	x			Conklin-6, Tank Discharge	1						x				

TOTAL NUMBER OF CONTAINERS

SPECIAL REMARKS:
pH NT

SAMPLES RELINQUISHED BY:		SAMPLES RECEIVED BY:	
NAME: Nicholas Lee	DATE: 9/14	NAME: Ben Murphy	DATE: 10-12-10
SIGNATURE:	TIME: 10/12/10	SIGNATURE:	TIME: 11:55
NAME: Ben Murphy	DATE: 10-12-10	NAME: Ryan Sheldon	DATE: 10-12-10
SIGNATURE:	TIME: 13:50	SIGNATURE:	TIME: 1350

Samples Received In Good Condition: [x] Yes [ ] No
Temperature 1.2 °C

White - CES's Copy - Canary - Return to Client With Report - Pink - Clients Initial Copy

APPENDIX B

Shumaker Consulting Engineering and Land Surveying, P.C.
Analytical History for the Conklin Landfill
SCE Project 08126.00

Monitoring Well 1		Date Sampled:	3/17/2008	6/24/2008	3/17/2009	6/3/2009	8/19/2009	10/21/2009	3/10/2010	6/2/2010	9/20/2011	12/28/2010			
Analyte (Note 1)	Units	Guidance Value													
Chloroethane	ug/l	5	-	<0.005	-	-	<0.001	-				<0.005			
1,2-Dichloropropane	ug/l	1	-	<0.005	-	-	<0.001	-				<0.005			
Methylene chloride	ug/l	5	-	<0.005	-	-	<0.001	-				<0.005			
o-Xylene	ug/l	5	-	<0.005	-	-	<0.001	-				<0.005			
m,p-Xylene	ug/l	5	-	<0.005	-	-	<0.001	-				<0.005			
Alkalinity as CaCO3	mg/l		236	232	242	238	253	248	230	254	26	242			
Ammonia as N	mg/l	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
Biochemical Oxygen Demand-5	mg/l		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6			
Chloride	mg/l	250	1.6	1.23	1.74	1.85	2.97	2.49	2.36	2.24	1.57	1.23			
Chemical Oxygen Demand	mg/l		<10	<10	47	<10	<10	<10	<10	<10	24	14			
Hexavalent Chromium	mg/l			<0.01			<0.01					<0.01			
Nitrate as N	mg/l	10	0.11	0.1	0.05	<0.05	0.18	0.07	<0.05	<0.05	0.39	0.2			
pH	pH Units	6.5-8.5	8.22	7.7	7.71	7.69	7.54	7.69	7.21	7.77	7.39	7.58			
Phenol	mg/l	0.001	<0.025	<0.025	<0.025	<0.025	0.039	<0.025	0.084	<0.025	0.077	<0.025			
Total Dissolved Solids	mg/l	500	260	250	218	205	443	372	228	284	275	233			
Sulfate as SO4	mg/l	250	5.76	6.21	5.8	5.67	6.15	6.1	7.75	6.6	14.3	10.2			
Total Kjeldahl Nitrogen	mg/l		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Total Organic Carbon	mg/l		1.3	0.7	<0.5	<0.5	0.7	<0.5	0.6	0.5	0.6	<0.5			
Total Hardess as CaCO3	mg/l		203	206	192	207	205	211	220	238	260	219			
Color	Color Units	5	-	<5			<5					<5			
Cyanide	mg/l	0.2	-	<0.010			<0.010					<0.010			
Bromide	mg/l	2	<0.050	<0.25	<0.050	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			
Mercury	mg/l	0.0007	-	<0.0002			<0.0002					<0.0002			
Silver	mg/l	0.05	-	<0.002			<0.002					<0.002			
Aluminum	mg/l		-	<0.050			0.567					<0.050			
Arsenic	mg/l	0.025	-	<0.025			<0.025					<0.025			
Boron	mg/l	1	-	<0.100			<0.100					<0.100			
Barium	mg/l	1	-	0.013			0.026					0.023			
Beryllium	mg/l	0.03	-	<0.001			<0.001					<0.001			
Calcium	mg/l		<0.001	51.4	47.6	52.2	53.4	52.1	55.9	60.8	61.7	56			
Cadmium	mg/l	0.005	50.3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			
Cobalt	mg/l		-	<0.010			<0.010					<0.010			
Chromium	mg/l	0.05	-	<0.010			<0.010					<0.010			
Copper	mg/l	0.2	-	<0.010			<0.010					<0.010			
Iron	mg/l	0.3	0.126	<0.020	0.949	<0.020	0.865	<0.020	0.048	18.2	12.5	0.064			
Potassium	mg/l		2.19	2.25	1.88	1.74	1.6	1.84	1.77	3.09	4.9	1.62			
Magnesium	mg/l	35	18.7	18.9	17.8	18.7	17.4	19.6	19.3	21	20.6	19.1			
Manganese	mg/l	0.3	0.634	0.074	0.079	0.011	0.067	0.017	0.111	0.753	0.449	0.133			
Sodium	mg/l	20	15	16.7	12.9	18.2	20.9	19.3	21.5	22.5	26	20.4			
Nickel	mg/l	0.1	-	<0.010			<0.010					<0.010			
Lead	mg/l	0.025	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010			
Antimony	mg/l	0.03	-	<0.020			<0.020					<0.020			
Thallium	mg/l	0.0005	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025			
Vanadium	mg/l		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.01	0.012	0.018	<0.010			
Zinc	mg/l	2	0.008	<0.005	0.011	<0.005	0.008	<0.005	<0.005	0.055	0.036	0.008			
Selenium	mg/l	0.01	-	<0.040			<0.040					<0.040			

Notes

1. Full analytical reports for the Target Compound List were analyzed but were not detected. Contaminants of concern plus Organic compounds listed herein are for the Methylene Chloride, which has been detected above standards in one sampling event.
2 Highlighted cell indicates compound detected above applicable regulatory limit.

Shumaker Consulting Engineering and Land Surveying, P.C.
Analytical History for the Conklin Landfill
SCE Project 08126.00

Monitoring Well 3		Date Sampled:	3/17/2008	6/24/2008	3/17/2009	6/3/2009	8/19/2009	10/21/2009	3/10/2010	6/2/2010	9/20/2010	12/28/2010		
Analyte (Note 1)	Units	Guidance Value												
Chloroethane	ug/l	5	-	<0.005			<0.001					<0.005		
1,2-Dichloropropane	ug/l	1	-	<0.005			<0.001					<0.005		
Methylene chloride	ug/l	5	-	<0.005			<0.001					<0.005		
o-Xylene	ug/l	5	-	<0.005			<0.001					<0.005		
m,p-Xylene	ug/l	5	-	<0.005			<0.001					<0.005		
Alkalinity as CaCO3	mg/l		172	148	168	82	105	144	122	140	140	126		
Ammonia as N	mg/l	2	<0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Biochemical Oxygen Demand-5	mg/l		<6	<6	<6	<6	<6	<6	<8	<6	<6	<6		
Chloride	mg/l	250	366	120	20.8	20.4	18.3	15.3	11.2	11.4	11.7	13.5		
Chemical Oxygen Demand	mg/l		53	108	23	23	70	<10	13	<10	58	114		
Hexavalent Chromium	mg/l		-	<0.01			<0.01					<0.01		
Nitrate as N	mg/l	10	0.15	0.05	<0.05	0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
pH	pH Units	6.5-8.5	7.77	6.89	6.74	6.45	6.49	6.71	6.51	6.61	6.36	6.52		
Phenol	mg/l	0.001	<0.025	<0.025	<0.025	<0.025	<0.025	0.074	<0.025	<0.025	0.036	<0.025		
Total Dissolved Solids	mg/l	500	784	304	70	242	16,200	370	163	290	189	208		
Sulfate as SO4	mg/l	250	20.6	19.3	18.6	15.9	16	14.2	12.2	14.5	13.4	10.8		
Total Kjeldahl Nitrogen	mg/l		<1.0	1.9	2	<1.0	<1.0	<1.0	<1.0	<1.0	3.9	<1.0		
Total Organic Carbon	mg/l		2.3	2.2	2.1	2	2	2	1.6	2	1.9	1.6		
Total Hardess as CaCO3	mg/l		155	217	2099	290	289	354	197	694	140	203		
Color	Color Units	5	-	8			<5					15		
Cyanide	mg/l	0.2	-	<0.010			<0.010					<0.010		
Bromide	mg/l	2	<0.25	<0.25	0.11	0.09	0.11	0.12	0.09	<0.05	0.09	0.09		
Mercury	mg/l	0.0007	-	<0.0002			<0.0002					<0.0002		
Silver	mg/l	0.05	-	<0.002			0.002					0.005		
Aluminum	mg/l		-	13			61.5					44.6		
Arsenic	mg/l	0.025	-	<0.025			0.039					0.032		
Boron	mg/l	1	-	<0.100			<0.1					<0.100		
Barium	mg/l	1	-	0.269			0.868					0.217		
Beryllium	mg/l	0.03	-	<0.001			0.004					0.002		
Calcium	mg/l		47.2	56.8	205	69.5	85.2	51.9	40.5	90.6	96.8	42.3		
Cadmium	mg/l	0.005	<0.001	<0.001	0.034	<0.001	<0.001	<0.005	<0.001	<0.009	<0.009	<0.001		
Cobalt	mg/l		-	0.012			0.071					0.4		
Chromium	mg/l	0.05	-	0.021			0.065					0.054		
Copper	mg/l	0.2	-	0.067			0.132					0.071		
Iron	mg/l	0.3	4.04	31.5	1970	97.3	114	302	94.1	627	628	96.2		
Potassium	mg/l		1.34	3.15	34.3	4.98	5.69	6.32	4.36	10.3	10.7	4.54		
Magnesium	mg/l	35	8.98	16.1	386	28.3	30.6	54.7	23.3	114	112	23.5		
Manganese	mg/l	0.3	5.17	12.5	74.5	4.77	3.47	3.49	1.18	10.1	7.92	1.25		
Sodium	mg/l	20	227	38.3	22.9	12.4	14.9	12.8	11.7	13.6	11.8	12		
Nickel	mg/l	0.1	-	0.023			0.119					0.09		
Lead	mg/l	0.025	<0.010	0.021	1.33	0.064	0.077	0.121	0.041	0.309	0.292	0.038		
Antimony	mg/l	0.03	-	<0.020			<0.02					<0.020		
Thallium	mg/l	0.0005	<0.025	<0.025	<0.425	0.072	<0.025	<0.125	0.034	0.313	<0.225	<0.225		
Vanadium	mg/l		<0.010	<0.020	1.1	0.067	0.078	0.157	0.056	0.308	0.317	0.054		
Zinc	mg/l	2	0.015	0.087	6.32	0.505	0.33	0.733	0.226	1.52	1.44	0.226		
Selenium	mg/l	0.01	-	<0.040			<0.040					<0.040		

Notes
1. Full analytical reports for the Target Compound List were analyzed but were not detected. Contaminants of concern plus Organic compounds listed herein are for the Methylene Chloride, which has been detected above standards in one sampling event.
2 Highlighted cell indicates compount detected above applicable regulatory limit.

Shumaker Consulting Engineering and Land Surveying, P.C.
Analytical History for the Conklin Landfill
SCE Project 08126.00

Monitoring Well 4		Date Sampled:	3/17/2006	9/24/2008	3/17/2009	6/3/2009	8/19/2009	6/21/2009	3/10/2010	6/2/2010	9/20/2010	12/28/2010			
Analyte (Note 1)	Units	Guidance Value													
Chloroethane	ug/l	5	-	<0.005			<0.001					<0.005			
1,2-Dichloropropane	ug/l	1	-	<0.005			<0.001					<0.005			
Methylene chloride	ug/l	5	-	<0.005			<0.001					<0.005			
o-Xylene	ug/l	5	-	<0.005			<0.001					<0.005			
m,p-Xylene	ug/l	5	-	<0.005			<0.001					<0.005			
Alkalinity as CaCO3	mg/l		108	88	126	66	95	94	102	82	132	104			
Ammonia as N	mg/l	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
Biochemical Oxygen Demand-5	mg/l		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6			
Chloride	mg/l	250	7.16	9.45	10.1	10.6	13.7	16.9	16.2	17	14.3	15.2			
Chemical Oxygen Demand	mg/l		<10	23	16	<10	41	<10	<10	<10	40	12			
Hexavalent Chromium	mg/l		-	<0.01			<0.01					<0.01			
Nitrate as N	mg/l	10	0.17	0.2	0.17	0.17	0.2	0.22	0.22	0.29	0.21	0.21			
pH	pH Units	6.5-8.5	8.1	6.94	7.42	7.02	6.76	6.69	6.43	7.15	6.94	7.06			
Phenol	mg/l	0.001	<0.025	<0.025	<0.025	<0.025	0.046	0.051	<0.025	<0.025	<0.025	<0.025			
Total Dissolved Solids	mg/l	500	136	121	89	10	1060	289	116	185	155	128			
Sulfate as SO4	mg/l	250	9.11	13	6.65	6.69	10.1	9.58	8.86	9.24	9	8.5			
Total Kjeldahl Nitrogen	mg/l		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.9	<1.0	<1.0			
Total Organic Carbon	mg/l		1.5	1.1	<0.5	0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5			
Total Hardess as CaCO3	mg/l		125	118	111	156	137	137	136	129	137	137			
Color	Color Units	5	-	10			5					20			
Cyanide	mg/l	0.2	-	<0.010			<0.010	0.07				<0.010			
Bromide	mg/l	2	<0.050	<0.25	<0.050	<0.050	0.08		<0.05	<0.05	<0.05	<0.05			
Mercury	mg/l	0.0007	-	<0.0002			<0.0002					<0.0002			
Silver	mg/l	0.05	-	<0.002			<0.002					<0.002			
Aluminum	mg/l		-	9.78			21.1					8.8			
Arsenic	mg/l	0.025	-	<0.025			<0.025					<0.025			
Boron	mg/l	1	-	<0.100			<0.100					<0.100			
Barium	mg/l	1	-	0.112			0.229					0.09			
Beryllium	mg/l	0.03	-	<0.001			<0.001					<0.001			
Calcium	mg/l		32.5	30.3	31.2	36.2	31.9	33.3	34.6	33.2	34.9	35.7			
Cadmium	mg/l	0.005	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001			
Cobalt	mg/l		-	0.042			0.081					0.024			
Chromium	mg/l	0.05	-	<0.010			0.021					0.011			
Copper	mg/l	0.2	-	0.018			0.035					0.014			
Iron	mg/l	0.3	20.3	18.8	0.337	81.5	44.7	37.8	27.4	20.8	27.5	16.7			
Potassium	mg/l		3	2.96	0.617	5.26	3.5	2.87	2.67	3.71	4.61	2.24			
Magnesium	mg/l	35	10.8	10.2	8.13	16.1	13.8	13	12.1	11.3	12.2	11.5			
Manganese	mg/l	0.3	31.2	4.18	0.307	8.56	8.35	3	3.79	1.89	5.09	1.95			
Sodium	mg/l	20	6.32	6.52	6.37	6.37	6.24	6.88	8.39	6.36	6.86	6.82			
Nickel	mg/l	0.1	-	0.018			0.048					0.016			
Lead	mg/l	0.025	0.025	0.026	<0.010	0.073	0.05	0.048		0.026	0.027	0.016			
Antimony	mg/l	0.03	-	<0.020			<0.020					<0.020			
Thallium	mg/l	0.0005	<0.025	<0.025	<0.025	0.098	<0.025	0.047	0.11	0.064	<0.025	<0.025			
Vanadium	mg/l		0.015	0.014	<0.010	0.045	0.027	0.023	0.017	0.021	0.028	0.012			
Zinc	mg/l	2	0.055	0.047	0.008	0.145	0.123	0.085	0.062	0.051	0.072	0.045			
Selenium	mg/l	0.01	-	<0.040			<0.040					<0.040			

Notes
1. Full analytical reports for the Target Compound List were analyzed but were not detected. Contaminants of concern plus Organic compounds listed herein are for the Methylene Chloride, which has been detected above standards in one sampling event.
2. Highlighted cell indicates compound detected above applicable regulatory limit.

Shumaker Consulting Engineering and Land Surveying, P.C.
Analytical History for the Conklin Landfill
SCE Project 08126.00

Monitoring Well 12		Date Sampled:	3/17/2009	6/3/2009	8/19/2009	6/21/2009	3/10/2010	6/2/2010	9/20/2010	12/28/2010			
Analyte (Note 1)	Units	Guidance Value											
Chloroethane	ug/l	5			<0.001					<0.005			
1,2-Dichloropropane	ug/l	1			<0.001					<0.005			
Methylene chloride	ug/l	5			<0.001					<0.005			
o-Xylene	ug/l	5			<0.001					<0.005			
m,p-Xylene	ug/l	5			<0.001					<0.005			
Alkalinity as CaCO3	mg/l		66	98	120	98	68	116	114	100			
Ammonia as N	mg/l	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
Biochemical Oxygen Demand-5	mg/l		<6	<6	<6	<6	<6	<6	<8	<6			
Chloride	mg/l	250	5.67	4.79	8.35	5.23	8.09	8.77	9.58	5.6			
Chemical Oxygen Demand	mg/l		32	<10	51	<10	<10	<10	65	43			
Hexavalent Chromium	mg/l				<0.01					<0.01			
Nitrate as N	mg/l	10	<0.05	<0.05	0.08	0.19	<0.05	<0.05	<0.05	<0.05			
pH	pH Units	6.5-8.5	6.51	8.25	6.53	6.66	5.88	6.33	6.25	6.34			
Phenol	mg/l	0.001	<0.025	<0.025	0.06	<0.025	<0.025	<0.025	<0.025	<0.025			
Total Dissolved Solids	mg/l	500	25	52	553	276	128	169	160	553			
Sulfate as SO4	mg/l	250	14.6	13.4	15.7	13.9	11.2	12.3	11.1	190			
Total Kjeldahl Nitrogen	mg/l		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Total Organic Carbon	mg/l		1.4	1.3	3.2	2.2	0.9	1.2	1.7	1.1			
Total Hardess as CaCO3	mg/l		144	38.5	217	124	30.2	116	116	702			
Color	Color Units	5			<5					18			
Cyanide	mg/l	0.2			<0.010					<0.010			
Bromide	mg/l	2	0.22	0.19	0.27	0.25	<0.05	0.24	0.22	0.23			
Mercury	mg/l	0.0007			0.0002					<0.0002			
Silver	mg/l	0.05			0.004					<0.002			
Aluminum	mg/l				60.9					11.3			
Arsenic	mg/l	0.025			0.102					<0.025			
Boron	mg/l	1			<0.100					<0.100			
Barium	mg/l	1			0.449					0.1			
Beryllium	mg/l	0.03			0.003					<0.001			
Calcium	mg/l		31.9	9.49	43.2	26	7.39	29.9	31.9	263			
Cadmium	mg/l	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002			
Cobalt	mg/l				0.048					<0.01			
Chromium	mg/l	0.05			0.066					0.015			
Copper	mg/l	0.2			0.151					<0.01			
Iron	mg/l	0.3	45.8	2.87	138	61.9	1.57	2.19	1.2	23.5			
Potassium	mg/l		3.19	0.847	5.53	3.17	0.747	0.713	0.948	2.06			
Magnesium	mg/l	35	15.5	3.6	26.5	14.4	2.85	10.1	9.43	10.8			
Manganese	mg/l	0.3	5.55	0.525	12.4	5.37	0.286	0.317	0.421	2.72			
Sodium	mg/l	20	10.5	6.58	10.2	9.5	5.67	9.73	9.39	10.3			
Nickel	mg/l	0.1			0.108					0.021			
Lead	mg/l	0.025	0.02	<0.010	0.075	0.027	<0.010	<0.010	<0.010	<0.01			
Antimony	mg/l	0.03			<0.020					<0.020			
Thallium	mg/l	0.0005	0.072	<0.025	<0.025	0.083	<0.025	<0.025	<0.025	<0.025			
Vanadium	mg/l		0.026	<0.010	0.065	0.031	<0.010	<0.010	<0.010	0.014			
Zinc	mg/l	2	0.099	0.008	0.3	0.136	0.006	0.011	<0.005	0.055			
Selenium	mg/l	0.01			<0.040					<0.040			

Notes

1. Full analytical reports for the Target Compound List were analyzed but were not detected. Contaminants of concern plus Organic compounds listed herein are for the Methylene Chloride, which has been detected above standards in one sampling event.
2 Highlighted cell indicates compound detected above applicable regulatory limit.

Shumaker Consulting Engineering and Land Surveying, P.C.
Analytical History for the Conklin Landfill
SCE Project 08126.00

Monitoring Well 37		Date Sampled:	3/17/2008	6/24/2008	3/17/2009	6/3/2009	8/19/2009	8/21/2009	3/10/2010	6/2/2010	9/20/2010	12/28/2010			
Analyte (Note 1)	Units	Guidance Value													
Chloroethane	ug/l	5	-	<0.005			<0.001					<0.005			
1,2-Dichloropropane	ug/l	1	-	<0.005			<0.001					<0.005			
Methylene chloride	ug/l	5	-	<0.005			<0.001					<0.005			
o-Xylene	ug/l	5	-	<0.005			<0.001					<0.005			
m,p-Xylene	ug/l	5	-	<0.005			<0.001					<0.005			
Alkalinity as CaCO3	mg/l		130	132	146	106	133	132	126	136	134	132			
Ammonia as N	mg/l	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
Biochemical Oxygen Demand-5	mg/l		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6			
Chloride	mg/l	250	5.88	6.29	6.04	7.54	6.9	9.58	8.22	7.24	8.96	11			
Chemical Oxygen Demand	mg/l		33	28	28	<10	48	<10	<10	<10	<10	19			
Hexavalent Chromium	mg/l		-	<0.01			<0.01					<0.01			
Nitrate as N	mg/l	10	0.2	0.3	0.13	0.16	0.13	0.12	0.15	0.11	0.15	0.12			
pH	pH Units	6.5-8.5	8.01	7.79	8.14	7.74	7.55	7.53	7.32	7.9	7.69	7.76			
Phenol	mg/l	0.001	<0.025	<0.025	<0.025	<0.025	0.028	<0.025	<0.025	<0.025	<0.025	<0.025			
Total Dissolved Solids	mg/l	500	188	174	158	166	296	188	177	465	178	60			
Sulfate as SO4	mg/l	250	11.9	13.4	11.6	12.9	12.9	13.5	12.2	11.3	11.5	14.1			
Total Kjeldahl Nitrogen	mg/l		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Total Organic Carbon	mg/l		0.6	0.7	<0.5	<0.05	0.7	<0.5	0.8	0.6	<0.5	<0.5			
Total Hardess as CaCO3	mg/l		143	137	151	128	173	136	142	802	274	148			
Color	Color Units	5	-	12			<5					15			
Cyanide	mg/l	0.2	-	<0.010			<0.010					<0.010			
Bromide	mg/l	2	<0.050	<0.25	<0.05	<0.05	<0.05	0.1	0.07	<0.05	<0.05	<0.05			
Mercury	mg/l	0.0007	-	<0.0002			<0.0002					<0.0002			
Silver	mg/l	0.05	-	<0.002			<0.002					<0.002			
Aluminum	mg/l		-	8			26.1					5			
Arsenic	mg/l	0.025	-	<0.025			0.027					<0.025			
Boron	mg/l	1	-	<0.100			<0.100					<0.100			
Barium	mg/l	1	-	0.059			0.158					0.045			
Beryllium	mg/l	0.03	-	<0.001			<0.001					<0.001			
Calcium	mg/l		44.8	41.3	43.4	40.7	44.6	42.6	43.7	93.9	57.8	45.8			
Cadmium	mg/l	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.003	<0.001			
Cobalt	mg/l		-	<0.010			0.025					<0.010			
Chromium	mg/l	0.05	-	0.019			0.058					0.014			
Copper	mg/l	0.2	-	0.018			0.035					<0.010			
Iron	mg/l	0.3	9.27	17.3	19.1	0.556	58.2	5.25	11.9	841	176	10.1			
Potassium	mg/l		4.41	9.24	4.43	11	9.6	5.23	3.56	38	13.4	4.08			
Magnesium	mg/l	35	7.61	8.26	9.73	6.39	15.1	7.34	7.95	138	31.6	8.21			
Manganese	mg/l	0.3	0.373	0.367	0.4	0.025	1.18	0.14	0.255	20.5	4.6	0.272			
Sodium	mg/l	20	8.62	9.66	7.99	10.3	8.97	9.25	7.68	9.67	8.46	9.21			
Nickel	mg/l	0.1	-	0.015			0.053					0.011			
Lead	mg/l	0.025	<0.010	<0.010	<0.010		0.026	<0.010	<0.010	0.402	0.071	<0.010			
Antimony	mg/l	0.03	-	<0.020			<0.020					<0.020			
Thallium	mg/l	0.0005	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.559	<0.025	<0.025			
Vanadium	mg/l		<0.010	0.012	0.013	<0.010	0.034	<0.010	<0.010	0.503	0.111	<0.010			
Zinc	mg/l	2	0.03	0.04	0.046	0.007	0.135	0.019	0.031	1.95	0.429	0.032			
Selenium	mg/l	0.01	-	<0.040			<0.040					<0.040			

Notes

1. Full analytical reports for the Target Compound List were analyzed but were not detected. Contaminants of concern plus Organic compounds listed herein are for the Methylene Chloride, which has been detected above standards in one sampling event.
2. Highlighted cell indicates compound detected above applicable regulatory limit.

Shumaker Consulting Engineering and Land Surveying, P.C.
Analytical History for the Conklin Landfill
SCE Project 08126.00

Monitoring Well 38D		Date Sampled:	3/17/2008	6/24/2008	3/17/2009	6/3/2009	8/19/2009	10/21/2009	3/10/2010	6/2/2010	9/20/2010	12/28/2010			
Analyte (Note 1)	Units	Guidance Value													
Chloroethane	ug/l	5	-	<0.005			<0.001					<0.005			
1,2-Dichloropropane	ug/l	1	-	<0.005			<0.001					<0.005			
Methylene chloride	ug/l	5	-	<0.005			<0.001					<0.005			
o-Xylene	ug/l	5	-	<0.005			<0.001					<0.005			
m,p-Xylene	ug/l	5	-	<0.005			<0.001					<0.005			
Alkalinity as CaCO3	mg/l		202	180		158	123	182	190	196	178	182			
Ammonia as N	mg/l	2	0.1	<0.1	0.1	<0.1	0.2	<0.1	<0.1	1.2	0.2	<0.1			
Biochemical Oxygen Demand-5	mg/l		<6	<6	<6	<6	<6	<6	<6	<6	<6	<6			
Chloride	mg/l	250	11.1	8.78	10.1	9.59	7.74	10.8	10.1	10.6	11.5	9.87			
Chemical Oxygen Demand	mg/l		139	151	23	<10	171	28	18	167	248	19			
Hexavalent Chromium	mg/l		-	<0.01			<0.01					<0.01			
Nitrate as N	mg/l	10	0.13	<0.05	0.2	0.09	<0.05	0.13	0.2	<0.05	<0.05	0.12			
pH	pH Units	6.5-8.5	8.38	7.7	8.09	7.76	7.56	7.62	7.63	7.72	7.57	8			
Phenol	mg/l	0.001	<0.025	<0.025	<0.025	<0.025	0.07	0.327	0.046	<0.025	<0.025	<0.025			
Total Dissolved Solids	mg/l	500	245	181	189	169	420	405	207	210	227	248			
Sulfate as SO4	mg/l	250	9	5.4	7.39	5.74	5.72	7.29	8.62	9.29	7.5	8.4			
Total Kjeldahl Nitrogen	mg/l		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.1	<0.1	<0.1	<0.1			
Total Organic Carbon	mg/l		0.9	0.5	0.8	<0.5	1.4	0.7	0.8	0.5	1.6	0.6			
Total Hardess as CaCO3	mg/l		477	379	380	256	778	757	397	238	5750	518			
Color	Color Units	5	-	12			17					5			
Cyanide	mg/l	0.2	-	<0.010			<0.010					<0.01			
Bromide	mg/l	2	<0.25	<0.25	0.1	0.09	0.09	0.15	0.11	<0.05	0.1	0.14			
Mercury	mg/l	0.0007	-	<0.0002			0.0004					<0.0002			
Silver	mg/l	0.05	-	<0.002			0.013					0.027			
Aluminum	mg/l		-	118			276					159			
Arsenic	mg/l	0.025	-	0.098			0.175					*			
Boron	mg/l	1	-	<0.100			<0.500					*			
Barium	mg/l	1	-	0.84			2.27					0.849			
Beryllium	mg/l	0.03	-	0.005			0.013					0.006			
Calcium	mg/l		79.6	55.9	53.3	50.6	95.7	79	72.2	227	823	72.5			
Cadmium	mg/l	0.005	0.016	0.002	0.006	<0.001	0.005	<0.009	<0.005	<0.1	0.073	0.018			
Cobalt	mg/l		-	0.117			0.321					0.185			
Chromium	mg/l	0.05	-	0.142			0.36					0.197			
Copper	mg/l	0.2	-	0.181			0.482					0.23			
Iron	mg/l	0.3	324	289	278	123	651	671	250	1120	4510	393			
Potassium	mg/l		11.5	10.1	9.7	7.14	14.7	12.3	8.97	133	54.4	11.1			
Magnesium	mg/l	35	67.5	58.1	58.9	31.6	131	136	52.8	211	895	81.9			
Manganese	mg/l	0.3	13.2	8.64	8.26	4.32	24.8	19.8	11.2	50.6	176	9.09			
Sodium	mg/l	20	40.6	38.3	37.3	34	27.5	34.9	36.2	59.2	46.2	40.1			
Nickel	mg/l	0.1	-	0.253			0.594					0.038			
Lead	mg/l	0.025	0.195	0.142	0.119	0.057	0.35	0.328	0.132	<1.00	2.69	0.182			
Antimony	mg/l	0.03	-	<0.020			<0.100					*			
Thallium	mg/l	0.0005	<0.025	<0.025	<0.125	0.065	<0.125	0.259	0.271	<2.5	<0.525	*			
Vanadium	mg/l		0.166	0.139	0.134	0.07	0.321	0.295	0.112	<1.00	1.36	0.174			
Zinc	mg/l	2	0.724	0.661	0.631	0.293	1.67	1.6	0.555	2.75	11.4	0.936			
Selenium	mg/l	0.01	-	<0.040			<0.200					*			

Notes
1. Full analytical reports for the Target Compound List were analyzed but were not detected. Contaminants of concern plus Organic compounds listed herein are for the Methylene Chloride, which has been detected above standards in one sampling event.
2 Highlighted cell indicates compound detected above applicable regulatory limit.
3. * Blank Cells on 12/28/10 Benchmark Analysis indicates no data received for this analyte.

Shumaker Consulting Engineering and Land Surveying, P.C.
Analytical History for the Conklin Landfill
SCE Project 08126.00

Carlin Creek		Date Sampled:	3/17/2009	6/3/2009	8/19/2009	10/21/2009	3/10/2010	6/2/2010*	12/28/2010			
Analyte (Note 1)	Units	Guidance Value										
Chloroethane	ug/l	5			<0.001				<0.005			
1,2-Dichloropropane	ug/l	1			<0.001				<0.005			
Methylene chloride	ug/l	5			<0.001				<0.005			
o-Xylene	ug/l	5			<0.001				<0.005			
m,p-Xylene	ug/l	5			<0.001				<0.005			
Alkalinity as CaCO3	mg/l		18	48	57	50	30	50	28			
Ammonia as N	mg/l	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
Biochemical Oxygen Demand-5	mg/l		<6	<6	<6	<6	<6	<6	<6			
Chloride	mg/l	250	41.3	28.6	48	44.9	80.4	34.9	27.5			
Chemical Oxygen Demand	mg/l		37	11	8	<10	<10	<10	<10			
Hexavalent Chromium	mg/l				<0.01				<0.01			
Nitrate as N	mg/l	10	0.36	0.08	<0.05	0.16	0.53	<0.05	<0.05			
pH	pH Units	6.5-8.5	7.31	7	6.88	7.23	7.26	7.77	0.37			
Phenol	mg/l	0.001	<0.025	<0.025	<0.025	<0.025	0.138	<0.025	<0.025			
Total Dissolved Solids	mg/l	500	92	11	240	160	203	130	170			
Sulfate as SO4	mg/l	250	10.3	8.86	10.4	10.9	8.24	8.86	9.09			
Total Kjeldahl Nitrogen	mg/l		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			
Total Organic Carbon	mg/l		1.6	2.2	1.6	18	2.8	1.9	2			
Total Hardess as CaCO3	mg/l		36.2	48	57	50	62.1	48.7	38			
Color	Color Units	5			<5				<5			
Cyanide	mg/l	0.2			<0.010				<0.010			
Bromide	mg/l	2	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05			
Mercury	mg/l	0.0007			<0.0002				<0.0002			
Silver	mg/l	0.05			<0.002				<0.002			
Aluminum	mg/l				0.625				0.053			
Arsenic	mg/l	0.025			<0.025				<0.025			
Boron	mg/l	1			<0.100				<0.100			
Barium	mg/l	1			0.05				0.01			
Beryllium	mg/l	0.03			<0.001				<0.001			
Calcium	mg/l		10.6	11.9	21.5	18.2	17.8	13.9	10.8			
Cadmium	mg/l	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001			
Cobalt	mg/l				<0.010				<0.010			
Chromium	mg/l	0.05			<0.010				<0.010			
Copper	mg/l	0.2			<0.010				<0.010			
Iron	mg/l	0.3	0.11	0.024	3.19	<0.020	<0.020	<0.020	0.079			
Potassium	mg/l		1.16	1.4	3.99	1.72	1.69	1.68	1.36			
Magnesium	mg/l	35	2.24	2.75	5.01	4.28	4.27	3.41	2.67			
Manganese	mg/l	0.3	0.003	0.003	0.654	0.006	0.02	0.018	0.01			
Sodium	mg/l	20	22.1	21	26.6	25	43.8	24.5	17.6			
Nickel	mg/l	0.1			<0.010				<0.010			
Lead	mg/l	0.025	<0.010	<0.010	<0.010	0.328	<0.010	<0.010	<0.010			
Antimony	mg/l	0.03			<0.020				<0.020			
Thallium	mg/l	0.0005	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025			
Vanadium	mg/l		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010			
Zinc	mg/l	2	<0.005	<0.005	0.012	1.6	0.041	<0.005	0.006			
Selenium	mg/l	0.01			<0.040				<0.040			

Notes
1. Full analytical reports for the Target Compound List were analyzed but were not detected. Contaminants of concern plus Organic compounds listed herein are for the Methylene Chloride, which has been detected above standards in one sampling event.
*. Third Quarter Analysis, 2010 not conducted.