Misc. Documents

Denial Cobb Landfill

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ENGINEERING, INC.

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SOLID WASTE SECTION

Waste Industry Experts

Joyce Engineering, Inc
2211 W. Meadowview Road
Suite 101
Greensboro, NC 27407

tel: 336/323-0092
fax: 336/323-0093

www.JoyceEngineering.com

February 27, 2008

Mr. Ethan Brown
Division of Waste Management
Solid Waste Section
1647 Mail Service Center
Raleigh, NC 27699-1646

RE: Coble's Sandrock C&D Landfill
Permit No. 01-05
Second Semiannual Groundwater Monitoring Report of 2007
JEI Project No. 419.00, Task 28

Dear Ethan,

Enclosed is a report of the laboratory analytical results for the water quality monitoring that was conducted in October 2007 at the Coble's Sandrock C&D Landfill. In accordance with the revised Groundwater Monitoring Plan, approved May 20, 2003, monitoring wells MW-1, -2, -4, -6 and -7 and surface water points SW-1 and SW-2 were sampled on October 11, 2007. The samples were sent to Air, Water, and Soil Laboratories, Inc. and analyzed for the NC Appendix I list of volatile organic compounds and the eight RCRA metals.

Poor sample numbers on retest - drought etc.

A summary of the October 2007 detections for Coble's Sandrock is included as Table 1. A summary of historical detected constituents can be found in Table 2. Due to the dry weather conditions MW-1, SW-1, and SW-2 were unable to be sampled. Cis-1,2-Dichloroethylene was the only organic constituent detected above the laboratory detection limits during the second semiannual groundwater monitoring event of 2007 in MW-7. Barium was detected at estimated concentrations in MW-4 and MW-6, while barium was also detected at a quantified concentration in MW-2 and MW-7. Cadmium detected above the laboratory detection limits in MW-2. Chromium was detected in MW-2 and MW-7 at a quantified concentration and at an estimated concentration in MW-4 and MW-6. The chromium detection in MW-2 were greater than the NC 2L Standards and EPA MCL levels. MW-2 was resampled on December 28, 2007 and the chromium concentration was less than the NC 2L Standards and EPA MCL levels. A summary of recent groundwater elevations is included as Table 3. The laboratory data report, field information forms, a groundwater elevation contour map, and a compact disc containing the laboratory report for this event are also enclosed in this report.

The next semiannual monitoring event is scheduled to take place in April 2008. If you have any questions, please feel free to contact me or Michelle Brown at (336) 323-0092.

DATE: 10-11-2007

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: COBLE'S SANDROCK & LF **Project No./Task No.:** 419.00.28

Well ID: 0105-MW7 **Sampler(s):** Dan Girdner, Robert Winfield

Well Location: Westside of the landfill near MW5

Well Diameter: 2 inches

Initial Depth to Water (DTW): 13.15 feet

Depth to Bottom (DTB): 16.00 feet

Water Column Thickness (WCT): 2.85 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 0.46 gallons

For 4" Well: WCT X 0.653 = --- gallons

For THREE Well Volumes: WV X 3 = 1.39 gallons

Actual Amount Purged/Bailed : 1.5 gallons

Purged with: disposable bailer

Sampled with: disposable bailer

Depth to Water before Sampling: 13.04 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	11:30	17.0	6.10	1279	7.23	DG
0.46	11:33	17.3	6.28	1390	107	DG
0.92	11:36	17.1	6.33	1402	236	DG
1.39	11:38	16.9	6.42	1463	429	DG
Before Sampling	14:45	17.3	6.27	1610	321	DG

odor!

Comments (weather conditions, odor, color, silt, etc.):

Sunny, breezy, 66°F

Sample odor, gray sediment

EQUIPMENT BLANK sample time: 15:00

Signature: [signature] **Date:** 10-11-07

QA/QC Sign Off: Daniel S. Girdner **Date:** 10-11-07

DATE: 12-28-07

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: COBLE'S SANDROCK & LF **Project No./Task No.:** 419.00.26

Well ID: 0105-MW2 **Sampler(s):** Daniel Girdner

Well Location: near top of hill; west side of LF

Well Diameter: 2 inches

Initial Depth to Water (DTW): 16.06 feet

Depth to Bottom (DTB): 22.98 feet

Water Column Thickness (WCT): 6.92 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 1.13 gallons

For 4" Well: WCT X 0.653 = - gallons

For THREE Well Volumes: WV X 3 = 3.39 gallons

Actual Amount Purged/Bailed : 3.4 gallons

Purged with: disposable bailer

Sampled with: disposable bailer

Depth to Water before Sampling: - feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	12:05	16.1	5.35	111.0	35.5	DG
1.13	12:12	16.1	5.64	97.9	176	DG
2.26	12:20	16.0	5.93	91.0	228	DG
3.39	12:25	16.0	5.84	88.1	313	DG
Before Sampling	12:25	16.0	5.84	88.1	313	DG

Comments (weather conditions, odor, color, silt, etc.): Mostly cloudy, 55°F. Light red brown, ultra fine sediment turbidity. Well pad is covered by leaves, dirt, and a tire. RESAMPLE for Chromium, total & dissolved. Dissolved sample field filtered. FIELD BLANK sampled at 12:35

Signature: Daniel A. Girdner **Date:** 12-28-07

QA/QC Sign Off: [illegible] **Date:** 2-28-08

Limited Testing

Blank Data Also Concern

TABLE 2

SUMMARY OF HISTORICALLY DETECTED CONSTITUENTS

BAD WELL

PARAMETER (NC 2L Standard); [EPA MCL] in µg/L	Date	DL	RL	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	SW-1	SW-2	Blanks
		Concentrations (µg/L)											
Arsenic	Apr-00	8	10	ND	ND	10 J	ND	-	-	-	ND	ND	ND
(50)	Nov-00	-	10	ND	ND	ND	ND	-	-	-	ND	ND	ND
[10]	Apr-01	-	10	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Dec-01	-	10	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-02	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-02	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Apr-03	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-03	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-04	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-04	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-05	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-05	-	10	-	ND	-	ND	-	ND	ND	ND	-	ND
	Apr-06	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-06	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-07	2.0	10	ND	ND	-	2.0 B	-	ND	ND	ND	2.6 B	2.1 J
	Oct-07	3.0	10	-	ND	-	ND	-	ND	ND	-	-	ND
Barium	Apr-00	2	8	240	180	340	ND	-	-	-	ND	ND	ND
(2000)	Nov-00	-	500	ND	ND	ND	ND	-	-	-	ND	ND	ND
[2000]	Apr-01	-	500	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Dec-01	-	500	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-02	-	500	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-02	-	500	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Apr-03	-	500	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-03	-	500	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-04	-	500	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-04	-	500	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-05	-	500	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-05	-	500	-	ND	-	ND	-	ND	ND	ND	-	ND
	Apr-06	-	500	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-06	-	500	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-07	0.20	100	19.4 J	66.0 J	-	24.9 J	-	58.8 J	140	28.1 J	40.7 J	0.30 J
	Oct-07	2.0	100	-	478	-	45.8 B	-	38.2 B	241	-	-	35.8 J
Cadmium	Apr-00	1	4	2 J	2 J	4	ND	-	-	-	ND	ND	ND
(1.75)	Nov-00	-	1	2	ND	ND	ND	-	-	-	ND	ND	ND
[5]	Apr-01	-	1	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Dec-01	-	1	3.5	1.0	ND	ND	-	-	-	1.4	ND	ND
	Apr-02	-	1	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-02	-	1	1.3	ND	ND	1.2	1.0	-	-	ND	ND	ND
	Apr-03	-	1	2.0	1.4	1.9	1.7	2.6	-	-	1.2	1.2	ND
	Nov-03	-	1	3.2	1.1	-	1.4	-	ND	ND	ND	ND	ND
	Apr-04	-	1	ND	1.7	-	ND	-	1.8	ND	ND	ND	ND
	Oct-04	-	1	ND	ND	-	ND	-	1	ND	ND	ND	ND
	Apr-05	-	1	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-05	-	1	-	ND	-	ND	-	ND	ND	ND	-	ND
	Apr-06	-	1	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-06	-	1.00	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-07	0.50	1	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-07	0.1	1	-	0.4 J	-	ND	-	ND	ND	-	-	ND
Chromium	Apr-00	3	12	36	30	76	10 J	-	-	-	ND	ND	ND
(50)	Nov-00	-	10	15	ND	ND	ND	-	-	-	ND	ND	ND
[100]	Apr-01	-	10	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Dec-01	-	10	31	10	ND	ND	-	-	-	ND	310	45
	Apr-02	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-02	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Apr-03	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-03	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-04	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-04	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-05	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-05	-	10	-	14	-	ND	-	ND	ND	ND	-	ND
	Apr-06	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-06	-	10.0	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-07	2.0	10	ND	10.9	-	3.8 J	-	ND	ND	ND	ND	ND
	Oct-07	1.0	10	-	121	-	5.8 J	-	1.7 J	12.7	-	-	ND
Resample	Dec-07	1.0	10	-	15.7	-	-	-	-	-	-	-	ND
Lead	Apr-00	3	12	5 J	5 J	19	ND	-	-	-	ND	ND	ND
(15)	Nov-00	-	10	ND	ND	ND	ND	-	-	-	ND	ND	ND
[15]*	Apr-01	-	10	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Dec-01	-	10	11	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-02	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-02	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Apr-03	-	10	ND	ND	ND	ND	ND	-	-	ND	ND	ND
	Nov-03	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-04	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-04	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-05	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-05	-	10	-	ND	-	ND	-	ND	ND	ND	-	ND
	Apr-06	-	10	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Oct-06	-	10.0	ND	ND	-	ND	-	ND	ND	ND	ND	ND
	Apr-07	2.0	10	ND	ND	-	ND	-	ND	ND	-	-	ND
	Oct-07	6.0	10	-	ND	-	ND	-	ND	ND	-	-	ND

AIR WATER SOIL LABORATORIES, INC.

2109A NORTH HAMILTON STREET
RICHMOND, VIRGINIA 23230
(804) 358-8295 PHONE
(804)358-8297 FAX

Large O/O No sample

CHAIN OF CUSTODY

CLIENT NAME: Joyce Engineering, Inc.	PROJECT NAME: Coble's Sandrock C&D
CLIENT CONTACT: Jeremey Kerry	SITE NAME: Coble's Sandrock C&D
CLIENT ADDRESS: 2211 W. Meadowview Rd Ste. 101 Gso NC 27407	PROJECT NUMBER: 419.00.28
CLIENT PHONE NUMBER: 336-323-0092	P.O. NUMBER:
CLIENT FAX NUMBER: 336-323-0093	REGULATORY AUTHORITY:
Is sample for compliance reporting? (YES) NO	Is sample from a chlorinated supply? YES (NO)
	PWS I.D. #:

SAMPLER NAME (PRINT): DAN GIRDNER / ROBERT WINFIELD SAMPLER SIGNATURE: [signature] Turn Around Time: 10 Day(s)

Have ammonia and TKN samples been verified to be dechlorinated at the time of sampling?: YES NO

CLIENT SAMPLE I.D.	Composite Start Date	Composite Start Time	Grab or Composite Stop Date	Grab or Composite Stop Time	Number of Containers	Grab	Composite	Field Filtered (Dissolved Metals)	Ground Water / Surface Water	Waste Water / Storm Water	Drinking Water	Soil	Solids	Other	NC App. I VOC-8260 (HCL)	RCRA 8 Metals (HNO3)						COMMENTS (Quote I.D.; PLEASE NOTE PRESERVATIVE(S) or PUMP RATE (L/min))
1) ~~0105 MW1~~									X						X	X						DRY WELL NO SAMPLE
2) 0105 - MW2			10-11-07	14:10	10	X			X						X	X						MS / MSD
3) 0105 - MW4			10-11-07	14:30	4	X			X						X	X						
4) 0105 - MW6			"	13:45	4	X			X						X	X						
5) 0105 - MW7			"	14:45	4	X			X						X	X						DRY NO SAMPLE
6) ~~0105 - SW1~~									X						X	X						DRY NO SAMPLE
7) ~~0105 - SW2~~									X						X	X						
8) Equipment Blank			10-11-07	15:00	4	X									X	X						
9) Trip Blank			10-11-07	15:00	2	X									X							
10)																						

RELINQUISHED:	DATE / TIME	RECEIVED:	DATE / TIME
Daniel S. Girdner	10-11-07/17:00	[signature]	10/12/07 1000

QC Data Package: Level I ☐ Level II ☒ Level III ☐ Level IV ☐

LAB USE ONLY COOLER TEMP 1.9 °C

AWS COC v070329.xls

DATE: 10-11-2007

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: COBLE'S SANDROCK & LF **Project No./Task No.:** 419.00.28

Well ID: 0105-MW6 **Sampler(s):** Dan Girdner, Robert Winfield

Well Location: flush mount in field that is fenced before the fill area (former P-3)

Well Diameter: 2 inches

Initial Depth to Water (DTW): 27.65 feet

Depth to Bottom (DTB): 41.00 feet

Water Column Thickness (WCT): 13.35 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 2.18 gallons

For 4" Well: WCT X 0.653 = --- gallons

For THREE Well Volumes: WV X 3 = 6.53 gallons

Actual Amount Purged/Bailed : 6.75 gallons

Purged with: disposable bailer

Sampled with: disposable bailer

Depth to Water before Sampling: 27.65 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	10:24	15.6	7.54	165.7	4.38	RW
2.18	10:27	15.4	6.37	194.0	166	RW
4.36	10:33	15.3	6.40	208.0	496	RW
6.53	10:38	15.2	6.00	201.0	913	RW
Before Sampling	13:45	16.0	6.86	195.7	17.02	RW

Comments (weather conditions, odor, color, silt, etc.):

Sunny, breezy, 65°F

Light brown sediment & mica

Signature: [signature] **Date:** 10-11-07

QA/QC Sign Off: Daniel A. Girdner **Date:** 10-11-2007

AIR WATER & SOIL LABORATORIES, INC.®
2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

Joyce Engineering, Inc. - Greensboro
Cobles Sandrock C&D
METALS ANALYSIS
AWS Laboratory I.D.: 08010029

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY -08010029-001 DIS

Parameter	EPA Method	Spike Conc (ug/L)	Sample Result (ug/L)	Matrix Spike Result (ug/L)	Matrix Spike % Rec	Matrix Spike Duplicate Result (ug/L)	Matrix Spike Dup % Rec	Lower % Rec Control Limit	Upper % Rec Control Limit	% RPD	RPD Limit	Date Analyzed	Analyst
Chromium	6010B	500	0	529	106	525	105	80	120	1	20	01-04-08	CGT

Draught !

Table 1

Summary of October 2007 Detected Constituents

Constituent	DL	RL	MW-2	MW-4	MW-6	MW-7	Blanks
Barium	2.0	100	478	45.8 B	38.2 B	241	35.8 J
Cadmium	0.1	1	0.4 J	ND	ND	ND	ND
Chromium	2.0	10	121 (15.7)	5.8 J	1.7 J	12.7	ND
Cis-1,2-Dichloroethylene	0.2	1	ND	ND	ND	0.40 J	ND

Notes:
1. ND = Non detected above laboratory detection limit.
2. - = Not analyzed
3. B = Blank qualified detections.
4. DL = Laboratory detection limit.
5. RL = Laboratory reporting limit (NC SWSL {or lower} beginning in April 2007 to present).
6. J = Estimated value between the DL and the RL.
7. NC SWSL = North Carolina Solid Waste Section Limits.
8. ( ) = December 2007 resampling result.

Air Water & Soil Laboratories, Inc.
2109 A. North Hamilton Street
Richmond, Virginia 23230
(804) 358-8295 - Telephone
(804) 358-8297 - Fax

Certificate of Analysis

Date Issued: 02/11/2008

Client Name: Joyce Engineering, Inc.-Greensboro
Client Site ID: Cobles Sandrock C&D
Submitted To: Jeremey Kerly

Parameter	CAS	Reference Method	Client Sample ID	Laboratory Sample ID	Sample Date	Analysis Date/Time	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Chloroform	67-66-3	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
Chloromethane	74-87-3	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.3	1.0	1	ug/L
cis-1,2-Dichloroethylene	156-59-2	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	0.4	J2	0.2	1.0	1	ug/L
cis-1,3-Dichloropropene	10061-01-5	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
Dibromochloromethane	124-48-1	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
Dibromomethane	74-95-3	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.3	1.0	1	ug/L
Ethylbenzene	100-41-4	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.1	1.0	1	ug/L
Iodomethane	74-88-4	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		1.7	10.0	1	ug/L
Methylene chloride	75-09-2	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		1.0	1.0	1	ug/L
Styrene	100-42-5	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.1	1.0	1	ug/L
Tetrachloroethylene (PCE)	127-18-4	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
Toluene	108-88-3	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
trans-1,2-Dichloroethylene	156-60-5	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
trans-1,3-Dichloropropene	10061-02-6	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		1.1	4.0	1	ug/L
Trichloroethylene	79-01-6	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
Vinyl acetate	108-05-4	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		2.2	10.0	1	ug/L
Vinyl chloride	75-01-4	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.2	1.0	1	ug/L
Xylenes, Total	1330-20-7	SW8260B	0105-MW7	07100227-004	10/11/07	10/23/07 5:34	BLOD		0.3	3.0	1	ug/L
Arsenic	7440-38-2	SW6010B	Equipment Blank	07100227-005	10/11/07	10/17/07 19:48	BLOD		3.0	10.0	1	ug/L
Barium	7440-39-3	SW6010B	Equipment Blank	07100227-005	10/11/07	10/17/07 19:48	35.8	J2	2.0	10.0	1	ug/L
Cadmium	7440-43-9	SW7131A	Equipment Blank	07100227-005	10/11/07	11/01/07 10:38	BLOD		0.1	0.3	1	ug/L
Chromium	7440-47-3	SW6010B	Equipment Blank	07100227-005	10/11/07	10/17/07 19:48	BLOD		1.0	10.0	1	ug/L
Lead	7439-92-1	SW6010B	Equipment Blank	07100227-005	10/11/07	10/17/07 19:48	BLOD		6.0	10.0	1	ug/L
Mercury	7439-97-6	SW7470A	Equipment Blank	07100227-005	10/11/07	10/16/07 12:33	BLOD		0.2	0.2	1	ug/L
Selenium	7782-49-2	SW7740	Equipment Blank	07100227-005	10/11/07	10/30/07 11:35	BLOD		2.0	10.0	1	ug/L
Silver	7440-22-4	SW6010B	Equipment Blank	07100227-005	10/11/07	10/17/07 19:48	BLOD		2.0	10.0	1	ug/L

Air Water & Soil Laboratories, Inc.
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Certificate of Analysis

Date Issued: 02/11/2008

Client Name: Joyce Engineering, Inc.-Greensboro
Client Site ID: Cobles Sandrock C&D
Submitted To: Jeremey Kerly

Parameter	CAS	Reference Method	Client Sample ID	Laboratory Sample ID	Sample Date	Analysis Date/Time	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Carbon disulfide	75-15-0	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.0	10.0	1	ug/L
Carbon tetrachloride	56-23-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Chlorobenzene	108-90-7	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.1	1.0	1	ug/L
Chloroethane	75-00-3	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Chloroform	67-66-3	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Chloromethane	74-87-3	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.3	1.0	1	ug/L
cis-1,2-Dichloroethylene	156-59-2	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
cis-1,3-Dichloropropene	10061-01-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Dibromochloromethane	124-48-1	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Dibromomethane	74-95-3	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.3	1.0	1	ug/L
Ethylbenzene	100-41-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.1	1.0	1	ug/L
Iodomethane	74-88-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.7	10.0	1	ug/L
Methylene chloride	75-09-2	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.0	1.0	1	ug/L
Styrene	100-42-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.1	1.0	1	ug/L
Tetrachloroethylene (PCE)	127-18-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Toluene	108-88-3	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
trans-1,2-Dichloroethylene	156-60-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
trans-1,3-Dichloropropene	10061-02-6	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.1	4.0	1	ug/L
Trichloroethylene	79-01-6	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Vinyl acetate	108-05-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		2.2	10.0	1	ug/L
Vinyl chloride	75-01-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Xylenes, Total	1330-20-7	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.3	3.0	1	ug/L
Arsenic	7440-38-2	SW6010B	0105-MW6	07100227-003	10/11/07	10/17/07 19:36	BLOD		3.0	10.0	1	ug/L
Barium	7440-39-3	SW6010B	0105-MW6	07100227-003	10/11/07	10/17/07 19:36	38.2	J2	2.0	10.0	1	ug/L
Cadmium	7440-43-9	SW7131A	0105-MW6	07100227-003	10/11/07	11/01/07 10:26	BLOD		0.1	0.3	1	ug/L
Chromium	7440-47-3	SW6010B	0105-MW6	07100227-003	10/11/07	10/17/07 19:36	1.7	J2	1.0	10.0	1	ug/L

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Client Name: Joyce Engineering, Inc.-Greensboro
Client Site ID: Cobles Sandrock C&D
Submitted To: Jeremey Kerly

Parameter	CAS	Reference Method	Client Sample ID	Laboratory Sample ID	Sample Date	Analysis Date/Time	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Chlorobenzene	108-90-7	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.1	1.0	1	ug/L
Chloroethane	75-00-3	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Chloroform	67-66-3	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Chloromethane	74-87-3	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.3	1.0	1	ug/L
cis-1,2-Dichloroethylene	156-59-2	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
cis-1,3-Dichloropropene	10061-01-5	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Dibromochloromethane	124-48-1	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.3	1.0	1	ug/L
Dibromomethane	74-95-3	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.1	1.0	1	ug/L
Ethylbenzene	100-41-4	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		1.7	10.0	1	ug/L
Iodomethane	74-88-4	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		1.0	1.0	1	ug/L
Methylene chloride	75-09-2	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.1	1.0	1	ug/L
Styrene	100-42-5	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Tetrachloroethylene (PCE)	127-18-4	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Toluene	108-88-3	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
trans-1,2-Dichloroethylene	156-60-5	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
trans-1,3-Dichloropropene	10061-02-6	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		1.1	4.0	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Trichloroethylene	79-01-6	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		2.2	10.0	1	ug/L
Vinyl acetate	108-05-4	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.2	1.0	1	ug/L
Vinyl chloride	75-01-4	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		0.3	3.0	1	ug/L
Xylenes, Total	1330-20-7	SW8260B	0105-MW6	07100227-003	10/11/07	10/23/07 5:07	BLOD		3.0	10.0	1	ug/L
Arsenic	7440-38-2	SW6010B	0105-MW7	07100227-004	10/11/07	10/17/07 19:45	241		2.0	10.0	1	ug/L
Barium	7440-39-3	SW6010B	0105-MW7	07100227-004	10/11/07	10/17/07 19:45	BLOD		0.1	0.3	1	ug/L
Cadmium	7440-43-9	SW7131A	0105-MW7	07100227-004	10/11/07	11/01/07 10:32	12.7		1.0	10.0	1	ug/L
Chromium	7440-47-3	SW6010B	0105-MW7	07100227-004	10/11/07	10/17/07 19:45	BLOD		6.0	10.0	1	ug/L
Lead	7439-92-1	SW6010B	0105-MW7	07100227-004	10/11/07	10/16/07 12:31	BLOD		0.2	0.2	1	ug/L
Mercury	7439-97-6	SW7470A	0105-MW7	07100227-004	10/11/07							

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Client Name: Joyce Engineering, Inc.-Greensboro
Client Site ID: Cobles Sandrock C&D
Submitted To: Jeremey Kerly

Parameter	CAS	Reference Method	Client Sample ID	Laboratory Sample ID	Sample Date	Analysis Date/Time	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Bromoform	75-25-2	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.3	1.0	1	ug/L
Bromomethane	74-83-9	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Carbon disulfide	75-15-0	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		1.0	10.0	1	ug/L
Carbon tetrachloride	56-23-5	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Chlorobenzene	108-90-7	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.1	1.0	1	ug/L
Chloroethane	75-00-3	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Chloroform	67-66-3	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Chloromethane	74-87-3	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.3	1.0	1	ug/L
cis-1,2-Dichloroethylene	156-59-2	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
cis-1,3-Dichloropropene	10061-01-5	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Dibromochloromethane	124-48-1	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.3	1.0	1	ug/L
Dibromomethane	74-95-3	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.1	1.0	1	ug/L
Ethylbenzene	100-41-4	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		1.7	10.0	1	ug/L
Iodomethane	74-88-4	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		1.0	1.0	1	ug/L
Methylene chloride	75-09-2	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.1	1.0	1	ug/L
Styrene	100-42-5	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Tetrachloroethylene (PCE)	127-18-4	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Toluene	108-88-3	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
trans-1,2-Dichloroethylene	156-60-5	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
trans-1,3-Dichloropropene	10061-02-6	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		1.1	4.0	1	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Trichloroethylene	79-01-6	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Trichlorofluoromethane	75-69-4	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		2.2	10.0	1	ug/L
Vinyl acetate	108-05-4	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.2	1.0	1	ug/L
Vinyl chloride	75-01-4	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		0.3	3.0	1	ug/L
Xylenes, Total	1330-20-7	SW8260B	0105-MW2	07100227-001	10/11/07	10/23/07 4:14	BLOD		3.0	10.0	1	ug/L
Arsenic	7440-38-2	SW6010B	0105-MW4	07100227-002	10/11/07	10/17/07 19:33	BLOD		2.0	10.0	1	ug/L
Barium	7440-39-3	SW6010B	0105-MW4	07100227-002	10/11/07	10/17/07 19:33	45.8	J2				

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Client Site ID: Cobles Sandrock C&D
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Parameter	CAS	Reference Method	Client Sample ID	Laboratory Sample ID	Sample Date	Analysis Date/Time	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Cadmium	7440-43-9	SW7131A	0105-MW4	07100227-002	10/11/07	11/01/07 10:08	BLOD		0.1	0.3	1	ug/L
Chromium	7440-47-3	SW6010B	0105-MW4	07100227-002	10/11/07	10/17/07 19:33	5.8	J2	1.0	10.0	1	ug/L
Lead	7439-92-1	SW6010B	0105-MW4	07100227-002	10/11/07	10/17/07 19:33	BLOD		6.0	10.0	1	ug/L
Mercury	7439-97-6	SW7470A	0105-MW4	07100227-002	10/11/07	10/16/07 12:26	BLOD		0.2	0.2	1	ug/L
Selenium	7782-49-2	SW7740	0105-MW4	07100227-002	10/11/07	10/30/07 11:18	BLOD		2.0	10.0	1	ug/L
Silver	7440-22-4	SW6010B	0105-MW4	07100227-002	10/11/07	10/17/07 19:33	BLOD		2.0	10.0	1	ug/L
1,1,1,2-Tetrachloroethane	630-20-6	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.1	1.0	1	ug/L
1,1,1-Trichloroethane	71-55-6	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.3	1.0	1	ug/L
1,1,2-Trichloroethane	79-00-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
1,1-Dichloroethane	75-34-3	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
1,1-Dichloroethylene	75-35-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
1,2,3-Trichloropropane	96-18-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.4	1.0	1	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.4	4.0	1	ug/L
1,2-Dibromoethane (EDB)	106-93-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.4	1.0	1	ug/L
1,2-Dichlorobenzene	95-50-1	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
1,2-Dichloroethane	107-06-2	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.3	1.0	1	ug/L
1,2-Dichloropropane	78-87-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.3	1.0	1	ug/L
1,4-Dichlorobenzene	106-46-7	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
2-Butanone (MEK)	78-93-3	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.7	10.0	1	ug/L
2-Hexanone (MBK)	591-78-6	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.7	10.0	1	ug/L
4-Methyl-2-pentanone (MIBK)	108-10-1	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.2	10.0	1	ug/L
Acetone	67-64-1	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		7.0	10.0	1	ug/L
Acrylonitrile	107-13-1	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		1.7	10.0	1	ug/L
Benzene	71-43-2	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Bromochloromethane	74-97-5	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.4	1.0	1	ug/L
Bromodichloromethane	75-27-4	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L
Bromoform	75-25-2	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.3	1.0	1	ug/L
Bromomethane	74-83-9	SW8260B	0105-MW4	07100227-002	10/11/07	10/23/07 4:41	BLOD		0.2	1.0	1	ug/L

DATE: 10-11-2007

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: COBLE'S SANDROCK & LF **Project No./Task No.:** 419.00.28

Well ID: 0105-MW1 **Sampler(s):** Dan Girdner, Robert Winfield

Well Location: backside of the landfill along perimeter road

Well Diameter: 2 inches

Initial Depth to Water (DTW): 35.72 feet

Depth to Bottom (DTB): 35.85 feet

Water Column Thickness (WCT): 0.13 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 0.02 gallons

For 4" Well: WCT X 0.653 = --- gallons

For THREE Well Volumes: WV X 3 = 0.06 gallons

Actual Amount Purged/Bailed : 0 gallons

Purged with: disposable bailer

Sampled with: NA dry, no sample

Depth to Water before Sampling: --- feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
Before Sampling	---					

Comments (weather conditions, odor, color, silt, etc.): Sunny, breezy, mid-60's

Well too dry, NO SAMPLES TAKEN

Signature: Daniel A. Girdner **Date:** 10-11-2007

QA/QC Sign Off: Robert L. Winfield **Date:** 10-11-07

AIR WATER & SOIL LABORATORIES, INC.®
2109A North Hamilton Street • Richmond, Virginia 23230 • Tel: (804) 358-8295 Fax: (804) 358-8297

Joyce Engineering, Inc. - Greensboro
Cobles Sandrock C&D
METALS ANALYSIS
AWS Laboratory I.D.: 08010029

LABORATORY CONTROL SAMPLE 01-03-08 (ICP)

Parameter	EPA Method	Spike Conc (ug/L)	LCS Result (ug/L)	LCS % Rec	Lower % Rec Control Limit	Upper % Rec Control Limit	Date Analyzed	Analyst
Chromium	6010B	500	522	104	80	120	01-04-08	CGT

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Joyce Engineering, Inc. - Greensboro
Cobles Sandrock C & D
METALS ANALYSES
AWS Laboratory I.D.: 07100227

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY -07100227-001

Parameter	EPA Method	Spike Conc (ug/L)	Sample Result (ug/L)	Matrix Spike Result (ug/L)	Matrix Spike % Rec	Matrix Spike Duplicate Result (ug/L)	Matrix Spike Dup % Rec	Lower % Rec Control Limit	Upper % Rec Control Limit	% RPD	RPD Limit	Date Analyzed	Analyst
Arsenic	6010B	500	0	410	82	419	84	80	120	2	20	10-17-07	DMH
Barium	6010B	500	478	987	102	1011.5	107	80	120	2	20	10-17-07	DMH
Cadmium	7131A	2.00	0.44	2.75	116	2.74	115	80	120	0	20	10-31-07	DMH
Chromium	6010B	500	121	626	101	641	104	80	120	2	20	10-17-07	DMH
Lead	6010B	500	0	506	101	521	104	80	120	3	20	10-17-07	DMH
Mercury	7470A	2.50	0	2.35	94	2.38	95	80	120	1	20	10-16-07	DMH
Selenium*	7740	200.0	0	184.8	92	189.1	95	80	120	2	20	10-30-07	DMH
Silver	6010B	100	0	93.8	94	95.9	96	80	120	2	20	10-17-07	DMH

* = Post Digestion Spike Recovery

DATE: 10/11/07

JOYCE ENGINEERING, INC.

SURFACE WATER MONITORING LOG

Project Name: COBLE'S SANDROCK & LF **Project/Task No.:** 419.00.28

Surface Point ID: 0105-SW1 **Sampler(s):** Dan Girdner/Robert Winfield

Location: Stream near MW-4

Field Parameters:

Time of Sampling: _____

pH: _____

Temperature : _____ (°C)

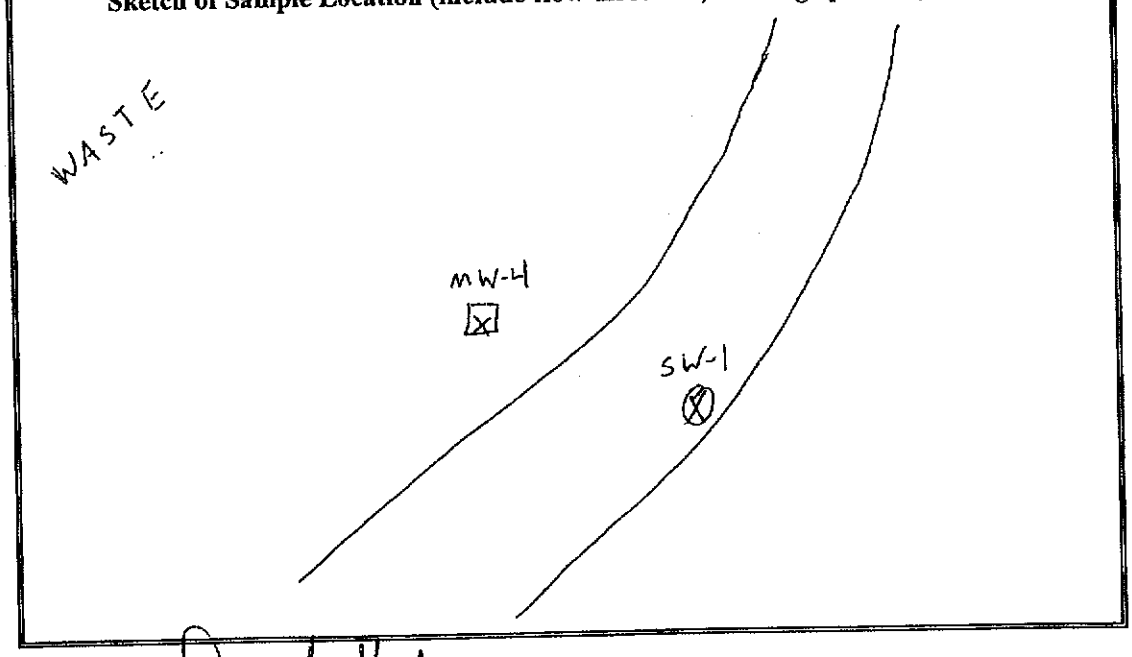
Conductivity : _____ (µS)

Turbidity : _____ (ntu)

Comments/Sample Description(weather conditions, odor, color, silt, etc.):

DRY-No water to sample

Sketch of Sample Location (include flow direction, drainage pathways, etc.):



Signature: Daniel Girdner **Date:** 10-11-07

QA/QC Sign Off: [illegible] **Date:** 2-27-08

http://www.ncga.state.nc.us/EnactedLegislation/Statutes/HTML/ByChapter/Chapter_130A.html

§ 130A-1.1. Mission and essential services.

(a) The General Assembly recognizes that unified purpose and direction of the public health system is necessary to ensure that all citizens in the State have equal access to essential public health services. The General Assembly declares that the mission of the public health system is to promote and contribute to the highest level of health possible for the people of North Carolina by:

(1) Preventing health risks and disease;

(2) Identifying and reducing health risks in the community;

(3) Detecting, investigating, and preventing the spread of disease;

(4) Promoting healthy lifestyles;

(5) Promoting a safe and healthful environment;

(6) Promoting the availability and accessibility of quality health care services through the private sector; and

(7) Providing quality health care services when not otherwise available.

DEHNR RECEIVED
AUG - 5 2008
SOLID WASTE SECTION

.0203 PERMIT APPROVAL OR DENIAL

(e) When the Division denies a permit for a solid waste management facility, it shall state in writing the reason for such denial and shall also state its estimate of the changes in the applicant's proposed activities or plans which will be required in order that the applicant may obtain a permit. A denial shall be without prejudice to the person's right to a hearing or for filing a future request after revisions are made to meet objections specified as reasons for denial. Reasons for denial are:

(1) Submission of incomplete information;

(2) Failure to meet the requirements set forth in Sections .0300, .0400 and .0500 of this Subchapter applicable to the type of facility applied for; or

(3) The past conduct by the applicant, as defined in G.S. 130A-309.06(b), which has resulted in repeated violations of solid waste management statutes, these Rules, or orders issued thereunder, or violations of permit conditions of a solid waste management facility located in this State; or

(4) Any other reasons which would prevent the solid waste facility or site from being operated in accordance with Article 9, Chapter 130A of the General Statutes, these Rules, the Federal Act, or acceptable engineering or public health and environmental standards.

DEHNR SOLID WASTE SECTION RECEIVED AUG - 5 2008

RECEIVED NOV AUG 5 2008 SOLID WASTE SECT

Construction debris landfill wants to expand

By TOMAS MURAWSKI
Staff Writer

The owner of a private landfill near Liberty may be about to pout to turn his facility into a regional dump for construction and demolition debris from as far away as Forsyth and Wake counties.

Kent Coble of Coble's Sandrock, Inc. has asked the state for a permit to expand a landfill along Foster Store Road from 12.2 to 67 acres. The permit that Coble is seeking won't allow his facility to receive any materials that it doesn't already accept. But it would allow him to conduct business on a much larger scale.

Coble has already filed an application with the state's division of waste management, which will ultimately decide whether to allow the requested expansion. Coble's application specifies, among other things, the service area of the expanded landfill. The facility would officially serve customers within 25 miles of the landfill. But it would also take waste from any clients Coble already has outside this area or replace them with new ones from beyond the 25-mile zone.

The new permit would, moreover, allow Coble to take waste from any county where he has previously done business, which, according to the permit, includes Alamance, Cabarrus, Caswell, Chatham, Davidson, Forsyth, Greene, Guilford, Lee, Orange, Randolph, Rockingham, and Wake.

Ming-Tai Chao, an engineer with the state's division of waste management, said that the county government is ultimately responsible for the service area of any private landfill. In most cases, he said, a landfill has already established its service area by that the time it comes to him for a permit.

"They have to get the franchise from the county, and the franchise would define where the waste would come from," Chao explained in an interview. "Either the county is big enough to generate enough waste, or the county says 'you can get waste from outside the county.'"

Coble's franchise agreement with Alamance County does, in fact, allow him to take trash from within 25 miles of his facility. The agreement also grandfathers in any existing customers outside this area, and it allows Coble to look outside the 25-mile area to replace customers that were also outside the permitted zone. Even so, Coble must "give first priority in terms of space in the landfill to Alamance County generated waste."

County officials have generally been reluctant to permit large, regional landfills within their jurisdiction. About four years ago, the county commissioners voted down a proposal to allow out-of-county waste at the county's own landfill along Austin Quarter Road. The commissioners made it clear, at the time, that they didn't want the county to become a dumping ground for the entire region.

But some county officials suspect that Coble's proposal may do just that – at least when it comes to construction and demolition debris.

Kent Coble, the owner of Coble's Sandrock, has applied for a permit to expand this landfill near Liberty from 12.2 to 67 acres.

David I. Smith, who serves as both county manager and county attorney, said Coble's plans may not go over well with the county commissioners.

"It seems like he's trying to get a regional landfill," Smith explained in an interview. "It's concerning to me; we don't want a regional landfill in Alamance County."

It's unclear what Coble ultimately wants to do with his landfill, aside from making it five times bigger than it is now. The business owner didn't return any of the newspaper's phone messages before press time on Wednesday.

Coble's landfill is much different from the county's facility, which receives most of the county's household and yard waste. Coble can only accept things like brick, rock, concrete, and asphalt as well as the tree trunks and stumps that remain after land has been cleared. His landfill isn't allowed to take any household garbage, yard trash, hazardous waste, or sludge from sewer plants, and Chao said that these limitations won't change under the proposed permit.

"Most of the time, people assume that this is just household garbage," the state engineer said, "but no. C&D is construction and demolition debris, and the state has very rigid definitions for that."

But household waste is, in some cases, mixed in with construction and demolition debris, Greg Thomas, the county's solid waste director, said that the county's landfill also has an area reserved for construction debris, which occasionally gets regular household garbage by accident.

"These other materials need to be sorted out," Thomas said in an interview, "and we're very diligent about that."

Thomas added that a law which the state recently passed requires construction and demolition landfills to install liners that prevent any unauthorized trash from seeping into the groundwater as it decomposes. Thomas said that the new requirement only applies to newly-built landfills and the rule won't affect Coble's facility, which has no liner to protect the groundwater.

Coble's proposed permit will also have no bearing on the grandfather privileges that his landfill has from the county.

About two years ago, the commissioners passed an ordinance to regulate high-impact land uses, which requires landfills and other facilities to be at least 2,000 feet from any home, church, medical clinic or any other "protected" structure. Jason Martin, the county's planning director, said that Coble's landfill is currently exempt from these rules and it won't lose its grandfather status as long as the expansion occurs on adjacent land.

Coble's expansion will at the very least have a considerable impact on the amount of debris that his facility receives. Thomas said Coble currently gets 150 to 200 tons of debris each day, which is roughly 40 times what arrives at the construction and demolition section of the county's landfill. Coble can actually accept up to 600 tons a day under the terms of his current franchise agreement, and his permit application projects an average daily rate of approximately 600 tons.

At this point, the state hasn't decided whether it will in fact issue Coble a permit to expand his facility. The division of waste management must first hold a public hearing in order to receive comments on the proposal. That hearing is slated to take place at 6:30 p.m. on Monday, July 21 at 8416 Snow Camp Road in Snow Camp.