Curl, Steve C.

From: Curl, Steve C.
Sent: Friday, January 15, 2010 3:53 PM
To: 'Drummond, Jaclynne'
Cc: Hopkins, Max E.; 'Dave Wasiela'; 'Alan Martin'; 'Tom Wilson'; 'Scott, Nancy'; 'Poindexter, Mark'; 'Watkins, Jason'; 'Patrone, John'; Warren, Reba; 'Lori Hinnant (LHinnant@wcsr.com)'; Boyette, Anthony (Tony) J.
Subject: RE: Rural Hall Ash Landfill Permit 34-05 - Phase II Activities
Importance: High
Attachments: 644750-61.xls; 9279.pdf

Tracking:

Recipient	Delivery
'Drummond, Jaclynne'	
Hopkins, Max E.	Delivered: 1/15/2010 3:53 PM
'Dave Wasiela'	
'Alan Martin'	
'Tom Wilson'	
'Scott, Nancy'	
'Poindexter, Mark'	
'Watkins, Jason'	
'Patrone, John'	
Warren, Reba	Delivered: 1/15/2010 3:53 PM
'Lori Hinnant (LHinnant@wcsr.com)'	
Boyette, Anthony (Tony) J.	Delivered: 1/15/2010 3:53 PM

Received
Waste
Management

Received
Waste
Management

1-15-2010

VIA EMAIL AND US MAIL:

Jaclynne:

Per your request dated January 12, 2010, attached is the laboratory EDD data from the April 30, 2009 semiannual sampling event. Please advise if you have any questions or concerns.

Best regards,

Steve

Steve Curl, PE
Sr. EHS Mgr.
RJ Reynolds Tobacco Co
336-741-5146
curls@rjrt.com

From: Hopkins, Max E.
Sent: Tuesday, January 12, 2010 4:09 PM

To: Curl, Steve C.
Subject: FW: Rural Hall Landfill

Hey Steve,

Attached is the requested data from R&A.

Max

From: R & A Labs [mailto:ralcc2@triad.rr.com]
Sent: Tuesday, January 12, 2010 4:04 PM
To: Hopkins, Max E.
Subject: Rural Hall Landfill

Max,

Please find attached the Rural Hall Landfill results for samples collected April 2009. If you should have any questions please so advise.

Thanks

Sid Champion
Research & Analytical Labs, Inc.

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	RHMW 001	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	7440-39-3	15	Barium	**30.5**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	744-43-9	34	Cadmium	**3.44**	ug/L		1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 001	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 001	SW324	324	Conductivity	**3,860**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	RHMW 001	7440-50-8	54	Copper	**4.9**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	7439-89-6	340	Iron	**599**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	7439-92-1	131	Lead	**13.1**	ug/L		1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	7439-96-5	342	Manganese	**4,560**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	RHMW 001	SW303	303	Nitrate-Nitrogen	**101**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	RHMW 001	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	7440-22-4	184	Silver	**1.44**	ug/L	J	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 001	14808-79-8	315	Sulfate	**1,890,000**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	RHMW 001	E-10195	357	TOC	**6,060 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	RHMW 001	SW311	311	Total Dissolved Solids	**3,370,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	RHMW 001	7440-66-6	213	Zinc	10	ug/L	U	1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644750

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	RHMW 003A	N/A	NE	Aluminum	**442**	ug/L		1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	7440-39-3	15	Barium	**368**	ug/L		1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 003A	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 003A	SW324	324	Conductivity	**603**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	RHMW 003A	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	7439-89-6	340	Iron	**638**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	7439-92-1	131	Lead	**8.5**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	7439-96-5	342	Manganese	**61.6**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	RHMW 003A	SW303	303	Nitrate-Nitrogen	**535**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	RHMW 003A	7782-49-2	183	Selenium	**154**	ug/L		1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003A	14808-79-8	315	Sulfate	**199,000**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	RHMW 003A	E-10195	357	TOC	**940 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	RHMW 003A	SW311	311	Total Dissolved Solids	**399,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	RHMW 003A	7440-66-6	213	Zinc	**68.2**	ug/L		1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644752

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	RHMW 002	N/A	NE	Aluminum	**5,170**	ug/L		1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	7440-39-3	15	Barium	**268**	ug/L		1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 002	7440-47-3	51	Chromium	**13.9**	ug/L		1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 002	SW324	324	Conductivity	**93.7**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	RHMW 002	7440-50-8	54	Copper	**11.3**	ug/L		1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	7439-89-6	340	Iron	**12,500**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	7439-92-1	131	Lead	**11.8**	ug/L		1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	7439-96-5	342	Manganese	**441**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	RHMW 002	SW303	303	Nitrate-Nitrogen	**72.0**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	RHMW 002	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 002	14808-79-8	315	Sulfate	**10,400**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	RHMW 002	E-10195	357	TOC	**7,570 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	RHMW 002	SW311	311	Total Dissolved Solids	**157,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	RHMW 002	7440-66-6	213	Zinc	**37.5**	ug/L		1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644751

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	RHMW 003B	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	7440-39-3	15	Barium	**42.6**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 003B	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	RHMW 003B	SW324	324	Conductivity	**1,150**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	RHMW 003B	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	7439-89-6	340	Iron	**490**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	7439-92-1	131	Lead	**10.5**	ug/L		1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	7439-96-5	342	Manganese	**999**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	RHMW 003B	SW303	303	Nitrate-Nitrogen	50.0	ug/L	U	1	NE	50	04/30/2009	N/A	05/01/2009
N/A	RHMW 003B	7782-49-2	183	Selenium	**9.7**	ug/L	J	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	7440-22-4	184	Silver	**1.5**	ug/L	J	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHMW 003B	14808-79-8	315	Sulfate	**185,000**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	RHMW 003B	E-10195	357	TOC	**5,560 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	RHMW 003B	SW311	311	Total Dissolved Solids	**827,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	RHMW 003B	7440-66-6	213	Zinc	**8.7**	ug/L	J	1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644753

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	Backgroud Well	N/A	NE	Aluminum	**139**	ug/L		1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	7440-39-3	15	Barium	**36.6**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	Backgroud Well	7440-47-3	51	Chromium	**7.0**	ug/L	J	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	Backgroud Well	SW324	324	Conductivity	**807**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	Backgroud Well	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	7439-89-6	340	Iron	**33.1**	ug/L	J	1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	7439-92-1	131	Lead	**2.9**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	7439-96-5	342	Manganese	**1.5**	ug/L	J	1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	Backgroud Well	SW303	303	Nitrate-Nitrogen	50.0	ug/L	U	1	NE	50	04/30/2009	N/A	05/01/2009
N/A	Backgroud Well	7782-49-2	183	Selenium	**8.1**	ug/L	J	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Backgroud Well	14808-79-8	315	Sulfate	**10,500**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	Backgroud Well	E-10195	357	TOC	**10,300 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	Backgroud Well	SW311	311	Total Dissolved Solids	**463,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	Backgroud Well	7440-66-6	213	Zinc	**33.2**	ug/L		1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644754

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	RHSS 001	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	7440-39-3	15	Barium	**64.8**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	RHSS 001	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	RHSS 001	SW324	324	Conductivity	**325**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	RHSS 001	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	7439-89-6	340	Iron	**77.8**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	7439-92-1	131	Lead	**5.4**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	7439-96-5	342	Manganese	**8.3**	ug/L	J	1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	RHSS 001	SW303	303	Nitrate-Nitrogen	**302**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	RHSS 001	7782-49-2	183	Selenium	**9.9**	ug/L	J	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 001	14808-79-8	315	Sulfate	**52,300**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	RHSS 001	E-10195	357	TOC	**4,470 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	RHSS 001	SW311	311	Total Dissolved Solids	**211,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	RHSS 001	7440-66-6	213	Zinc	**15.9**	ug/L		1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644755

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	RHSS 002	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	7440-39-3	15	Barium	**60.8**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	RHSS 002	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	RHSS 002	SW324	324	Conductivity	**821**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	RHSS 002	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	7439-89-6	340	Iron	**89.4**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	7439-92-1	131	Lead	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	7439-96-5	342	Manganese	**222**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	RHSS 002	SW303	303	Nitrate-Nitrogen	**499**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	RHSS 002	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	RHSS 002	14808-79-8	315	Sulfate	**201,000**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	RHSS 002	E-10195	357	TOC	**3,390 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	RHSS 002	SW311	311	Total Dissolved Solids	**518,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	RHSS 002	7440-66-6	213	Zinc	**19.2**	ug/L		1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644756

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	Ret Pond E MW 003	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	7440-39-3	15	Barium	**53.2**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	Ret Pond E MW 003	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	Ret Pond E MW 003	SW324	324	Conductivity	**2,930**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	Ret Pond E MW 003	7440-50-8	54	Copper	10	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	7439-89-6	340	Iron	**4,620**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	7439-92-1	131	Lead	**7.2**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	7439-96-5	342	Manganese	**4,960**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	Ret Pond E MW 003	SW303	303	Nitrate-Nitrogen	**337**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	Ret Pond E MW 003	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 003	14808-79-8	315	Sulfate	**261,000**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	Ret Pond E MW 003	E-10195	357	TOC	**4,110 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	Ret Pond E MW 003	SW311	311	Total Dissolved Solids	**2,460,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	Ret Pond E MW 003	7440-66-6	213	Zinc	**14.6**	ug/L		1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644757

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	Ret Pond E MW 001	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	7440-39-3	15	Barium	**77.4**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	744-43-9	34	Cadmium	**1.8**	ug/L		1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	Ret Pond E MW 001	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	Ret Pond E MW 001	SW324	324	Conductivity	**4,070**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	Ret Pond E MW 001	7440-50-8	54	Copper	**3.6**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	7439-89-6	340	Iron	**4,080**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	7439-92-1	131	Lead	**4.4**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	7439-96-5	342	Manganese	**3,100**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	Ret Pond E MW 001	SW303	303	Nitrate-Nitrogen	**264**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	Ret Pond E MW 001	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Ret Pond E MW 001	14808-79-8	315	Sulfate	**37,700**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	Ret Pond E MW 001	E-10195	357	TOC	**3,940 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	Ret Pond E MW 001	SW311	311	Total Dissolved Solids	**2,904,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	Ret Pond E MW 001	7440-66-6	213	Zinc	10.0	ug/L	U	1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644758

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	Duplicate	N/A	NE	Aluminum	**571**	ug/L		1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	7440-39-3	15	Barium	**268**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	Duplicate	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	Duplicate	SW324	324	Conductivity	**617**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	Duplicate	7440-50-8	54	Copper	**2.5**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	7439-89-6	340	Iron	**332**	ug/L		1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	7439-92-1	131	Lead	**7.1**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	7439-96-5	342	Manganese	**30.8**	ug/L		1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	Duplicate	SW303	303	Nitrate-Nitrogen	**510**	ug/L		1	NE	50	04/30/2009	N/A	05/01/2009
N/A	Duplicate	7782-49-2	183	Selenium	**153**	ug/L		1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	Duplicate	14808-79-8	315	Sulfate	**203,000**	ug/L		1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	Duplicate	E-10195	357	TOC	**1,070 ***	ug/L		1	NE	500	04/30/2009	N/A	05/06/2009
N/A	Duplicate	SW311	311	Total Dissolved Solids	**389,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	Duplicate	7440-66-6	213	Zinc	**32.4**	ug/L		1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644759

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	FB	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	FB	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	FB	7440-39-3	15	Barium	**7.7**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	FB	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	FB	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	FB	SW324	324	Conductivity	**109**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	FB	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	FB	7439-89-6	340	Iron	50.0	ug/L	U	1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	FB	7439-92-1	131	Lead	**4.5**	ug/L	J	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	FB	7439-96-5	342	Manganese	**8.0**	ug/L	J	1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	FB	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	FB	SW303	303	Nitrate-Nitrogen	50.0	ug/L	U	1	NE	50	04/30/2009	N/A	05/01/2009
N/A	FB	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	FB	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	FB	14808-79-8	315	Sulfate	10,000	ug/L	U	1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	FB	E-10195	357	TOC	500 *	ug/L	U	1	NE	500	04/30/2009	N/A	05/06/2009
N/A	FB	SW311	311	Total Dissolved Solids	**90,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	FB	7440-66-6	213	Zinc	10	ug/L	U	1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644761

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

Rural Hall Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
N/A	TB	N/A	NE	Aluminum	100	ug/L	U	1	NE	100	04/30/2009	05/01/2009	05/20/2009
N/A	TB	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/30/2009	05/01/2009	05/20/2009
N/A	TB	7440-39-3	15	Barium	**8.6**	ug/L	J	1	100	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	TB	744-43-9	34	Cadmium	**0.3**	ug/L	J	1	1.0	0.2	04/30/2009	05/01/2009	05/21/2009
N/A	TB	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/30/2009	05/01/2009	05/21/2009
N/A	TB	SW324	324	Conductivity	**115**	umhos		1	NE	30	04/30/2009	N/A	05/05/2009
N/A	TB	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	TB	7439-89-6	340	Iron	50.0	ug/L	U	1	NE	21.5	04/30/2009	05/01/2009	05/20/2009
N/A	TB	7439-92-1	131	Lead	10.0	ug/L	U	1	10.0	2.0	04/30/2009	05/01/2009	05/20/2009
N/A	TB	7439-96-5	342	Manganese	**7.1**	ug/L	J	1	NE	0.2	04/30/2009	05/01/2009	05/20/2009
N/A	TB	7439-97-6	132	Mercury	0.2 *	ug/L	U	1	0.2	0.01	04/30/2009	05/27/2009	05/28/2009
N/A	TB	SW303	303	Nitrate-Nitrogen	50.0	ug/L	U	1	NE	50	04/30/2009	N/A	05/01/2009
N/A	TB	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/30/2009	05/01/2009	05/20/2009
N/A	TB	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/30/2009	05/01/2009	05/20/2009
N/A	TB	14808-79-8	315	Sulfate	10,000	ug/L	U	1	NE	10,000	04/30/2009	N/A	05/11/2009
N/A	TB	E-10195	357	TOC	500 *	ug/L	U	1	NE	500	04/30/2009	N/A	05/06/2009
N/A	TB	SW311	311	Total Dissolved Solids	**85,000**	ug/L		1	NE	5,000	04/30/2009	N/A	05/01/2009
N/A	TB	7440-66-6	213	Zinc	10	ug/L	U	1	10.0	2.7	04/30/2009	05/01/2009	05/21/2009

RAL Sample #: 644760

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)
* = Mercury analysis subcontracted to NC Lab #40.
* = TOC Subcontracted to NC Lab #67

GROUNDWATER MONITORING FIELD LOG

Facility: RJR Landfill

Weather: 68°F Cloudy

April 30, 2009
Date

Personnel Present:
Glenn Price

COMMENTS:
*MW003B purged 1 well volume to stabilization and sampled.

Monitoring Well No..	RHMW 001	RHMW 002	RHMW 003A	*RHMW 003B	**Background	RHSS001	RHSS002	Ret. Pond @ MW-3	Ret. Pond @ MW-1		
Total Depth (FT.)	27.91	19.36	18.00	205.00	200.00						
Surface Depth (FT.)	13.23	15.18	7.12	0.00	98.28						
Water Depth (FT.)	14.68	4.18	10.88	205.00	101.72						
Diameter (IN.)	2"	2"	2"	2"	2"						
Conversion Factor	0.16	0.16	0.16	0.16	0.16						
Well Volume (GAL.)	2.35	0.67	1.74	32.80	16.28						
Volume (GAL.) X 3	7.05	2.01	5.22	98.40	48.83						
# Bails (L)	29	7	21	394	196						
Purge Date	04/30/09	04/30/09	04/30/09	04/30/09	04/30/09						
Purge Time (hrs.)	0924	0917	0933	0945	1208						
Purge Method	Bailer	Bailer	Bailer	Bailer	Bailer						
Volume Removed (GAL.)	1.75-Dry	0.50-Dry	5.25	34.00	28.00-Dry						
Sampling Date	04/30/09	04/30/09	04/30/09	04/30/09	04/30/09	04/30/09	04/30/09	04/30/08	04/30/08		
Sampling Time (hrs.)	1146	1152	1110	1107	1319	1121	1129	1114	1137		
Sampling Method	Bailer	Bailer	Bailer	Bailer	Bailer	Grab-Direct	Grab-Direct	Grab-Direct	Grab-Direct		
pH (Standard Units)	6.32	6.20	6.22	6.64	10.31	6.89	6.74	6.49	7.24		
Temperature (EC)	11.3	10.9	11.2	12.2	11.9	10.3	10.1	10.3	10.1		
Conductivity (µmhos/cm)											
Dissolved Oxygen (mg\L)											
Observations\Sampling	Clear	Turbid	Clear	Clear	Slightly Turbid	Clear	Clear	Slightly Turbid	Slightly Turbid		

RHMW 003B Stabilization			
Gal	pH	Temp	Time
20.00	6.74	12.6	1018
24.00	6.58	12.2	1029
28.00	6.62	12.3	1043
34.00	6.64	12.2	1107