Resampling of MW-6R

34-12

March 2, 2004

Fac/Perm/Co.ID #	Date	Doc ID#
34-12	3/18/04	DIN

Mr. Larry Rose
North Carolina Department of Environment
and Natural Resources (NCDENR)
Division of Solid Waste Management
Solid Waste Section
P. O. Box 27687
Raleigh, NC 27611-7687

Re: Fall 2003 Semiannual Groundwater Re-Sampling Analytical Monitoring Results
Winston-Salem Construction and Demolition (C&D) Landfill (No. 34-12)
Forsyth County, North Carolina
HDR Project No. 00162-3925-018

Dear Mr. Rose:

HDR Engineering, Inc. of the Carolinas (HDR), on behalf of the Winston-Salem City/County Utility Commission (the City), is hereby submitting the groundwater re-sampling results for monitoring well MW-6R at the C&D Landfill (the Landfill) located in Forsyth County, North Carolina.

Acetone was detected in this well during the regular fall 2003 monitoring period (July through December 2003). It was the only volatile organic compound (VOC) detected during that sampling event and at a concentration well below its 2L Standard. Based on past groundwater monitoring, the detection of acetone was probably due to laboratory error. Acetone is commonly used in laboratories as a cleaning agent during equipment preparation. Regardless, the City requested that this well be re-sampled.

HDR Engineering, Inc. of the Carolinas
128 S Tryon Street
Suite 1400
Charlotte, NC 28202-5004
Phone: (704) 338-6700
Fax: (704) 338-6760
www.hdrinc.com

A groundwater sample was collected from detection monitoring well MW-6R on December 9, 2003, for acetone analysis. Field measurements of pH, specific conductance, and temperature were recorded during pre-sampling well purging on field forms, which will be provided upon request. Acetone was not detected in the groundwater at monitoring well MW-6R during this recent re-sampling. This verifies that the previous detection of acetone to have been erroneous. The Report of Laboratory Analysis for this sampling event at the Landfill is attached to this letter.

If you have any questions or comments concerning the information summarized in this letter or in the attached analytical data report, please do not hesitate to contact me at (704) 338-6777.

Sincerely,

Chris Randazzo
Staff Geologist

CR/eas

Attachments: Report of Laboratory Analysis Sheets

cc: Edward Gibson, PE, Winston-Salem City/County Utility Commission
File

Pace Analytical®
www.pacelabs.com

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

December 17, 2003

Mr. Chris Randazzo
HDR Engineering
128 S. Tryon St. Suite 1400
Charlotte, NC 28202

RE: Lab Project Number: 9255428
Client Project ID: W-S OSR 00162-3925-002

Dear Mr. Randazzo:

Enclosed are the analytical results for sample(s) received by the laboratory on December 9, 2003. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Bonnie Kamla

Bonnie Kamla
Bonnie.Kamla@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

Pace Analytical®
www.pacelabs.com

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

Lab Project Number: 9255428
Client Project ID: W-S OSR 00162-3925-002

Lab Sample No: 923612576 Project Sample Number: 9255428-001 Date Collected: 12/09/03 15:00
Client Sample ID: MW-6R Matrix: Water Date Received: 12/09/03 16:19

Parameters	Results	Units	Report Limit	DF	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles									
GC/MS VOCs by 8260	Method: EPA 8260								
Acetone	ND	ug/l	10.	1.0	12/16/03 12:04	DLK	67-64-1		
Toluene-d8 (S)	97	%		1.0	12/16/03 12:04	DLK	2037-26-5		
4-Bromofluorobenzene (S)	91	%		1.0	12/16/03 12:04	DLK	460-00-4		
Dibromofluoromethane (S)	107	%		1.0	12/16/03 12:04	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	96	%		1.0	12/16/03 12:04	DLK	17060-07-0		

REPORT OF LABORATORY ANALYSIS

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

Pace Analytical®
www.pacelabs.com

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

Lab Project Number: 9255428
Client Project ID: W-S OSR 00162-3925-002

PARAMETER FOOTNOTES

Dilution factor shown represents the factor applied to the reported result and reporting limit due to changes in sample preparation, dilution of the extract, or moisture content

Inorganic Wet Chemistry and Metals Analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Charlotte laboratory unless otherwise footnoted.

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

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

Pace Analytical®
www.pacelabs.com

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

QUALITY CONTROL DATA

Lab Project Number: 9255428
Client Project ID: W-S OSR 00162-3925-002

QC Batch: 87295 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: GC/MS VOCs by 8260
Associated Lab Samples: 923612576

METHOD BLANK: 923634117
Associated Lab Samples: 923612576

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acetone	ug/l	ND	10.	
Toluene-d8 (S)	%	98		
4-Bromofluorobenzene (S)	%	96		
Dibromofluoromethane (S)	%	98		
1,2-Dichloroethane-d4 (S)	%	88		

LABORATORY CONTROL SAMPLE: 923634133

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acetone	ug/l	100.00	71.45	71	
Toluene-d8 (S)				100	
4-Bromofluorobenzene (S)				94	
Dibromofluoromethane (S)				98	
1,2-Dichloroethane-d4 (S)				91	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923634141 923634158

Parameter	Units	923613137 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Toluene-d8 (S)						100	96		
4-Bromofluorobenzene (S)						96	98		
Dibromofluoromethane (S)						90	103		
1,2-Dichloroethane-d4 (S)						88	97		

REPORT OF LABORATORY ANALYSIS

Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006

Pace Analytical®
www.pacelabs.com

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

Lab Project Number: 9255428
Client Project ID: W-S OSR 00162-3925-002

QUALITY CONTROL DATA PARAMETER FOOTNOTES

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

LCS(D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
DUP	Sample Duplicate
ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
RPD	Relative Percent Difference
(S)	Surrogate

REPORT OF LABORATORY ANALYSIS

Pace Analytical
www.pacelabs.com

786640

Page: 1 **of** 1

Section A
Required Client Information:

Company	HDR Eng Inc
Address	128 S Tryon St. Ste 1400
	Charlotte NC 28202
Phone	704 338 6700
Fax	704.338.6760

Section B
Required Client Information:

Report To:	C. Ranzaro
Copy To:	
Invoice To:	Same
P.O.	
Project Name:	WS DSR
Project Number:	00162-3925-002

Client Information (Check quote/contract):

Requested Due Date:	*TAT: NATM

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.

Turn Around Time (TAT) in calendar days.

Section C
To Be Completed by Pace Analytical and Client

Quote Reference:	
Project Manager:	
Project #:	9255428
Profile #:	

Requested Analysis: ACETONE

Section D
Required Client Information:

SAMPLE ID

One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm / dd / yy	TIME COLLECTED hh:mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	ACETONE	Remarks / Lab ID
1	MW-6R	WT	12/9/03	1500	6				6					X	923612576
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

SITE LOCATION

☒ NC ☐ SC ☐ GA ☐ Other ______

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ Other ______

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
C. Ranzaro / HDR	12/9/03	1619	[signature]	12/9/03	1619

SAMPLE CONDITION

Temp in °C	3.2
Received on Ice	(Y)/N
Sealed Cooler	(Y)/N
Samples Intact	(Y)/N

SAMPLE NOTES

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: CHRIS RANZARO

SIGNATURE of SAMPLER: [signature]

DATE Signed: (MM / DD / YY) 12/9/03

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev. 0903