Wilson, Donna

From: Colone, Mathew [ColoneMF@cdm.com]
Sent: Friday, January 09, 2009 1:58 PM
To: <donna.wilson@ncmail.net>
Cc: Brinchek, W. Michael (Mike)
Subject: North Wake Landfill Leachate Pond Confirmatory Soil Sampling Results
Attachments: Table 1.xlsx; G175-685.pdf

Donna,

Here's a summary table and the complete laboratory data. I compared the results to the DENR Inactive Sites Risk-Based RGs and the EPA Region PRGs for Protection of Groundwater. As we discussed, there were several metals that exceeded one or both levels, but based on the detections in each sample, I believe the results to be related to naturally occurring background concentrations.

There were random J value detections of methylene chloride, 4-4-DDT, and Di-n-octylphthalate that were below the DENR and EPA levels, but the detections are likely attributed to laboratory contaminants.

<<Table 1.xlsx>> <<G175-685.pdf>>

Please call me if you have any questions.

Thanks,

Mat

Mathew F. Colone, P.G.

CDM

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SGS

Dan Forbes
Camp, Dresser & McKee
5400 Glenwood Avenue
Raleigh, NC 27612

Report Number: G175-685

Client Project: N Wake Leachate Pond at Lined Landfill

Dear Dan Forbes,

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS Environmental Services at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

Ashley Nifong 1/8/09

Project Manager Date
Ashley Nifong

List of Reporting Abbreviations
And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% soilds = Percent Solids

Special Notes:
1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
2) Uncertainty for all reported data is less than or equal to 30 percent.

MI34.021808.4

Results for Volatiles
by GCMS 8260 Appendix II

Client Sample ID: S1
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID G175-685-1A
Lab Project ID: G175-685
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 12-31-2008 11:10
Date Received: 1/2/2009
Matrix: Soil
Sample Amount: 5.11 g
%Solids: 80.1

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	60.9	8.42	1	1/5/2009	
Acetonitrile	BQL	1220	123	1	1/5/2009	
Acrolein	BQL	60.9	9.53	1	1/5/2009	
Acrylonitrile	BQL	60.9	14.6	1	1/5/2009	
Allyl chloride	BQL	6.09	2.06	1	1/5/2009	
Benzene	BQL	6.09	1.30	1	1/5/2009	
Bromochloromethane	BQL	6.09	2.10	1	1/5/2009	
Bromodichloromethane	BQL	6.09	1.21	1	1/5/2009	
Bromoform	BQL	6.09	1.22	1	1/5/2009	
Bromomethane	BQL	6.09	1.28	1	1/5/2009	
2-Butanone	BQL	30.5	6.62	1	1/5/2009	
Carbon disulfide	BQL	6.09	3.27	1	1/5/2009	
Carbon tetrachloride	BQL	6.09	1.24	1	1/5/2009	
Chlorobenzene	BQL	6.09	1.45	1	1/5/2009	
Chloroethane	BQL	6.09	1.94	1	1/5/2009	
2-Chloroethyl vinyl ether	BQL	6.09	8.63	1	1/5/2009	
Chloroform	BQL	6.09	1.46	1	1/5/2009	
Chloromethane	BQL	6.09	1.38	1	1/5/2009	
Chloroprene	BQL	6.09	1.39	1	1/5/2009	
Dibromochloromethane	BQL	6.09	1.68	1	1/5/2009	
1,2-Dibromo-3-chloropropan	BQL	30.5	1.77	1	1/5/2009	
Dibromomethane	BQL	6.09	1.84	1	1/5/2009	
1,2-Dibromoethane	BQL	6.09	1.38	1	1/5/2009	
1,2-Dichlorobenzene	BQL	6.09	1.57	1	1/5/2009	
1,3-Dichlorobenzene	BQL	6.09	1.56	1	1/5/2009	
1,4-Dichlorobenzene	BQL	6.09	1.28	1	1/5/2009	
trans-1,4-Dichloro-2-buten	BQL	30.5	1.68	1	1/5/2009	
1,1-Dichloroethane	BQL	6.09	1.29	1	1/5/2009	
1,1-Dichloroethene	BQL	6.09	1.80	1	1/5/2009	
1,2-Dichloroethane	BQL	6.09	1.61	1	1/5/2009	
cis-1,2-Dichloroethene	BQL	6.09	1.56	1	1/5/2009	
trans-1,2-Dichloroethene	BQL	6.09	1.38	1	1/5/2009	
1,2-Dichloropropane	BQL	6.09	1.44	1	1/5/2009	
1,3-Dichloropropane	BQL	6.09	1.37	1	1/5/2009	
2,2-Dichloropropane	BQL	6.09	1.46	1	1/5/2009	
1,1-Dichloropropene	BQL	6.09	1.91	1	1/5/2009	
cis-1,3-Dichloropropene	BQL	6.09	1.02	1	1/5/2009	
trans-1,3-Dichloropropene	BQL	6.09	1.17	1	1/5/2009	
Dichlorodifluoromethane	BQL	6.09	1.61	1	1/5/2009	
Ethylbenzene	BQL	6.09	1.06	1	1/5/2009	
Ethyl methacrylate	BQL	6.09	3.00	1	1/5/2009	
2-Hexanone	BQL	6.09	3.95	1	1/5/2009	
Isobutyl alcohol	BQL	6.09	512	1	1/5/2009	
Iodomethane	BQL	6.09	1.32	1	1/5/2009	

Results for Volatiles
by GCMS 8260 Appendix II

Client Sample ID: S1
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID G175-685-1A
Lab Project ID: G175-685
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 12-31-2008 11:10
Date Received: 1/2/2009
Matrix: Soil
Sample Amount: 5.11 g
%Solids: 80.1

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Methacrylonitrile	BQL	6.09	27.2	1	1/5/2009	
Methylene chloride	BQL	24.4	1.45	1	1/5/2009	
Methyl methacrylate	BQL	6.09	2.51	1	1/5/2009	
4-Methyl-2-pentanone	BQL	6.09	5.64	1	1/5/2009	
Pentachloroethane	BQL	6.09	15.5	1	1/5/2009	
Propionitrile	BQL	1220	150	1	1/5/2009	
Styrene	BQL	6.09	1.34	1	1/5/2009	
1,1,1,2-Tetrachloroethane	BQL	6.09	1.24	1	1/5/2009	
1,1,2,2-Tetrachloroethane	BQL	6.09	1.38	1	1/5/2009	
Tetrachloroethene	BQL	6.09	1.12	1	1/5/2009	
Toluene	BQL	6.09	1.22	1	1/5/2009	
Trichloroethene	BQL	6.09	1.16	1	1/5/2009	
1,1,1-Trichloroethane	BQL	6.09	1.38	1	1/5/2009	
1,1,2-Trichloroethane	BQL	6.09	2.00	1	1/5/2009	
Trichlorofluoromethane	BQL	6.09	1.26	1	1/5/2009	
1,2,3-Trichloropropane	BQL	6.09	1.51	1	1/5/2009	
Vinyl acetate	BQL	15.2	1.57	1	1/5/2009	
Vinyl chloride	BQL	6.09	1.66	1	1/5/2009	
m/p-Xylene	BQL	12.2	2.34	1	1/5/2009	
o-Xylene	BQL	6.09	1.18	1	1/5/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	52.9	106
Toluene-d8	50	48	96
4-Bromofluorobenzene	50	41.7	83

Comments:

Flags:
BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: _____

Reviewed By: _____

Results for Volatiles
by GCMS 8260 Appendix II

Client Sample ID: S2
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID G175-685-2A
Lab Project ID: G175-685
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 12-31-2008 13:25
Date Received: 1/2/2009
Matrix: Soil
Sample Amount: 5.09 g
%Solids: 80.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	61.4	8.48	1	1/5/2009	
Acetonitrile	BQL	1230	124	1	1/5/2009	
Acrolein	BQL	61.4	9.60	1	1/5/2009	
Acrylonitrile	BQL	61.4	14.7	1	1/5/2009	
Allyl chloride	BQL	6.14	2.07	1	1/5/2009	
Benzene	BQL	6.14	1.31	1	1/5/2009	
Bromochloromethane	BQL	6.14	2.11	1	1/5/2009	
Bromodichloromethane	BQL	6.14	1.22	1	1/5/2009	
Bromoform	BQL	6.14	1.23	1	1/5/2009	
Bromomethane	BQL	6.14	1.29	1	1/5/2009	
2-Butanone	BQL	30.7	6.66	1	1/5/2009	
Carbon disulfide	BQL	6.14	3.29	1	1/5/2009	
Carbon tetrachloride	BQL	6.14	1.25	1	1/5/2009	
Chlorobenzene	BQL	6.14	1.46	1	1/5/2009	
Chloroethane	BQL	6.14	1.95	1	1/5/2009	
2-Chloroethyl vinyl ether	BQL	6.14	8.69	1	1/5/2009	
Chloroform	BQL	6.14	1.47	1	1/5/2009	
Chloromethane	BQL	6.14	1.39	1	1/5/2009	
Chloroprene	BQL	6.14	1.40	1	1/5/2009	
Dibromochloromethane	BQL	6.14	1.69	1	1/5/2009	
1,2-Dibromo-3-chloropropan	BQL	30.7	1.78	1	1/5/2009	
Dibromomethane	BQL	6.14	1.85	1	1/5/2009	
1,2-Dibromoethane	BQL	6.14	1.39	1	1/5/2009	
1,2-Dichlorobenzene	BQL	6.14	1.58	1	1/5/2009	
1,3-Dichlorobenzene	BQL	6.14	1.57	1	1/5/2009	
1,4-Dichlorobenzene	BQL	6.14	1.29	1	1/5/2009	
trans-1,4-Dichloro-2-buten	BQL	30.7	1.69	1	1/5/2009	
1,1-Dichloroethane	BQL	6.14	1.30	1	1/5/2009	
1,1-Dichloroethene	BQL	6.14	1.82	1	1/5/2009	
1,2-Dichloroethane	BQL	6.14	1.62	1	1/5/2009	
cis-1,2-Dichloroethene	BQL	6.14	1.57	1	1/5/2009	
trans-1,2-Dichloroethene	BQL	6.14	1.39	1	1/5/2009	
1,2-Dichloropropane	BQL	6.14	1.45	1	1/5/2009	
1,3-Dichloropropane	BQL	6.14	1.37	1	1/5/2009	
2,2-Dichloropropane	BQL	6.14	1.47	1	1/5/2009	
1,1-Dichloropropene	BQL	6.14	1.93	1	1/5/2009	
cis-1,3-Dichloropropene	BQL	6.14	1.02	1	1/5/2009	
trans-1,3-Dichloropropene	BQL	6.14	1.18	1	1/5/2009	
Dichlorodifluoromethane	BQL	6.14	1.62	1	1/5/2009	
Ethylbenzene	BQL	6.14	1.06	1	1/5/2009	
Ethyl methacrylate	BQL	6.14	3.02	1	1/5/2009	
2-Hexanone	BQL	6.14	3.98	1	1/5/2009	
Isobutyl alcohol	BQL	6.14	515	1	1/5/2009	
Iodomethane	BQL	6.14	1.33	1	1/5/2009	

Results for Volatiles
by GCMS 8260 Appendix II

Client Sample ID: S2
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID G175-685-2A
Lab Project ID: G175-685
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 12-31-2008 13:25
Date Received: 1/2/2009
Matrix: Soil
Sample Amount: 5.09 g
%Solids: 80.0

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Methacrylonitrile	BQL	6.14	27.4	1	1/5/2009	
Methylene chloride	**1.69**	24.5	1.46	1	1/5/2009	J
Methyl methacrylate	BQL	6.14	2.53	1	1/5/2009	
4-Methyl-2-pentanone	BQL	6.14	5.68	1	1/5/2009	
Pentachloroethane	BQL	6.14	15.6	1	1/5/2009	
Propionitrile	BQL	1230	151	1	1/5/2009	
Styrene	BQL	6.14	1.35	1	1/5/2009	
1,1,1,2-Tetrachloroethane	BQL	6.14	1.25	1	1/5/2009	
1,1,2,2-Tetrachloroethane	BQL	6.14	1.39	1	1/5/2009	
Tetrachloroethene	BQL	6.14	1.12	1	1/5/2009	
Toluene	BQL	6.14	1.22	1	1/5/2009	
Trichloroethene	BQL	6.14	1.17	1	1/5/2009	
1,1,1-Trichloroethane	BQL	6.14	1.39	1	1/5/2009	
1,1,2-Trichloroethane	BQL	6.14	2.01	1	1/5/2009	
Trichlorofluoromethane	BQL	6.14	1.26	1	1/5/2009	
1,2,3-Trichloropropane	BQL	6.14	1.52	1	1/5/2009	
Vinyl acetate	BQL	15.3	1.58	1	1/5/2009	
Vinyl chloride	BQL	6.14	1.67	1	1/5/2009	
m/p-Xylene	BQL	12.3	2.36	1	1/5/2009	
o-Xylene	BQL	6.14	1.19	1	1/5/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	54.5	109
Toluene-d8	50	47.9	96
4-Bromofluorobenzene	50	39	78

Comments:

Flags:
BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: _____

Reviewed By: _____

Results for Volatiles
by GCMS 8260 Appendix II

Client Sample ID: S3
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID G175-685-3A
Lab Project ID: G175-685
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 12-31-2008 11:45
Date Received: 1/2/2009
Matrix: Soil
Sample Amount: 5.05 g
%Solids: 77.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Acetone	BQL	63.7	8.80	1	1/5/2009	
Acetonitrile	BQL	1270	129	1	1/5/2009	
Acrolein	BQL	63.7	9.96	1	1/5/2009	
Acrylonitrile	BQL	63.7	15.3	1	1/5/2009	
Allyl chloride	BQL	6.37	2.15	1	1/5/2009	
Benzene	BQL	6.37	1.36	1	1/5/2009	
Bromochloromethane	BQL	6.37	2.19	1	1/5/2009	
Bromodichloromethane	BQL	6.37	1.26	1	1/5/2009	
Bromoform	BQL	6.37	1.27	1	1/5/2009	
Bromomethane	BQL	6.37	1.34	1	1/5/2009	
2-Butanone	BQL	31.8	6.92	1	1/5/2009	
Carbon disulfide	BQL	6.37	3.41	1	1/5/2009	
Carbon tetrachloride	BQL	6.37	1.30	1	1/5/2009	
Chlorobenzene	BQL	6.37	1.52	1	1/5/2009	
Chloroethane	BQL	6.37	2.03	1	1/5/2009	
2-Chloroethyl vinyl ether	BQL	6.37	9.02	1	1/5/2009	
Chloroform	BQL	6.37	1.53	1	1/5/2009	
Chloromethane	BQL	6.37	1.44	1	1/5/2009	
Chloroprene	BQL	6.37	1.45	1	1/5/2009	
Dibromochloromethane	BQL	6.37	1.76	1	1/5/2009	
1,2-Dibromo-3-chloropropan	BQL	31.8	1.85	1	1/5/2009	
Dibromomethane	BQL	6.37	1.92	1	1/5/2009	
1,2-Dibromoethane	BQL	6.37	1.44	1	1/5/2009	
1,2-Dichlorobenzene	BQL	6.37	1.64	1	1/5/2009	
1,3-Dichlorobenzene	BQL	6.37	1.63	1	1/5/2009	
1,4-Dichlorobenzene	BQL	6.37	1.34	1	1/5/2009	
trans-1,4-Dichloro-2-buten	BQL	31.8	1.76	1	1/5/2009	
1,1-Dichloroethane	BQL	6.37	1.35	1	1/5/2009	
1,1-Dichloroethene	BQL	6.37	1.89	1	1/5/2009	
1,2-Dichloroethane	BQL	6.37	1.68	1	1/5/2009	
cis-1,2-Dichloroethene	BQL	6.37	1.63	1	1/5/2009	
trans-1,2-Dichloroethene	BQL	6.37	1.44	1	1/5/2009	
1,2-Dichloropropane	BQL	6.37	1.50	1	1/5/2009	
1,3-Dichloropropane	BQL	6.37	1.43	1	1/5/2009	
2,2-Dichloropropane	BQL	6.37	1.53	1	1/5/2009	
1,1-Dichloropropene	BQL	6.37	2.00	1	1/5/2009	
cis-1,3-Dichloropropene	BQL	6.37	1.06	1	1/5/2009	
trans-1,3-Dichloropropene	BQL	6.37	1.23	1	1/5/2009	
Dichlorodifluoromethane	BQL	6.37	1.68	1	1/5/2009	
Ethylbenzene	BQL	6.37	1.10	1	1/5/2009	
Ethyl methacrylate	BQL	6.37	3.13	1	1/5/2009	
2-Hexanone	BQL	6.37	4.13	1	1/5/2009	
Isobutyl alcohol	BQL	6.37	535	1	1/5/2009	
Iodomethane	BQL	6.37	1.38	1	1/5/2009	

Results for Volatiles
by GCMS 8260 Appendix II

Client Sample ID: S3
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID G175-685-3A
Lab Project ID: G175-685
Report Basis: Dry Weight

Analyzed By: MJC
Date Collected: 12-31-2008 11:45
Date Received: 1/2/2009
Matrix: Soil
Sample Amount: 5.05 g
%Solids: 77.6

Report Name Compound	Result UG/KG	Quantitation Limit UG/KG	MDL UG/KG	Dilution Factor	Date Analyzed	Flag
Methacrylonitrile	BQL	6.37	28.4	1	1/5/2009	
Methylene chloride	BQL	25.5	1.52	1	1/5/2009	
Methyl methacrylate	BQL	6.37	2.62	1	1/5/2009	
4-Methyl-2-pentanone	BQL	6.37	5.90	1	1/5/2009	
Pentachloroethane	BQL	6.37	16.2	1	1/5/2009	
Propionitrile	BQL	1270	157	1	1/5/2009	
Styrene	BQL	6.37	1.40	1	1/5/2009	
1,1,1,2-Tetrachloroethane	BQL	6.37	1.30	1	1/5/2009	
1,1,2,2-Tetrachloroethane	BQL	6.37	1.44	1	1/5/2009	
Tetrachloroethene	BQL	6.37	1.17	1	1/5/2009	
Toluene	BQL	6.37	1.27	1	1/5/2009	
Trichloroethene	BQL	6.37	1.22	1	1/5/2009	
1,1,1-Trichloroethane	BQL	6.37	1.44	1	1/5/2009	
1,1,2-Trichloroethane	BQL	6.37	2.09	1	1/5/2009	
Trichlorofluoromethane	BQL	6.37	1.31	1	1/5/2009	
1,2,3-Trichloropropane	BQL	6.37	1.58	1	1/5/2009	
Vinyl acetate	BQL	15.9	1.64	1	1/5/2009	
Vinyl chloride	BQL	6.37	1.73	1	1/5/2009	
m/p-Xylene	BQL	12.7	2.45	1	1/5/2009	
o-Xylene	BQL	6.37	1.23	1	1/5/2009	

	Spike Added	Spike Result	Percent Recovered
1,2-Dichloroethane-d4	50	53.7	107
Toluene-d8	50	48.8	98
4-Bromofluorobenzene	50	39.6	79

Comments:

Flags:
BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Analyst: _____

Reviewed By: _____

Results for Metals

Client Sample ID:	S1	Analyzed By:	PSW DCP
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 11:10
Lab Sample ID:	G175-685-1	Date Received:	1/2/2009
Lab Project ID:	G175-685	Matrix:	SOIL
ICP InitWt/Vol:	0.5 g Final Vol: 50 mL	Solids	80.12
Hg InitWt/Vol:	0.53 g Final Vol: 50 mL	Report Basis:	Dry
Prep Batch:	13371 13380		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.749	1.13	1	MG/KG	6010B	1/6/2009	
Arsenic	**3.64**	1.25	0.999	1	MG/KG	6010B	1/6/2009	
Barium	**66.8**	12.5	0.588	1	MG/KG	6010B	1/5/2009	
Beryllium	**1.31**	0.125	0.874	1	MG/KG	6010B	1/6/2009	
Cadmium	BQL	0.125	0.0151	10	MG/KG	6020	1/7/2009	
Chromium	**32.5**	1.25	0.137	1	MG/KG	6010B	1/5/2009	
Cobalt	**14.7**	1.25	0.343	1	MG/KG	6010B	1/6/2009	
Copper	**54.7**	1.25	0.225	1	MG/KG	6010B	1/5/2009	B
Lead	**15.0**	1.25	0.801	1	MG/KG	6010B	1/5/2009	
Mercury	**0.0547**	0.0235	0.00135	1	MG/KG	7471	1/6/2009	
Nickel	**15.2**	6.24	0.750	1	MG/KG	6010B	1/6/2009	
Selenium	**12.7**	1.25	0.909	1	MG/KG	6010B	1/6/2009	
Silver	BQL	1.25	0.110	1	MG/KG	6010B	1/5/2009	
Thallium	BQL	0.686	1.10	1	MG/KG	6010B	1/5/2009	
Tin	BQL	12.5	0.468	1	MG/KG	6010B	1/7/2009	
Vanadium	**120**	31.2	0.374	100	MG/KG	6020	1/7/2009	
Zinc	**41.7**	1.25	0.401	1	MG/KG	6010B	1/5/2009	

Comments
BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL

Reviewed By:
METALS.XLS

Results for Metals

Client Sample ID:	S2	Analyzed By:	PSW DCP
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 13:25
Lab Sample ID:	G175-685-2	Date Received:	1/2/2009
Lab Project ID:	G175-685	Matrix:	SOIL
ICP InitWt/Vol:	0.58 g Final Vol: 50 mL	Solids	80.04
Hg InitWt/Vol:	0.53 g Final Vol: 50 mL	Report Basis:	Dry
Prep Batch:	13371 13380		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.646	0.975	1	MG/KG	6010B	1/6/2009	
Arsenic	**5.94**	1.08	0.862	1	MG/KG	6010B	1/6/2009	
Barium	**61.7**	10.8	0.507	1	MG/KG	6010B	1/5/2009	
Beryllium	BQL	0.108	0.754	1	MG/KG	6010B	1/6/2009	
Cadmium	BQL	0.108	0.0130	10	MG/KG	6020	1/7/2009	
Chromium	**40.8**	1.08	0.118	1	MG/KG	6010B	1/5/2009	
Cobalt	**11.9**	1.08	0.296	1	MG/KG	6010B	1/6/2009	
Copper	**50.5**	1.08	0.194	1	MG/KG	6010B	1/5/2009	B
Lead	**12.9**	1.08	0.691	1	MG/KG	6010B	1/5/2009	
Mercury	**0.0578**	0.0236	0.00136	1	MG/KG	7471	1/6/2009	
Nickel	**18.7**	5.39	0.647	1	MG/KG	6010B	1/6/2009	
Selenium	**11.1**	1.08	0.784	1	MG/KG	6010B	1/6/2009	
Silver	BQL	1.08	0.0947	1	MG/KG	6010B	1/5/2009	
Thallium	BQL	0.592	0.948	1	MG/KG	6010B	1/5/2009	
Tin	BQL	10.8	0.404	1	MG/KG	6010B	1/7/2009	
Vanadium	**110**	26.9	0.323	100	MG/KG	6020	1/7/2009	
Zinc	**40.2**	1.08	0.346	1	MG/KG	6010B	1/5/2009	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL

Reviewed By: METALS.XLS

Results for Metals

Client Sample ID:	S3	Analyzed By:	PSW DCP
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 11:45
Lab Sample ID:	G175-685-3	Date Received:	1/2/2009
Lab Project ID:	G175-685	Matrix:	SOIL
ICP InitWt/Vol:	0.53 g Final Vol: 50 mL	Solids	77.57
Hg InitWt/Vol:	0.52 g Final Vol: 50 mL	Report Basis:	Dry
Prep Batch:	13371 13380		

Metals	Result	SWSL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.730	1.10	1	MG/KG	6010B	1/6/2009	
Arsenic	**4.67**	1.22	0.973	1	MG/KG	6010B	1/6/2009	
Barium	**54.9**	12.2	0.573	1	MG/KG	6010B	1/5/2009	
Beryllium	BQL	0.122	0.851	1	MG/KG	6010B	1/6/2009	
Cadmium	BQL	0.122	0.0147	10	MG/KG	6020	1/7/2009	
Chromium	**45.0**	1.22	0.134	1	MG/KG	6010B	1/5/2009	
Cobalt	**12.5**	1.22	0.334	1	MG/KG	6010B	1/6/2009	
Copper	**54.3**	1.22	0.219	1	MG/KG	6010B	1/5/2009	B
Lead	**14.4**	1.22	0.781	1	MG/KG	6010B	1/5/2009	
Mercury	**0.0511**	0.0248	0.00143	1	MG/KG	7471	1/6/2009	
Nickel	**16.0**	6.08	0.731	1	MG/KG	6010B	1/6/2009	
Selenium	**12.4**	1.22	0.885	1	MG/KG	6010B	1/6/2009	
Silver	BQL	1.22	0.107	1	MG/KG	6010B	1/5/2009	
Thallium	**2.01**	0.669	1.07	1	MG/KG	6010B	1/5/2009	
Tin	BQL	12.2	0.456	1	MG/KG	6010B	1/7/2009	
Vanadium	**118**	30.4	0.365	100	MG/KG	6020	1/7/2009	
Zinc	**40.0**	1.22	0.390	1	MG/KG	6010B	1/5/2009	

Comments
BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL

Reviewed By:
METALS.XLS

Results for Pesticides
by EPA 8081

Client Sample ID:	S1	Analyzed By:	EAW
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 11:10
Lab Sample ID:	G175-685-1H	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Sample Wt/Vol:	32.95 g	ColumnID: STX_CLPest	Matrix: Soil
Report Basis:	Dry Weight	% Solids:	80.1

Compound	Result ug/KG	RL ug/KG	MDL ug/KG	Dilution Factor	Date Analyzed	Flags
alpha-BHC	BQL	11.4	1.03	1.0	1/6/2009	
beta-BHC	BQL	11.4	1.15	1.0	1/6/2009	
delta-BHC	BQL	11.4	1.06	1.0	1/6/2009	
gamma-BHC (Lindane)	BQL	11.4	1.06	1.0	1/6/2009	
Heptachlor	BQL	11.4	1.09	1.0	1/6/2009	
Aldrin	BQL	11.4	1.05	1.0	1/6/2009	
Heptachlor epoxide	BQL	11.4	1.05	1.0	1/6/2009	
Endosulfan I	BQL	11.4	1.04	1.0	1/6/2009	
Dieldrin	BQL	11.4	0.966	1.0	1/6/2009	
4,4'-DDE	BQL	11.4	1.02	1.0	1/6/2009	
Endrin	BQL	11.4	0.962	1.0	1/6/2009	
DDD	BQL	11.4	0.939	1.0	1/6/2009	
Endosulfan II	BQL	11.4	1.09	1.0	1/6/2009	
4,4'-DDT	BQL	11.4	1.00	1.0	1/6/2009	
Methoxychlor	BQL	11.4	1.28	1.0	1/6/2009	
Toxaphene	BQL	37.9	7.42	1.0	1/6/2009	
alpha-Chlordane	BQL	11.4	0.992	1.0	1/6/2009	
gamma-Chlordane	BQL	11.4	1.03	1.0	1/6/2009	
Chlordane, Total	BQL	18.9	10.8	1.0	1/6/2009	
Endrin aldehyde	BQL	11.4	1.45	1.0	1/6/2009	
Endosulfan sulfate	BQL	11.4	1.18	1.0	1/6/2009	
Endrin ketone	BQL	11.4	1.14	1.0	1/6/2009	

	Spike Added	Spike Result	Percent Recovered
TCMX	100	55.8	55.8
DBC	100	56.2	56.2

Comments:
BQL = Below Quantitation Limit

Reviewed By: _____

8081

Results for Pesticides
by EPA 8081

Client Sample ID:	S2	Analyzed By:	EAW
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 13:25
Lab Sample ID:	G175-685-2F	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Sample Wt/Vol:	32.06 g	ColumnID: STX_CLPest	Matrix: Soil
Report Basis:	Dry Weight	% Solids:	80.0

Compound	Result ug/KG	RL ug/KG	MDL ug/KG	Dilution Factor	Date Analyzed	Flags
alpha-BHC	BQL	11.7	1.06	1.0	1/6/2009	
beta-BHC	BQL	11.7	1.18	1.0	1/6/2009	
delta-BHC	BQL	11.7	1.10	1.0	1/6/2009	
gamma-BHC (Lindane)	BQL	11.7	1.10	1.0	1/6/2009	
Heptachlor	BQL	11.7	1.12	1.0	1/6/2009	
Aldrin	BQL	11.7	1.08	1.0	1/6/2009	
Heptachlor epoxide	BQL	11.7	1.08	1.0	1/6/2009	
Endosulfan I	BQL	11.7	1.07	1.0	1/6/2009	
Dieldrin	BQL	11.7	0.994	1.0	1/6/2009	
4,4'-DDE	BQL	11.7	1.05	1.0	1/6/2009	
Endrin	BQL	11.7	0.990	1.0	1/6/2009	
DDD	BQL	11.7	0.966	1.0	1/6/2009	
Endosulfan II	BQL	11.7	1.12	1.0	1/6/2009	
4,4'-DDT	**1.11**	11.7	1.03	1.0	1/6/2009	J
Methoxychlor	BQL	11.7	1.32	1.0	1/6/2009	
Toxaphene	BQL	39.0	7.64	1.0	1/6/2009	
alpha-Chlordane	BQL	11.7	1.02	1.0	1/6/2009	
gamma-Chlordane	BQL	11.7	1.06	1.0	1/6/2009	
Chlordane, Total	BQL	19.5	11.1	1.0	1/6/2009	
Endrin aldehyde	BQL	11.7	1.50	1.0	1/6/2009	
Endosulfan sulfate	BQL	11.7	1.22	1.0	1/6/2009	
Endrin ketone	BQL	11.7	1.17	1.0	1/6/2009	

	Spike Added	Spike Result	Percent Recovered
TCMX	100	54.5	54.5
DBC	100	54.8	54.8

Comments:
BQL = Below Quantitation Limit

Reviewed By:

8081

Results for Pesticides
by EPA 8081

Client Sample ID:	S3	Analyzed By:	EAW
Client Project ID:	N Wake Leachate Pond at Lined Landfil	Date Collected:	12/31/2008 11:45
Lab Sample ID:	G175-685-3F	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Sample Wt/Vol:	33.04 g	ColumnID: STX_CLPest	Matrix: Soil
Report Basis:	Dry Weight	% Solids:	77.6

Compound	Result ug/KG	RL ug/KG	MDL ug/KG	Dilution Factor	Date Analyzed	Flags
alpha-BHC	BQL	11.7	1.06	1.0	1/5/2009	
beta-BHC	BQL	11.7	1.18	1.0	1/5/2009	
delta-BHC	BQL	11.7	1.10	1.0	1/5/2009	
gamma-BHC (Lindane)	BQL	11.7	1.10	1.0	1/5/2009	
Heptachlor	BQL	11.7	1.12	1.0	1/5/2009	
Aldrin	BQL	11.7	1.08	1.0	1/5/2009	
Heptachlor epoxide	BQL	11.7	1.08	1.0	1/5/2009	
Endosulfan I	BQL	11.7	1.07	1.0	1/5/2009	
Dieldrin	BQL	11.7	0.995	1.0	1/5/2009	
4,4'-DDE	BQL	11.7	1.05	1.0	1/5/2009	
Endrin	BQL	11.7	0.991	1.0	1/5/2009	
DDD	BQL	11.7	0.968	1.0	1/5/2009	
Endosulfan II	BQL	11.7	1.12	1.0	1/5/2009	
4,4'-DDT	BQL	11.7	1.03	1.0	1/5/2009	
Methoxychlor	BQL	11.7	1.32	1.0	1/5/2009	
Toxaphene	BQL	39.0	7.65	1.0	1/5/2009	
alpha-Chlordane	BQL	11.7	1.02	1.0	1/5/2009	
gamma-Chlordane	BQL	11.7	1.06	1.0	1/5/2009	
Chlordane, Total	BQL	19.5	11.1	1.0	1/5/2009	
Endrin aldehyde	BQL	11.7	1.50	1.0	1/5/2009	
Endosulfan sulfate	BQL	11.7	1.22	1.0	1/5/2009	
Endrin ketone	BQL	11.7	1.17	1.0	1/5/2009	

	Spike Added	Spike Result	Percent Recovered
TCMX	100	55.0	55.0
DBC	100	54.6	54.6

Comments:
BQL = Below Quantitation Limit

Reviewed By:

8081

Results for Herbicides
by EPA 8151

Client Sample ID:	S1	Analyzed By:	ALT
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 11:10
Lab Sample ID:	G175-685-1R	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Sample Wt/Vol:	32.12 g	Matrix:	Soil
Report Basis:	Dry Weight	% Solids:	80.1

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL ug/KG	Dilution Factor	Date Analyzed	Flag
2,4-D	BQL	38.8	3.03	1	1/8/2009	
2,4,5-TP(Silvex)	BQL	38.8	3.61	1	1/8/2009	
2,4,5-T	BQL	38.8	2.34	1	1/8/2009	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered	Limits
DCAA	2.0	1.75	87	35-135

Comments:
BQL = Below Quantitation Limit
Column IDs: RTX_CLPesticides / RTX_CLPesticides2

Reviewed By:

8151.XLS

Results for Herbicides
by EPA 8151

Client Sample ID:	S2	Analyzed By:	ALT
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 13:25
Lab Sample ID:	G175-685-2M	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Sample Wt/Vol:	32.71 g	Matrix:	Soil
Report Basis:	Dry Weight	% Solids:	80.0

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL ug/KG	Dilution Factor	Date Analyzed	Flag
2,4-D	BQL	38.2	2.98	1	1/8/2009	
2,4,5-TP(Silvex)	BQL	38.2	3.54	1	1/8/2009	
2,4,5-T	BQL	38.2	2.30	1	1/8/2009	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered	Limits
DCAA	2.0	1.41	70	35-135

Comments:
BQL = Below Quantitation Limit
Column IDs: RTX_CLPesticides / RTX_CLPesticides2

Reviewed By:

8151.XLS

Results for Herbicides
by EPA 8151

Client Sample ID:	S3	Analyzed By:	ALT
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 11:45
Lab Sample ID:	G175-685-3M	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Sample Wt/Vol:	32.98 g	Matrix:	Soil
Report Basis:	Dry Weight	% Solids:	77.6

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL ug/KG	Dilution Factor	Date Analyzed	Flag
2,4-D	BQL	39.1	3.05	1	1/8/2009	
2,4,5-TP(Silvex)	BQL	39.1	3.63	1	1/8/2009	
2,4,5-T	BQL	39.1	2.35	1	1/8/2009	

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered	Limits
DCAA	2.0	1.26	63	35-135

Comments:
BQL = Below Quantitation Limit
Column IDs: RTX_CLPesticides / RTX_CLPesticides2

Reviewed By:

8151.XLS

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S1
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-1M
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 32.8 g

Analyzed By: DCS
Date Collected: 12/31/2008 11:10
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 80.12

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	381	58.2	1	1/7/2009	
Acenaphthylene	BQL	381	53.3	1	1/7/2009	
Acetophenone	BQL	381	59.4	1	1/7/2009	
2-Acetylaminofluorene	BQL	761	53.3	1	1/7/2009	
4-Aminobiphenyl	BQL	381	42.6	1	1/7/2009	
Aniline	BQL	381	60.9	1	1/7/2009	
Anthracene	BQL	381	51.8	1	1/7/2009	
Aramite	BQL	381	81.1	1	1/7/2009	
Benzidine	BQL	761	111	1	1/7/2009	
Benzo[a]anthracene	BQL	381	52.1	1	1/7/2009	
Benzo[a]pyrene	BQL	381	54.8	1	1/7/2009	
Benzo[b]fluoranthene	BQL	381	52.9	1	1/7/2009	
Benzo[g,h,i]perylene	BQL	381	66.2	1	1/7/2009	
Benzo[k]fluoranthene	BQL	381	54.0	1	1/7/2009	
Benzyl Alcohol	BQL	761	68.5	1	1/7/2009	
Bis(2-chloroethoxy)methane	BQL	381	55.9	1	1/7/2009	
Bis(2-chloroethyl)ether	BQL	381	77.2	1	1/7/2009	
Bis(2-chloroisopropyl)ether	BQL	381	61.3	1	1/7/2009	
Bis(2-ethylhexyl)phthalate	BQL	381	58.2	1	1/7/2009	
4-Bromophenyl phenyl ether	BQL	381	67.4	1	1/7/2009	
Butylbenzylphthalate	BQL	381	56.3	1	1/7/2009	
Chlorobenzilate	BQL	381	47.2	1	1/7/2009	
2-Chloronaphthalene	BQL	381	52.9	1	1/7/2009	
2-Chlorophenol	BQL	381	48.3	1	1/7/2009	
4-Chloro-3-methylphenol	BQL	381	55.6	1	1/7/2009	
4-Chloroaniline	BQL	381	62.0	1	1/7/2009	
4-Chlorophenyl phenyl ether	BQL	381	55.9	1	1/7/2009	
Chrysene	BQL	381	36.5	1	1/7/2009	
Diallate	BQL	381	247	1	1/7/2009	
Dibenz[a,j]acridine	BQL	381	293	1	1/7/2009	
Dibenzo[a,h]anthracene	BQL	381	48.7	1	1/7/2009	
Dibenzofuran	BQL	381	53.7	1	1/7/2009	
Di-n-Butylphthalate	BQL	381	55.6	1	1/7/2009	
1,2-Dichlorobenzene	BQL	381	64.3	1	1/7/2009	
1,3-Dichlorobenzene	BQL	381	61.6	1	1/7/2009	
1,4-Dichlorobenzene	BQL	381	55.2	1	1/7/2009	
3,3'-Dichlorobenzidine	BQL	761	62.8	1	1/7/2009	
2,4-Dichlorophenol	BQL	381	41.5	1	1/7/2009	
2,6-Dichlorophenol	BQL	381	52.9	1	1/7/2009	
Diethylphthalate	BQL	381	51.0	1	1/7/2009	
Dimethoate	BQL	381	57.5	1	1/7/2009	
3,3'-Dimethylbenzidine	BQL	1900	850	1	1/7/2009	
a,a-Dimethylphenethylamine	BQL	1900	761	1	1/7/2009	
Dimethylphthalate	BQL	381	59.0	1	1/7/2009	
p-Dimethylaminoazobenzene	BQL	381	51.4	1	1/7/2009	
7,12-Dimethylbenz[a]anthracene	BQL	381	183	1	1/7/2009	
2,4-Dimethylphenol	BQL	381	68.9	1	1/7/2009	

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S1
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-1M
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 32.8 g

Analyzed By: DCS
Date Collected: 12/31/2008 11:10
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 80.12

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Di-n-octylphthalate	**126**	381	58.6	1	1/7/2009	J
4,6-Dinitro-2-methylphenol	BQL	1900	45.3	1	1/7/2009	
m-Dinitrobenzene	BQL	381	92.8	1	1/7/2009	
2,4-Dinitrophenol	BQL	1900	49.5	1	1/7/2009	
2,4-Dinitrotoluene	BQL	381	57.8	1	1/7/2009	
2,6-Dinitrotoluene	BQL	381	62.8	1	1/7/2009	
Dinoseb	BQL	1900	38.4	1	1/7/2009	
Diphenylamine *	BQL	381	47.9	1	1/7/2009	
Disulfoton	BQL	381	99.7	1	1/7/2009	
Ethylmethanesulfonate	BQL	381	52.5	1	1/7/2009	
Famphur	BQL	1900	66.6	1	1/7/2009	
Fluoranthene	BQL	381	61.3	1	1/7/2009	
Fluorene	BQL	381	59.4	1	1/7/2009	
Hexachlorobenzene	BQL	1900	82.6	1	1/7/2009	
Hexachlorobutadiene	BQL	381	69.3	1	1/7/2009	
Hexachlorocyclopentadiene	BQL	761	74.2	1	1/7/2009	
Hexachloroethane	BQL	381	59.4	1	1/7/2009	
Hexachlorophene	BQL	381	174	1	1/7/2009	
Hexachloropropene	BQL	761	60.9	1	1/7/2009	
Indeno(1,2,3-c,d)pyrene	BQL	381	44.9	1	1/7/2009	
Isodrin	BQL	381	53.3	1	1/7/2009	
Isophorone	BQL	381	55.6	1	1/7/2009	
Isosafrole	BQL	381	59.0	1	1/7/2009	
Kepone	BQL	1900	1900	1	1/7/2009	
Methapyrilene	BQL	381	381	1	1/7/2009	
Methyl parathion	BQL	381	161	1	1/7/2009	
Methylmethanesulfonate	BQL	381	54.0	1	1/7/2009	
2-Methylnaphthalene	BQL	381	62.0	1	1/7/2009	
2-Methylphenol	BQL	381	58.2	1	1/7/2009	
3- & 4-Methylphenol	BQL	381	49.5	1	1/7/2009	
3-Methylcholanthrene	BQL	381	47.2	1	1/7/2009	
Naphthalene	BQL	381	53.3	1	1/7/2009	
1,4-Naphthoquinone	BQL	381	70.4	1	1/7/2009	
1-Naphthylamine	BQL	1900	55.2	1	1/7/2009	
2-Naphthylamine	BQL	1900	32.7	1	1/7/2009	
5-Nitro-o-toluidine	BQL	381	55.2	1	1/7/2009	
2-Nitroaniline	BQL	381	51.0	1	1/7/2009	
3-Nitroaniline	BQL	1900	55.9	1	1/7/2009	
4-Nitroaniline	BQL	1900	51.0	1	1/7/2009	
Nitrobenzene	BQL	381	50.6	1	1/7/2009	
2-Nitrophenol	BQL	381	55.6	1	1/7/2009	
4-Nitrophenol	BQL	1900	66.2	1	1/7/2009	
4-Nitroquinoline-1-oxide	BQL	1900	152	1	1/7/2009	
N-Nitroso-di-n-butylamine	BQL	381	46.8	1	1/7/2009	
N-Nitrosodi-n-propylamine	BQL	381	61.3	1	1/7/2009	
N-Nitrosodiethylamine	BQL	381	53.3	1	1/7/2009	
N-Nitrosodimethylamine	BQL	381	56.7	1	1/7/2009	

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S1
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-1M
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 32.8 g

Analyzed By: DCS
Date Collected: 12/31/2008 11:10
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 80.12

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
N-Nitrosomethylethylamine	BQL	381	67.7	1	1/7/2009	
N-Nitrosomorpholine	BQL	381	61.3	1	1/7/2009	
N-Nitrosopiperidine	BQL	381	53.7	1	1/7/2009	
N-Nitrosopyrrolidine	BQL	381	235	1	1/7/2009	
Parathion	BQL	761	90.2	1	1/7/2009	
Pentachlorobenzene	BQL	381	53.3	1	1/7/2009	
Pentachloronitrobenzene	BQL	381	54.8	1	1/7/2009	
Pentachlorophenol	BQL	1900	35.0	1	1/7/2009	
Phenacetin	BQL	381	72.3	1	1/7/2009	
Phenanthrene	BQL	381	53.3	1	1/7/2009	
Phenol	BQL	381	51.8	1	1/7/2009	
p-Phenylenediamine	BQL	761	520	1	1/7/2009	
Phorate	BQL	761	66.6	1	1/7/2009	
2-Piccoline	BQL	381	67.7	1	1/7/2009	
Pronamide	BQL	381	59.4	1	1/7/2009	
Pyrene	BQL	381	51.8	1	1/7/2009	
Pyridine	BQL	381	129	1	1/7/2009	
Safrole	BQL	381	57.8	1	1/7/2009	
Sulfotep	BQL	381	94.4	1	1/7/2009	
1,2,4,5-Tetrachlorobenzene	BQL	381	52.9	1	1/7/2009	
2,3,4,6-Tetrachlorophenol	BQL	381	63.5	1	1/7/2009	
Thionazin	BQL	761	220	1	1/7/2009	
o-Toluidine	BQL	381	75.3	1	1/7/2009	
1,2,4-Trichlorobenzene	BQL	381	68.5	1	1/7/2009	
2,4,5-Trichlorophenol	BQL	381	56.7	1	1/7/2009	
2,4,6-Trichlorophenol	BQL	381	33.9	1	1/7/2009	
O,O,O-Triethylphosphorothioate	BQL	381	183	1	1/7/2009	
1,3,5-Trinitrobenzene	BQL	1900	68.5	1	1/7/2009	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	10	100
2-Fluorophenol	10	9.7	97
Nitrobenzene-d5	10	10.4	104
Phenol-d6	10	10.4	104
2,4,6-Tribromophenol	10	9.5	94
4-Terphenyl-d14	10	8.6	86

Comments:
* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:
BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By:

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S2
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-2H
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 33.69 g

Analyzed By: DCS
Date Collected: 12/31/2008 13:25
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 80.04

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	371	56.7	1	1/7/2009	
Acenaphthylene	BQL	371	51.9	1	1/7/2009	
Acetophenone	BQL	371	57.9	1	1/7/2009	
2-Acetylaminofluorene	BQL	742	51.9	1	1/7/2009	
4-Aminobiphenyl	BQL	371	41.5	1	1/7/2009	
Aniline	BQL	371	59.3	1	1/7/2009	
Anthracene	BQL	371	50.4	1	1/7/2009	
Aramite	BQL	371	79.0	1	1/7/2009	
Benzidine	BQL	742	108	1	1/7/2009	
Benzo[a]anthracene	BQL	371	50.8	1	1/7/2009	
Benzo[a]pyrene	BQL	371	53.4	1	1/7/2009	
Benzo[b]fluoranthene	BQL	371	51.5	1	1/7/2009	
Benzo[g,h,i]perylene	BQL	371	64.5	1	1/7/2009	
Benzo[k]fluoranthene	BQL	371	52.7	1	1/7/2009	
Benzyl Alcohol	BQL	742	66.8	1	1/7/2009	
Bis(2-chloroethoxy)methane	BQL	371	54.5	1	1/7/2009	
Bis(2-chloroethyl)ether	BQL	371	75.3	1	1/7/2009	
Bis(2-chloroisopropyl)ether	BQL	371	59.7	1	1/7/2009	
Bis(2-ethylhexyl)phthalate	BQL	371	56.7	1	1/7/2009	
4-Bromophenyl phenyl ether	BQL	371	65.6	1	1/7/2009	
Butylbenzylphthalate	BQL	371	54.9	1	1/7/2009	
Chlorobenzilate	BQL	371	46.0	1	1/7/2009	
2-Chloronaphthalene	BQL	371	51.5	1	1/7/2009	
2-Chlorophenol	BQL	371	47.1	1	1/7/2009	
4-Chloro-3-methylphenol	BQL	371	54.1	1	1/7/2009	
4-Chloroaniline	BQL	371	60.4	1	1/7/2009	
4-Chlorophenyl phenyl ether	BQL	371	54.5	1	1/7/2009	
Chrysene	BQL	371	35.6	1	1/7/2009	
Diallate	BQL	371	241	1	1/7/2009	
Dibenz[a,j]acridine	BQL	371	286	1	1/7/2009	
Dibenzo[a,h]anthracene	BQL	371	47.5	1	1/7/2009	
Dibenzofuran	BQL	371	52.3	1	1/7/2009	
Di-n-Butylphthalate	BQL	371	54.1	1	1/7/2009	
1,2-Dichlorobenzene	BQL	371	62.7	1	1/7/2009	
1,3-Dichlorobenzene	BQL	371	60.1	1	1/7/2009	
1,4-Dichlorobenzene	BQL	371	53.8	1	1/7/2009	
3,3'-Dichlorobenzidine	BQL	742	61.2	1	1/7/2009	
2,4-Dichlorophenol	BQL	371	40.4	1	1/7/2009	
2,6-Dichlorophenol	BQL	371	51.5	1	1/7/2009	
Diethylphthalate	BQL	371	49.7	1	1/7/2009	
Dimethoate	BQL	371	56.0	1	1/7/2009	
3,3'-Dimethylbenzidine	BQL	1850	828	1	1/7/2009	
a,a-Dimethylphenethylamine	BQL	1850	742	1	1/7/2009	
Dimethylphthalate	BQL	371	57.5	1	1/7/2009	
p-Dimethylaminoazobenzene	BQL	371	50.1	1	1/7/2009	
7,12-Dimethylbenz[a]anthracene	BQL	371	178	1	1/7/2009	
2,4-Dimethylphenol	BQL	371	67.1	1	1/7/2009	

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S2
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-2H
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 33.69 g

Analyzed By: DCS
Date Collected: 12/31/2008 13:25
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 80.04

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Di-n-octylphthalate	BQL	371	57.1	1	1/7/2009	
4,6-Dinitro-2-methylphenol	BQL	1850	44.1	1	1/7/2009	
m-Dinitrobenzene	BQL	371	90.5	1	1/7/2009	
2,4-Dinitrophenol	BQL	1850	48.2	1	1/7/2009	
2,4-Dinitrotoluene	BQL	371	56.4	1	1/7/2009	
2,6-Dinitrotoluene	BQL	371	61.2	1	1/7/2009	
Dinoseb	BQL	1850	37.5	1	1/7/2009	
Diphenylamine *	BQL	371	46.7	1	1/7/2009	
Disulfoton	BQL	371	97.2	1	1/7/2009	
Ethylmethanesulfonate	BQL	371	51.2	1	1/7/2009	
Famphur	BQL	1850	64.9	1	1/7/2009	
Fluoranthene	BQL	371	59.7	1	1/7/2009	
Fluorene	BQL	371	57.9	1	1/7/2009	
Hexachlorobenzene	BQL	1850	80.5	1	1/7/2009	
Hexachlorobutadiene	BQL	371	67.5	1	1/7/2009	
Hexachlorocyclopentadiene	BQL	742	72.3	1	1/7/2009	
Hexachloroethane	BQL	371	57.9	1	1/7/2009	
Hexachlorophene	BQL	371	170	1	1/7/2009	
Hexachloropropene	BQL	742	59.3	1	1/7/2009	
Indeno(1,2,3-c,d)pyrene	BQL	371	43.8	1	1/7/2009	
Isodrin	BQL	371	51.9	1	1/7/2009	
Isophorone	BQL	371	54.1	1	1/7/2009	
Isosafrole	BQL	371	57.5	1	1/7/2009	
Kepone	BQL	1850	1850	1	1/7/2009	
Methapyrilene	BQL	371	371	1	1/7/2009	
Methyl parathion	BQL	371	156	1	1/7/2009	
Methylmethanesulfonate	BQL	371	52.7	1	1/7/2009	
2-Methylnaphthalene	BQL	371	60.4	1	1/7/2009	
2-Methylphenol	BQL	371	56.7	1	1/7/2009	
3- & 4-Methylphenol	BQL	371	48.2	1	1/7/2009	
3-Methylcholanthrene	BQL	371	46.0	1	1/7/2009	
Naphthalene	BQL	371	51.9	1	1/7/2009	
1,4-Naphthoquinone	BQL	371	68.6	1	1/7/2009	
1-Naphthylamine	BQL	1850	53.8	1	1/7/2009	
2-Naphthylamine	BQL	1850	31.9	1	1/7/2009	
5-Nitro-o-toluidine	BQL	371	53.8	1	1/7/2009	
2-Nitroaniline	BQL	371	49.7	1	1/7/2009	
3-Nitroaniline	BQL	1850	54.5	1	1/7/2009	
4-Nitroaniline	BQL	1850	49.7	1	1/7/2009	
Nitrobenzene	BQL	371	49.3	1	1/7/2009	
2-Nitrophenol	BQL	371	54.1	1	1/7/2009	
4-Nitrophenol	BQL	1850	64.5	1	1/7/2009	
4-Nitroquinoline-1-oxide	BQL	1850	148	1	1/7/2009	
N-Nitroso-di-n-butylamine	BQL	371	45.6	1	1/7/2009	
N-Nitrosodi-n-propylamine	BQL	371	59.7	1	1/7/2009	
N-Nitrosodiethylamine	BQL	371	51.9	1	1/7/2009	
N-Nitrosodimethylamine	BQL	371	55.3	1	1/7/2009	

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S2
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-2H
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 33.69 g

Analyzed By: DCS
Date Collected: 12/31/2008 13:25
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 80.04

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
N-Nitrosomethylethylamine	BQL	371	66.0	1	1/7/2009	
N-Nitrosomorpholine	BQL	371	59.7	1	1/7/2009	
N-Nitrosopiperidine	BQL	371	52.3	1	1/7/2009	
N-Nitrosopyrrolidine	BQL	371	229	1	1/7/2009	
Parathion	BQL	742	87.9	1	1/7/2009	
Pentachlorobenzene	BQL	371	51.9	1	1/7/2009	
Pentachloronitrobenzene	BQL	371	53.4	1	1/7/2009	
Pentachlorophenol	BQL	1850	34.1	1	1/7/2009	
Phenacetin	BQL	371	70.5	1	1/7/2009	
Phenanthrene	BQL	371	51.9	1	1/7/2009	
Phenol	BQL	371	50.4	1	1/7/2009	
p-Phenylenediamine	BQL	742	507	1	1/7/2009	
Phorate	BQL	742	64.9	1	1/7/2009	
2-Piccoline	BQL	371	66.0	1	1/7/2009	
Pronamide	BQL	371	57.9	1	1/7/2009	
Pyrene	BQL	371	50.4	1	1/7/2009	
Pyridine	BQL	371	126	1	1/7/2009	
Safrole	BQL	371	56.4	1	1/7/2009	
Sulfotep	BQL	371	92.0	1	1/7/2009	
1,2,4,5-Tetrachlorobenzene	BQL	371	51.5	1	1/7/2009	
2,3,4,6-Tetrachlorophenol	BQL	371	61.9	1	1/7/2009	
Thionazin	BQL	742	215	1	1/7/2009	
o-Toluidine	BQL	371	73.4	1	1/7/2009	
1,2,4-Trichlorobenzene	BQL	371	66.8	1	1/7/2009	
2,4,5-Trichlorophenol	BQL	371	55.3	1	1/7/2009	
2,4,6-Trichlorophenol	BQL	371	33.0	1	1/7/2009	
O,O,O-Triethylphosphorothioate	BQL	371	178	1	1/7/2009	
1,3,5-Trinitrobenzene	BQL	1850	66.8	1	1/7/2009	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	9	90
2-Fluorophenol	10	9.5	94
Nitrobenzene-d5	10	9.3	93
Phenol-d6	10	10.3	103
2,4,6-Tribromophenol	10	7.9	79
4-Terphenyl-d14	10	7.4	74

Comments:
* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:
BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By:

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S3
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-3J
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 32.62 g

Analyzed By: DCS
Date Collected: 12/31/2008 11:45
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 77.57

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Acenaphthene	BQL	395	60.5	1	1/7/2009	
Acenaphthylene	BQL	395	55.3	1	1/7/2009	
Acetophenone	BQL	395	61.7	1	1/7/2009	
2-Acetylaminofluorene	BQL	790	55.3	1	1/7/2009	
4-Aminobiphenyl	BQL	395	44.3	1	1/7/2009	
Aniline	BQL	395	63.2	1	1/7/2009	
Anthracene	BQL	395	53.7	1	1/7/2009	
Aramite	BQL	395	84.2	1	1/7/2009	
Benzidine	BQL	790	115	1	1/7/2009	
Benzo[a]anthracene	BQL	395	54.1	1	1/7/2009	
Benzo[a]pyrene	BQL	395	56.9	1	1/7/2009	
Benzo[b]fluoranthene	BQL	395	54.9	1	1/7/2009	
Benzo[g,h,i]perylene	BQL	395	68.8	1	1/7/2009	
Benzo[k]fluoranthene	BQL	395	56.1	1	1/7/2009	
Benzyl Alcohol	BQL	790	71.1	1	1/7/2009	
Bis(2-chloroethoxy)methane	BQL	395	58.1	1	1/7/2009	
Bis(2-chloroethyl)ether	BQL	395	80.2	1	1/7/2009	
Bis(2-chloroisopropyl)ether	BQL	395	63.6	1	1/7/2009	
Bis(2-ethylhexyl)phthalate	BQL	395	60.5	1	1/7/2009	
4-Bromophenyl phenyl ether	BQL	395	70.0	1	1/7/2009	
Butylbenzylphthalate	BQL	395	58.5	1	1/7/2009	
Chlorobenzilate	BQL	395	49.0	1	1/7/2009	
2-Chloronaphthalene	BQL	395	54.9	1	1/7/2009	
2-Chlorophenol	BQL	395	50.2	1	1/7/2009	
4-Chloro-3-methylphenol	BQL	395	57.7	1	1/7/2009	
4-Chloroaniline	BQL	395	64.4	1	1/7/2009	
4-Chlorophenyl phenyl ether	BQL	395	58.1	1	1/7/2009	
Chrysene	BQL	395	37.9	1	1/7/2009	
Diallate	BQL	395	257	1	1/7/2009	
Dibenz[a,j]acridine	BQL	395	305	1	1/7/2009	
Dibenzo[a,h]anthracene	BQL	395	50.6	1	1/7/2009	
Dibenzofuran	BQL	395	55.7	1	1/7/2009	
Di-n-Butylphthalate	BQL	395	57.7	1	1/7/2009	
1,2-Dichlorobenzene	BQL	395	66.8	1	1/7/2009	
1,3-Dichlorobenzene	BQL	395	64.0	1	1/7/2009	
1,4-Dichlorobenzene	BQL	395	57.3	1	1/7/2009	
3,3'-Dichlorobenzidine	BQL	790	65.2	1	1/7/2009	
2,4-Dichlorophenol	BQL	395	43.1	1	1/7/2009	
2,6-Dichlorophenol	BQL	395	54.9	1	1/7/2009	
Diethylphthalate	BQL	395	53.0	1	1/7/2009	
Dimethoate	BQL	395	59.7	1	1/7/2009	
3,3'-Dimethylbenzidine	BQL	1980	883	1	1/7/2009	
a,a-Dimethylphenethylamine	BQL	1980	790	1	1/7/2009	
Dimethylphthalate	BQL	395	61.3	1	1/7/2009	
p-Dimethylaminoazobenzene	BQL	395	53.4	1	1/7/2009	
7,12-Dimethylbenz[a]anthracene	BQL	395	190	1	1/7/2009	
2,4-Dimethylphenol	BQL	395	71.5	1	1/7/2009	

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S3
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-3J
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 32.62 g

Analyzed By: DCS
Date Collected: 12/31/2008 11:45
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 77.57

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
Di-n-octylphthalate	BQL	395	60.9	1	1/7/2009	
4,6-Dinitro-2-methylphenol	BQL	1980	47.0	1	1/7/2009	
m-Dinitrobenzene	BQL	395	96.4	1	1/7/2009	
2,4-Dinitrophenol	BQL	1980	51.4	1	1/7/2009	
2,4-Dinitrotoluene	BQL	395	60.1	1	1/7/2009	
2,6-Dinitrotoluene	BQL	395	65.2	1	1/7/2009	
Dinoseb	BQL	1980	39.9	1	1/7/2009	
Diphenylamine *	BQL	395	49.8	1	1/7/2009	
Disulfoton	BQL	395	104	1	1/7/2009	
Ethylmethanesulfonate	BQL	395	54.5	1	1/7/2009	
Famphur	BQL	1980	69.2	1	1/7/2009	
Fluoranthene	BQL	395	63.6	1	1/7/2009	
Fluorene	BQL	395	61.7	1	1/7/2009	
Hexachlorobenzene	BQL	1980	85.8	1	1/7/2009	
Hexachlorobutadiene	BQL	395	71.9	1	1/7/2009	
Hexachlorocyclopentadiene	BQL	790	77.1	1	1/7/2009	
Hexachloroethane	BQL	395	61.7	1	1/7/2009	
Hexachlorophene	BQL	395	181	1	1/7/2009	
Hexachloropropene	BQL	790	63.2	1	1/7/2009	
Indeno(1,2,3-c,d)pyrene	BQL	395	46.6	1	1/7/2009	
Isodrin	BQL	395	55.3	1	1/7/2009	
Isophorone	BQL	395	57.7	1	1/7/2009	
Isosafrole	BQL	395	61.3	1	1/7/2009	
Kepone	BQL	1980	1980	1	1/7/2009	
Methapyrilene	BQL	395	395	1	1/7/2009	
Methyl parathion	BQL	395	167	1	1/7/2009	
Methylmethanesulfonate	BQL	395	56.1	1	1/7/2009	
2-Methylnaphthalene	BQL	395	64.4	1	1/7/2009	
2-Methylphenol	BQL	395	60.5	1	1/7/2009	
3- & 4-Methylphenol	BQL	395	51.4	1	1/7/2009	
3-Methylcholanthrene	BQL	395	49.0	1	1/7/2009	
Naphthalene	BQL	395	55.3	1	1/7/2009	
1,4-Naphthoquinone	BQL	395	73.1	1	1/7/2009	
1-Naphthylamine	BQL	1980	57.3	1	1/7/2009	
2-Naphthylamine	BQL	1980	34.0	1	1/7/2009	
5-Nitro-o-toluidine	BQL	395	57.3	1	1/7/2009	
2-Nitroaniline	BQL	395	53.0	1	1/7/2009	
3-Nitroaniline	BQL	1980	58.1	1	1/7/2009	
4-Nitroaniline	BQL	1980	53.0	1	1/7/2009	
Nitrobenzene	BQL	395	52.6	1	1/7/2009	
2-Nitrophenol	BQL	395	57.7	1	1/7/2009	
4-Nitrophenol	BQL	1980	68.8	1	1/7/2009	
4-Nitroquinoline-1-oxide	BQL	1980	158	1	1/7/2009	
N-Nitroso-di-n-butylamine	BQL	395	48.6	1	1/7/2009	
N-Nitrosodi-n-propylamine	BQL	395	63.6	1	1/7/2009	
N-Nitrosodiethylamine	BQL	395	55.3	1	1/7/2009	
N-Nitrosodimethylamine	BQL	395	58.9	1	1/7/2009	

Results for Semivolatiles
by GCMS 8270-Appendix II

Client Sample ID: S3
Client Project ID: N Wake Leachate Pond at Lined Landfill
Lab Sample ID: G175-685-3J
Lab Project ID: G175-685
Report Basis: Dry weight
Initial Weight: 32.62 g

Analyzed By: DCS
Date Collected: 12/31/2008 11:45
Date Received: 1/2/2009
Date Extracted: 1/5/2009
Matrix: Soil
% Solids: 77.57

Compound	Result ug/Kg	RL ug/Kg	MDL ug/Kg	Dilution Factor	Date Analyzed	Flag
N-Nitrosomethylethylamine	BQL	395	70.3	1	1/7/2009	
N-Nitrosomorpholine	BQL	395	63.6	1	1/7/2009	
N-Nitrosopiperidine	BQL	395	55.7	1	1/7/2009	
N-Nitrosopyrrolidine	BQL	395	244	1	1/7/2009	
Parathion	BQL	790	93.7	1	1/7/2009	
Pentachlorobenzene	BQL	395	55.3	1	1/7/2009	
Pentachloronitrobenzene	BQL	395	56.9	1	1/7/2009	
Pentachlorophenol	BQL	1980	36.4	1	1/7/2009	
Phenacetin	BQL	395	75.1	1	1/7/2009	
Phenanthrene	BQL	395	55.3	1	1/7/2009	
Phenol	BQL	395	53.7	1	1/7/2009	
p-Phenylenediamine	BQL	790	540	1	1/7/2009	
Phorate	BQL	790	69.2	1	1/7/2009	
2-Piccoline	BQL	395	70.3	1	1/7/2009	
Pronamide	BQL	395	61.7	1	1/7/2009	
Pyrene	BQL	395	53.7	1	1/7/2009	
Pyridine	BQL	395	134	1	1/7/2009	
Safrole	BQL	395	60.1	1	1/7/2009	
Sulfotep	BQL	395	98.0	1	1/7/2009	
1,2,4,5-Tetrachlorobenzene	BQL	395	54.9	1	1/7/2009	
2,3,4,6-Tetrachlorophenol	BQL	395	66.0	1	1/7/2009	
Thionazin	BQL	790	229	1	1/7/2009	
o-Toluidine	BQL	395	78.3	1	1/7/2009	
1,2,4-Trichlorobenzene	BQL	395	71.1	1	1/7/2009	
2,4,5-Trichlorophenol	BQL	395	58.9	1	1/7/2009	
2,4,6-Trichlorophenol	BQL	395	35.2	1	1/7/2009	
O,O,O-Triethylphosphorothioate	BQL	395	190	1	1/7/2009	
1,3,5-Trinitrobenzene	BQL	1980	71.1	1	1/7/2009	

	Spike Added	Spike Result	Percent Recovered
2-Fluorobiphenyl	10	8.6	86
2-Fluorophenol	10	9	90
Nitrobenzene-d5	10	9.1	91
Phenol-d6	10	9.9	99
2,4,6-Tribromophenol	10	7.4	74
4-Terphenyl-d14	10	7.6	76

Comments:
* N-Nitrosodiphenylamine is reported as the breakdown product Diphenylamine.

Flags:
BQL = Below Quantitation Limits.
J = Detected below the quantitation limit.

Reviewed By:

Results for PCBs
by EPA 8082

Client Sample ID:	S1	Analyzed By:	BWS
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 11:10
Lab Sample ID:	G175-685-1N	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Initial Wt/Vol:	34.40 g	Matrix:	Soil
Final Volume:	10 mL	%SOLIDS:	80.1
ColumnID:	STX-CLPest	Report Basis:	Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	36.3	4.35	1	01/07/09	
Aroclor-1221	BQL	36.3	6.60	1	01/07/09	
Aroclor-1232	BQL	36.3	3.20	1	01/07/09	
Aroclor-1242	BQL	36.3	4.57	1	01/07/09	
Aroclor-1248	BQL	36.3	3.09	1	01/07/09	
Aroclor-1254	BQL	36.3	10.7	1	01/07/09	
Aroclor-1260	BQL	36.3	4.75	1	01/07/09	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	84.6	84.6
DCBP	100	91.1	91.1

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By:

8082.xls

Results for PCBs
by EPA 8082

Client Sample ID:	S2	Analyzed By:	BWS
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 13:25
Lab Sample ID:	G175-685-2K	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Initial Wt/Vol:	33.20 g	Matrix:	Soil
Final Volume:	10 mL	%SOLIDS:	80.0
ColumnID:	STX-CLPest	Report Basis:	Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	37.6	4.52	1	01/07/09	
Aroclor-1221	BQL	37.6	6.85	1	01/07/09	
Aroclor-1232	BQL	37.6	3.32	1	01/07/09	
Aroclor-1242	BQL	37.6	4.74	1	01/07/09	
Aroclor-1248	BQL	37.6	3.20	1	01/07/09	
Aroclor-1254	BQL	37.6	11.1	1	01/07/09	
Aroclor-1260	BQL	37.6	4.93	1	01/07/09	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	97.9	97.9
DCBP	100	97.9	97.9

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By: _____

8082.xls

Results for PCBs
by EPA 8082

Client Sample ID:	S3	Analyzed By:	BWS
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	12/31/2008 11:45
Lab Sample ID:	G175-685-3K	Date Received:	1/2/2009
Lab Project ID:	G175-685	Date Extracted:	1/5/2009
Initial Wt/Vol:	30.95 g	Matrix:	Soil
Final Volume:	10 mL	%SOLIDS:	77.6
ColumnID:	STX-CLPest	Report Basis:	Dry Weight

Compound	Result ug/KG	Quantitation Limit ug/KG	MDL	Dilution Factor	Date Analyzed	Flags
Aroclor-1016	BQL	41.6	5.00	1	01/07/09	
Aroclor-1221	BQL	41.6	7.58	1	01/07/09	
Aroclor-1232	BQL	41.6	3.68	1	01/07/09	
Aroclor-1242	BQL	41.6	5.25	1	01/07/09	
Aroclor-1248	BQL	41.6	3.54	1	01/07/09	
Aroclor-1254	BQL	41.6	12.3	1	01/07/09	
Aroclor-1260	BQL	41.6	5.46	1	01/07/09	

Surrogate Spike Recoveries	Spike Added (ug/L)	Spike Result (ug/L)	Percent Recovered (%)
TCMX	100	73.0	73.0
DCBP	100	84.4	84.4

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By:

8082.xls

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090494

(1)

CLIENT: CDM

CONTACT: Aaron Weisgerning PHONE NO:(914) 325-3500

PROJECT: N Wake Leachate Pond SITE/PWSID#: at Lined Landfill

REPORTS TO: Dan Forbes E-MAIL: On File FAX NO.:( )

INVOICE TO: Same QUOTE # P.O. NUMBER

SGS Reference: E175-685

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP G= GRAB)	App IX VOC by 8260	App IX Metals	Pesticides/Herbicides	SVOC/PCB by 8270						REMARKS
						Preservatives Used	—	—	—	—						
						(3) Analysis Required										
	S1	12/31/08	1110	S	4	G	1	1	1	1						-Provide Electronic
	S2	12/31/08	1335	S	4	G	1	1	1	1						Deliverable
	S3	12/31/08	1155	S	4	G	1	1	1	1						- Report "J" Values
																-Report Results
																according to SWSL
																reporting limits

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
[signature]	12/31/08	1415	Willard Hunt	12/31/08	14:15
Relinquished By: (2) Willard Hunt	Date 1/2/08	Time 12:47	Received By: [signature]	Date 1/2/09	Time 12:47
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: 5.9 °F:

Special Deliverable Requirements:

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions:

Requested Turnaround Time:

☒ RUSH 5 day TAT Date Needed ☒ STD

Wilson, Donna

From: Colone, Mathew [ColoneMF@cdm.com]
Sent: Tuesday, January 13, 2009 5:24 PM
To: <donna.wilson@ncmail.net>
Cc: Brossoie, Robert; Brinchek, W. Michael (Mike)
Subject: North Wake Landfill Leachate Pond - Background Sample Results
Attachments: G175-686.pdf; Table 1.xlsx

Donna,

Attached is a revised Table with the confirmatory and background sampling results and the lab data for the background sample collected Friday. The background sample was collected from the former borrow area at the North Wake Landfill. The background material sampled was similar in color and grain-size to the material underneath the leachate pond liner.

Results for the background sample indicate that the metals detected in the confirmatory samples beneath the pond liner are naturally occurring elements in the on-site soils and not related to a release from the pond.

<<G175-686.pdf>> <<Table 1.xlsx>>

Compaction and backfill of the pond excavation to final grade is a critical path for Wake County and the contractor on this project. Upon your approval, CDM will direct the contractor to begin backfilling. When complete, there will be approximately 10-feet of compacted fill above the clay layer.

Thanks for your help,

Mat

Mathew F. Colone, P.G.

CDM

5400 Glenwood Avenue Suite 300

Raleigh, North Carolina 27612

(919) 787-5620 office

(919) 325-3569 direct

(919) 781-5730 fax

SGS

Mat Colone
Camp, Dresser & McKee
5400 Glenwood Avenue
Raleigh, NC 27612

Report Number: G175-686

Client Project: N Wake Leachate Pond

Dear Mat Colone,

Enclosed are the results of the analytical services performed under the referenced project. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call SGS Environmental Services at (910) 350-1903. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS Environmental Services for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,
SGS Environmental Services, Inc.

Ashley Nifong 1/13/09

Project Manager Date
Ashley Nifong

List of Reporting Abbreviations And Data Qualifiers

B = Compound also detected in batch blank

BQL = Below Quantification Limit (RL or MDL)

DF = Dilution Factor

Dup = Duplicate

D = Detected, but RPD is > 40% between results in dual column method.

E = Estimated concentration, exceeds calibration range.

J = Estimated concentration, below calibration range and above MDL

LCS(D) = Laboratory Control Spike (Duplicate)

MDL = Method Detection Limit

MS(D) = Matrix Spike (Duplicate)

PQL = Practical Quantitation Limit

RL/CL = Reporting Limit / Control Limit

RPD = Relative Percent Difference

mg/kg = milligram per kilogram, ppm, parts per million

ug/kg = micrograms per kilogram, ppb, parts per billion

mg/L = milligram per liter, ppm, parts per million

ug/L = micrograms per liter, ppb, parts per billion

% Rec = Percent Recovery

% soilds = Percent Solids

Special Notes:
1) Metals and mercury samples are digested with a hot block, see the standard operating procedure document for details.
2) Uncertainty for all reported data is less than or equal to 30 percent.

MI34.021808.4

Results for Metals

Client Sample ID:	Background	Analyzed By:	PSW DCP
Client Project ID:	N Wake Leachate Pond at Lined Landfill	Date Collected:	1/9/2009 12:05
Lab Sample ID:	G175-686-1	Date Received:	1/10/2009
Lab Project ID:	G175-686	Matrix:	SOIL
ICP InitWt/Vol:	0.57 g Final Vol: 50 mL	Solids	84.14
Hg InitWt/Vol:	0.58 g Final Vol: 50 mL	Report Basis:	Dry
Prep Batch:	13413 13422		

Metals	Result	RL	MDL	DF	Units	Method	Date Analyzed	Flags
Antimony	BQL	0.626	0.943	1	MG/KG	6010B	1/12/2009	
Arsenic	**3.39**	1.04	0.834	1	MG/KG	6010B	1/12/2009	
Barium	**74.8**	10.4	0.491	1	MG/KG	6010B	1/12/2009	B
Beryllium	**1.46**	0.104	0.730	1	MG/KG	6010B	1/12/2009	
Cadmium	BQL	0.521	0.142	1	MG/KG	6010B	1/12/2009	B
Chromium	**20.9**	1.04	0.115	1	MG/KG	6010B	1/12/2009	B
Cobalt	**12.6**	1.04	0.287	1	MG/KG	6010B	1/12/2009	
Copper	**41.6**	1.04	0.188	1	MG/KG	6010B	1/12/2009	B
Lead	**15.8**	1.04	0.669	1	MG/KG	6010B	1/12/2009	
Mercury	**0.0318**	0.0205	0.00118	1	MG/KG	7471	1/13/2009	
Nickel	**9.64**	5.21	0.627	1	MG/KG	6010B	1/12/2009	
Selenium	**10.1**	1.04	0.759	1	MG/KG	6010B	1/12/2009	
Silver	BQL	1.04	0.0916	1	MG/KG	6010B	1/12/2009	B
Thallium	BQL	0.573	0.917	1	MG/KG	6010B	1/12/2009	
Tin	BQL	10.4	0.391	1	MG/KG	6010B	1/13/2009	B
Vanadium	**76.4**	5.21	0.631	1	MG/KG	6010B	1/12/2009	
Zinc	**51.3**	1.04	0.335	1	MG/KG	6010B	1/12/2009	

Comments

BQL = Below Quantitation Limits
DF = Dilution Factor
J = Between MDL and RL
B= Amount in Prep Blank > MDL

Reviewed By:
METALS.XLS

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090466

(1)

CLIENT: CDM

CONTACT: Aaron Weisphenning PHONE NO: (919) 325-3500

PROJECT: Nivelle Landfill (Fed) SITE/PWSID#: Nivelle Landfill

REPORTS TO: Matt Colone E-MAIL: on file FAX NO.: (919) 751-5730

INVOICE TO: Same QUOTE # P.O. NUMBER

SGS Reference: G175-686

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Preservatives Used: —	Analysis Required (3): Arc II Metals								REMARKS
	Background	1/9/09	1205	S	2	G		2								- Provide Electronic deliverable - Report results down to SQL reporting limits - Report "J" values

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:	Date	Time
[illegible]	1/9/09	1240	L. Lockamy	1/10/09	940
Relinquished By: (2)	Date	Time	Received By:	Date	Time
Relinquished By: (3)	Date	Time	Received By:	Date	Time
Relinquished By: (4)	Date	Time	Received By:	Date	Time

(4)

Shipping Carrier: Fedex

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: 3.0° °F:

Special Deliverable Requirements:

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Special Instructions:

Requested Turnaround Time: ☒ RUSH 24 hrs (Date Needed) ☐ STD

❑ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
❑ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557
❑ 1270 Greenbrier Street **Charleston, WV 25311** Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

SGS Environmental Services, Inc.

Table 1
Soil Sampling Summary
North Wake Subtitle D Landfill Closure
Leachate Pond Removal
Confirmatory Soil Sampling Results

	Metals (mg/kg)																VOC/Pesticide/SVOC (mg/kg)		
Sample #	Arsenic	Barium	Beryllium	Cadmium	Chromium (Total)	Cobalt	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Tin	Vanadium	Zinc	Methylene Chloride	4,4'-DDT	Di-n-octylphthalate
NCDENR Inactive Sites Risk Based RGs	**4.4**	**--**	**30**	**7.4**	**24000**	**--**	**620**	**400**	**4.6**	**320**	**78**	**78**	**1.04**	**--**	**15.6**	**4600**	**9.1**	**1.7**	**480**
EPA Region 9 PRG (MCL Based) Soil to GW	**0.29**	**8200**	**3.2**	**0.38**	**NL**	**0.49***	**460**	**140**	**0.1**	**480**	**0.26**	**1.6***	**0.14**	**5500***	**180***	**680**	**0.0013**	**0.087***	**--**
Background	3.39	74.8 B	1.46	<0.142	20.9 B	12.6	41.6 B	15.8	0.0318	9.64	10.1	<1.04	<0.917	<40.4	76.4	51.3	NS	NS	NS
S-1	3.64	66.8	1.31	<0.125	32.5	14.7	54.7 B	15	0.0547	15.2	12.7	<1.25	<0.686	<12.5	120	41.7	<0.00145	<0.001	0.126 J
S-2	5.94	61.7	<0.108	<0.108	40.8	11.9	50.5 B	12.9	0.0578	18.7	11.1	<1.08	<0.592	<10.8	110	40.2	0.00169 J	0.00111 J	<0.0571
S-3	4.67	54.9	<0.122	<0.122	45	12.5	54.3 B	14.4	0.0511	16	12.4	<1.22	2.01	<12.2	118	40	<0.00152	<0.00103	<0.0609

Notes:

- Concentration exceeds NCDENR Inactive Sites Risk-Based Concentration Level.

- Concentration exceeds EPA Region 9 Preliminary Remediation Goals Protection of Groundwater levels.

J - Estimated value. Detected between laboratory Reporting Limit and Method Detection Limit.

B - Compound also detected in Batch Blank. Amount in Prep/Batch Blank was greater than Method Detection Limit.

* - Risk-based SSL

Wilson, Donna

From: Colone, Mathew [ColoneMF@cdm.com]
Sent: Wednesday, January 14, 2009 4:04 PM
To: <donna.wilson@ncmail.net>
Cc: Brossoie, Robert
Subject: Leachate Pond Confirmatory and Background Sample Locations
Attachments: Leachate Pond.pdf; Soil Sample Locations.pdf

Donna,

Attached is a blow-up of the leachate pond area with sampling locations for S-1, S-2 and S-3. Also attached is a large map of the entire site with the approximate location of the background sample. The background sample was collected from undisturbed material in the former borrow area of the site.

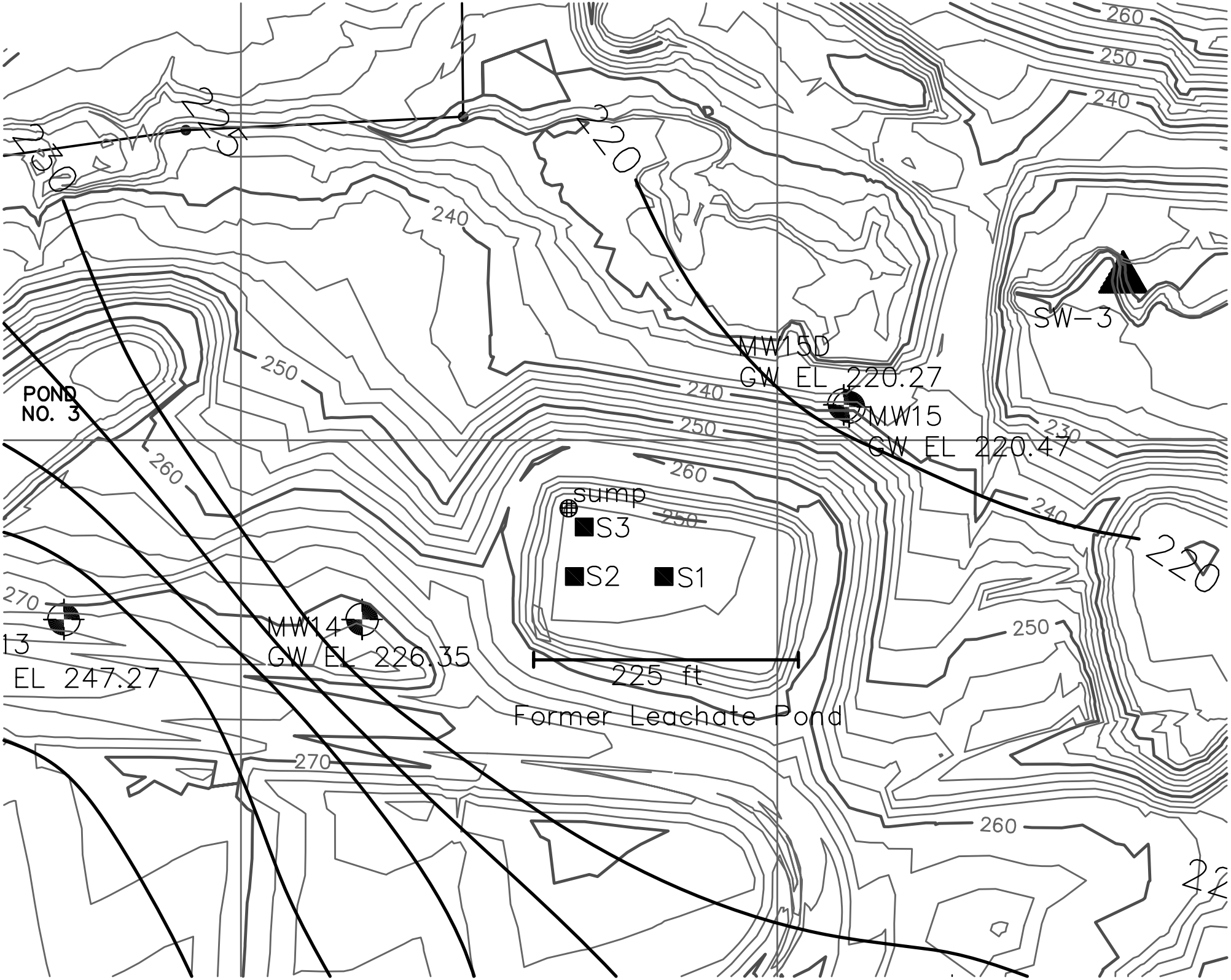
<<Leachate Pond.pdf>> <<Soil Sample Locations.pdf>>

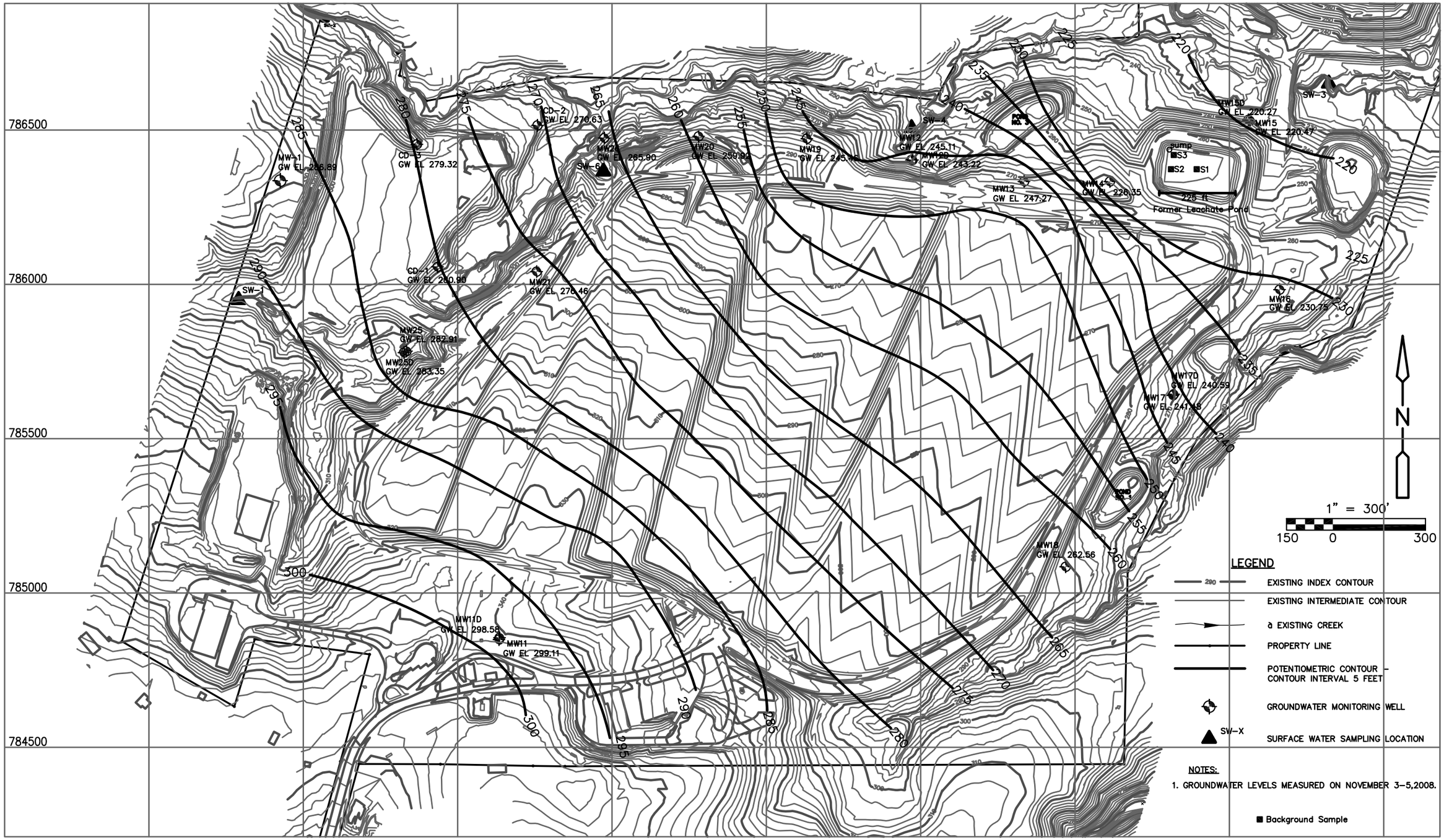
Please let me know if you need any further information.

Thank you for your timely review.

-Mat

Mathew F. Colone, P.G.
CDM
5400 Glenwood Avenue Suite 300
Raleigh, North Carolina 27612
(919) 787-5620 office
(919) 325-3569 direct
(919) 781-5730 fax


260
250
240
230
220
SW-3
MW15D
GW EL 220.27
MW15
GW EL 220.47
POND
NO. 3
sump
S3
S2
S1
MW14
GW EL 226.35
13
EL 247.27
270
225 ft
Former Leachate Pond



CDM Camp Dresser & McKee

Figure No.1
NORTH WAKE LINED LANDFILL
POTENTIOMETRIC CONTOUR MAP

Wilson, Donna

From: Donna Wilson [Donna.Wilson@ncmail.net]
Sent: Thursday, January 15, 2009 2:40 PM
To: Colone, Mathew
Cc: Michael Brinchek; Johnny Beal; Ed Mussler
Subject: North Wake Landfill leachate pond soil samples

Matt -
I've reviewed the analytical sampling results from the soil samples taken below the leachate pond at North Wake Landfill, and the background sample. The State concurs that the results indicate that there are no significant levels of constituents above background levels, and does not object to the plan to close out the area with additional cover and regrading.

The summary of the sampling results should have been compared to the Inactive Hazardous Sites Branch Health Based Soil Remediation Goal Table, dated October 2008 and to the Inactive Hazardous Sites Branch Protection of Groundwater Soil Remediation Goal Table, dated October 2008. The screening values submitted in the table do not correspond to these levels. Also, although not required, I could not find the location of the background sample on the map submitted in your email dated Jan. 14.

If you have any questions, please let me know.
Donna Wilson

--
Donna J. Wilson
Environmental Engineer
Solid Waste Section/Division of Waste Management NC DENR
1646 Mail Service Center
Raleigh NC 27699-1646
Phone 919-508-8510
Section webpage - http://wastenotnc.org/swhome