



January 20, 2006

Mr. Ed Ellis

Permit Engineer

Arkansas Department of Environmental Quality

8001 National Drive

PO Box 8913

Little Rock, Arkansas 72219-8913

AFIN: 31-00005

Pmt #: 0283-54

REC'D

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Doc ID#: 31987

To: SM7 file

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Subject: Landfill Evaluation

Class 4 Landfill for Holcim (US) Inc. (Holcim), Okay, Arkansas

ADEQ Permit Number: 0283-54, AFIN 31-00005

RMT Project Number: 00-71467.04

Reference: Site Action Plan, January 28, 2005

Dear Mr. Ellis:

The landfill evaluation presented in this letter is provided in follow-up to the referenced site action plan.

Introduction

Background

Holcim permitted and constructed an on-site Class IV landfill to receive waste from the demolition of its cement plant in Okay, Arkansas. As shown on Figure 1 (see Attachment 1), the landfill is located approximately two miles northwest of Saratoga in Howard County, Arkansas. Inert demolition materials (concrete, roofing materials, masonry, floor tile, metal siding, non-chrome refractory brick, wall board, and wood) and was disposed of in the existing on-site quarry. After the last receipt of waste in 1998, the landfill was reportedly covered with a three-foot layer of soil and then vegetated. When the cement plant was fully decommissioned, all structures and equipment, including the pumps that were used to actively dewater the quarry during operations, were removed. As a result, water began to accumulate within the quarry and the landfill become submerged.

Recent inspections of the landfill by Arkansas Department of Environmental Quality (ADEQ) have noted some deficiencies with respect to storm water management, the maintenance of the vegetative cover, and compliance with the original permit conditions. In January 2005, RMT prepared a site action plan to address the Agency's concerns. The site action plan was approved by ADEQ. Quarry water sampling activities were conducted in August 2005 and included collection of quarry water samples for chemical analysis.

Objectives

The purpose of this report is to summarize the following:

- Results of the landfill closure documentation review
- Analytical results of the quarry water testing and
- Geologic evaluation and the hydrologic assessment
- Preliminary human health and ecological risk evaluation of the quarry water

Summary of the Landfill Closure Documentation Review

A final application for the Class IV landfill was submitted to Arkansas Solid Waste Division on January 30, 1994. In the narrative attached to the application, it was noted that upon closure the landfill would "be covered by three feet of previously stockpiled partly weathered Marlbrook marl." Inasmuch as the proposed end usage of the reclaimed site was livestock grazing, it was also proposed that the soil cover be seeded with a suitable grass or grass/clover mixture. The permit, issued on August 11, 1994, stipulated that the cover vegetation be properly mowed during the 2-year post-closure period.

RMT reviewed Holcim's project files in an effort to recover any documentation related to the closure of the landfill. No formalized record or report was found that fully documented construction of the landfill cover. However, there were a few references that appeared to corroborate the understanding that a soil cover was constructed in conformance with the landfill permit requirements. These references are as follows:

- Letter from Chris Schillesci, Philip Environmental Services Group (demolition contractor), to Ms. Kathy Shanteau, Holcim, Inc. dated July 30, 1997. An excerpt from the letter states:

"As you requested, I have contacted the State of Arkansas, Department of Pollution Control and spoke with Mr. Prasad Camilla regarding notification for final closure of the landfill at Okay, Arkansas. Mr. Camilla advised me that if the procedure on the original permit is followed, no additional permit or notification is required. I explained to Mr. Camilla that Philip Services will follow the procedures as outlined in the permit."
- Arkansas Department of Pollution Control and Ecology report for a site inspection that took place on October 15, 1998. Letter from Sheldon Hadley, Solid Waste Management Division, to Mr. Chuck Weidenhoft, Holnam, Inc., dated October 28, 1998. An excerpt from the report reads:

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“Closed area is lacking vegetative cover. Also noted water has reached the closure area, but it is not under water at this time.”

This letter suggests that the soil cover was in place, but at the time was lacking the vegetative planting specified in the permit application.

RMT also conducted interviews with Holcim’s Jack Gathright, who was on the site throughout the decommissioning of the plant and the construction of the landfill. Interviews indicate that the landfill was covered with a three-foot layer of soil as required by the permit.

Evidence suggests that the Class IV landfill was probably closed between 1997 and 1998 with a soil cover as required by the permit. There is some indication that the landfill may not have received a vegetative cover. Such a vegetative cover would not be sustainable or practical for the long-term conditions after the two--year post-closure period. Without permanent active dewatering, it is evident that submersion of the landfill would occur, eradicating any vegetation that may have been established. The soil component of the final cover; however, should remain intact.

Summary of Sampling Activities

RMT collected water in the existing quarry at three locations. As shown on Figure 2 (see Attachment 1), one sample was collected immediately in the vicinity of the existing landfill, and the remaining two samples were retrieved from opposite sides of the quarry, on a triangular spacing. A laboratory blank was also tested along with these samples. The samples were analyzed for the Regulation 22 Appendix 3 constituents, which were promulgated for use in determining groundwater compliance for Class III and Class IV landfills. These promulgated maximum contaminant levels (MCLs) were established under drinking water standards, and therefore should be protective of both the groundwater and the surface water. In addition, the samples were analyzed for chloride, total dissolved solids, sulfate, total organic carbon, pH, specific conductance, iron, and manganese.

Due to a sample delivery service failure, the sample hold times and temperatures were exceeded and are noted in the data validation notes included in Attachment 2 to this report. The impact of temperature on the analysis is potential degradation of the constituents that may be present in the sample. The main concern with hold time exceedance is with respect to the volatile organic compound (VOC) analysis; however, VOCs are not anticipated as a concern at the site. With the exception of holding times and temperature, United States Environmental Protection Agency (USEPA) standards for liquid samples intended for chemical analyses and for liquid samples for VOC analysis were followed.

Hydrogeology Evaluation

A hydrogeologic evaluation for the site was conducted using information obtained from historical Holcim communication records regarding the landfill, geologic information summarized in the *Site Inspection Work Plan for Ideal Basic Industries, Inc.* (USEPA, May 1995), and readily available information from the Arkansas Geological Commission.

The landfill is located within the Gulf Coastal Plain Physiographic Province. According to records regarding a preliminary site investigation of the quarry prior to its use as a landfill (Memorandum: *Preliminary Site Investigation for Proposed Holnam, Inc. Class IV Landfill*, Arkansas Department of Pollution Control and Ecology, December 1993), the quarry was noted to have been excavated through approximately 25 feet of the Marlbrook Marl Formation and terminated within the Annona Chalk Formation. While the Annona Chalk Formation generally ranges from 0 to 100 feet thick, it is estimated to be approximately 40 feet thick in the vicinity of the quarry. Therefore, approximately 15 to 20 feet of the Annona Chalk is estimated to be present under the base of the quarry. As the permeability of both the Marlbrook Marl Formation and the Annona Chalk formation is very low, these formations have been characterized by the United States Geological Survey (USGS) as non-water bearing formations with low recharge potential where they occur on the surface. The closest producing aquifer in the vicinity of the quarry is the Tokio Formation. The Tokio Formation underlies the quarry but is further separated from its base by both the Ozan Formation and the Brownstown Formation (underlying the Annona Chalk Formation), which have a reported thickness that ranges from 150 to 250 feet and 250 feet, respectively. Additionally, the Ozan Formation is comprised of low permeability sediments similar to the Annona Chalk and Marlbrook Marl. Figure 3 is a cross section that shows the relationship of the geologic formations underlying the quarry.

According to the USEPA Site Inspection Workplan, the closest production well to the landfill is the Ideal Cement Co. well (Well #100). This well is at a depth of 503 feet and is screened within the Tokio Formation. The water level in this well was reported to be 119 feet below land surface (bls), well below the depth of the bottom of the quarry, which is between 60 to 90 feet bls. Based on the geologic and hydrogeologic information available, there appears to be approximately 165 to 265 feet of low permeable soils separating the bulk of the quarry from the underlying producing aquifer. Additionally, no groundwater seeps or mineral staining were observed in the exposed portions of the quarry wall during the annual landfill inspection conducted during January 2005 to indicate infiltration of groundwater. The water that has accumulated within the landfill is not adversely impacting the underlying aquifer and appears the majority of its infiltration is from precipitation and surface water drainage.

Water Balance Evaluation

RMT evaluated the water balance of the quarry in order to estimate the likelihood of an eventual surface water discharge into adjacent water bodies. During RMT's site inspection in January 2005, the culvert pipe connecting the quarry (containing the Class 4 landfill) with the adjacent pond was observed to be at least 15 feet above the existing quarry water surface (see Photograph 1 in Attachment 3). It was evident that significantly greater water accumulation would be required for water to reach a level where it can discharge from the quarry. RMT evaluated the potential for change in storage volume, defined as input (precipitation, groundwater infiltration and surface water run-on) minus output (evaporation, groundwater exfiltration, and surface water outflow).

Climatological data for nearby weather stations were examined. Precipitation and evaporation data were obtained for the Millwood Dam station. The precipitation database was further augmented with information from the Ashdown 4 SSE station. Topographic maps showing the drainage trends of the surrounding area were reviewed with respect for the potential for surface water flow into the quarry. The potential for groundwater exfiltration or recharge was also investigated by reviewing the geologic setting (see the preceding section).

RMT's review of site topography shows that there is little potential for surface water inflow due to tributary drainage. Aside from the cut slopes of the quarry sidewalls, all off-site drainage appears to be diverted away from the quarry. No significant water storage volume changes attributable to surface water drainage are expected. The primary source of water into the quarry is likely rainwater.

Review of geologic data indicates that the quarry is sited in a dense chalk and marl formation that is inherently of very low permeability. Consequently, any water volume losses due to exfiltration or volume gains due to groundwater infiltration are both anticipated to be very low.

Precipitation data shows that the average annual rainfall is approximately 51 inches per year at the Ashdown station (1969-2005) and about 49 inches at Millwood Dam (1995-2004). Corresponding evaporation data for the Mill Dam station shows an average annual evaporation of approximately 51 inches (see Table 1 in Attachment 4). Since surface water and groundwater contributions are expected to be relatively insignificant, the quarry would be expected to be in a generally static condition. While some seasonal fluctuation is anticipated, on an annual basis the evaporation approximately equals the precipitation. Seasonal water level fluctuation has been observed in the field. It was noted that the water level in the quarry during RMT's sampling exercise in August was approximately 5 to 6 feet lower than was observed during RMT's visit in January. Given that the water elevation observed in January was likely at a seasonal high, the probability of the quarry water level rising 15 or more feet to an elevation where it may discharge into the adjacent pond is highly remote.

Evaluation of Human Health and Environmental Impacts

A preliminary risk evaluation relative to human health and the environment was performed for water collected from the quarry containing the 2.5-acre landfill site. The current land use along with potential future land use of the site was considered in this evaluation. The analytical data was compared to appropriate criteria for protection of human health and the environment.

Environmental Setting

As previously stated, the landfill was closed was covered with 3 feet of clean fill. According to the Landfill ADEQ Permit Application No. 274-S4, there was only one residence located within ½ mile radius of the landfill and there were no water supply wells located within the 1-mile radius. Groundwater is at a depth of approximately 15 to 20 feet. Surface water drainage is directed away for the quarry. The only potential for discharge from the quarry to surface water is through a culvert pipe to an adjacent pond. This pipe has been observed to be at least 15 feet above the quarry water surface. Though this pond previously discharged to a sump where it was pumped to Millwood Lake by the United States Army Corps of Engineers (USACE), the discharge from that pond has been sealed (see Photograph 2 in Attachment 3).

Exposure Assessment

The objective of the exposure assessment is to estimate the potential for, type and magnitude of potential exposure to the closed landfill area and overlying quarry water. The environmental setting of the closed landfill is described previously in this report. Potential human receptors and their expected types of exposure to the constituents present in the quarry water evaluated were identified for current and hypothetical future land use scenarios. These potential human receptors represent those segments of the population most likely to come in contact with the constituents present in environmental media at the former landfill.

Given the location of the former landfill, human populations that may potentially be exposed under the current land use scenario are limited to selected industrial workers, which may be employed for subcontracting purposes nearby the landfill. Fencing, accessibility limitations in the form of steep slopes on the side of the quarry limit trespasser exposure to quarry water in the landfill. Shallow groundwater is not available and groundwater in the deeper aquifer (15 to 20 feet) is the main source of drinking water in the area, however, there are no residential wells located within one mile of the site (according to the Site Inspection 1995 along with the January 2005 site visit). Furthermore, migration to groundwater from the surface water overlying the landfill is not likely, given the

geological characteristics of the site, as discussed previously in this report. Quarry water is the only potential exposure pathway for the current land use and hypothetical future land use.

Potentially exposed ecological populations are limited to terrestrial species, which may rely on the surface water as a source of drinking water. Evaluation of the surface water to support aquatic species was not performed, however, the exposure pathway to potential aquatic populations is quarry water.

Comparison of the surface water analytical results to human health and ecological screening criteria are included in the following sections of this report.

Human Health Assessment

USEPA Region 6 does not publish screening levels for surface water on their Human Health Media-Specific Screening Levels; therefore, surface water analytical data was compared to MCLs and to USEPA's federal ambient water quality criteria for human health, which can be found at <http://www.epa.gov/waterscience/humanhealth115table-fs.htm>.

VOCs, pesticides, and herbicides were non-detect in the three water samples. Metals detected include barium, iron and manganese. Chloride, fluoride, nitrogen and sulfate were detected in one or more of the surface water samples. VOCs, pesticides were not detected in any of the surface water samples. The detected constituents included barium, iron, manganese, chloride, fluoride, and nitrogen. Tables 2 and 3 (see Attachment 4) summarize the results of the screening against MCLs and USEPA's federal ambient water quality criteria, respectively. Barium was detected in all three samples at concentrations ranging from 0.065 j to 0.067 j mg/L; however, the detected concentrations were below the published federal ambient water quality standard and MCL, both of which are 1 mg/L. Iron was detected in two of the three surface water samples with concentrations of 0.11 and 0.15 mg/L, below the federal ambient water quality standard of 0.3 mg/L. A published MCL is not available for iron. Manganese was detected in two samples at concentrations of 0.0059 mg/L and 0.0073 mg/L. An MCL and federal ambient water quality standard for manganese are not available for comparison. Chloride, fluoride, nitrate, and sulfate were detected in all three samples; however, published screening criteria and MCLs are not available. Nitrogen was detected in one sample at 0.12 j mg/L and is below its published federal ambient water quality standard and MCL, both of which are 10 mg/L. No parameters were detected at levels that were above the published MCLs or federal ambient water quality standards.

Based on the comparison of quarry water analytical data to the MCLs and federal ambient water quality criteria for human health, potential for human health risk is not anticipated.

Ecological Assessment

For ecological considerations, the environmental setting was evaluated and described above. The primary exposure pathway of potential ecological receptors to the closed Class IV landfill is limited to surface water. Analytical results from the quarry water evaluation described previously were compared to USEPA Region 4 ecological screening levels for surface water. Table 4 (see Attachment 3) summarizes the comparison of quarry water concentrations to the ecological screening levels. Screening Levels were not available for comparison to the detected constituents barium, manganese, fluoride, nitrate, and sulfate. Iron and chloride were detected at concentrations less than the corresponding USEPA Region 4 ecological screening levels. Based on the relatively few detected concentrations and the favorable comparison to screening levels, potential for ecological risk is not anticipated for this site.

Conclusions

The information gathered and presented in this report support the conclusion that the landfill was closed with an appropriate clean fill cover. Furthermore, quarry water is not migrating to groundwater and the potential for risk from the quarry water overlying the closed landfill to human health and the environment are negligible. Based on this information, no additional evaluations are warranted for the site.

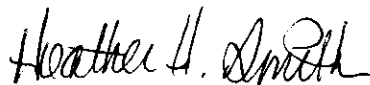
We trust this provides the information needed at this time. Please feel free to contact this office should questions arise.

Sincerely,

RMT, Inc.



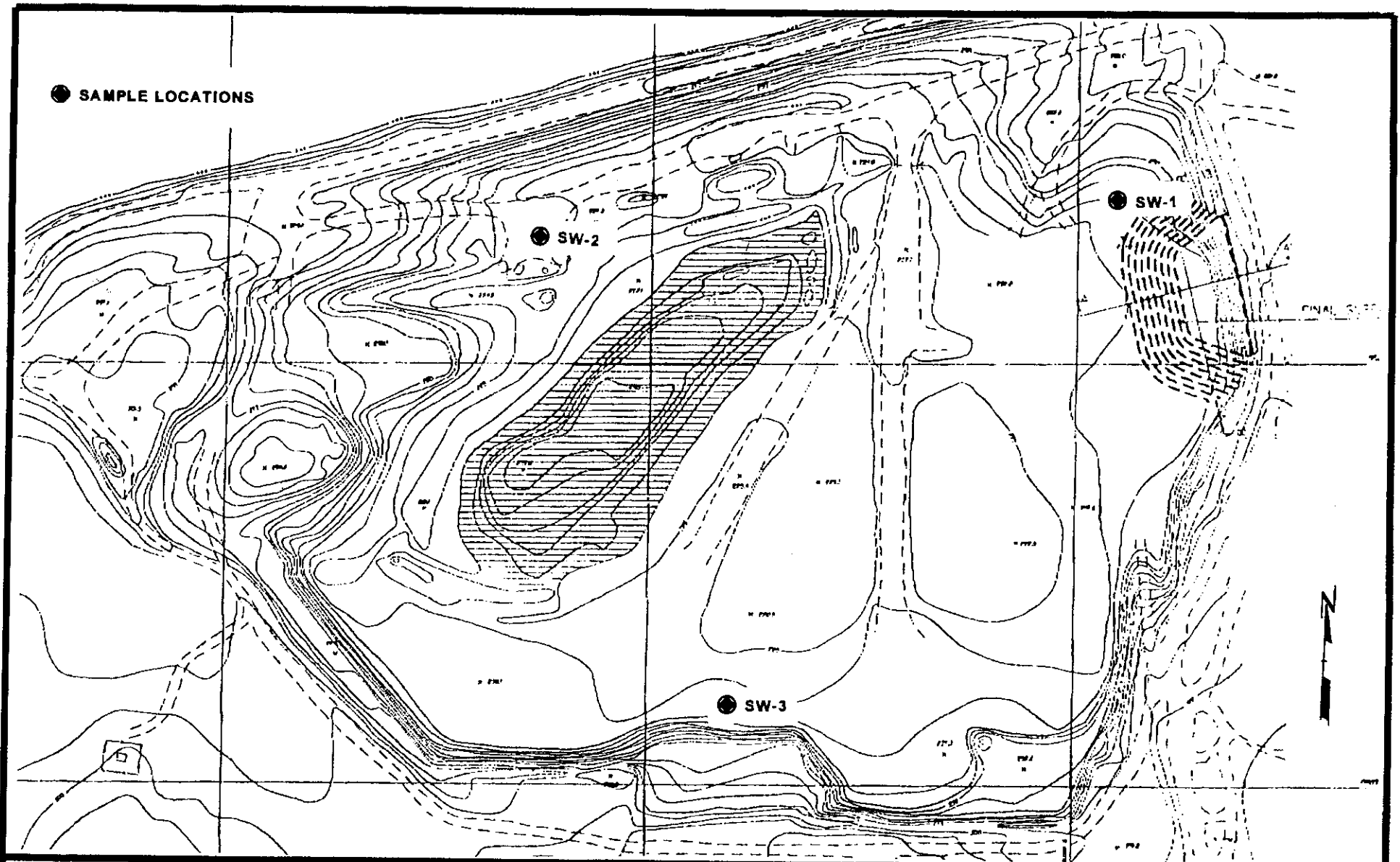
R. Kent Nilsson, P.E.
Project Manager



Heather H. Smith
Environmental Scientist

Attachments

cc: Meg Garakani, Holcim (US) Inc.
Karen Lutz, RMT
Central Files

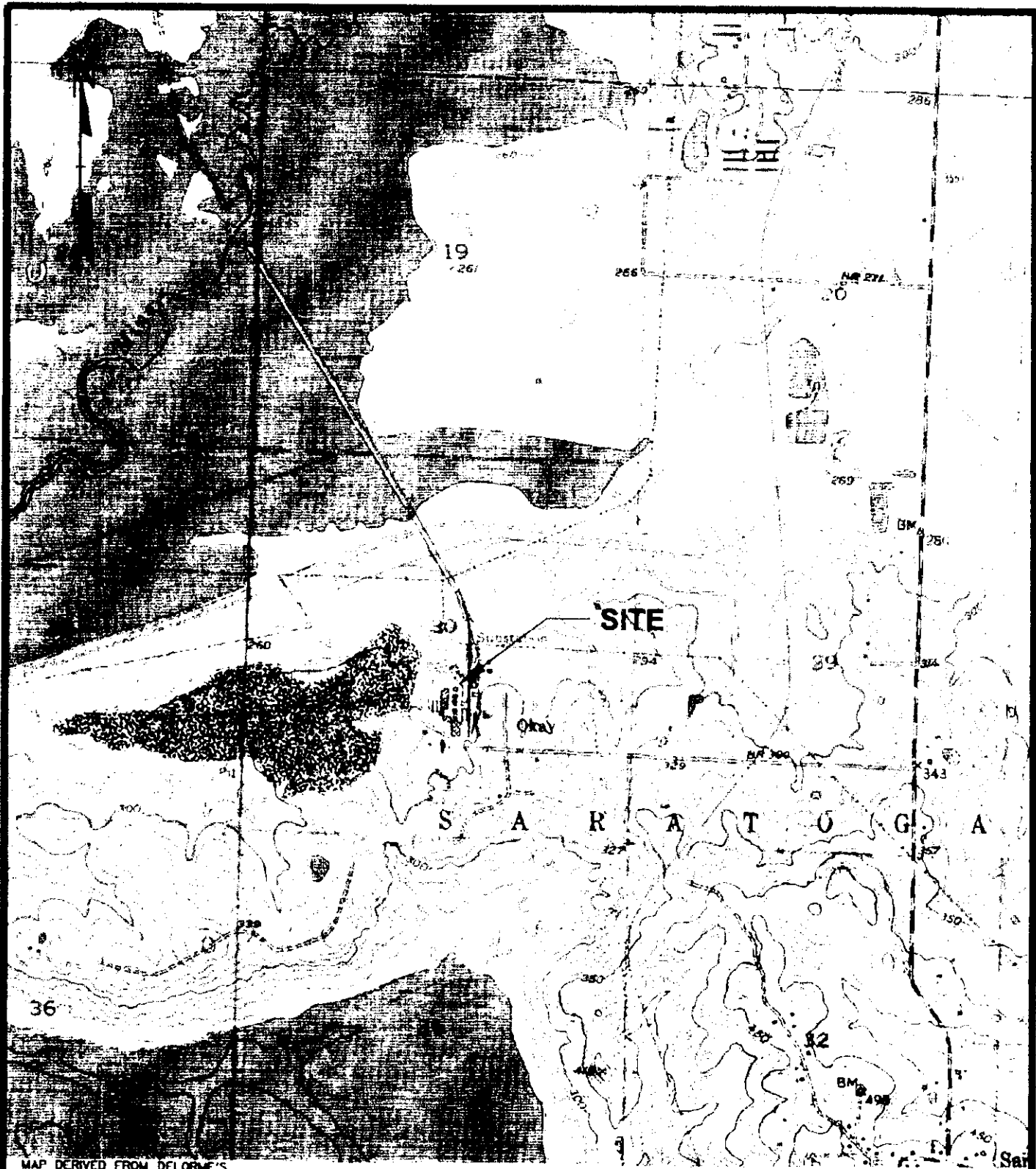


HOLCIM
OKAY, HOWARD COUNTY, ARKANSAS

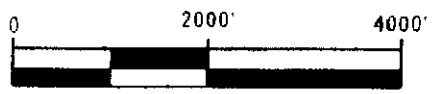
SURFACE WATER SAMPLE LOCATION MAP

DRAWN BY:	AHS
APPROVED BY:	
PROJECT NO.	71467.04
FILE NO.	HARDCOPY
DATE:	SEPTEMBER 2005

FIGURE 2



MAP DERIVED FROM DELORME'S
MINERAL SPRINGS SOUTH (AR)
1975 7.5' USGS TOPOGRAPHIC QUADRANGLE



SCALE 1" = 2000'

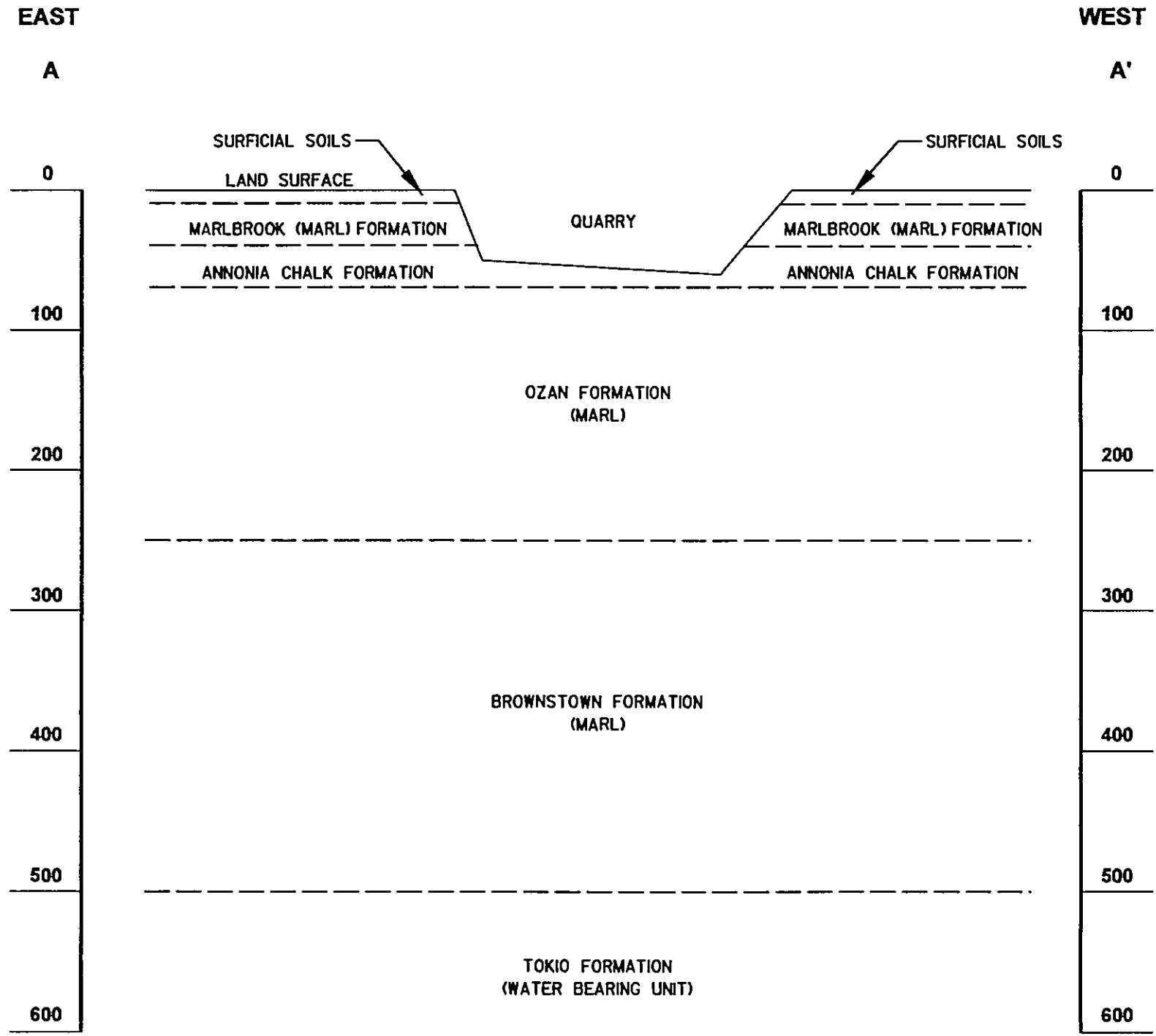


HOLCIM
OKAY, HOWARD COUNTY, ARKANSAS

SITE LOCATION MAP

DRAWN BY	APB
APPROVED BY:	
PROJECT NO	11467.04
FILE NO	XXX
DATE:	SEPTEMBER 2005

FIGURE 1



HORIZONTAL NOT TO SCALE

NOTE

THICKNESS AND DEPTH OF GEOLOGIC FORMATIONS APPROXIMATED FROM USGS INFORMATION

PROJECT: HOLCIM			
OKAY, HOWARD COUNTY, ARKANSAS			
SHEET TITLE: CROSS SECTION EAST TO WEST ACROSS MIDDLE OF QUARRY			
DRAWN BY: AHS	SCALE:	PROJ NO: 71467.04	
CHECKED BY:		FILE NO CSG-00 71467 01-002 GN	
APPROVED BY:	DATED PRINTED:	FIGURE 3	
DATE: JANUARY 2006	JANUARY 2006		
RMT.		30 Patwood Drive, Suite 100 Greenville, SC 29615-3535	
		Phone: 864-281-0030 Fax: 864-281-0288	

Attachment 2

Data Validation Notes

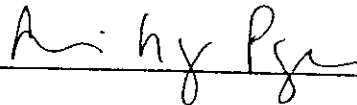
ANALYTICAL REPORT

Job Number: 680-6794-1

Job Description: Holcim

For:
RMT
30 Patewood Drive
Greenville, SC 29615-3535

Attention: Mr. Kent Nilsson



Abbie Page

Project Manager I
apage@stl-inc.com

08/25/2005

File, Data Mgmt., ~~██████~~
71467.04

Severn Trent Laboratories, Inc.

STL Savannah 5102 LaRoche Avenue, Savannah, GA 31404

Tel 912-3547858 Fax 912-3513673 www.stl-inc.com

METHOD SUMMARY

Client: RMT

Job Number: 680-6794-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatle Organic Compounds by GC/MS Purge-and-Trap	STL-SAV STL-SAV	SW846 8260B	SW846 5030B
Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography	STL-SAV	SW846 8081A_8082	
Continuous Liquid-Liquid Extraction	STL-SAV		SW846 3520C
Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzoylation Derivat	STL-SAV	SW846 8151A	
Chlorinated Herbicides by GC - Aqueous Prep	STL-SAV		SW846 8151A
Inductively Coupled Plasma - Mass Spectrometry	STL-SAV	SW846 6020	
Acid Digestion of Waters for Total Recoverable or	STL-SAV		SW846 3005A
Mercury in Liquid Waste (Manual Cold Vapor Technique)	STL-SAV	SW846 7470A	
Mercury in Liquid Waste (Manual Cold Vapor)	STL-SAV		SW846 7470A
Conductivity, Specific Conductance	STL-SAV	MCAWW 120.1	
pH, Electrometric	STL-SAV	MCAWW 150.1	
Residue, Filterable, Gravimetric, Dried at 180°C (TDS)	STL-SAV	MCAWW 160.1	
Chloride (Colorimetric, Automated Ferricyanide, AAI)	STL-SAV	MCAWW 325.2	
Fluoride (Potentiometric, Ion Selective Electrode)	STL-SAV	MCAWW 340.2	
Nitrogen, Nitrate-Nitrite (Colorimetric, Automated, Cadmium Reduction)	STL-SAV	MCAWW 353.2	
Sulfate (Turbidimetric)	STL-SAV	MCAWW 375.4	
Total Organic Carbon, Combustion or Oxidation	STL-SAV	MCAWW 415.1	
Chromium, Hexavalent (Colorimetric)	STL-SAV	SW846 7196A	

LAB REFERENCES:

STL-SAV = STL-Savannah

METHOD REFERENCES:

MCAWW - "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: RMT

Job Number: 680-6794-1

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Client Matrix</u>	<u>Date/Time Sampled</u>	<u>Date/Time Received</u>
680-6794-1	1	Water	08/05/2005 1500	08/09/2005 1855
680-6794-2	2	Water	08/05/2005 1435	08/09/2005 1855
680-6794-3	3	Water	08/05/2005 1400	08/09/2005 1855
680-6794-4	Blank	Water	08/05/2005 1330	08/09/2005 1855

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 1

Lab Sample ID: 680-6794-1

Date Sampled: 08/05/2005 1500

Client Matrix: Water

Date Received: 08/09/2005 1855

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-19267

Instrument ID: GC/MS Volatiles - P

Preparation: 5030B

Lab File ID: p8489.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 08/12/2005 1814

Final Weight/Volume: 5 mL

Date Prepared: 08/12/2005 1814

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
1,4-Dichlorobenzene	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	93		77 - 120
Dibromofluoromethane	100		75 - 123
Toluene-d8	100		79 - 122

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 3

Lab Sample ID: 680-6794-3

Client Matrix: Water

Date Sampled: 08/05/2005 1400

Date Received: 08/09/2005 1855

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-19267

Instrument ID: GC/MS Volatiles - P

Preparation: 5030B

Lab File ID: p8493.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 08/12/2005 1911

Final Weight/Volume: 5 mL

Date Prepared: 08/12/2005 1911

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
1,4-Dichlorobenzene	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	95		77 - 120
Dibromofluoromethane	96		75 - 123
Toluene-d8	98		79 - 122

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: Blank

Lab Sample ID: 680-6794-4

Date Sampled: 08/05/2005 1330

Client Matrix: Water

Date Received: 08/09/2005 1855

8260B Volatile Organic Compounds by GC/MS

Method: 8260B

Analysis Batch: 680-19267

Instrument ID: GC/MS Volatiles - P

Preparation: 5030B

Lab File ID: p8495.d

Dilution: 1.0

Initial Weight/Volume: 5 mL

Date Analyzed: 08/12/2005 1939

Final Weight/Volume: 5 mL

Date Prepared: 08/12/2005 1939

Analyte	Result (ug/L)	Qualifier	RL
Benzene	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
1,4-Dichlorobenzene	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Surrogate	%Rec		Acceptance Limits
4-Bromofluorobenzene	90		77 - 120
Dibromofluoromethane	101		75 - 123
Toluene-d8	105		79 - 122

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 1

Lab Sample ID: 680-6794-1

Date Sampled: 08/05/2005 1500

Client Matrix: Water

Date Received: 08/09/2005 1855

8081A_8082 Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography

Method: 8081A_8082
Preparation: 3520C
Dilution: 1.0
Date Analyzed: 08/15/2005 1530
Date Prepared: 08/12/2005 0928

Analysis Batch: 680-19145
Prep Batch: 680-19018

Instrument ID: GC SemiVolatiles - M
Lab File ID: mag15016.d
Initial Weight/Volume: 1060 mL
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Endrin	<0.094		0.094
gamma-BHC (Lindane)	<0.047		0.047
Methoxychlor	<0.47		0.47
Toxaphene	<4.7		4.7
Surrogate	%Rec		Acceptance Limits
DCB Decachlorobiphenyl	62		30 - 150
Tetrachloro-m-xylene	63		30 - 150

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 2

Lab Sample ID: 680-6794-2

Date Sampled: 08/05/2005 1435

Client Matrix: Water

Date Received: 08/09/2005 1855

8081A_8082 Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography

Method:	8081A_8082	Analysis Batch: 680-19145	Instrument ID: GC SemiVolatiles - M
Preparation:	3520C	Prep Batch: 680-19018	Lab File ID: mag15017.d
Dilution:	1.0		Initial Weight/Volume: 1060 mL
Date Analyzed:	08/15/2005 1550		Final Weight/Volume: 10 mL
Date Prepared:	08/12/2005 0928		Injection Volume:
			Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Endrin	<0.094		0.094
gamma-BHC (Lindane)	<0.047		0.047
Methoxychlor	<0.47		0.47
Toxaphene	<4.7		4.7
Surrogate	%Rec		Acceptance Limits
DCB Decachlorobiphenyl	53		30 - 150
Tetrachloro-m-xylene	61		30 - 150

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 3

Lab Sample ID: 680-6794-3

Date Sampled: 08/05/2005 1400

Client Matrix: Water

Date Received: 08/09/2005 1855

8081A_8082 Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography

Method: 8081A_8082
Preparation: 3520C
Dilution: 1.0
Date Analyzed: 08/15/2005 1609
Date Prepared: 08/12/2005 0928

Analysis Batch: 680-19145
Prep Batch: 680-19018

Instrument ID: GC SemiVolatiles - M
Lab File ID: mag15018.d
Initial Weight/Volume: 1060 mL
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Endrin	<0.094		0.094
gamma-BHC (Lindane)	<0.047		0.047
Methoxychlor	<0.47		0.47
Toxaphene	<4.7		4.7
Surrogate	%Rec		Acceptance Limits
DCB Decachlorobiphenyl	53		30 - 150
Tetrachloro-m-xylene	63		30 - 150

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: Blank

Lab Sample ID: 680-6794-4

Client Matrix: Water

Date Sampled: 08/05/2005 1330

Date Received: 08/09/2005 1855

8081A_8082 Organochlorine Pesticides & Polychlorinated Biphenyls by Gas Chromatography

Method: 8081A_8082
Preparation: 3520C
Dilution: 1.0
Date Analyzed: 08/15/2005 1628
Date Prepared: 08/12/2005 0928

Analysis Batch: 680-19145
Prep Batch: 680-19018

Instrument ID: GC SemiVolatiles - M
Lab File ID: mag15019.d
Initial Weight/Volume: 1060 mL
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Endrin	<0.094		0.094
gamma-BHC (Lindane)	<0.047		0.047
Methoxychlor	<0.47		0.47
Toxaphene	<4.7		4.7
Surrogate	%Rec		Acceptance Limits
DCB Decachlorobiphenyl	71		30 - 150
Tetrachloro-m-xylene	57		30 - 150

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 1

Lab Sample ID: 680-6794-1

Date Sampled: 08/05/2005 1500

Client Matrix: Water

Date Received: 08/09/2005 1855

8151A Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivat

Method:	8151A	Analysis Batch: 680-19158	Instrument ID:	GC SemiVolatiles - S
Preparation:	8151A	Prep Batch: 680-18879	Lab File ID:	sag15014.d
Dilution:	1.0		Initial Weight/Volume:	1020 mL
Date Analyzed:	08/15/2005 1736		Final Weight/Volume:	10 mL
Date Prepared:	08/12/2005 0753		Injection Volume:	
			Column ID:	PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dichlorophenoxyacetic acid	<0.49		0.49
Surrogate	%Rec		Acceptance Limits
DCAA	107		35 - 134

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 2

Lab Sample ID: 680-6794-2

Client Matrix: Water

Date Sampled: 08/05/2005 1435

Date Received: 08/09/2005 1855

8151A Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzoylation Derivat

Method: 8151A

Analysis Batch: 680-19158

Instrument ID: GC SemiVolatiles - S

Preparation: 8151A

Prep Batch: 680-18879

Lab File ID: sag15015.d

Dilution: 1.0

Initial Weight/Volume: 1030 mL

Date Analyzed: 08/15/2005 1758

Final Weight/Volume: 10 mL

Date Prepared: 08/12/2005 0753

Injection Volume:

Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
2,4-Dichlorophenoxyacetic acid	<0.49		0.49
Surrogate	%Rec		Acceptance Limits
DCAA	120		35 - 134

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 1

Lab Sample ID: 680-6794-1
Client Matrix: Water

Date Sampled: 08/05/2005 1500
Date Received: 08/09/2005 1855

6020 Inductively Coupled Plasma - Mass Spectrometry-Total Recoverable

Method: 6020 Analysis Batch: 680-19577 Instrument ID: ICP MS
Preparation: 3005A Prep Batch: 680-19059 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 50 mL
Date Analyzed: 08/18/2005 1552 Final Weight/Volume: 250 mL
Date Prepared: 08/15/2005 1358

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<2.5		2.5
Barium	67		5.0
Cadmium	<0.50		0.50
Chromium	<5.0		5.0
Lead	<1.5		1.5
Selenium	<2.5		2.5
Silver	<1.0		1.0
Iron	<100		100
Manganese	<5.0		5.0

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A Analysis Batch: 680-19682 Instrument ID: LEEMAN1
Preparation: 7470A Prep Batch: 680-19276 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 50 mL
Date Analyzed: 08/18/2005 1846 Final Weight/Volume: 50 mL
Date Prepared: 08/17/2005 1124

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: 2

Lab Sample ID: 680-6794-2
Client Matrix: Water

Date Sampled: 08/05/2005 1435
Date Received: 08/09/2005 1855

6020 Inductively Coupled Plasma - Mass Spectrometry-Total Recoverable

Method: 6020 Analysis Batch: 680-19577 Instrument ID: ICP MS
Preparation: 3005A Prep Batch: 680-19059 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 50 mL
Date Analyzed: 08/18/2005 1613 Final Weight/Volume: 250 mL
Date Prepared: 08/15/2005 1358

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<2.5		2.5
Barium	67		5.0
Cadmium	<0.50		0.50
Chromium	<5.0		5.0
Lead	<1.5		1.5
Selenium	<2.5		2.5
Silver	<1.0		1.0
Iron	150		100
Manganese	5.9		5.0

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A Analysis Batch: 680-19682 Instrument ID: LEEMAN1
Preparation: 7470A Prep Batch: 680-19276 Lab File ID: N/A
Dilution: 1.0 Initial Weight/Volume: 50 mL
Date Analyzed: 08/18/2005 1849 Final Weight/Volume: 50 mL
Date Prepared: 08/17/2005 1124

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Client: RMT

Job Number: 680-6794-1

Client Sample ID: Blank

Lab Sample ID: 680-6794-4
Client Matrix: WaterDate Sampled: 08/05/2005 1330
Date Received: 08/09/2005 1855**6020 Inductively Coupled Plasma - Mass Spectrometry-Total Recoverable**

Method:	6020	Analysis Batch: 680-19577	Instrument ID:	ICP MS
Preparation:	3005A	Prep Batch: 680-19059	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	08/18/2005 1628		Final Weight/Volume:	250 mL
Date Prepared:	08/15/2005 1358			

Analyte	Result (ug/L)	Qualifier	RL
Arsenic	<2.5		2.5
Barium	<5.0		5.0
Cadmium	<0.50		0.50
Chromium	<5.0		5.0
Lead	<1.5		1.5
Selenium	<2.5		2.5
Silver	<1.0		1.0
Iron	<100		100
Manganese	<5.0		5.0

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch: 680-19682	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch: 680-19276	Lab File ID:	N/A
Dilution:	1.0		Initial Weight/Volume:	50 mL
Date Analyzed:	08/19/2005 1302		Final Weight/Volume:	50 mL
Date Prepared:	08/17/2005 1124			

Analyte	Result (ug/L)	Qualifier	RL
Mercury	<0.20		0.20

Analytical Data

Job Number: 680-6794-1

Client: RMT

General Chemistry

Client Sample ID: 1

Lab Sample ID: 680-6794-1
Client Matrix: Water

Date Sampled: 08/05/2005 1500
Date Received: 08/09/2005 1855

Analyte	Result	Qual	Units	RL	Dil	Method
Chromium, hexavalent	<0.010		mg/L	0.010	1.0	7196A
	Anly Batch: 680-18896		Date Analyzed	08/10/2005 0925		
Total Organic Carbon	3.9		mg/L	1.0	1.0	415.1
	Anly Batch: 680-19727		Date Analyzed	08/19/2005 1021		
Sulfate	540		mg/L	100	20	375.4
	Anly Batch: 680-19485		Date Analyzed	08/18/2005 1503		
Nitrogen, Nitrate	<0.050		mg/L	0.050	1.0	353.2
	Anly Batch: 680-18767		Date Analyzed	08/10/2005 1515		
Fluoride	1.3		mg/L	0.20	1.0	340.2
	Anly Batch: 680-19204		Date Analyzed	08/16/2005 1345		
Chloride	16		mg/L	1.0	1.0	325.2
	Anly Batch: 680-19613		Date Analyzed	08/19/2005 1415		

Analyte	Result	Qual	Units	Dil	Method
pH	8.20		SU	1.0	150.1
	Anly Batch: 680-18754		Date Analyzed	08/10/2005 1008	

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1600	*	umhos/cm	5.0	1.0	120.1
	Anly Batch: 680-18912		Date Analyzed	08/10/2005 1403		
Total Dissolved Solids	1100		mg/L	5.0	1.0	160.1
	Anly Batch: 680-19089		Date Analyzed	08/11/2005 2223		

Analytical Data

Client: RMT

Job Number: 680-6794-1

General Chemistry

Client Sample ID: 2

Lab Sample ID: 680-6794-2

Date Sampled: 08/05/2005 1435

Client Matrix: Water

Date Received: 08/09/2005 1855

Analyte	Result	Qual	Units	RL	Dil	Method
Chromium, hexavalent	<0.010		mg/L	0.010	1.0	7196A
	Anly Batch: 680-18896	Date Analyzed	08/10/2005 0908			
Total Organic Carbon	3.6		mg/L	1.0	1.0	415.1
	Anly Batch: 680-19727	Date Analyzed	08/19/2005 1021			
Sulfate	500		mg/L	100	20	375.4
	Anly Batch: 680-19485	Date Analyzed	08/18/2005 1503			
Nitrogen, Nitrate	0.12		mg/L	0.050	1.0	353.2
	Anly Batch: 680-18767	Date Analyzed	08/10/2005 1515			
Fluoride	1.5		mg/L	0.20	1.0	340.2
	Anly Batch: 680-19204	Date Analyzed	08/16/2005 1345			
Chloride	16		mg/L	1.0	1.0	325.2
	Anly Batch: 680-19613	Date Analyzed	08/19/2005 1415			

Analyte	Result	Qual	Units	Dil	Method
pH	8.10		SU	1.0	150.1
	Anly Batch: 680-18754	Date Analyzed	08/10/2005 1008		

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1600	*	umhos/cm	5.0	1.0	120.1
	Anly Batch: 680-18912	Date Analyzed	08/10/2005 1403			
Total Dissolved Solids	1100		mg/L	5.0	1.0	160.1
	Anly Batch: 680-19089	Date Analyzed	08/11/2005 2223			

Analytical Data

Client: RMT

Job Number: 680-6794-1

General Chemistry

Client Sample ID: 3

Lab Sample ID: 680-6794-3

Date Sampled: 08/05/2005 1400

Client Matrix: Water

Date Received: 08/09/2005 1855

Analyte	Result	Qual	Units	RL	Dil	Method
Chromium, hexavalent	<0.010		mg/L	0.010	1.0	7196A
	Anly Batch: 680-18896		Date Analyzed 08/10/2005 0908			
Total Organic Carbon	3.8		mg/L	1.0	1.0	415.1
	Anly Batch: 680-19727		Date Analyzed 08/19/2005 1021			
Sulfate	510		mg/L	100	20	375.4
	Anly Batch: 680-19485		Date Analyzed 08/18/2005 1506			
Nitrogen, Nitrate	<0.050		mg/L	0.050	1.0	353.2
	Anly Batch: 680-18767		Date Analyzed 08/10/2005 1515			
Fluoride	1.4		mg/L	0.20	1.0	340.2
	Anly Batch: 680-19204		Date Analyzed 08/16/2005 1345			
Chloride	16		mg/L	1.0	1.0	325.2
	Anly Batch: 680-19613		Date Analyzed 08/19/2005 1415			

Analyte	Result	Qual	Units	Dil	Method
pH	8.30		SU	1.0	150.1
	Anly Batch: 680-18754		Date Analyzed 08/10/2005 1008		

Analyte	Result	Qual	Units	RL	Dil	Method
Specific Conductance	1600	*	umhos/cm	5.0	1.0	120.1
	Anly Batch: 680-18912		Date Analyzed 08/10/2005 1403			
Total Dissolved Solids	1100		mg/L	5.0	1.0	160.1
	Anly Batch: 680-19089		Date Analyzed 08/11/2005 2223			

Analytical Data

Client: RMT

Job Number: 680-6794-1

General Chemistry

Client Sample ID: Blank

Lab Sample ID: 680-6794-4

Client Matrix: Water

Date Sampled: 08/05/2005 1330

Date Received: 08/09/2005 1855

Analyte	Result	Qual	Units	RL	Dil	Method
Total Organic Carbon	<1.0		mg/L	1.0	1.0	415.1
	Anly Batch: 680-19727	Date Analyzed	08/19/2005	1021		
Sulfate	<5.0		mg/L	5.0	1.0	375.4
	Anly Batch: 680-19485	Date Analyzed	08/18/2005	1441		
Nitrogen, Nitrate	<0.050		mg/L	0.050	1.0	353.2
	Anly Batch: 680-18767	Date Analyzed	08/10/2005	1515		
Fluoride	<0.20		mg/L	0.20	1.0	340.2
	Anly Batch: 680-19204	Date Analyzed	08/16/2005	1345		
Chloride	<1.0		mg/L	1.0	1.0	325.2
	Anly Batch: 680-19613	Date Analyzed	08/19/2005	1359		
Chromium, hexavalent	<0.010		mg/L	0.010	1.0	7196A
	Anly Batch: 680-18896	Date Analyzed	08/10/2005	0908		

Analyte	Result	Qual	Units	Dil	Method
pH	5.50		SU	1.0	150.1
	Anly Batch: 680-18754	Date Analyzed	08/10/2005	1008	

Analyte	Result	Qual	Units	RL	Dil	Method
Total Dissolved Solids	33		mg/L	5.0	1.0	160.1
	Anly Batch: 680-19089	Date Analyzed	08/11/2005	2223		
Specific Conductance	<5.0	*	umhos/cm	5.0	1.0	120.1
	Anly Batch: 680-18912	Date Analyzed	08/10/2005	1403		

DATA REPORTING QUALIFIERS

Client: RMT

Job Number: 680-6794-1

<u>Lab Section</u>	<u>Qualifier</u>	<u>Description</u>
General Chemistry	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19267

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 680-19267/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/12/2005 1129
Date Prepared: 08/12/2005 1129

Analysis Batch: 680-19267
Prep Batch: N/A
Units: ug/L

Instrument ID: GC/MS Volatiles - P
Lab File ID: pq441.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	RL
Benzene	<1.0		1.0
Carbon tetrachloride	<1.0		1.0
1,4-Dichlorobenzene	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
1,1,1-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	96	77 - 120
Dibromofluoromethane	98	75 - 123
Toluene-d8	98	79 - 122

Laboratory Control Sample - Batch: 680-19267

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 680-19267/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/12/2005 1005
Date Prepared: 08/12/2005 1005

Analysis Batch: 680-19267
Prep Batch: N/A
Units: ug/L

Instrument ID: GC/MS Volatiles - P
Lab File ID: pq435.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	50.0	53	106	74 - 122	
Carbon tetrachloride	50.0	54	109	64 - 137	
1,4-Dichlorobenzene	50.0	50	100	65 - 127	
1,2-Dichloroethane	50.0	53	105	68 - 130	
1,1-Dichloroethene	50.0	53	106	64 - 132	
1,1,1-Trichloroethane	50.0	53	107	70 - 132	
Trichloroethene	50.0	51	101	75 - 122	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19018

Method: 8081A_8082
Preparation: 3520C

Lab Sample ID: MB 680-19018/5-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/15/2005 1353
Date Prepared: 08/12/2005 0928

Analysis Batch: 680-19145
Prep Batch: 680-19018
Units: ug/L

Instrument ID: GC SemiVolatiles - M
Lab File ID: mag15011.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Endrin	<0.10		0.10
gamma-BHC (Lindane)	<0.050		0.050
Methoxychlor	<0.50		0.50
Toxaphene	<5.0		5.0

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	87	30 - 150
Tetrachloro-m-xylene	78	30 - 150

Laboratory Control Sample - Batch: 680-19018

Method: 8081A_8082
Preparation: 3520C

Lab Sample ID: LCS 680-19018/6-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/15/2005 1451
Date Prepared: 08/12/2005 0928

Analysis Batch: 680-19145
Prep Batch: 680-19018
Units: ug/L

Instrument ID: GC SemiVolatiles - M
Lab File ID: mag15014.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Endrin	0.200	0.20	99	34 - 146	
gamma-BHC (Lindane)	0.100	0.087	87	27 - 115	
Methoxychlor	0.200	<0.50	125	53 - 167	

Surrogate	% Rec	Acceptance Limits
DCB Decachlorobiphenyl	51	30 - 150
Tetrachloro-m-xylene	72	30 - 150

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-18879

Method: 8151A
Preparation: 8151A

Lab Sample ID: MB 680-18879/5-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/15/2005 1654
Date Prepared: 08/12/2005 0753

Analysis Batch: 680-19158
Prep Batch: 680-18879
Units: ug/L

Instrument ID: GC SemiVolatiles - S
Lab File ID: sag15012.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
2,4-Dichlorophenoxyacetic acid	<0.50		0.50
Surrogate	% Rec	Acceptance Limits	
DCAA	113	35 - 134	

Laboratory Control Sample - Batch: 680-18879

Method: 8151A
Preparation: 8151A

Lab Sample ID: LCS 680-18879/6-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/15/2005 1715
Date Prepared: 08/12/2005 0753

Analysis Batch: 680-19158
Prep Batch: 680-18879
Units: ug/L

Instrument ID: GC SemiVolatiles - S
Lab File ID: sag15013.d
Initial Weight/Volume: 1000 mL
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4-Dichlorophenoxyacetic acid	2.00	2.2	112	45 - 146	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19059

Lab Sample ID: MB 680-19059/21-A
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 08/18/2005 1454
 Date Prepared: 08/15/2005 1358

Analysis Batch: 680-19577
 Prep Batch: 680-19059
 Units: ug/L

Method: 6020
Preparation: 3005A
Total Recoverable

Instrument ID: ICP MS
 Lab File ID: N/A
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 250 mL

Analyte	Result	Qual	RL
Arsenic	<2.5		2.5
Barium	<5.0		5.0
Cadmium	<0.50		0.50
Chromium	<5.0		5.0
Lead	<1.5		1.5
Selenium	<2.5		2.5
Silver	<1.0		1.0
Iron	<100		100
Manganese	<5.0		5.0

Laboratory Control/

Laboratory Control Duplicate Recovery Report - Batch: 680-19059

LCS Lab Sample ID: LCS 680-19059/22-A
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 08/18/2005 1501
 Date Prepared: 08/15/2005 1358

Analysis Batch: 680-19577
 Prep Batch: 680-19059
 Units: ug/L

Method: 6020
Preparation: 3005A
Total Recoverable

Instrument ID: ICP MS
 Lab File ID: N/A
 Initial Weight/Volume: 50 mL
 Final Weight/Volume: 250 mL

LCS Lab Sample ID	Analysis Batch	Instrument ID
LCS 680-19059/22-A	680-19577	ICP MS
Client Matrix: Water	Prep Batch: 680-19059	Lab File ID: N/A
Dilution: 1.0	Units: ug/L	Initial Weight/Volume: 50 mL
Date Analyzed: 08/18/2005 1501		Final Weight/Volume: 250 mL
Date Prepared: 08/15/2005 1358		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCS Qual
	LCS	LCSD					
Arsenic	97	97	75 - 125	1	20		
Barium	87	88	75 - 125	1	20		
Cadmium	89	90	75 - 125	2	20		
Chromium	94	93	75 - 125	0	20		
Lead	95	95	75 - 125	0	20		
Selenium	99	97	75 - 125	3	20		
Silver	94	94	75 - 125	1	20		
Iron	105	102	75 - 125	4	20		
Manganese	96	98	75 - 125	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19276

Method: 7470A
Preparation: 7470A

Lab Sample ID: MB 680-19276/23-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/18/2005 1758
Date Prepared: 08/17/2005 1124

Analysis Batch: 680-19682
Prep Batch: 680-19276
Units: ug/L

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Mercury	<0.20		0.20

Laboratory Control Sample - Batch: 680-19276

Method: 7470A
Preparation: 7470A

Lab Sample ID: LCS 680-19276/24-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/18/2005 1800
Date Prepared: 08/17/2005 1124

Analysis Batch: 680-19682
Prep Batch: 680-19276
Units: ug/L

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	2.50	2.5	99	80 - 120	

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 680-19276

Method: 7470A
Preparation: 7470A

MS Lab Sample ID: 680-6794-3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1257
Date Prepared: 08/17/2005 1124

Analysis Batch: 680-19682
Prep Batch: 680-19276

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 680-6794-3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1259
Date Prepared: 08/17/2005 1124

Analysis Batch: 680-19682
Prep Batch: 680-19276

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Mercury	84	84	80 - 120	1	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-18912

Method: 120.1
Preparation: N/A

Lab Sample ID: MB 680-18912/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 1403
Date Prepared: N/A

Analysis Batch: 680-18912
Prep Batch: N/A
Units: umhos/cm

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume:

Analyte	Result	Qual	RL
Specific Conductance	<5.0		5.0

Matrix Duplicate - Batch: 680-18912

Method: 120.1
Preparation: N/A

Lab Sample ID: 680-6794-4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 1403
Date Prepared: N/A

Analysis Batch: 680-18912
Prep Batch: N/A
Units: umhos/cm

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Specific Conductance	<5.0	<5.0	NC	10	*

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Laboratory Control Sample - Batch: 680-18754

Method: 150.1
Preparation: N/A

Lab Sample ID: LCS 680-18754/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 1008
Date Prepared: N/A

Analysis Batch: 680-18754
Prep Batch: N/A
Units: SU

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
pH	7.00	7.03	100	63 - 158	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19089

Method: 160.1
Preparation: N/A

Lab Sample ID: MB 680-19089/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/11/2005 2223
Date Prepared: N/A

Analysis Batch: 680-19089
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume:

Analyte	Result	Qual	RL
Total Dissolved Solids	<5.0		5.0

Laboratory Control Sample - Batch: 680-19089

Method: 160.1
Preparation: N/A

Lab Sample ID: LCS 680-19089/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/11/2005 2223
Date Prepared: N/A

Analysis Batch: 680-19089
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume:

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids	247	250	100	80 - 120	

Matrix Duplicate - Batch: 680-19089

Method: 160.1
Preparation: N/A

Lab Sample ID: 680-6794-4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/11/2005 2223
Date Prepared: N/A

Analysis Batch: 680-19089
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids	33	35	6	25	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19613

Method: 325.2
Preparation: N/A

Lab Sample ID: MB 680-19613/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1359
Date Prepared: N/A

Analysis Batch: 680-19613
Prep Batch: N/A
Units: mg/L

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume: 2 mL
Final Weight/Volume: 2 mL

Analyte	Result	Qual	RL
Chloride	<1.0		1.0

**Laboratory Control/
Laboratory Control Duplicate Recovery Report - Batch: 680-19613**

Method: 325.2
Preparation: N/A

LCS Lab Sample ID: LCS 680-19613/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1402
Date Prepared: N/A

Analysis Batch: 680-19613
Prep Batch: N/A
Units: mg/L

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume: 2 mL
Final Weight/Volume: 2 mL

LCSD Lab Sample ID: LCSD 680-19613/7
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1402
Date Prepared: N/A

Analysis Batch: 680-19613
Prep Batch: N/A
Units: mg/L

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume: 2 mL
Final Weight/Volume: 2 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chloride	107	106	85 - 115	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-19613**

**Method: 325.2
Preparation: N/A**

MS Lab Sample ID: 680-6794-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1402
Date Prepared: N/A

Analysis Batch: 680-19613
Prep Batch: N/A

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 680-6794-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1402
Date Prepared: N/A

Analysis Batch: 680-19613
Prep Batch: N/A

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chloride	107	108	85 - 115	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19204

Lab Sample ID: MB 680-19204/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/16/2005 1345
Date Prepared: N/A

Analysis Batch: 680-19204
Prep Batch: N/A
Units: mg/L

Method: 340.2
Preparation: N/A

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Fluoride	<0.20		0.20

Laboratory Control Sample - Batch: 680-19204

Lab Sample ID: LCS 680-19204/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/16/2005 1345
Date Prepared: N/A

Analysis Batch: 680-19204
Prep Batch: N/A
Units: mg/L

Method: 340.2
Preparation: N/A

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Fluoride	4.72	5.0	107	85 - 115	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-18767

Method: 353.2
Preparation: N/A

Lab Sample ID: MB 680-18767/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 1515
Date Prepared: N/A

Analysis Batch: 680-18767
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Nitrogen, Nitrate	<0.050		0.050

Laboratory Control Sample - Batch: 680-18767

Method: 353.2
Preparation: N/A

Lab Sample ID: LCS 680-18767/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 1515
Date Prepared: N/A

Analysis Batch: 680-18767
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrogen, Nitrate	1.00	1.1	112	80 - 120	

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-18767**

Method: 353.2
Preparation: N/A

MS Lab Sample ID: 680-6794-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 1515
Date Prepared: N/A

Analysis Batch: 680-18767
Prep Batch: N/A

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 680-6794-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 1515
Date Prepared: N/A

Analysis Batch: 680-18767
Prep Batch: N/A

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Nitrogen, Nitrate	101	101	80 - 120	0	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19485

Method: 375.4
Preparation: N/A

Lab Sample ID: MB 680-19485/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/18/2005 1425
Date Prepared: N/A

Analysis Batch: 680-19485
Prep Batch: N/A
Units: mg/L

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 2 mL

Analyte	Result	Qual	RL
Sulfate	<5.0		5.0

Laboratory Control/

Laboratory Control Duplicate Recovery Report - Batch: 680-19485

Method: 375.4
Preparation: N/A

LCS Lab Sample ID: LCS 680-19485/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/18/2005 1425
Date Prepared: N/A

Analysis Batch: 680-19485
Prep Batch: N/A
Units: mg/L

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 2 mL

LCSD Lab Sample ID: LCSD 680-19485/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/18/2005 1425
Date Prepared: N/A

Analysis Batch: 680-19485
Prep Batch: N/A
Units: mg/L

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 2 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Sulfate	102	101	75 - 125	0	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-19727

Method: 415.1
Preparation: N/A

Lab Sample ID: MB 680-19727/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1021
Date Prepared: N/A

Analysis Batch: 680-19727
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
Total Organic Carbon	<1.0		1.0

Laboratory Control/

Laboratory Control Duplicate Recovery Report - Batch: 680-19727

Method: 415.1
Preparation: N/A

LCS Lab Sample ID: LCS 680-19727/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1021
Date Prepared: N/A

Analysis Batch: 680-19727
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 680-19727/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/19/2005 1021
Date Prepared: N/A

Analysis Batch: 680-19727
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Total Organic Carbon	102	105	80 - 120	3	25		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

Method Blank - Batch: 680-18896

Lab Sample ID: MB 680-18896/1
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 08/10/2005 0908
 Date Prepared: N/A

Analysis Batch: 680-18896
 Prep Batch: N/A
 Units: mg/L

Method: 7196A
Preparation: N/A

Instrument ID: KoneLab1
 Lab File ID: N/A
 Initial Weight/Volume:
 Final Weight/Volume: 2 mL

Analyte	Result	Qual	RL
Chromium, hexavalent	<0.010		0.010

**Laboratory Control/
 Laboratory Control Duplicate Recovery Report - Batch: 680-18896**

Method: 7196A
Preparation: N/A

LCS Lab Sample ID: LCS 680-18896/2
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 08/10/2005 0908
 Date Prepared: N/A

Analysis Batch: 680-18896
 Prep Batch: N/A
 Units: mg/L

Instrument ID: KoneLab1
 Lab File ID: N/A
 Initial Weight/Volume:
 Final Weight/Volume: 2 mL

LCSD Lab Sample ID: LCSD 680-18896/3
 Client Matrix: Water
 Dilution: 1.0
 Date Analyzed: 08/10/2005 0908
 Date Prepared: N/A

Analysis Batch: 680-18896
 Prep Batch: N/A
 Units: mg/L

Instrument ID: KoneLab1
 Lab File ID: N/A
 Initial Weight/Volume:
 Final Weight/Volume: 2 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Chromium, hexavalent	101	102	85 - 115	0	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Quality Control Results

Client: RMT

Job Number: 680-6794-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 680-18896**

**Method: 7196A
Preparation: N/A**

MS Lab Sample ID: 680-6794-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 0925
Date Prepared: N/A

Analysis Batch: 680-18896
Prep Batch: N/A

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 680-6794-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/10/2005 0925
Date Prepared: N/A

Analysis Batch: 680-18896
Prep Batch: N/A

Instrument ID: KoneLab1
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Chromium, hexavalent	97	100	85 - 115	3	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Serial Number 44911

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

**SEVERN
TRENT**

STL

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE Holcim	PROJECT NO. 00-71467.04	PROJECT LOCATION (STATE) AR	MATRIX TYPE	REQUIRED ANALYSIS										PAGE	OF		
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.	COMPOSITE (C) OR GRAB (G) INDICATE AQUEOUS (WATER) SOLID OR SEMISOLID AIR NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	Chlorinated Pesticides	Cl. Phenoxycid Herb.	Total Organic Carbon	Nitrate as N	Nitrate as N	RCRA Metals / Fe, Mn	TDS / pH / Sulfate / SC	RCRA Metals	Cr, hexavalent	YOC	FI, CI	STANDARD REPORT DELIVERY <input checked="" type="radio"/>	DATE DUE	
CLIENT (SITE) PM Kent Nilsson	CLIENT PHONE 864-281-0030	CLIENT FAX 864-281-0288		None	None	HCl	None	H ₂ O	HNO ₃	None	HNO ₃	None	H ₂ O	None	None	EXPEDITED REPORT DELIVERY (SURCHARGE) <input type="radio"/>	DATE DUE
CLIENT NAME RMT, Inc.	CLIENT E-MAIL kent.nilsson@rmtinc.com			None	None	None	None	None	None	None	None	None	None	None	None	NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 4	
CLIENT ADDRESS 30 Patewood Dr. - Suite 100 Greenville, SC 29615				COMPANY CONTRACTING THIS WORK (if applicable)													

SAMPLE		SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	NUMBER OF CONTAINERS SUBMITTED										REMARKS
DATE	TIME							Chlorinated Pesticides	Cl. Phenoxycid Herb.	Total Organic Carbon	Nitrate as N	Nitrate as N	RCRA Metals / Fe, Mn	TDS / pH / Sulfate / SC	RCRA Metals	Cr, hexavalent	YOC	
8/5/05	14:35	2	✓	✓			3											
			✓	✓			3											
			✓	✓					1									
			✓	✓						1								
			✓	✓							1							
			✓	✓								1						
			✓	✓									1					
			✓	✓										1				
			✓	✓														

23.4/24.8/23.2
TEMP. 22.8

RELINQUISHED BY: (SIGNATURE) Jama Heron	DATE 8/5/05	TIME 17:50	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY: (SIGNATURE) Mark Lawrence	DATE 8/5	TIME 17:50	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE) Phil P...	DATE 08/05	TIME 17:50	CUSTODY INTACT YES: <input type="radio"/> NO: <input type="radio"/>	CUSTODY SEAL NO.	STL SAVANNAH LOG NO. 020-6794	LABORATORY REMARKS
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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN
TRENT **STL**

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE Holcim	PROJECT NO. 00-71467.04	PROJECT LOCATION (STATE) AR	MATRIX TYPE	REQUIRED ANALYSIS										PAGE	OF					
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	Chlorinated Pesticides	Cr. Phenoxypicid Herb.	Total Organic Carbon	Nitrate as N	Nitrate as N	RCRA Metals / Fe, Mn	TDS / pH / Sulfate / SC	RCRA Metals	Cr. Hexavalent	VOC	FL, CI	STANDARD REPORT DELIVERY <input checked="" type="radio"/>	DATE DUE
CLIENT (SITE) PM Kent Nilsson	CLIENT PHONE 864-281-0030	CLIENT FAX 864-281-0288						None	None	HC1	None	H2SO4								
CLIENT NAME RMT, Inc.	CLIENT E-MAIL kent.nilsson@rmtinc.com		CLIENT ADDRESS 30 Patewood Dr. - Suite 100 Greenville, SC 29615																NUMBER OF COOLERS SUBMITTED PER SHIPMENT: 4	
COMPANY CONTRACTING THIS WORK (if applicable)																				

SAMPLE		SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT, ...)	NUMBER OF CONTAINERS SUBMITTED										REMARKS		
DATE	TIME							None	None	HC1	None	H2SO4								
8/5/05	13:30	Blank						3												
									3											
										1										
											1									
												1								
													1							
														1						
															1					
																1				

23.4/24.8/23.2/22.8
TEMP.

RELINQUISHED BY: (SIGNATURE) <i>Tania Newton</i>	DATE 8/5/05	TIME 17:50	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY: (SIGNATURE) <i>Mal Lakoo</i>	DATE 8/5	TIME 17:50	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY (SIGNATURE) <i>[Signature]</i>	DATE 8/5/05	TIME 17:50	CUSTODY INTACT YES <input type="radio"/> NO <input type="radio"/>	CUSTODY SEAL NO.	STL SAVANNAH LOG NO. 620-6794	LABORATORY REMARKS
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Attachment 3

Photographs

Photographic Log



Client Name: Holcim, Inc.		Site Location: Okay, Arkansas	Project No.: 00-71467.04
Photo No. 1	Date January 2005		
Description A culvert pipe connecting the quarry with the adjacent pond is located in the distant embankment. The pipe is estimated to be approximately 15 feet above the existing water surface.			

Photo No. 2	Date January 2005		
Description Welded plate on the inlet side of the culvert pipe from the quarry pond to off-site drainage prevents discharge.			

Attachment 4

Tables

Table 1
Water Balance Evaluation
Holcim, Inc., Okay, Arkansas

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1995	Evap. (- in)	-	-	-	-	-	-	-6.14	-6.65	-4.34	-3.52	-	-	
	Prec. (+ in)	-	-	-	-	-	-	1.2	2.41	3.9	0.17	-	-	
1996	Evap. (- in)	-	-	-	-	-5.45	-5.65	-	-5.2	-	-2.78	-	-	
	Prec. (+ in)	-	-	-	-	1.27	6.52	-	5.01	-	4.91	-	-	
1997	Evap. (- in)	-	-1.85	-	-	-	-6.4	-7.14	-	-4.79	-3	-	-	
	Prec. (+ in)	-	6.94	-	-	-	6.78	1.86	-	2.12	5.8	-	-	
1998	Evap. (- in)	-	-1.99	-	-4.69	-5.46	-6.78	-	-	-5.22	-	-	-	
	Prec. (+ in)	-	6.49	-	2.45	3.98	0.9	-	-	9.07	-	-	-	
1999	Evap. (- in)	-	-2.06	-	-3.84	-	-6.34	-6.56	-22.5	-4.07	-3.25	-2.63	-	
	Prec. (+ in)	-	2.84	-	5.17	-	6.4	0.1	1.26	4.41	2.54	1.96	-	
2000	Evap. (- in)	-	-2.1	-	-	-5.12	-	-6.65	-5.83	-4.56	-	-	-	
	Prec. (+ in)	-	2.69	-	-	8.74	-	0.21	0.11	4.44	-	-	-	
2001	Evap. (- in)	-	-	-	-4.95	-	-5.27	-5.9	-5.86	-	-3.57	-1.8	-1.24	
	Prec. (+ in)	-	-	-	2.31	-	3.4	2.12	6.77	-	5.48	5.1	9.14	
2002	Evap. (- in)	-1.7	-	-	-5.84	-4.68	-	-6.46	-	-5.04	-	-	-	
	Prec. (+ in)	2.43	-	-	3.6	5.03	-	2.38	-	1.84	-	-	-	
2003	Evap. (- in)	-	-	-3.32	-4.4	-	-	-	-	-4.75	-	-	-	
	Prec. (+ in)	-	-	3.55	1.43	-	-	-	-	4.27	-	-	-	
2004	Evap. (- in)	-	-	-4.87	-	-	-	-5.85	-	-	-	-	-	
	Prec. (+ in)	-	-	3.76	-	-	-	3.49	-	-	-	-	-	
Average	Evap. (- in)	-1.7	-2	-4.095	-4.744	-5.1775	-6.088	-6.38571	-9.208	-4.68143	-3.224	-2.215	-1.24	-50.75864
	Prec. (+ in)	2.43	4.74	3.655	2.992	4.755	4.8	1.622857	3.112	4.292857	3.78	3.53	9.14	48.849714
Outcome		-1.90893												

Table 2
MCL Screening of Surface Water Samples
Holcim, Inc., Okay, Arkansas

PARAMETER ⁽¹⁾	MCL ⁽²⁾	LOCATION/SAMPLE DATE		
		SW-1 08/05/05	SW-2 08/05/05	SW-3 08/05/05
Volatile Organics				
Benzene	1	<0.001 uj	<0.001 uj	<0.001 uj
Carbon tetrachloride	0.005	<0.001 uj	<0.001 uj	<0.001 uj
1,4-Dichlorobenzene	0.075	<0.001 uj	<0.001 uj	<0.001 uj
1,2-Dichloroethane	0.005	<0.001 uj	<0.001 uj	<0.001 uj
1,1-Dichloroethene	0.007	<0.001 uj	<0.001 uj	<0.001 uj
1,1,1-Trichloroethane	0.2	<0.001 uj	<0.001 uj	<0.001 uj
Trichloroethene	0.005	<0.001 uj	<0.001 uj	<0.001 uj
Pesticides				
Endrin	0.0002	<0.000094 uj	<0.000094 uj	<0.000094 uj
gamma-BHC (Lindane)	0.004	<0.000047 uj	<0.000047 uj	<0.000047 uj
Methoxychlor	0.1	<0.000047 uj	<0.000047 uj	<0.000047 uj
Toxaphene	0.005	<0.0047 uj	<0.0047 uj	<0.0047 uj
Herbicides				
2,4-D	0.1	<0.00049 uj	<0.00049 uj	<0.00049 uj
Metals				
Arsenic	0.05	<0.0025 uj	<0.0025 uj	<0.0025 uj
Barium	1	0.067 j	0.067 j	0.065 j
Cadmium	0.01	<0.0005 uj	<0.0005 uj	<0.0005 uj
Chromium	--	<0.005 uj	<0.005 uj	<0.005 uj
Chromium, hexavalent	0.05	<0.01 uj	<0.01 uj	<0.01 uj
Iron	--	<0.1 uj	0.15 j	0.11 j
Lead	0.05	<0.0015 uj	<0.0015 uj	<0.0015 uj
Manganese	--	<0.005 uj	0.0059 j	0.0073 j
Mercury	0.002	<0.0002 uj	<0.0002 uj	<0.0002 uj
Selenium	0.01	<0.0025 uj	<0.0025 uj	<0.0025 uj
Silver	0.05	<0.001 uj	<0.001 uj	<0.001 uj
Wet Chemistry				
Chloride	--	16 j	16 j	16 j
Fluoride	4	1.3 j	1.5 j	1.4 j
Nitrogen, nitrate	10	<0.05 uj	0.12 j	<0.05 uj
Solids, total dissolved	--	1100 j	1100 j	1100 j
Sulfate	--	540 j	500 j	510 j
Total organic carbon	--	3.9 j	3.6 j	3.8 j
Field Parameters				
Conductance, specific (umhos/cm)	--	1600 *j	1600 *j	1600 *j
pH (SU)	--	8.2	8.1	8.3

⁽¹⁾ Analytical results are reported in milligrams per liter (mg/L) unless otherwise noted.

⁽²⁾ Maximum Contaminant Level (ADPC&E Regulation No. 22 ; April 6,1995).

j - Concentration considered an estimate based on data validation.

* - LCS, LCSD, MS, MSD, MD, or surrogate exceeds the control limits.

Bolded text indicates detections.

Table 3
Human Health Screening of Surface Water Samples
Holcim, Inc., Okay, Arkansas

PARAMETER ⁽¹⁾	SURFACE WATER QUALITY STANDARDS ⁽²⁾	LOCATION/SAMPLE DATE		
		SW-1 08/05/05	SW-2 08/05/05	SW-3 08/05/05
Volatile Organics				
Benzene	0.0022	<0.001 uj	<0.001 uj	<0.001 uj
Carbon tetrachloride	0.00023	<0.001 uj	<0.001 uj	<0.001 uj
1,4-Dichlorobenzene	--	<0.001 uj	<0.001 uj	<0.001 uj
1,2-Dichloroethane	0.00038	<0.001 uj	<0.001 uj	<0.001 uj
1,1-Dichloroethene	0.33	<0.001 uj	<0.001 uj	<0.001 uj
1,1,1-Trichloroethane	0.2 ⁽³⁾	<0.001 uj	<0.001 uj	<0.001 uj
Trichloroethene	0.0025	<0.001 uj	<0.001 uj	<0.001 uj
Pesticides				
Endrin	0.000059	<0.000094 uj	<0.000094 uj	<0.000094 uj
gamma-BHC (Lindane)	0.00098	<0.000047 uj	<0.000047 uj	<0.000047 uj
Methoxychlor	--	<0.000047 uj	<0.000047 uj	<0.00047 uj
Toxaphene	0.00000028	<0.0047 uj	<0.0047 uj	<0.0047 uj
Herbicides				
2,4-D	0.1	<0.00049 uj	<0.00049 uj	<0.00049 uj
Metals				
Arsenic	0.00014	<0.0025 uj	<0.0025 uj	<0.0025 uj
Barium	1	0.067 j	0.067 j	0.065 j
Cadmium	--	<0.0005 uj	<0.0005 uj	<0.0005 uj
Chromium	--	<0.005 uj	<0.005 uj	<0.005 uj
Chromium, hexavalent	--	<0.01 uj	<0.01 uj	<0.01 uj
Iron	0.3	<0.1 uj	0.15 j	0.11 j
Lead	--	<0.0015 uj	<0.0015 uj	<0.0015 uj
Manganese	--	<0.005 uj	0.0059 j	0.0073 j
Mercury	--	<0.0002 uj	<0.0002 uj	<0.0002 uj
Selenium	0.17	<0.0025 uj	<0.0025 uj	<0.0025 uj
Silver	--	<0.001 uj	<0.001 uj	<0.001 uj
Wet Chemistry				
Chloride	--	16 j	16 j	16 j
Fluoride	--	1.3 j	1.5 j	1.4 j
Nitrogen, nitrate	10	<0.05 uj	0.12 j	<0.05 uj
Solids, total dissolved	--	1100 j	1100 j	1100 j
Sulfate	--	540 j	500 j	510 j
Total organic carbon	--	3.9 j	3.6 j	3.8 j
Field Parameters				
Conductance, specific (umhos/cm)	--	1600 *j	1600 *j	1600 *j
pH (SU)	5-9	8.2	8.1	8.3

⁽¹⁾ Analytical results are reported in milligrams per liter (mg/L) unless otherwise noted.

⁽²⁾ Human Health for Consumption of Water and Organism (*National Recommended Water Quality Criteria*; USEPA 2004).

⁽³⁾ Maximum Contaminant Level (*Drinking Water Standards and Health Advisories*; USEPA, Winter 2004).

j - Concentration considered an estimate based on data validation.

* - LCS, LCSD, MS, MSD, MD, or surrogate exceeds the control limits.

Bolded text indicates detections.

Table 4
Region 4 Screening of Surface Water Samples
Holcim, Inc., Okay, Arkansas

PARAMETER ⁽¹⁾	USEPA REGION 4 SURFACE WATER SCREENING VALUES	LOCATION/SAMPLE DATE		
		SW-1 08/05/05	SW-2 08/05/05	SW-3 08/05/05
Volatile Organics				
Benzene	0.053	<0.001 uj	<0.001 uj	<0.001 uj
Carbon tetrachloride	0.352	<0.001 uj	<0.001 uj	<0.001 uj
1,4-Dichlorobenzene	0.0112	<0.001 uj	<0.001 uj	<0.001 uj
1,2-Dichloroethane	2	<0.001 uj	<0.001 uj	<0.001 uj
1,1-Dichloroethene	0.303	<0.001 uj	<0.001 uj	<0.001 uj
1,1,1-Trichloroethane	0.528	<0.001 uj	<0.001 uj	<0.001 uj
Trichloroethene	--	<0.001 uj	<0.001 uj	<0.001 uj
Pesticides				
Endrin	0.000023	<0.000094 uj	<0.000094 uj	<0.000094 uj
gamma-BHC (Lindane)	0.00008	<0.000047 uj	<0.000047 uj	<0.000047 uj
Methoxychlor	0.00003	<0.000047 uj	<0.000047 uj	<0.00047 uj
Toxaphene	0.000002	<0.0047 uj	<0.0047 uj	<0.0047 uj
Herbicides				
2,4-D	--	<0.00049 uj	<0.00049 uj	<0.00049 uj
Metals				
Arsenic	0.19	<0.0025 uj	<0.0025 uj	<0.0025 uj
Barium	--	0.067 j	0.067 j	0.065 j
Cadmium	0.00066	<0.0005 uj	<0.0005 uj	<0.0005 uj
Chromium	0.11732	<0.005 uj	<0.005 uj	<0.005 uj
Chromium, hexavalent	0.011	<0.01 uj	<0.01 uj	<0.01 uj
Iron	1	<0.1 uj	0.15 j	0.11 j
Lead	0.00132	<0.0015 uj	<0.0015 uj	<0.0015 uj
Manganese	--	<0.005 uj	0.0059 j	0.0073 j
Mercury	0.000012	<0.0002 uj	<0.0002 uj	<0.0002 uj
Selenium	0.005	<0.0025 uj	<0.0025 uj	<0.0025 uj
Silver	0.000012	<0.001 uj	<0.001 uj	<0.001 uj
Wet Chemistry				
Chloride	230	16 j	16 j	16 j
Fluoride	--	1.3 j	1.5 j	1.4 j
Nitrogen, nitrate	--	<0.05 uj	0.12 j	<0.05 uj
Solids, total dissolved	--	1100 j	1100 j	1100 j
Sulfate	--	540 j	500 j	510 j
Total organic carbon	--	3.9 j	3.6 j	3.8 j
Field Parameters				
Conductance, specific (umhos/cm)	--	1600 *j	1600 *j	1600 *j
pH (SU)	6.5-9.0	8.2	8.1	8.3

⁽¹⁾ Analytical results are reported in milligrams per liter (mg/L) unless otherwise noted.

⁽²⁾ Ecological Screening Value (Region 4 Waste Management Division Freshwater Surface Water Screening Values for Hazardous Waste; USEPA 2001).

⁽³⁾ Maximum Contaminant Level (Drinking Water Standards and Health Advisories; USEPA, Winter 2004).

j - Concentration considered an estimate based on data validation.

* - LCS, LCSD, MS, MSD, MD, or surrogate exceeds the control limits.

Bolded text indicates detections.