RFB NO. 108105



CONSTRUCTION DOCUMENTS PROJECT MANUAL

DANE COUNTY DEPARTMENT OF PUBLIC WORKS, HIGHWAY AND TRANSPORTATION

PUBLIC WORKS SOLID WASTE DIVISION 1919 ALLIANT ENERGY CENTER WAY MADISON, WISCONSIN 53713

REQUEST FOR PROPOSALS NO. 108105 LFG CONDITIONING & COMPRESSION SYSTEM DANE COUNTY LANDFILL SITE #2 7102 U.S. HIGHWAY 12 & 18 MADISON, WISCONSIN

Opening Date: THURSDAY, AUGUST 28, 2008

Time: 2:00 P.M. CST

Performance / Payment Bond: 100% OF CONTRACT AMOUNT

Location: DANE COUNTY SOLID WASTE DEPARTMENT 1919 ALLIANT ENERGY CENTER WAY MADISON, WI 53713

FOR INFORMATION ON THIS REQUEST FOR BIDS, PLEASE CONTACT:

ROBERT REGAN, PROJECT ENGINEER TELEPHONE NO.: 608/266-4139 FAX NO.: 608/267-1533 E-MAIL: REGAN@CO.DANE.WI.US



DANE COUNTY DEPARTMENT of PUBLIC WORKS, HIGHWAY and TRANSPORTATION

1919 Alliant Energy Center Way • Madison, Wisconsin 53713 Phone: (608) 266-4018 • Fax: (608) 267-1533 Commissioner / Director Gerald J. Mandli

July 24, 2008

INVITATION FOR PROPOSALS

You are invited to submit a professional cost proposal for the design, fabrication, delivery, installation, and start-up of a gas conditioning and compression system to convert landfill gas into high BTU biomethane at the Rodefeld Landfill in Madison, Wisconsin. Proposals for the operation and maintenance of the gas conditioning and compression system for the first two years after system startup will also be accepted, but are optional. The Proposals are due on or before **2:00 PM CST, Thursday, August 28, 2008**. No proposal bond is required for this project. However, the selected contractor will be required to post a performance bond equal to the value of the contract.

SPECIAL INSTRUCTIONS

Please be sure to complete one unbound original and **five** bound copies of the entire proposal package. To return your proposal, please follow these instructions:

- 1. Place Proposal information in order and including all items, as outlined in Sections E and F of the Requested Services and Business Information.
- 2. Clearly label your envelope containing your proposal in the lower left-hand corner as follows: "Proposal No. 108105

LFG Conditioning & Compression System

2:00 PM CST, Thursday, August 28, 2008"

3. Mail to:

Dane County Solid Waste Department Attention: Robert Regan 1919 Alliant Energy Center Way Madison, WI 53713

If any additional information about this Request for Proposals is needed, please call Robert Regan at 608/266-4139.

Sincerely,

Robert Regan Project Engineer

Encl.: Request for Proposals No. 108105 Package

DOCUMENT INDEX FOR RFP NO. 108105

PROPOSAL DOCUMENTS

Project Manual Cover Cover Letter Documents Index and Dane County Vendor Registration Program Invitation to Propose (Legal Notice) Signature Page Fair Labor Practices Certification Scope of Proposal and Background Information Requested Services and Business Information

Attachments

Attachment 1 – Landfill gas laboratory test results: Sections A, B, C, & D

Figures

Figure 1 – Map of Wisconsin with ANR Pipelines and Site Location Figure 2 – Map of Landfill Property with ANR Pipeline

DANE COUNTY VENDOR REGISTRATION PROGRAM

All bidders / proposers wishing to submit a bid / proposal should be registered with Dane County Purchasing before bid / proposal opening & must be registered before award of contract. Complete a Vendor Registration Form at www.danepurchasing.com, or obtain one by calling 608/266-4131.

INVITATION TO PROPOSE

Dane County Public Works, Highway & Transportation Dept., 1919 Alliant Energy Center Way, Madison, WI 53713, will receive sealed Proposals until:

2:00 P.M. CST, THURSDAY, AUGUST 28, 2008

REQUEST FOR PROPOSALS NO. 108105 LFG CONDITIONING & COMPRESSION SYSTEM DANE COUNTY LANDFILL SITE #2 MADISON, WISCONSIN

Dane County requests proposals for the design, fabrication, delivery, installation, and start-up of a gas conditioning and compression system to convert landfill gas into high BTU biomethane at the Rodefeld Landfill in Madison, Wisconsin. Proposals for the operation and maintenance of the gas conditioning and compression system for the first two years after system startup will also be accepted, but are optional.

Request for Proposals package may be obtained at Dane County Public Works, Highway & Transportation Dept., 1919 Alliant Energy Center Way, Madison, WI 53713, by calling 608/266-4018, or by downloading it from <u>www.countyofdane.com/pwht/bid/logon.aspx</u>. Please call Robert Regan, Project Engineer, at 608/266-4139, for any questions or additional information.

All Proposers wishing to submit Proposals should be a registered vendor with Dane County Purchasing before proposal opening & must be registered before award of contract. Complete Vendor Registration Form at <u>www.danepurchasing.com</u> or obtain one by calling 608/266-4131.

PUBLISH: JULY 28, 2008 & AUGUST 4, 2008- WISCONSIN STATE JOURNAL AUGUST 4 & 11, 2008 - WESTERN BUILDER



SIGNATURE PAGE

County of Dane DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION Room 425, City-County Building 210 Martin Luther King, Jr. Blvd.

Madison, Wisconsin 53703

(608) 266-4131

DMMODITY / SERVICE: LFG Conditioning & Compression System					
EQUEST FOR PROPOSAL NO.:	PROPOSAL OPENING DATE:	PROPOSAL OPENING DATE: BID BOND: PERFORMANCE F			
108105	08/28/08	N/A	100% of Contract		
PROPOSAL INVALID WITHOUT SIGNATURE THE UNDERSIGNED, SUBMITTING THIS PROPOSAL, HEREBY AGREES WITH ALL TERMS, CONDITIONS AND REQUIREMENTS OF THE ABOVE REFERENCED REQUEST FOR PROPOSAL, AND DECLARES THAT THE ATTACHED PROPOSAL AND PRICING ARE IN CONFORMITY THEREWITH.					
SIGNATURE OF PROPOSER REQUIRED: (Do Not Type or Print) DATE:					
SUBMITTED BY: (Typed Name) TELEPHONE: (Include Area Code)					
COMPANY NAME:		L			
ADDRESS: (Street, City, State,	Zip Code)				

CONTRACT COMPLIANCE PROGRAM WORKSHEET

- A. Dane County has an established Contract Compliance Program that encourages targeted groups identified below to do business with Dane County, and requires Dane County to actively solicit bids from these businesses.
- B. Information from your response to this worksheet will be entered in the Purchasing Division's Advanced Procurement Systems database to provide data that will be valuable to Dane County's Contract Compliance Program as well as establishing computerized bidder lists for future solicitations. All vendors will be added to the database whether or not they qualify as a targeted business.
- C. **Contract Compliance Program:** Following are abbreviated definitions of ethnic and group codes used by Contract Compliance Program. See reverse side for full definitions:
 - 1. DBE Disadvantaged Business Enterprise
 - 2. MBE Minority Business Enterprise
 - 3. WBE Women Business Enterprise
 - 4. ESB Emerging Small Business
- D. Please select category / categories that best describe your business by marking letter for each column in box provided at bottom of column:

D DBE M MBE	BAfrican AmericanHHispanic American	L Male F Female	E ESB
W WBE	N Native American / American Indian		
	A Asian Pacific American		
	I Asian-Indian American		
$\mathbf{+}$	\mathbf{V}	\mathbf{A}	$\mathbf{+}$

E. I hereby certify that all of the above information given is true. If no category / categories are marked, I do not meet the requirements for any of the targeted groups.

Signature: _____

(over)

_____ Date: ____

DANE COUNTY CONTRACT COMPLIANCE PROGRAM DEFINITIONS

A. Disadvantaged Business Enterprise (DBE): A small business concern:

- 1. Which is at least fifty-one percent (51%) owned by one or more socially and economically disadvantaged individuals, or in the case of any publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by one or more socially and economically disadvantages individuals; and
- 2. Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- 3. Socially and Economically Disadvantaged Individuals:
 - a) Any person having a current Section 8 (a) Certification from the Small Business Administration is considered socially and economically disadvantaged.
 - b) Individuals who are citizens of the United States (of lawfully permanent residents) are socially and economically disadvantaged:
 - 1) Women;
 - 2) Black Americans, which includes persons having origins in any of the black racial groups of Africa;
 - Hispanic Americans, which includes persons of Mexican, Puerto Rican, Cuban, Central, or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - 4) Native Americans, which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
 - 5) Asian-Pacific Americans, which includes persons whose origins are from Burma, Thailand, Malaysian, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S. Trust territories of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, or the Commonwealth of the Northern Mariana Islands; and
 - 6) Asian-Indian Americans, which includes persons who origins are from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal.
- B. **Minority Business Enterprise (MBE):** A minority person(s) owned and controlled independent and valid business concern. A minority person(s) must own fifty-one percent (51%) of the business and must control the management daily operation of the business.
- C. Women Owned Enterprise (WBE): A woman or women owned and controlled independent and valid business concern. A woman or women must own fifty-one percent (51%) of the business and. must control the management daily operation of the business.

D. Emerging Small Business (ESB):

- 1. An independent business concern that has been in business for at least one (1) year.
- 2. Business is located in the State of Wisconsin.
- 3. Business is comprised of less than twenty-five (25) employees.
- 4. Business must not have gross sales in excess of three million over the past three (3) years.
- 5. Business does not have a history of failing to complete projects.

FAIR LABOR PRACTICES CERTIFICATION

The undersigned, for and on behalf of the BIDDER, APPLICANT or PROPOSER named herein, certifies as follows:

- A. That he or she is an officer or duly authorized agent of the above-referenced BIDDER, APPLICANT or PROPOSER, which has a submitted a proposal, bid or application for a contract with the county of Dane.
- B. That BIDDER, APPLICANT or PROPOSER has (check one):

_____ not been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

______ been found by the National Labor Relations Board ("NLRB") or the Wisconsin Employment Relations Commission ("WERC") to have violated any statute or regulation regarding labor standards or relations in the seven years prior to the signature date of this Certification.

Officer or Authorized Agent Signature

Date

Printed or Typed Name and Title

Printed or Typed Business Name

NOTE: You can find information regarding the violations described above at: <u>www.nlrb.gov</u> and <u>werc.wi.gov</u>.

For reference, Dane County Ordinance 25.11(28)(a) is as follows:

(28) BIDDER RESPONSIBILITY. (a) Any bid, application or proposal for any contract with the county, including public works contracts regulated under chapter 40, shall include a certification indicating whether the bidder has been found by the National Labor Relations Board (NLRB) or the Wisconsin Employment Relations Committee (WERC) to have violated any statute or regulation regarding labor standards or relations within the last seven years. The purchasing manager shall investigate any such finding and make a recommendation to the committee, which shall determine whether the conduct resulting in the finding affects the bidder's responsibility to perform the contract.

If you indicated that the NLRB or WERC have found you to have such a violation, you must include copies of any relevant information regarding such violation with your proposal, bid or application.

Scope of Proposal and Background Information

I. Summary of Request for Proposals

Dane County Solid Waste Department (Dane County) requests proposals for the design, fabrication, delivery, installation, and start-up of a gas conditioning and compression system to convert landfill gas into high BTU biomethane at the Rodefeld Landfill in Madison, Wisconsin. Proposals for the operation and maintenance of the gas conditioning and compression system for the first two years after system startup will also be accepted, but are optional. This request does not seek a "turn-key" or "owner-operator" approach. Dane County will retain its rights to all of the biomethane and shall be the sole owner of the gas conditioning and compression systems. The high BTU biomethane will be injected into an existing high pressure natural gas transmission pipeline that bisects the landfill property. Dane County is currently in the process of finalizing a pipeline interconnection agreement and a gas purchase agreement.

Proposals must be submitted to Dane County by August 28, 2008 by 2:00 pm CST. Dane County intends to respond to all proposers as to the feasibility of their proposal by September 11, 2008.

Respondents' proposals that are reviewed favorably by Dane County may be asked to interview or asked to provide more detailed information. Dane County acknowledges that many different types of landfill gas conditioning and compression equipment technologies are available. For this reason Dane County welcomes individual proposer's creativity.

II. Background

The Rodefeld Landfill is currently collecting approximately 1,200 standard cubic feet per minute (SCFM) of landfill gas from the anaerobic decomposition of municipal solid waste. Currently, the majority of the biogas is used to produce electricity for sale off site. Dane County intends to shut down all or parts of this existing electrical generation plant and replace it with the landfill gas to high BTU biomethane processing facility requested in this proposal.

Waste is still being placed in the landfill and based upon results from the EPA LandGem Model, total gas production will reach a peak of approximately 2,000 SCFM. Therefore, the proposed gas conditioning and compression system shall be designed to have a flexible operating range with a maximum landfill gas flow of 2,000 SCFM. Landfill gas will be produced at the Rodefeld Landfill for the next 30 years or more.

The primary function of the gas conditioning and compression system will be to achieve the pipeline quality standards set by the ANR Pipeline Company (ANR). The landfill gas from Rodefeld Landfill has been sampled and analyzed for several constituents. Table 1 below

summarizes the results of that analysis and the corresponding ANR standards that must be obtained. Complete laboratory results are included as Attachment 1 for review.

IABLE I					
Natural Gas Property	Gas Sample 03/28/2007	ANR Pipeline Quality Standard			
Heating Value	560 Btu/ft ³	967-1200 Btu/ft ³			
Hydrogen Sulfide (H ₂ S)	18 ppm	< 4 ppm (1 grain/100 ft ³)			
Oxygen (O ₂)	0.32%	< 1% by volume			
Carbon Dioxide (CO ₂)	42%	< 2% by volume			
Nitrogen (N ₂)	1.7%	< 3% by volume			
Water Vapor	N/A	$< 7 \text{ lb}/1 \text{x} 10^6 \text{ ft}^3$			
Temperature	N/A	$40^{\circ}F < T < 120^{\circ}F$			
Liquid Hydrocarbons	N/A	None			
Pressure	+20-in H2O	1,000 PSI			

TABLE 1

Monthly landfill gas quality readings from the last 10 months are also included as Table 2.

	TABLE 2					
Date	Methane (%)	Carbon Dioxide (%)	Oxygen (%)	Nitrogen (%)		
6/08	56.6	41.2	0.1	2.1		
5/08	55.7	39.8	0.3	4.2		
4/08	60.5	39.5	0.0	0.0		
3/08	55.3	39.0	0.8	4.9		
2/08	55.3	38.9	1.3	4.5		
1/08	57.4	40.9	0.4	1.3		
12/07	52.3	38.6	1.5	7.6		
11/07	52.4	38.7	0.7	8.2		
10/07	52.0	38.3	1.0	8.7		
9/07	57.6	41.9	0.0	0.5		

TABLE 2

Additional gas testing will not be performed prior to the proposal submittal deadline. If additional information is required, proposer shall indicate the testing requested within proposal and also indicated the impact test results will have on proposal.

REQUESTED SERVICES AND BUSINESS INFORMATION

- A. Dane County is inviting professional cost proposals for supplying equipment to condition and compress landfill gas to produce high Btu biomethane for injection into the ANR natural gas pipeline at the Rodefeld Landfill.
- B. All proposals must include design, fabrication, delivery, installation, and start up of both the gas conditioning system and the gas compression system. The proposer is responsible for the installation of all electrical, mechanical, process piping, etc. within the confines of the proposer's system or system skid. Dane County will provide all civil site work, electrical power to the system, process piping to the system, and mechanical up to the proposed system.
- C. The proposals may also include an alternate two-year operations and maintenance contract of the proposed gas compression and gas conditioning system.
- D. The selected contractor will be required to post a performance bond equal to the value of the contract.
- E. To ensure consideration, and for ease of review and evaluation, all proposals should be prepared in accordance with the following format.
 - a. Pages are limited in size to 8 ¹/₂" x 11" except drawings shall be on 11"x17" paper.
 - b. Each page and exhibit of the proposal should have the following information in the top right corner.

Dane County Solid Waste Department
High BTU Biomethane Equipment Proposal
Bidder:
Project:
Page <u>#</u> of <u>#</u>

F. Proposers are requested to submit the following information in their proposal, in 8 distinct sections.

<u>Section 1 – Executive Summary</u>

The Executive Summary section should provide a general description of the proposed gas conditioning and compression systems, operation and maintenance considerations, and any subcontractors used to design, supply, or operate and maintain the system.

<u>Section 2 – Proposer's Qualifications</u>

This section should include, but not be limited to, the following information:

- Primary and secondary contact information:
- Corporate/business structure, including primary and secondary businesses;

- A list of the Proposer's currently operating and under construction gas conditioning/compression systems including High Btu Plants over the last five (5) years. For each project on this list, include the name, address, and telephone number of the client for whom the work was done;
- Description of any past, current, or pending litigation concerning landfill gas conditioning/compression systems and payments; and
- Separate descriptions, as appropriate, for each member if there is a consortium or partnership of two of more firms proposing, and a description of the relationship between the entities for this Proposal.

<u>Section 3 – Project Description</u>

This section should include a detailed description of the technology proposed to remove contaminants from the landfill gas to meet ANR pipeline gas standards. These contaminants include hydrogen sulfide, carbon dioxide, oxygen, nitrogen, VOCs, siloxanes, and moisture. Any compression that is required to operate the gas conditioning system, as well as to compress the gas to 1,000 psi for delivery to the ANR pipeline, must be included in the proposal.

It is understood by Dane County that some of the technologies used to treat landfill gas are proprietary. If proprietary information is included in the design of the system, explain so in this section. Items in this section should include but not necessarily be limited to:

- Methods used to remove hydrogen sulfide;
- Methods used to remove VOCs and siloxanes;
- Methods used to remove carbon dioxide;
- Methods used to remove oxygen and nitrogen;
- Compressor system design;
- Off product destruction methods;
- Byproduct recovery methods and uses; and
- Installation, start up and operation of the system.

Detailed information about the maintenance of the gas conditioning and compression equipment, including associated costs, shall also be included in this section. Information shall include, at a minimum, the following:

- Media and/or filter types being to be used, including required change-out frequency and replacement costs / disposal requirements;
- Parasitic load for system in terms of electrical demand (kWh/operating hour and Horsepower) and/or gas use.
- Volume of landfill gas required for byproduct destruction; and
- Total life expectancy of all system components.

If subcontractors are to be used to design, supply, or operate and maintain aspects of the entire system, they should be identified and their contribution to the project should be described.

Section 4 – System Controls

This section should include the types of controls proposed to regulate and monitor system operation, and how the controls for each piece of equipment in the system are integrated. In addition, the type of training necessary to understand the operation of the controls should be included, as this will help Dane County in staffing operators for the proposed system.

Section 5 – Operation and Maintenance (optional)

Operation and maintenance by the Proposer is optional. If the Proposer chooses to include operation and maintenance as part of the bid, this section should include a scope of services and qualifications of the Proposer or his subcontractor(s). Also include contract terms and pricing for operating and maintaining the system for a period of two years from the end of system start up.

Section 6 – System Cost Estimate

This section shall include the following information related to the cost of the proposed gas conditioning and/or compression systems.

- Conditioning system design;
- Conditioning system equipment;
- Compression system equipment;
- Fabrication and delivery (f.o.b. Rodefeld Landfill)
- System controls and electrical;
- System installation;
- Initial system startup;
- Annual energy cost;
- Annual maintenance cost; and
- Annual operations cost.

Section 7 – Schedule

Dane County would like to have these systems operational by September 1, 2009. In this section, include the following items and required time (with dates) assuming a contract award date of October 9, 2008.

- System design;
- System fabrication;
- Equipment arrival;
- Equipment installation;
- Initial system startup; and
- System fully operational.

If additional items are necessary for the system to become operational include those items in the schedule.

As an incentive, if proposer can complete the installation and start-up of the system, making it operational before September 1, 2009, Dane County is willing to pay a percentage of the estimated \$30,000 per week of gas sales revenue for the time period between the actual start-up date and September 1, 2009. Proposer should indicate anticipated completion date and what percentage of the gas sales revenue proposer requires to complete the project by this date. These values will be negotiated during contract negotiations.

Proposer may provide several separate start-up dates and the costs, including percentages of gas sales revenues, associated with those separate dates.

Dane County reserves the right to charge contractor liquidated damages in the form of a percentage of the estimated \$30,000 per week of gas sales revenue if proposer does not complete start-up by the date agreed upon in the contract. These values will be negotiated during contract negotiations.

Section 8 – Other Information

- This section provides the opportunity to describe other aspects of the proposal that may not fit into the above categories.
- G. All costs of proposal development are to be borne by the proposer. Dane County will not reimburse any proposer for costs incurred in responding to this RFP or for the costs incurred during any subsequent negotiations.
- H. Dane County will provide all necessary and available site information to selected proposing company.
- I. Listed below are specific and estimated dates and times of events related to this RFP. The events with specific dates must be completed as indicated unless otherwise changed by Dane County. In the event that Dane County finds it necessary to change any of the specific dates and times in the calendar of events listed below, it will do so by issuing an addendum to this RFP. There may or may not be a formal notification issued for changes in the estimated dates and times.

DATE	EVENT
July 24, 2008	RFP issued
August 18, 2008	Written inquiries due
August 21, 2008	Last Addendum (if necessary)
August 28, 2008, 2:00 p.m. CS	ST Proposals due
August 29, 2008	Decision on feasibility of proposals
September 3, 2008 (estimated)	Submit additional information / Meeting for invited proposing companies
September 9, 2008 (estimated)	Contract negotiated
October 9, 2008 (estimated)	Contract approved by County Boards
September 1, 2009 (estimated)	Start up of gas conditioning system and gas compression system

J. One unbound original and **five** bound copies of the entire proposal should be sent to the following address:

Dane County Solid Waste Department Attention: Robert Regan 1919 Alliant Energy Center Way Madison, WI 53713

- K. To obtain information regarding this project or to schedule a site visit, please contact Robert Regan, Project Engineer, 608/266-4139. Proposers must submit all questions in writing by August 18, 2008 to the following email address: <u>Regan@co.dane.wi.us</u>. All responses to questions will be posted on the Dane County web site, <u>www.countyofdane.com/pwht/bid/logon.aspx</u>, in the form of Addenda.
- L. Proposers may download an electronic copy of the RFP from the Dane County web site, <u>www.countyofdane.com/pwht/bid/logon.aspx</u>. This should be done to best conform to proposal requirements. If RFP documents are obtained from the Dane County web site, proposing company is responsible to check back regularly at the web site for Addenda.

M. All Proposals must be submitted by 2:00 P.M. CST, Thursday, August 28, 2008.

- N. Dane County reserves the right to accept or reject any Proposal submitted.
- O. Proposals will be received and reviewed in two separate phases. Proposals must be submitted to Dane County by 2:00 pm CST, August 28, 2008. Information submitted will allow Dane County to determine the feasibility of the proposed gas conditioning and gas compression system. Upon completing the review of proposals (Phase 1), Dane County will inform respondents of the status of their proposal. Proposers whose proposals are reviewed favorably by Dane County may be asked to submit more detailed information (Phase 2) either in writing or in a meeting with Dane County and their technical representatives. Those appearing for a meeting shall be prepared to discuss their approach for the design and completion of this Work, a timetable, and the basis of their fee schedule.
- P. Dane County will assess all proposals to determine which proposals are economical, innovative, and viable options for utilizing the biomethane gas from the Rodefeld Landfill. The assessment will be based primarily on costs, but it will also take into account non-price factors, such as schedule and proposed contract terms.
- Q. Dane County reserves the right, without qualification and in its sole discretion, to reject any and/or all proposals or to waive any informality, technicality or deficiency in proposals received. Dane County reserves the right to consider proposals or alternatives outside of this solicitation, in its sole discretion, to utilize the biogas produced at the Rodefeld Landfill. In addition, Dane County reserves the right, in its sole discretion, to modify or waive any of the criteria contained herein and/or the process described herein. Those who submit proposals agree to do so without recourse against Dane County for either rejection or failure to execute a contract for any reason.
- R. Dane County reserves the right to negotiate an Agreement after the successful firm is selected. The commencement of negotiations between any proposer and Dane County does not create or imply any commitment by Dane County to enter into an agreement with that proposer. Selection will be based only on the proposal submitted and subsequent interviews / requested information. Therefore, the proposals must be complete. Submission of a proposal shall constitute a valid offer.
- S. Dane County is an Equal Opportunity Employer.

Attachment 1

Landfill Gas Laboratory Test Results



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020 Hours 8:00 A.M to 6:00 P.M. Pacific



WORK ORDER #: 0703652A

Work Order Summary

CLIENT:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717	BILL TO:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717
PHONE:	608-831-4444	P.O. #	6198.04
FAX:	608-831-3334	PROJECT #	6198.04 Rodefeld Landfill
DATE RECEIVED:	03/29/2007	CONTACT:	Brandon Dunmore
DATE COMPLETED:	04/03/2007		

			KECEIF I
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.
01A	Blower Outlet	Modified TO-15	4.5 "Hg
01AA	Blower Outlet Duplicate	Modified TO-15	4.5 "Hg
02A	Lab Blank	Modified TO-15	NA
03A	CCV	Modified TO-15	NA
04A	LCS	Modified TO-15	NA

Sinda d. Fruman

DATE: <u>04/03/07</u>

DECEIDT

Laboratory Director

CERTIFIED BY:

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Page 1 of 15



LABORATORY NARRATIVE Modified TO-15 RMT, Inc. Workorder# 0703652A

One 6 Liter Summa Canister sample was received on March 29, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

Method modifications taken to run these samples are summarized in the below table. Specific project requirements may over-ride the ATL modifications.

Requirement	TO-15	ATL Modifications
Daily CCV	+- 30% Difference	= 30% Difference with two allowed out up to </=40%.;<br flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit.
- UJ- Non-detected compound associated with low bias in the CCV
- N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified



b-File was quantified by a second column and detector r1-File was requantified for the purpose of reissue



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Blower Outlet

Compound	Rɒt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	79	990	390	4900
Vinyl Chloride	79	740	200	1900
Freon 11	79	150	440	860
Ethanol	320	5000	600	9500
Acetone	320	2800	750	6600
2-Propanol	320	1400	780	3500
Carbon Disulfide	79	81	250	250
Methylene Chloride	79	210	270	740
Hexane	79	1300	280	4400
1,1-Dichloroethane	79	140	320	560
2-Butanone (Methyl Ethyl Ketone)	79	3800	230	11000
cis-1,2-Dichloroethene	79	710	310	2800
Tetrahydrofuran	79	3200	230	9600
Cyclohexane	79	1300	270	4500
2,2,4-Trimethylpentane	79	570	370	2600
Benzene	79	660	250	2100
Heptane	79	1900	320	8000
Trichloroethene	79	290	420	1600
4-Methyl-2-pentanone	79	320	320	1300
Toluene	79	19000	300	70000
Tetrachloroethene	79	240	540	1700
Chlorobenzene	79	110	360	490
Ethyl Benzene	79	5200	340	23000
m,p-Xylene	79	8800	340	38000
o-Xylene	79	2600	340	11000
Styrene	79	440	340	1900
Propylbenzene	79	280	390	1400
4-Ethyltoluene	79	910	390	4500
1,3,5-Trimethylbenzene	79	340	390	1700
1,2,4-Trimethylbenzene	79	860	390	4200
1,4-Dichlorobenzene	79	260	480	1600

Client Sample ID: Blower Outlet Duplicate

Lab ID#: 0703652A-01AA

Compound	Rpt. Limit	Amount	Rpt. Limit	Amount
	(ppbv)	(ppbv)	(uG/m3)	(uG/m3)
Freon 12	79	920	390	4500



Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Blower Outlet Duplicate

ab ID#: 0703652A-01AA				
Vinyl Chloride	79	700	200	1800
Freon 11	79	140	440	820
Ethanol	320	5400	600	10000
Acetone	320	2900	750	6800
2-Propanol	320	1500	780	3700
Carbon Disulfide	79	88	250	270
Methylene Chloride	79	210	270	740
Hexane	79	1300	280	4700
1,1-Dichloroethane	79	140	320	570
2-Butanone (Methyl Ethyl Ketone)	79	4000	230	12000
cis-1,2-Dichloroethene	79	730	310	2900
Tetrahydrofuran	79	3400	230	9900
Cyclohexane	79	1400	270	4700
2,2,4-Trimethylpentane	79	580	370	2700
Benzene	79	660	250	2100
Heptane	79	2000	320	8200
Trichloroethene	79	290	420	1600
4-Methyl-2-pentanone	79	320	320	1300
Toluene	79	19000	300	71000
Tetrachloroethene	79	260	540	1800
Chlorobenzene	79	110	360	520
Ethyl Benzene	79	5300	340	23000
m,p-Xylene	79	9100	340	39000
o-Xylene	79	2800	340	12000
Styrene	79	480	340	2000
Propylbenzene	79	300	390	1500
4-Ethyltoluene	79	1000	390	4900
1,3,5-Trimethylbenzene	79	360	390	1700
1,2,4-Trimethylbenzene	79	950	390	4700
1,4-Dichlorobenzene	79	330	480	2000



Client Sample ID: Blower Outlet Lab ID#: 0703652A-01A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	t040213 158		Date of Collection: Date of Analysis: 4	
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(uG/m3)	(uG/m3)
Freon 12	79	990	390	4900
Freon 114	79	Not Detected	550	Not Detected
Chloromethane	320	Not Detected	650	Not Detected
Vinyl Chloride	79	740	200	1900
1,3-Butadiene	79	Not Detected	170	Not Detected
Bromomethane	79	Not Detected	310	Not Detected
Chloroethane	79	Not Detected	210	Not Detected
Freon 11	79	150	440	860
Ethanol	320	5000	600	9500
Freon 113	79	Not Detected	600	Not Detected
1,1-Dichloroethene	79	Not Detected	310	Not Detected
Acetone	320	2800	750	6600
2-Propanol	320	1400	780	3500
Carbon Disulfide	79	81	250	250
3-Chloropropene	320	Not Detected	990	Not Detected
Methylene Chloride	79	210	270	740
Methyl tert-butyl ether	79	Not Detected	280	Not Detected
rans-1,2-Dichloroethene	79	Not Detected	310	Not Detected
Hexane	79	1300	280	4400
1,1-Dichloroethane	79	140	320	560
2-Butanone (Methyl Ethyl Ketone)	79	3800	230	11000
cis-1,2-Dichloroethene	79	710	310	2800
Tetrahydrofuran	79	3200	230	9600
Chloroform	79	Not Detected	380	Not Detected
1,1,1-Trichloroethane	79	Not Detected	430	Not Detected
Cyclohexane	79	1300	270	4500
Carbon Tetrachloride	79	Not Detected	500	Not Detected
2,2,4-Trimethylpentane	79	570	370	2600
Benzene	79	660	250	2100
1.2-Dichloroethane	79	Not Detected	320	Not Detected
Heptane	79	1900	320	8000
Trichloroethene	79	290	420	1600
1,2-Dichloropropane	79	Not Detected	360	Not Detected
1,4-Dioxane	320	Not Detected	1100	Not Detected
Bromodichloromethane	79	Not Detected	530	Not Detected
cis-1,3-Dichloropropene	79	Not Detected	360	Not Detected
4-Methyl-2-pentanone	79	320	320	1300
Toluene	79	19000	300	70000
trans-1,3-Dichloropropene	79	Not Detected	360	Not Detected



Client Sample ID: Blower Outlet Lab ID#: 0703652A-01A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	t040213 158		Date of Collection: Date of Analysis: 4/	
Compound	Rɒt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	79	Not Detected	430	Not Detected
Tetrachloroethene	79	240	540	1700
2-Hexanone	320	Not Detected	1300	Not Detected
Dibromochloromethane	79	Not Detected	670	Not Detected
1,2-Dibromoethane (EDB)	79	Not Detected	610	Not Detected
Chlorobenzene	79	110	360	490
Ethyl Benzene	79	5200	340	23000
m,p-Xylene	79	8800	340	38000
o-Xylene	79	2600	340	11000
Styrene	79	440	340	1900
Bromoform	79	Not Detected	820	Not Detected
Cumene	79	Not Detected	390	Not Detected
1,1,2,2-Tetrachloroethane	79	Not Detected	540	Not Detected
Propylbenzene	79	280	390	1400
4-Ethyltoluene	79	910	390	4500
1,3,5-Trimethylbenzene	79	340	390	1700
1,2,4-Trimethylbenzene	79	860	390	4200
1,3-Dichlorobenzene	79	Not Detected	480	Not Detected
1,4-Dichlorobenzene	79	260	480	1600
alpha-Chlorotoluene	79	Not Detected	410	Not Detected
1,2-Dichlorobenzene	79	Not Detected	470	Not Detected
1,2,4-Trichlorobenzene	320	Not Detected	2300	Not Detected
Hexachlorobutadiene	320	Not Detected	3400	Not Detected

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: Blower Outlet Duplicate Lab ID#: 0703652A-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	t040214 158		Date of Collection: Date of Analysis: 4	
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(uG/m3)	(uG/m3)
Freon 12	79	920	390	4500
Freon 114	79	Not Detected	550	Not Detected
Chloromethane	320	Not Detected	650	Not Detected
Vinyl Chloride	79	700	200	1800
1,3-Butadiene	79	Not Detected	170	Not Detected
Bromomethane	79	Not Detected	310	Not Detected
Chloroethane	79	Not Detected	210	Not Detected
Freon 11	79	140	440	820
Ethanol	320	5400	600	10000
Freon 113	79	Not Detected	600	Not Detected
1,1-Dichloroethene	79	Not Detected	310	Not Detected
Acetone	320	2900	750	6800
2-Propanol	320	1500	780	3700
Carbon Disulfide	79	88	250	270
3-Chloropropene	320	Not Detected	990	Not Detected
Methylene Chloride	79	210	270	740
Methyl tert-butyl ether	79	Not Detected	280	Not Detected
trans-1,2-Dichloroethene	79	Not Detected	310	Not Detected
Hexane	79	1300	280	4700
1,1-Dichloroethane	79	140	320	570
2-Butanone (Methyl Ethyl Ketone)	79	4000	230	12000
cis-1,2-Dichloroethene	79	730	310	2900
Tetrahydrofuran	79	3400	230	9900
Chloroform	79	Not Detected	380	Not Detected
1,1,1-Trichloroethane	79	Not Detected	430	Not Detected
Cyclohexane	79	1400	270	4700
Carbon Tetrachloride	79	Not Detected	500	Not Detected
2,2,4-Trimethylpentane	79	580	370	2700
Benzene	79	660	250	2100
1,2-Dichloroethane	79	Not Detected	320	Not Detected
Heptane	79	2000	320	8200
Trichloroethene	79	290	420	1600
1,2-Dichloropropane	79	Not Detected	360	Not Detected
1,4-Dioxane	320	Not Detected	1100	Not Detected
Bromodichloromethane	79	Not Detected	530	Not Detected
cis-1,3-Dichloropropene	79	Not Detected	360	Not Detected
4-Methyl-2-pentanone	79	320	320	1300
Toluene	79	19000	300	71000
trans-1,3-Dichloropropene	79	Not Detected	360	Not Detected



Client Sample ID: Blower Outlet Duplicate Lab ID#: 0703652A-01AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	t040214 158		Date of Collection: Date of Analysis: 4	
Compound	Rɒt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	79	Not Detected	430	Not Detected
Tetrachloroethene	79	260	540	1800
2-Hexanone	320	Not Detected	1300	Not Detected
Dibromochloromethane	79	Not Detected	670	Not Detected
1,2-Dibromoethane (EDB)	79	Not Detected	610	Not Detected
Chlorobenzene	79	110	360	520
Ethyl Benzene	79	5300	340	23000
m,p-Xylene	79	9100	340	39000
o-Xylene	79	2800	340	12000
Styrene	79	480	340	2000
Bromoform	79	Not Detected	820	Not Detected
Cumene	79	Not Detected	390	Not Detected
1,1,2,2-Tetrachloroethane	79	Not Detected	540	Not Detected
Propylbenzene	79	300	390	1500
4-Ethyltoluene	79	1000	390	4900
1,3,5-Trimethylbenzene	79	360	390	1700
1,2,4-Trimethylbenzene	79	950	390	4700
1,3-Dichlorobenzene	79	Not Detected	480	Not Detected
1,4-Dichlorobenzene	79	330	480	2000
alpha-Chlorotoluene	79	Not Detected	410	Not Detected
1,2-Dichlorobenzene	79	Not Detected	470	Not Detected
1,2,4-Trichlorobenzene	320	Not Detected	2300	Not Detected
Hexachlorobutadiene	320	Not Detected	3400	Not Detected

Container Type: 6 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	102	70-130



Client Sample ID: Lab Blank Lab ID#: 0703652A-02A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	t040212 1.00		Date of Collection: I Date of Analysis: 4	
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(uG/m3)	(uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	2.0	Not Detected	4.1	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	0.50	Not Detected	1.6	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected



Client Sample ID: Lab Blank Lab ID#: 0703652A-02A MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	t040212 1.00		Date of Collection: I Date of Analysis: 4	
Compound	Rɒt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected
Dibromochloromethane	0.50	Not Detected	4.2	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.8	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Bromoform	0.50	Not Detected	5.2	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
4-Ethyltoluene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	21	Not Detected

Container Type: NA - Not Applicable

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	96	70-130	
1,2-Dichloroethane-d4	100	70-130	
4-Bromofluorobenzene	91	70-130	



Client Sample ID: CCV

Lab ID#: 0703652A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Freon 12 Freon 114 Chloromethane Vinyl Chloride 1,3-Butadiene Bromomethane Chloroethane Freon 11 Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	26 AM
Freon 114 Chloromethane Vinyl Chloride <u>1,3-Butadiene</u> Bromomethane Chloroethane Freon 11 Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	ecovery
Chloromethane Vinyl Chloride 1,3-Butadiene Bromomethane Chloroethane Freon 11 Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	98
Vinyl Chloride 1,3-Butadiene Bromomethane Chloroethane Freon 11 Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	104
1,3-ButadieneBromomethaneChloroethaneFreon 11EthanolFreon 1131,1-DichloroetheneAcetone2-PropanolCarbon Disulfide	99
Bromomethane Chloroethane Freon 11 Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	92
Chloroethane Freon 11 Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	95
Freon 11 Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	94
Ethanol Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	83
Freon 113 1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	105
1,1-Dichloroethene Acetone 2-Propanol Carbon Disulfide	92
Acetone 2-Propanol Carbon Disulfide	98
2-Propanol Carbon Disulfide	97
Carbon Disulfide	91
	92
	97
3-Chloropropene	92
Methylene Chloride	98
Methyl tert-butyl ether	98
trans-1,2-Dichloroethene	96
Hexane	90
1,1-Dichloroethane	95
2-Butanone (Methyl Ethyl Ketone)	91
cis-1,2-Dichloroethene	97
Tetrahydrofuran	92
Chloroform	95
1,1,1-Trichloroethane	100
Cyclohexane	93
Carbon Tetrachloride	106
2,2,4-Trimethylpentane	93
Benzene	92
1,2-Dichloroethane	103
Heptane	98
Trichloroethene	100
1,2-Dichloropropane	95
1,4-Dioxane	96
Bromodichloromethane	103
cis-1,3-Dichloropropene	99
4-Methyl-2-pentanone	95
Toluene	97
trans-1,3-Dichloropropene	98



Client Sample ID: CCV

Lab ID#: 0703652A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: t040202 Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 4/2/07 08:26 AM
Compound		%Recovery
1,1,2-Trichloroethane		96
Tetrachloroethene		93
2-Hexanone		93
Dibromochloromethane		105
1,2-Dibromoethane (EDB)		100
Chlorobenzene		96
Ethyl Benzene		94
m,p-Xylene		93
o-Xylene		93
Styrene		84
Bromoform		110
Cumene		80
1,1,2,2-Tetrachloroethane		93
Propylbenzene		91
4-Ethyltoluene		92
1,3,5-Trimethylbenzene		87
1,2,4-Trimethylbenzene		86
1,3-Dichlorobenzene		89
1,4-Dichlorobenzene		88
alpha-Chlorotoluene		97
1,2-Dichlorobenzene		87
1,2,4-Trichlorobenzene		102
Hexachlorobutadiene		94

Container Type: NA - Not Applicable

······································		Method
Surrogates	%Recovery	Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	105	70-130



Client Sample ID: LCS

Lab ID#: 0703652A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Freon 12 84 Freon 114 72 Chloromethane 83 Uhyl Chloride 81 1,3-Butadiene 84 Brommethane 88 Chloroethane 80 Freon 11 97 Ethanol 100 Freon 113 104 1,1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropthene 89 Methylene Chloride 94 Methylene Chloride 94 Perane 88 1,1-Dichloroethene 91 1,1-Dichloroethene 94 2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 Chloroftm 90 1,1,1-Tichloroethane 94 Cyclohexane 89 Coltorottrachloride 93 2,2,4-Timethylpentane 88 Benzene 99 Heptane 96	File Name: Dil. Factor:	t040203 1.00	Date of Collection: NA Date of Analysis: 4/2/07 09:09 AM
Freen 11472Chloromethane83Vinyl Chloride811.3-Butadiene84Bronmethane88Chloroethane80Freen 1197Ethanol100Freen 1131041.1-Dichloroethene103Acetone952-Propanol97Carbon Disulfide923-Chloropopene89Methylten-Chloride94Methylten-Chloride942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene931,1-Trichloroethane942-Jobexane89Carbon Disulfide942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran89Carbon Tetrachloride942-Quehane961,1-Trichloroethane942-Quehane982,2-4-Trimethylpentane88Benzene89Carbon Tetrachloride991,2-Dichloroethane991,2-Dichloroethane991,2-Dichloroethane991,2-Dichloroethane991,2-Dichloroethane911,2-Dichloroethane911,2-Dichloroethane911,2-Dichloroethane911,2-Dichloroethane911,2-Dichloroethane932,2-4-Trimethylpentane93Benzene951,2-Dichloroethane911,2-Dichloroethane911,2-Di	Compound		%Recovery
Chloromethane 83 Vinyl Chloride 81 1,3-Butadiene 84 Bromomethane 88 Chloroethane 80 Freen 11 97 Ethanol 100 Freen 113 104 1,1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropropene 89 Methylen Chloride 94 Methylen Chloride 94 Methylen Chloroethene 91 1,1-Dichloroethane 94 2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 2-Butanone (Methyl Ethyl Ketone) 89 Chloroftm 90 1,1,1-Trichloroethane 94 Cyclohexane 88 2,2-J-Timethylpentane 89 Chloroethane 99 1,2-Dichloroethane 99 1,2-Dichloroethane 99 1,2-Dichloroethane 99	Freon 12		84
Vinyl Chloride 81 1.3-Butadiene 84 Bromomethane 88 Chloroethane 80 Freon 11 97 Ethanol 100 Freon 11 97 Ethanol 100 Freon 113 104 1.1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloroptopene 89 Methyl ter-butyl ether 95 1.1-Dichloroethene 91 Hexane 1.1 Stolkoroptone 89 Chloroptorethene 93 Tetrahydtofuran 89 Chloroform 90 1.1.1-Trichloroethane 94 Cyclohexane 89 Carbon Tetrachloride 98 2.2.4.4 Trimethylpentane 88 Benzene 99 Heptane 95 Trichloroethane 91 Hotoroethane 91	Freon 114		72
1,2-Butadiene 84 Bromomethane 88 Chloroethane 80 Freen 11 97 Ethanol 100 Freen 113 104 1,1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropropene 89 Methylee Chloride 94 Methylter-butyl ether 95 2-Propanol 91 Hexane 88 1,1-Dichloroethane 94 2-Dichoroethane 91 4-Sutanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethane 93 2-Butanone (Methyl Ethyl Ketone) 89 Chloroform 90 1,1,1-Trichloroethane 94 Cyclohexane 89 Carbon Tetrachloride 98 2,2,4-Trimethylpentane 86 Benzene 99 Heptane 95 Trichloroethane 91 1,4-Dichlor	Chloromethane		83
Bromomethane 88 Chloroethane 80 Freon 11 97 Ethanol 100 Freon 113 104 1,1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropropene 89 Methylene Chloride 94 Methylene Chloride 95 trans-1,2-Dichloroethene 91 Hexane 88 1,1-Dichloroethene 91 Hexane 88 1,1-Dichloroethane 94 Z-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 Tetrahydrofuran 89 Chloroform 90 1,1,1-Trichloroethane 94 Cyclohexane 89 2,2,4-Trimethylpentane 88 Benzene 89 1,2-Dichloroethane 99 Heptane 95 Trichloroethane 91 1,2-Dichloroethane <td>Vinyl Chloride</td> <td></td> <td>81</td>	Vinyl Chloride		81
Chloroethane80Freon 1197Ethanol100Freon 1131041.1-Dichloroethene103Acetone952-Propanol97Carbon Disulfide923-Chloropropene89Methylene Chloride94Methyl etr-butyl ether95Trans-1,2-Dichloroethene91Hexane881,1-Dichloroethane942-Butanone (Methyl Ethyl Ketone)99cis-1,2-Dichloroethane94Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene89Chloroethane99Heptane95Trichloroethane99Heptane95Trichloroethane99Heptane95Trichloroethane99Heptane95Trichloroethane911,2-Dichloroethane911,2-Dichloroethane911,2-Dichloroethane911,2-Dichloroethane911,2-Dichloroethane95Trichloroethane911,2-Dichloroethane95Trichloroethane951,2-Dichloroethane95Trichloroethane95Trichloroethane951,2-Dichloroethane95Trichloroethane95Trichloroethane95Trichloroethane961,2-Dichl	1,3-Butadiene		84
Freon 11 97 Ethanol 100 Freon 113 104 1.1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropropene 89 Methylene Chloride 94 Methylene Chloride 94 Methylene Chlorode 94 2-Butanone (Methyl Ethyl Ketone) 89 Cis'-1,2-Dichloroethene 93 2-Butanone (Methyl Ethyl Ketone) 89 Chloroform 90 1,1-1richloroethane 94 Cyclohexane 89 Chloroform 90 1,1-1richloroethane 98 2,2,4-Trimethylpentane 88 Benzene 99 Heptane 95	Bromomethane		88
Ethanol 100 Freon 113 104 1,1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropropene 89 Methylene Chloride 94 Methylene Chloride 91 Hersene 91 Hexane 91 1,1-Dichloroethene 94 2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 Tetrahydrofuran 89 Chloroform 90 1,1,1-Trichloroethane 94 Qclohexane 89 Carbon Tetrachloride 98 2,2,4-Trimethylpentane 88 Benzene 89 1,2-Dichloroethane 99 Heptane 95 Trichloroethane 99 Heptane 95 Tichloroethane 91 1,2-Dichloroethane 91 1,4-Dioxane 91 Bromodichloromethane	Chloroethane		80
Freon 113 104 1,1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropropene 89 Methylene Chloride 94 Methylene Chloride 94 Methyl tert-butyl ether 95 trans-1,2-Dichloroethene 91 Hexane 88 1,1-Dichloroethene 94 2-Butanone (Methyl Ethyl Ketone) 89 Cis-1,2-Dichloroethene 93 Chloroform 90 1,1,1-Trichloroethane 94 Cyclohexane 89 Carbon Tetrachloride 98 2,2,4-Trimethylpentane 88 Benzene 99 Heptane 96 1,2-Dichloroethane 91 1,2-Dichloropropane 91 1,4-Dioxane 91 Heptane 96 Cis-1,3-Dichloropropane 91 1,4-Dioxane 91 Bromodichloromethane 98	Freon 11		97
1,1-Dichloroethene 103 Acetone 95 2-Propanol 97 Carbon Disulfide 92 3-Chloropropene 89 Methylene Chloride 94 Methylene Chloride 94 Methylene Chloride 91 Methylene Chloroethene 91 Hexane 88 1,1-Dichloroethane 94 2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 Tetrahydrofuran 89 Chloroform 90 1,1,1-Trichloroethane 94 Cyclohexane 89 Carbon Tetrachloride 98 2,2,4-Trimethylpentane 88 Benzene 89 1,2-Dichloroethane 99 Heptane 95 Trichloroethane 91 1,2-Dichloroethane 91 1,2-Dichloroethane 91 1,2-Dichloroethane 95 Trichloroethane 91 1,2-Dichloroethane 91	Ethanol		100
Acetone952-Propanol97Carbon Disulfide923-Chloropropene89Methylene Chloride94Methylene Chloride94Methylene Chloride95trans-1,2-Dichloroethene91Hexane881,1-Dichloroethene942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran89Chloroform901,1,1-Trichloroethane942,2,4-Trimethylpentane88Benzene891,2-Dichloroethane982,2,4-Trimethylpentane89Carbon Tetrachloride982,2,4-Trimethylpentane891,2-Dichloroethane99Heptane95Trichloroethene95Trichloroethane911,2-Dichloroethane911,2-Dichloroethane95Trichloroethane95Trichloroethane911,2-Dichloroethane911,2-Dichloroethane95Trichloroethane911,2-Dichloroethane911,2-Dichloroethane911,4-Dioxane93Arbutyl-2-pentanone93Toluene93Toluene93	Freon 113		104
2-Propanol97Carbon Disulfide923-Chioropropene89Methylene Chloride94Methyl tert-butyl ether95trans-1,2-Dichloroethene881,1-Dichloroethane842-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene932-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloroethane95Trichloroethane95Trichloroethane95Trichloroethane95Trichloroethane961,2-Dichloroethane95Trichloroethane95Trichloroethane95Trichloroethane961,2-Dichloroethane914,4-Dixane914,4-Dixane914,4-Dixane914,4-Methyl-2-pentanone934-Methyl-2-pentanone96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene97	1,1-Dichloroethene		103
Carbon Disulfide923-Chloropropene89Methylene Chloride94Methyl tert-butyl ether95trans-1,2-Dichloroethene91Hexane881,1-Dichloroethane942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran89Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloropthane99Heptane95Trichloroethane99Heptane95Trichloropthane911,2-Dichloropthane99Heptane95Trichloropthane961,2-Dichloropthane911,2-Dichloropthane961,2-Dichloropthane911,2-Dichloropthane911,2-Dichloropthane911,2-Dichloropthane911,2-Dichloropthane911,2-Dichloropthane911,2-Dichloropthane934-Methyl-2-pentanone932,3-4-Turpene932,3-4-Turpene933,3-4-Methyl-2-pentanone934-Methyl-2-pentanone9610uene97	Acetone		95
3-Chloropropene 89 Methylene Chloride 94 Methyl tert-butyl ether 95 trans-1,2-Dichloroethene 91 Hexane 88 1,1-Dichloroethane 94 2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 89 2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 Tetrahydrofuran 89 Chloroform 90 1,1,1-Trichloroethane 94 Cyclohexane 89 Carbon Tetrachloride 98 2,2,4-Trimethylpentane 88 Benzene 89 1,2-Dichloroethane 99 Heptane 95 Trichloroethane 96 1,2-Dichloropropane 91 1,4-Dioxane 91 1,4-Dioxane 98 cis-1,3-Dichloropropene 93 4-Methyl-2-pentanone 93 4-Methyl-2-pentanone 93 1,4-Dioxane 98 cis-1,3-Dic	2-Propanol		97
Methylene Chloride94Methylene Chloride95trans-1,2-Dichloroethene91Hexane881,1-Dichloroethane942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran90Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane89Benzene891,2-Dichloroethane99Heptane95Trichloroethane99Hotane911,2-Dichloroptane911,2-Dichloroptane911,2-Dichloroptane911,2-Dichloroptane911,2-Dichloroptane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloroptopene934-Methyl-2-pentanone93Toluene97	Carbon Disulfide		92
Methyl tert-butyl ether95trans-1,2-Dichloroethene91Hexane881,1-Dichloroethane942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran89Chloroform901,1,1-Tichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane89Benzene891,2-Dichloroethane99Heptane95Trichloroethane99Heptane95Trichloroethane911,4-Dioxane91Bromodichloromethane934-Methyl-2-pentanone934-Methyl-2-pentanone93	3-Chloropropene		89
trans-1,2-Dichloroethene 91 Hexane 88 1,1-Dichloroethane 94 2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 Tetrahydrofuran 89 Chloroform 90 1,1,1-Trichloroethane 94 Cyclohexane 89 Carbon Tetrachloride 98 2,2,4-Trimethylpentane 88 Benzene 89 1,2-Dichloroethane 99 Heptane 95 Trichloroethene 96 1,2-Dichloropropane 91 1,4-Dioxane 91 Srichloropropane 91 1,4-Dioxane 91 Bromodichloromethane 98 cis-1,3-Dichloropropene 93 4-Methyl-2-pentanone 96 Toluene 97	Methylene Chloride		94
Hexane881,1-Dichloroethane942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran89Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane89Benzene891,2-Dichloroethane99Heptane95Trichloroptane911,2-Dichloroptane911,2-Dichloroptane911,3-Dichloroptane912,2-4-Timmethylpentane951,2-Dichloroptane914-Methyl-2-pentanone934-Methyl-2-pentanone96Toluene96Toluene97	Methyl tert-butyl ether		95
1,1-Dichloroethane942-Butanone (Methyl Ethyl Ketone)89cis-1,2-Dichloroethene93Tetrahydrofuran89Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane891,2-Dichloroethane991,2-Dichloroethane991,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane934-Methyl-2-pentanone934-Methyl-2-pentanone96Toluene96	trans-1,2-Dichloroethene		91
2-Butanone (Methyl Ethyl Ketone) 89 cis-1,2-Dichloroethene 93 Tetrahydrofuran 89 Chloroform 90 1,1,1-Trichloroethane 94 Cyclohexane 89 Carbon Tetrachloride 98 2,2,4-Trimethylpentane 88 Benzene 89 1,2-Dichloroethane 99 Heptane 99 Heptane 95 Trichloroethene 96 1,2-Dichloropropane 91 1,4-Dioxane 91 1,4-Dioxane 91 Sromodichloromethane 98 cis-1,3-Dichloropropene 93 4-Methyl-2-pentanone 96 Toluene 97	Hexane		88
cis-1,2-Dichloroethene93Tetrahydrofuran89Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloroethane99Heptane95Trichloroptopane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloroptopene934-Methyl-2-pentanone96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene96Toluene97	1,1-Dichloroethane		94
Tetrahydrofuran89Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene961,2-Dichloropropene93	2-Butanone (Methyl Ethyl Ketone)		89
Chloroform901,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene96	cis-1,2-Dichloroethene		93
1,1,1-Trichloroethane94Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	Tetrahydrofuran		89
Cyclohexane89Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	Chloroform		90
Carbon Tetrachloride982,2,4-Trimethylpentane88Benzene891,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone97	1,1,1-Trichloroethane		94
2,2,4-Trimethylpentane88Benzene891,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	Cyclohexane		89
Benzene891,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	Carbon Tetrachloride		98
1,2-Dichloroethane99Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	2,2,4-Trimethylpentane		88
Heptane95Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	Benzene		89
Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	1,2-Dichloroethane		99
Trichloroethene961,2-Dichloropropane911,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97	Heptane		95
1,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97			96
1,4-Dioxane91Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97			
Bromodichloromethane98cis-1,3-Dichloropropene934-Methyl-2-pentanone96Toluene97			91
cis-1,3-Dichloropropene 93 4-Methyl-2-pentanone 96 Toluene 97	Bromodichloromethane		98
4-Methyl-2-pentanone96Toluene97			93
Toluene 97			
	Toluene		



Client Sample ID: LCS

Lab ID#: 0703652A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	t040203 1.00	Date of Collection: NA Date of Analysis: 4/2/07 09:09 AM
Compound		%Recovery
1,1,2-Trichloroethane		90
Tetrachloroethene		89
2-Hexanone		93
Dibromochloromethane		100
1,2-Dibromoethane (EDB)		91
Chlorobenzene		91
Ethyl Benzene		90
m,p-Xylene		89
o-Xylene		90
Styrene		85
Bromoform		108
Cumene		81
1,1,2,2-Tetrachloroethane		91
Propylbenzene		92
4-Ethyltoluene		93
1,3,5-Trimethylbenzene		85
1,2,4-Trimethylbenzene		85
1,3-Dichlorobenzene		89
1,4-Dichlorobenzene		88
alpha-Chlorotoluene		102
1,2-Dichlorobenzene		87
1,2,4-Trichlorobenzene		106
Hexachlorobutadiene		97

Container Type: NA - Not Applicable

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	96	70-130	
4-Bromofluorobenzene	108	70-130	



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020 Hours 8:00 A.M to 6:00 P.M. Pacific



WORK ORDER #: 0703652B

Work Order Summary

CLIENT:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717	BILL TO:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717
PHONE:	608-831-4444	P.O. #	6198.04
FAX:	608-831-3334	PROJECT #	6198.04 Rodefeld Landfill
DATE RECEIVED:	03/29/2007	CONTACT:	Brandon Dunmore
DATE COMPLETED:	04/03/2007		

			RECEIPT
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.
01A	Blower Outlet	Modified ASTM D-1945	4.5 "Hg
02A	Lab Blank	Modified ASTM D-1945	NA
02B	Lab Blank	Modified ASTM D-1945	NA
03A	LCS	Modified ASTM D-1945	NA
03B	LCS	Modified ASTM D-1945	NA

Sinda d. Fruman

DATE: _____

Laboratory Director

CERTIFIED BY:

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Page 1 of 9



LABORATORY NARRATIVE Modified ASTM D-1945 RMT, Inc. Workorder# 0703652B

One 6 Liter Summa Canister sample was received on March 29, 2007. The laboratory performed analysis via modified ASTM Method D-1945 for Methane and fixed gases in natural gas using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample. See the data sheets for the reporting limits for each compound.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples include:
--

Requirement	ASTM D-1945	ATL Modifications
Normalization	Sum of original values should not differ from 100.0% by more than 1.0%.	Sum of original values may range between 75-125%. Normalization of data not performed.
Sample analysis	Equilibrate samples to 20-50° F. above source temperature at field sampling	No heating of samples is performed.
Sample calculation	Response factor is calculated using peak height for C5 and lighter compounds.	Peak areas are used for all target analytes to quantitate concentrations.
Reference Standard	Concentration should not be < half of nor differ by more than 2 X the concentration of the sample. Run 2 consecutive checks; must agree within 1%.	A minimum 3-point linear calibration is performed. The acceptance criterion is %RSD = 25%. All target analytes must be within the linear range of calibration (with the exception of O2, N2, and C6+ Hydrocarbons).</td
Sample Injection Volume	0.50 mL to achieve Methane linearity.	1.0 mL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Since Nitrogen is used to pressurize samples, the Nitrogen values are calculated by adding all the sample components and subtracting from 100%.



Definition of Data Qualifying Flags

Six qualifiers may have been used on the data analysis sheets and indicate as follows:

- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

Client Sample ID: Blower Outlet

Lab ID#: 0703652B-01A

	Rpt. Limit	Amount	
Compound	(%)	(%)	
Oxygen	0.16	0.32	
Nitrogen	0.16	1.7	
Methane	0.00016	56	
Carbon Dioxide	0.016	42	



Client Sample ID: Blower Outlet Lab ID#: 0703652B-01A NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name: 9040212 Date of Collection: 3/28/07 Dil. Factor: 1.58 Date of Analysis: 4/2/07 01:37 PM Rpt. Limit Amount Compound (%) (%) 0.16 0.32 Oxygen Nitrogen 0.16 1.7 0.016 Not Detected Carbon Monoxide 0.00016 56 Methane 0.016 42 Carbon Dioxide Ethane 0.0016 Not Detected Ethene 0.0016 Not Detected 0.0016 Not Detected Acetylene Propane 0.0016 Not Detected Isobutane 0.0016 Not Detected 0.0016 Not Detected **Butane** 0.0016 Not Detected Neopentane 0.0016 Not Detected Isopentane 0.0016 Not Detected Pentane Not Detected C6+ 0.016 0.016 Not Detected Hydrogen

Container Type: 6 Liter Summa Canister



Client Sample ID: Lab Blank Lab ID#: 0703652B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name: Dil. Factor:	9040210 1.00	Date of Collection: NA Date of Analysis: 4/2/07 12:0		
Compound		Rpt. Limit (%)	Amount (%)	
Oxygen		0.10	Not Detected	
Nitrogen		0.10	Not Detected	
Carbon Monoxide		0.010	Not Detected	
Methane		0.00010	Not Detected	
Carbon Dioxide		0.010	Not Detected	
Ethane		0.0010	Not Detected	
Ethene		0.0010	Not Detected	
Acetylene		0.0010	Not Detected	
Propane		0.0010	Not Detected	
Isobutane		0.0010	Not Detected	
Butane		0.0010	Not Detected	
Neopentane		0.0010	Not Detected	
Isopentane		0.0010	Not Detected	
Pentane		0.0010	Not Detected	
C6+		0.010	Not Detected	



Client Sample ID: Lab Blank Lab ID#: 0703652B-02B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name: Dil. Factor:	9040209b 1.00	Date of Collection: NA Date of Analysis: 4/2/07 11:33 AM	
		Rpt. Limit	Amount
Compound		(%)	(%)
Hydrogen		0.010	Not Detected



Client Sample ID: LCS

Lab ID#: 0703652B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name: 9040208 Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 4/2/07 11:07 AM	
		%Recovery	
Oxygen		95	
Nitrogen		99	
Carbon Monoxide		99	
Methane		102	
Carbon Dioxide		102	
Ethane		104	
Ethene		102	
Acetylene		101	
Propane		99	
Isobutane		105	
Butane		108	
Neopentane		107	
Isopentane		101	
Pentane		98	
C6+		99	



Client Sample ID: LCS

Lab ID#: 0703652B-03B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1945

File Name:	9040207b	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 4/2/07 10:39 AM

Compound

%Recovery 94

Hydrogen



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020 Hours 8:00 A.M to 6:00 P.M. Pacific



WORK ORDER #: 0703652C

Work Order Summary

CLIENT:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717	BILL TO:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717
PHONE:	608-831-4444	P.O. #	6198.04
FAX:	608-831-3334	PROJECT #	6198.04 Rodefeld Landfill
DATE RECEIVED: DATE COMPLETED:	03/29/2007 04/03/2007	CONTACT:	Brandon Dunmore

FRACTION #	NAME	TEST
01A	72122 (Front Half)	Siloxanes
01AA	72122 (Front Half) Duplicate	Siloxanes
01B	72123 (Back Half)	Siloxanes
02A	Lab Blank	Siloxanes
03A	LCS	Siloxanes

Sinda d. Fruman

DATE: <u>04/03/07</u>

CERTIFIED BY:

Laboratory Director

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd. 180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020



LABORATORY NARRATIVE Siloxanes RMT, Inc. Workorder# 0703652C

Two Vial samples were received on March 29, 2007. The laboratory performed analysis for siloxanes by GC/MS. A sample volume of 1.0 uL was injected directly onto the GC column. Initial results are in ug/mL. The units are converted to total micrograms (ug) by multiplying the result (ug/mL) by the total volume (mL) contained in the impinger. See the data sheets for the reporting limits for each compound.

Receiving Notes

The ice included in the sample shipment melted during transit, therefore the temperature at receipt was greater than 6 °C. The discrepancy was noted in the Sample Receipt Confirmation email/fax and the analysis proceeded.

Analytical Notes

Impinger volumes were measured at the laboratory using a graduated cylinder and documented in the analytical logbook.

Sampling volume was supplied by the client. A sample volume of 26.0 L was assumed for all QC samples.

Definition of Data Qualifying Flags

Six qualifiers may have been used on the data analysis sheets and indicate as follows:

- B Compound present in laboratory blank greater than reporting limit.
- J Estimated Value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

- a-File was requantified
- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue



Summary of Detected Compounds SILOXANES - GC/MS

Client Sample ID: 72122 (Front Half)

Lab ID#: 0703652C-01A

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(uG/m3)	(uG/m3)
Octamethylcyclotetrasiloxane (D4)	43	560	520	6800
Decamethylcylopentasiloxane (D5)	34	410	520	6300

Client Sample ID: 72122 (Front Half) Duplicate

Lab ID#: 0703652C-01AA

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(uG/m3)	(uG/m3)
Octamethylcyclotetrasiloxane (D4)	43	600	520	7200
Decamethylcylopentasiloxane (D5)	34	430	520	6500

Client Sample ID: 72123 (Back Half)

Lab ID#: 0703652C-01B

No Detections Were Found.



Client Sample ID: 72122 (Front Half) Lab ID#: 0703652C-01A

SILOXANES - GC/MS

File Name: Dil. Factor:	k032915 1.00		Date of Collection: Date of Analysis: 3	0, _ 0, 0 .
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Octamethylcyclotetrasiloxane (D4)	43	560	520	6800
Decamethylcylopentasiloxane (D5)	34	410	520	6300
Dodecamethylcyclohexasiloxane (D6)	57	Not Detected	1000	Not Detected
Hexamethyldisiloxane	78	Not Detected	520	Not Detected
Octamethyltrisiloxane	54	Not Detected	520	Not Detected

Air Sample Volume(L): 26.1 Impinger Total Volume(mL): 13.6

Container Type: Vial

		Method
Surrogates	%Recovery	Limits
Hexamethyl disiloxane -d18	91	70-130



Client Sample ID: 72122 (Front Half) Duplicate

Lab ID#: 0703652C-01AA

SILOXANES - GC/MS

File Name: Dil. Factor:	k032917 Date of Collection: 3/28/07 1.00 Date of Analysis: 3/29/07 07			
Compound	Røt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Octamethylcyclotetrasiloxane (D4)	43	600	520	7200
Decamethylcylopentasiloxane (D5)	34	430	520	6500
Dodecamethylcyclohexasiloxane (D6)	57	Not Detected	1000	Not Detected
Hexamethyldisiloxane	78	Not Detected	520	Not Detected
Octamethyltrisiloxane	54	Not Detected	520	Not Detected

Air Sample Volume(L): 26.1 Impinger Total Volume(mL): 13.6

Container Type: Vial

		Method
Surrogates	%Recovery	Limits
Hexamethyl disiloxane -d18	92	70-130



Client Sample ID: 72123 (Back Half) Lab ID#: 0703652C-01B

SILOXANES - GC/MS

File Name: Dil. Factor:	k032916 1.00			
Compound	Røt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Octamethylcyclotetrasiloxane (D4)	48	Not Detected	580	Not Detected
Decamethylcylopentasiloxane (D5)	38	Not Detected	580	Not Detected
Dodecamethylcyclohexasiloxane (D6)	64	Not Detected	1200	Not Detected
Hexamethyldisiloxane	87	Not Detected	580	Not Detected
Octamethyltrisiloxane	60	Not Detected	580	Not Detected

Air Sample Volume(L): 26.1 Impinger Total Volume(mL): 15.1

Container Type: Vial

		Method	
Surrogates	%Recovery	Limits	
Hexamethyl disiloxane -d18	92	70-130	



Client Sample ID: Lab Blank Lab ID#: 0703652C-02A

SILOXANES - GC/MS

File Name: Dil. Factor:	k032905 1.00		Date of Collection: NA Date of Analysis: 3/29/07 02:31 PM	
Compound	Rɒt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Octamethylcyclotetrasiloxane (D4)	3.2	Not Detected	38	Not Detected
Decamethylcylopentasiloxane (D5)	2.5	Not Detected	38	Not Detected
Dodecamethylcyclohexasiloxane (D6)	4.2	Not Detected	77	Not Detected
Hexamethyldisiloxane	5.8	Not Detected	38	Not Detected
Octamethyltrisiloxane	4.0	Not Detected	38	Not Detected

Air Sample Volume(L): 26.0 Impinger Total Volume(mL): 1.00

		Method
Surrogates	%Recovery	Limits
Hexamethyl disiloxane -d18	91	70-130



Client Sample ID: LCS Lab ID#: 0703652C-03A

SILOXANES - GC/MS

File Name: k032904 Dil. Factor: 1.00		Date of Collection: NA Date of Analysis: 3/29/07 02:07 PM	
Compound		%Recovery	
Octamethylcyclotetrasiloxa	ane (D4)	94	
Decamethylcylopentasilox	ane (D5)	105	
Dodecamethylcyclohexasi	loxane (D6)	Not Spiked	
Hexamethyldisiloxane		95	
Octamethyltrisiloxane		93	

		Method	
Surrogates	%Recovery	Limits	
Hexamethyl disiloxane -d18	95	70-130	



Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020 Hours 8:00 A.M to 6:00 P.M. Pacific



WORK ORDER #: 0703652D

Work Order Summary

CLIENT:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717	BILL TO:	Mr. Mark Torresani RMT, Inc. 744 Heartland Trail Madison, WI 53717
PHONE:	608-831-4444	P.O. #	6198.04
FAX:	608-831-3334	PROJECT #	6198.04 Rodefeld Landfill
DATE RECEIVED:	03/29/2007	CONTACT:	Brandon Dunmore
DATE COMPLETED:	04/02/2007		

			RECEIPT
FRACTION #	NAME	<u>TEST</u>	VAC./PRES.
01A	72124	ASTM D-5504	Tedlar Bag
01AA	72124 Duplicate	ASTM D-5504	Tedlar Bag
02A(on hold)	72125	ASTM D-5504	Tedlar Bag
03A	Lab Blank	ASTM D-5504	NA
04A	LCS	ASTM D-5504	NA

Sinda d. Fruman

DATE: <u>04/02/07</u>

Laboratory Director

CERTIFIED BY:

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004 NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act, Accreditation number: E87680, Effective date: 07/01/06, Expiration date: 06/30/07

Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Air Toxics Ltd.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Page 1 of 7



LABORATORY NARRATIVE ASTM D-5504 RMT, Inc. Workorder# 0703652D

Two 1 Liter Tedlar Bag samples were received on March 29, 2007. The laboratory performed the analysis of sulfur compounds via ASTM D-5504 using GC/SCD. The method involves direct injection of the air sample into the GC via a fixed 1.0 mL sampling loop. See the data sheets for the reporting limits for each compound.

Receiving Notes

Sample 72125 was placed on hold per the client's request.

Analytical Notes

Samples 72124 and 72124 Duplicate were received with insufficient time remaining to analyze within the method specified 24 hour hold time.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:

- B Compound present in laboratory blank greater than reporting limit.
- J Estimated value.
- E Exceeds instrument calibration range.
- S Saturated peak.
- Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the detection limit.
- M Reported value may be biased due to apparent matrix interferences.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

- b-File was quantified by a second column and detector
- r1-File was requantified for the purpose of reissue



Summary of Detected Compounds SULFUR GASES BY ASTM D-5504 GC/SCD

Client Sample ID: 72124

	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)
Hydrogen Sulfide	2400	180000
Client Sample ID: 72124 Duplicate		
Lab ID#: 0703652D-01AA		
	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)
Hydrogen Sulfide	2400	170000



Client Sample ID: 72124 Lab ID#: 0703652D-01A SULFUR GASES BY ASTM D-5504 GC/SCD

File Name: Dil. Factor:	b032914 600	Date of Collection: 3/28/07 Date of Analysis: 3/29/07 02:14 PM	
Compound		Rpt. Limit (ppbv)	Amount (ppbv)
Hydrogen Sulfide		2400	180000

Container Type: 1 Liter Tedlar Bag



Client Sample ID: 72124 Duplicate Lab ID#: 0703652D-01AA SULFUR GASES BY ASTM D-5504 GC/SCD

File Name: Dil. Factor:	b032915 600	Date of Collection: 3/28/07 Date of Analysis: 3/29/07 02:35 PM	
		Rpt. Limit	Amount
Compound		(ppbv)	(ppbv)
Hydrogen Sulfide		2400	170000

Container Type: 1 Liter Tedlar Bag



Client Sample ID: Lab Blank Lab ID#: 0703652D-03A SULFUR GASES BY ASTM D-5504 GC/SCD

File Name: Dil. Factor:	b032903 1.00		Date of Collection: NA Date of Analysis: 3/29/07 10:06 AM
Compound		Rpt. Limit (ppbv)	Amount (ppbv)
Hydrogen Sulfide		4.0	Not Detected



Client Sample ID: LCS

Lab ID#: 0703652D-04A

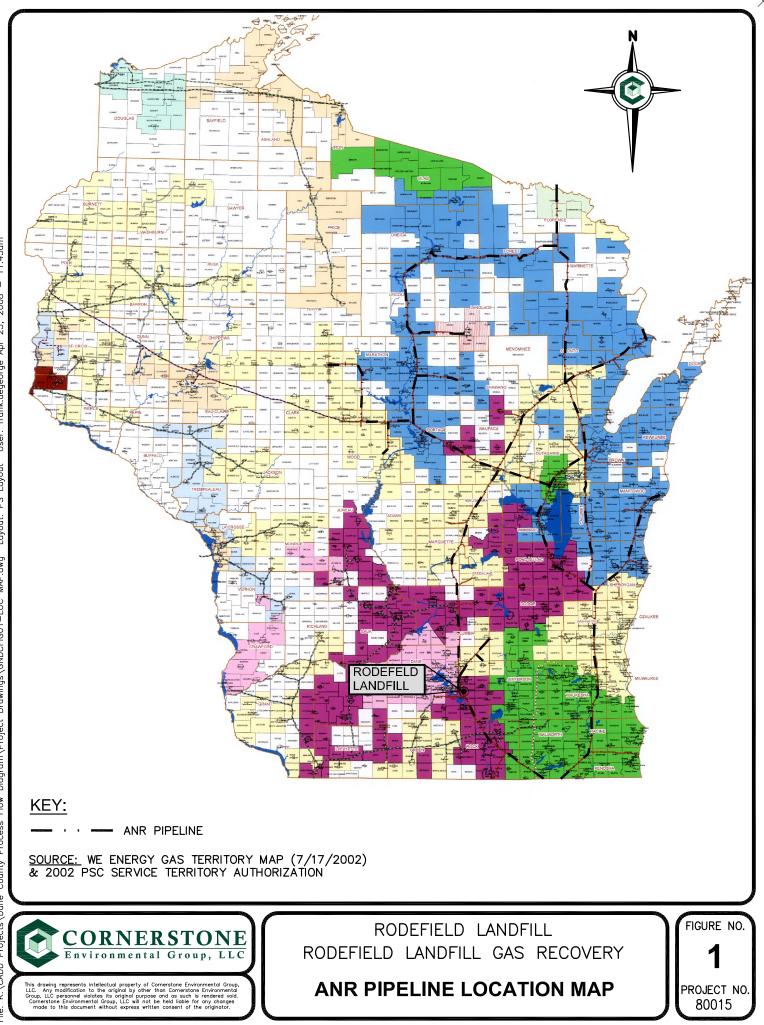
SULFUR GASES BY ASTM D-5504 GC/SCD

File Name:	b032902	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 3/29/07 09:04 AM

Compound

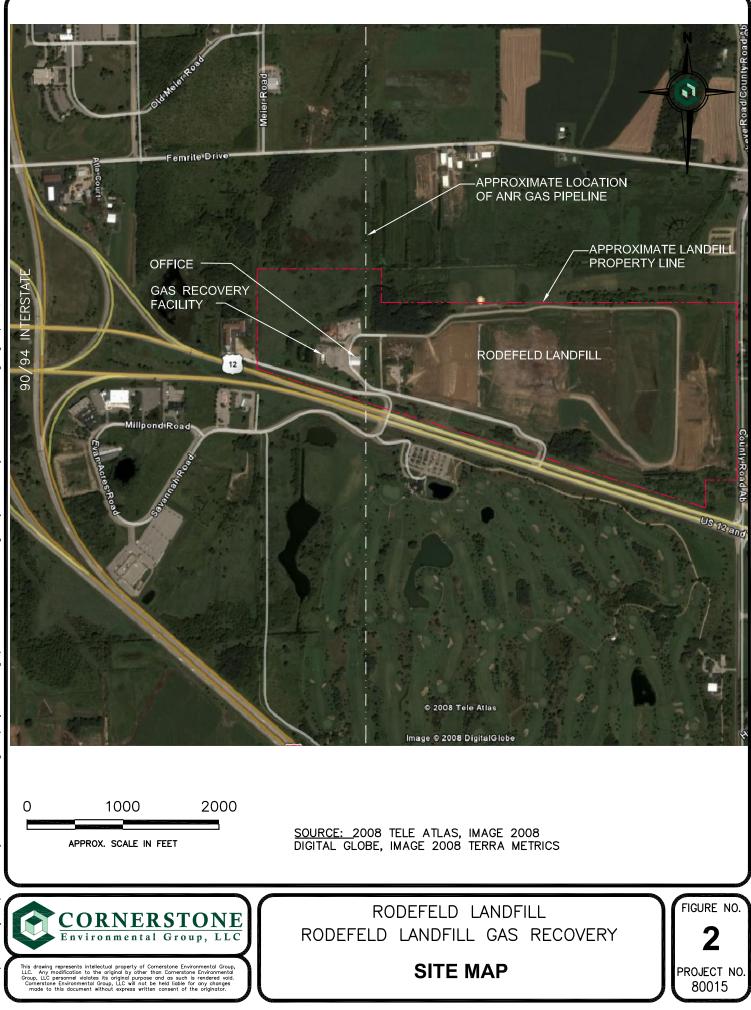
%Recovery 97

Hydrogen Sulfide



ò.

¥4



ò