



64538

**WORK PLAN FOR EVALUATION AND INTERIM
REMEDATION OF SOILS
O'HENRY LAUNDRY, TUTU, ST. THOMAS
U.S. VIRGIN ISLANDS**

Prepared for:

**L'Henri, Inc.
St. Thomas, U.S. Virgin Islands**

Prepared by:

**IT Corporation
Knoxville, Tennessee**

IT Project No. 409830

June 1994

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List of Acronyms

CLP	Contract Laboratory Program
EPA	U.S. Environmental Protection Agency
FS	feasibility study
GC	gas chromatograph
PCE	tetrachloroethene
PID	photoionization detector
ppb	parts per billion
PRG	Preliminary Remediation Goal
psi	pounds per square inch
QC	quality control
RI	remedial investigation
SOW	Statement of Work
TCL	target compound list
TIP	Photovac Micro TIP II
USVI	U.S. Virgin Islands
VOC	volatile organic compound

1.0 Introduction

The O'Henry Laundry is located on Highway 38, Tutu, St. Thomas, U.S. Virgin Islands (USVI). Contaminants, principally tetrachloroethene (PCE), have been detected in subsurface soils in the vicinity of the laundry. It has been determined through evaluation of soil and shallow groundwater conditions that interim soil remediation is warranted. The purpose of this work plan is to describe the methods by which the interim soil remediation will be conducted. A Health and Safety Plan to be used during the remediation is included in Appendix A.

1.1 Scope and Objectives

This work plan addresses interim remediation of PCE in vadose zone soil in an area immediately adjacent to the southwest side of the O'Henry Laundry (Figure 1-1). An estimated 1575 cubic feet (ft³) of soil will be excavated and that soil determined to contain PCE will be stored on site in a secure area pending implementation of a final remedy. The objective of the interim remediation is to reduce the human health risk and the potential for shallow groundwater contamination resulting from known soil contamination.

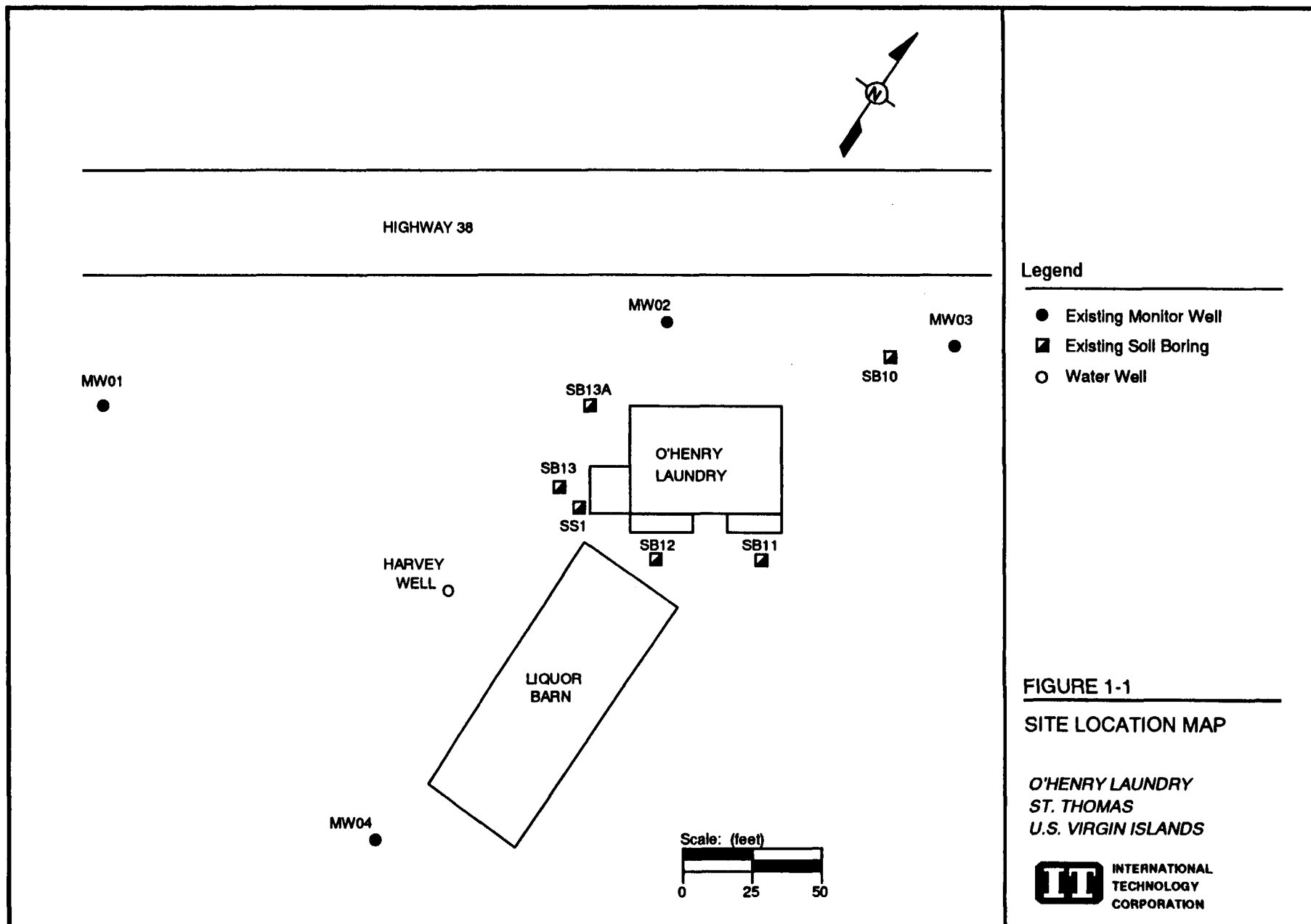
Based on these objectives, two cleanup criteria for interim soil remediation are considered:

- A risk-based Preliminary Remediation Goal (PRG) using a direct soil exposure scenario
- A model-based determination of the maximum PCE concentration in soil that is protective of groundwater if not remediated.

Final soil remediation may not be attainable under this work scope due to uncertainties in the cleanup level and because of physical limitations on the area that may be excavated. If more stringent soil cleanup levels are developed subsequent to implementation of this work plan, or if PCE is found in soils that cannot be excavated, in situ remediation may be considered under a later scope of work.

1.2 Background

Six soil borings have been drilled and sampled at the O'Henry Laundry during previous investigations (Figure 1-1). Soil boring SS1, located near the southwest corner of the laundry, was drilled and sampled in June 1990. A cross section depicting soil types, depth to water, and PCE concentrations encountered in boring SS1 is included in Appendix B. The boring



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was drilled to a depth of approximately 24 feet, terminating at auger refusal. No boring log for SS1 exists. Five soil samples obtained from the boring were analyzed for volatile organic compounds (VOC) of the U.S. Environmental Protection Agency's (EPA) target compound list (TCL). The results of this analysis are summarized in Table 1-1. Five VOCs were reported. Three of these compounds (acetone, 2-butanone, and methylene chloride) were typically found in the associated laboratory method blanks and are common laboratory reagents. Therefore, the concentrations of these substances may not be representative. Further, there is no other evidence that these compounds contaminate environmental media at the laundry. The remaining compounds detected were PCE and xylenes (total); however, xylenes were also detected at concentrations near quantitation limits in the method blank for every sample. Because the sample analyses were conducted at secondary dilution factors, these low level background concentrations were multiplied by dilution factors ranging from 125 to 1,250. This could account for the observed xylenes and their apparent depth correlation with PCE.

The concentrations of PCE and xylenes appeared to follow similar trends with depth. In sample TW2, collected from depths between 2.5 and 4.0 feet, PCE was detected at a concentration of 5,400 parts per billion (ppb), and xylenes were detected at a concentration of approximately 280 ppb. At a depth of approximately 6 feet (sample TW5), concentrations of both compounds increased by approximately one order of magnitude to their maximum reported values for the boring; PCE was reported at 59,000 ppb, and xylenes were reported at 11,000 ppb. Concentrations of both compounds decreased below this depth, and at a depth of approximately 19 feet (sample TW20), PCE was not detected. Xylenes were detected at an estimated concentration of 630 ppb.

Five additional soil borings have been drilled and sampled at the O'Henry Laundry and are discussed in "Technical Memorandum II, Results of the Field Program, Tutu Service Station Investigation, St. Thomas, U.S. Virgin Islands" (Geraghty and Miller, 1993). The soil borings are designated SB10, SB11, SB12, SB13, and SB13A in Figure 1-1. PCE was the only significant VOC detected. Concentrations above detection limits were as follows:

- 29 ppb from soil boring SB11 at 0.0 to 2.0 feet
- 200 ppb from soil boring SB13 at 4.0 to 6.0 feet
- 15 ppb from soil boring SB13A at 0.0 to 2.0 feet.

Table 1-1

**Summary of Soil Analytical Results, Soil Boring SS1
June 1990
St. Thomas, U.S. Virgin Islands
Project No. 409830**

Compound (ppb) ^a	Sample Number and Depth					
	TW2	TW5	TW5DUP	TW8MS	TW8MSD	TW20
	2.5-4.0 ft.	5.0-6.5 ft.	5.0-6.5 ft.	8.5-10 ft.	8.5-10 ft.	19.0-19.5 ft.
Acetone	ND ^b	3000 DJ	ND	2000	2900	ND
Methylene chloride	270 DBJ ^c	3100 DBJ	3000 BJ	880 B	ND	1300 BJ
2-Butanone	370 DBJ	ND	ND	440 BJ	310 BJ	ND
Tetrachloroethene	5400 D	59000 D	22000	230 J	150 J	ND
Xylenes (Total)	280 DBJ	11000 DB	4700 BJ	450 BJ	520 BJ	630 BJ

^appb - Parts per billion (µg/kg).

^bND - Not detected.

^cD - Compound analyzed at secondary dilution factor.

B - Compound detected in method blank.

J - Compound detected below contract required detection limit.

2.0 Soil Cleanup Levels

Two criteria for the soil remediation were developed. Both criteria are based on site-specific data and, therefore, may not be applicable for other areas. In the first method, the PRG for PCE in soil was calculated using a risk-based direct exposure scenario according to EPA guidance (EPA, 1991).

The risk-based PRG was developed based on the assumption that the O'Henry Laundry will continue to be used as a commercial/industrial site. Based on this classification, the following exposure pathways were considered:

- Incidental soil ingestion
- Inhalation of organic compounds volatilized from surface soil
- Inhalation of particulates suspended in air due to site activities.

Dermal contact was not considered in the development of a PRG because most of the site is paved, and any workers involved in excavating contaminated subsurface soil will have adequate levels of personnel protective equipment. Since PCE is a carcinogen, the PRG was developed for a target risk of 10^{-6} cancer incidence in excess of background. The risk-based PRG calculated for soils at the O'Henry Laundry is 9,000 ppb. Details of the PRG calculation are included in Appendix C.

The direct exposure to soil scenario used to calculate the risk-based PRG does not consider secondary impacts on groundwater. Therefore, a second soil remediation criterion was established by modeling the transport of PCE through vadose zone soils to groundwater using the computer model VLEACH developed at the Robert S. Kerr Environmental Research Laboratory for the EPA (Ravi and Johnson, 1993). The modeling procedures were similar to those described in Rosenbloom, et. al. (1993) and considered liquid advection, gaseous diffusion, liquid to solid phase sorption/desorption, liquid-gas partitioning, and volatilization of the gas phase into the atmosphere. The VLEACH model was used to predict the mass of PCE per unit time that will reach groundwater for a range of conditions that were based on existing data for the site. A simple mixing cell was then used to determine the resulting concentrations of PCE in groundwater. These concentrations were compared to the drinking water standard for PCE (5 micrograms per liter [$\mu\text{g/L}$]). Based on the most restrictive model results, PCE concentrations greater than 328 ppb, distributed throughout the vadose zone soil profile, will result in groundwater contamination in excess of the 5 $\mu\text{g/L}$ drinking water

standard. Therefore, the model based PRG calculated for soils at the O'Henry Laundry is 328 ppb. Details of the VLEACH modeling are provided in Appendix B.

The soil cleanup level chosen for the interim soil remediation is 328 ppb, the more stringent (lower) of the two values calculated. However, as discussed in Section 3.1 soil will be excavated and removed until samples submitted for on-site analysis are below detection limits or until physical or safety limitations prevent further excavation.

3.0 Field Methods

Analytical results indicate that the maximum concentration of PCE in soil is approximately 60,000 ppb at a depth of 6 feet in soil boring SS1. Soil boring SS1 is located near the southwest side of the laundry (Figure 3-1). The maximum concentration detected in other borings around the site was 200 ppb. This concentration was detected in soil boring SB13, which is located near SS1. Therefore, only soils in the vicinity of soil boring SS1 will be included in the interim remediation.

3.1 Soil Excavation and Storage

Soils in the vicinity of soil boring SS1 will be excavated in stages to depths of approximately 1 foot, 3 feet, 5 feet, and 7 feet. The excavation will be conducted according to OSHA safety standards as documented in the Health and Safety Plan (Appendix A). At each stage, undisturbed soil samples will be collected and will undergo on-site chemical analysis (Section 3.2). At each interval, a minimum of one sample will be collected from each wall of the excavation and a minimum of three samples will be collected from the floor of the excavation. The total number of samples collected for on-site analysis will range between approximately 20 and 30. Excavation will continue until PCE concentrations in soil samples submitted for on-site analysis are below detection limits or until physical limitations imposed by buildings, safety considerations, or the presence of groundwater become prohibitive. The lower detection limits of the on-site analysis are expected to be between 50 and 100 ppb for PCE, depending on site conditions. Therefore, it is expected that PCE concentrations in soils left in place after the interim removal action will be well below the threshold concentration (328 ppb) shown by vadose zone modeling to have an adverse affect on groundwater (Section 2.0). Soil which is removed from the excavation from around the area containing PCE (i.e., soil which is removed to maintain the required slope angle) will be field screened. If found to be clean it will be segregated from soil which contains detectable PCE in the staging area and may be put back into the excavation as backfill. The staging area will be set up so that soils will be piled on visqueen and covered in the event of rain.

On reaching the final dimensions of the excavation, five soil samples will be collected from the walls and floor of the excavation. The excavation will then be backfilled using clean soils from the site and clean soil transported to the site from an appropriate source. The five soil samples will be sent to a fixed-base analytical laboratory for confirmation of whether further soil remediation is necessary. The samples will undergo analysis for VOCs according

to EPA's Contract Laboratory Program (CLP) 1990 scope of work (Section 3.3). The confirmatory analysis results will be submitted to the EPA for review.

Excavated soil found to contain detectable levels of PCE will be placed in appropriate containers (such as 17 H Drums or roll-off containers with plastic liners) and stored in compliance with 40 CFR 265 Subpart I "Use and Management of Containers." Containers will be affixed with standard hazardous waste stickers. Containers will be stored on pallets, on visqueen and covered with visqueen. The containers will be stored on site surrounded by a security fence (Figure 3-1). No further action will be performed on the excavated soils at this time; however, they will be inspected weekly and an inspection form completed (Figure 3-2). The forms will be kept at the site. The final remedy for soil removed from the excavation will be consistent with the final remedy for the Tutu site considered under the remedial investigation/feasibility study (RI/FS) currently being performed.

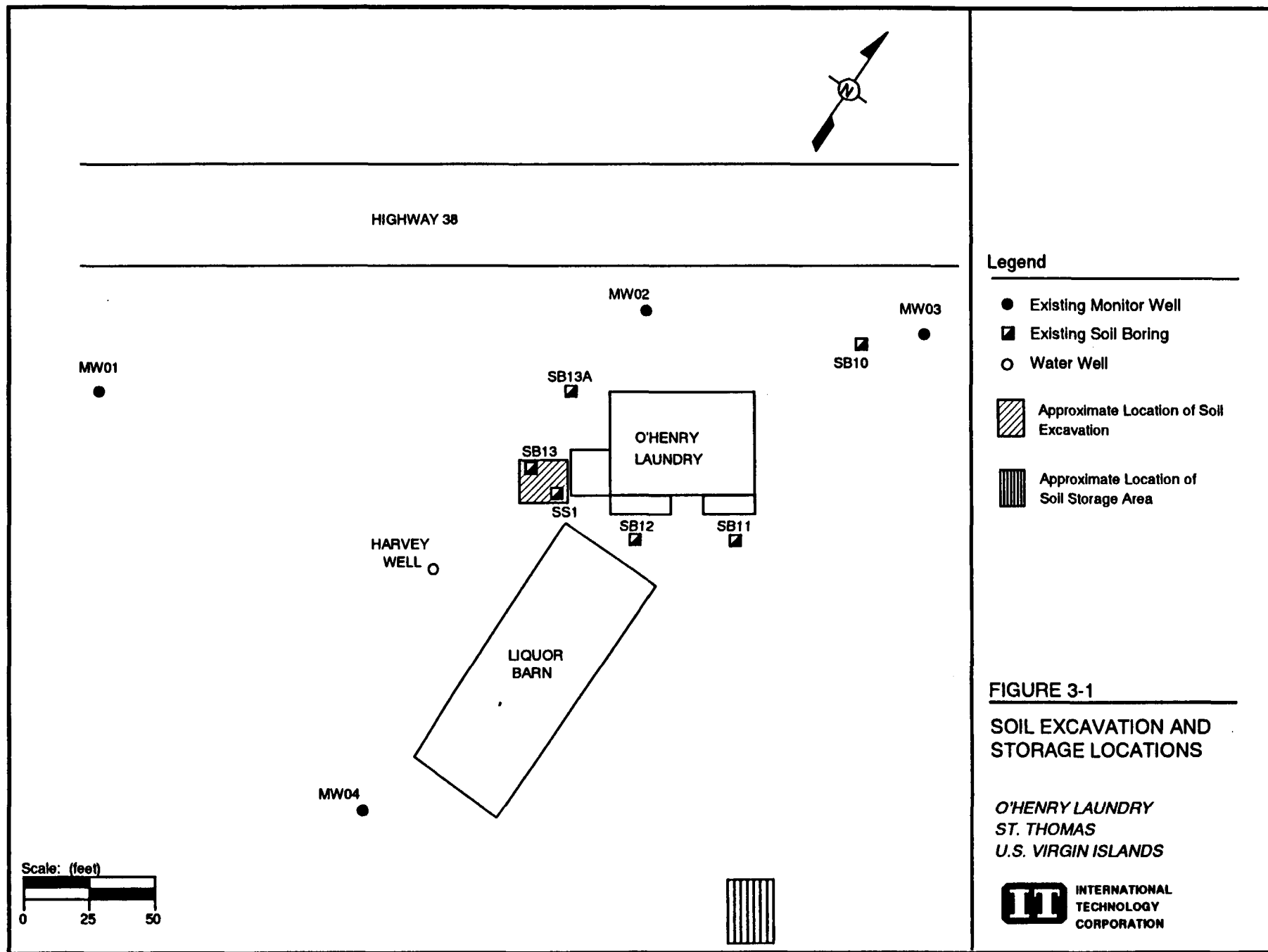
If excavation ceases before the extent of contaminated soil has been removed, due to physical or safety limitations, then as a contingency gravel and perforated pipe will be laid into the base of the excavation and the piping vented to the surface before backfill is placed. This will allow for the installation of a soil vapor extraction system if it is determined that additional soil remediation is necessary.

3.2 Field Screening

Soil samples will be collected and analyzed on site for the purpose of monitoring the removal of PCE from around the O'Henry Laundry facility. The on-site analytical program will provide real-time data of reliable quality for the purpose of guiding the excavation and avoiding either the removal of an excessive amount of soil or the failure to remove enough soil prior to backfilling.

3.2.1 Soil Sample Collection

During the interim remediation effort, soil samples will be collected for two purposes. Monitoring samples will be collected during excavation for on-site analysis by gas chromatography. When the on-site laboratory has determined that the defined action limits have been met, samples for closure verification will be collected and sent to the fixed-base laboratory for analysis by EPA CLP 1990 Statement of Work (SOW) protocol. Quality control (QC) samples will consist of trip blanks which will accompany the samples to the laboratory.



Name of Person Performing Inspection _____

Date of Inspection _____

	<u>Yes</u>	<u>No</u>
Security in place (fence secure)	_____	_____
Storage containers are in good condition	_____	_____
No leaks observed	_____	_____
Lids are secure	_____	_____
No evidence of tampering	_____	_____
Labels are in place and readable	_____	_____

If "No" was answered to any of the above, explain the deficiency and provide corrective actions taken and date:

Figure 3-2

Soil Storage Weekly Inspection Checklist
L'Henri, Inc.
Tutu, St. Thomas, U.S. Virgin Islands

All samples for analysis will be collected in a manner that minimizes losing PCE by volatilization. Soil samples for analysis at the fixed-base laboratory will be collected as grab samples and placed unmixed into a glass container, making an effort to leave no headspace. The volume of soil sample required by the CLP SOW will be collected, cooled to 4°C and shipped under appropriate chain of custody to a fixed-base laboratory for closure verification analysis.

Two separate aliquots of soils will be collected for on-site analysis. One aliquot will be collected by filling a 500 milliliter (mL) jar half full. A second aliquot will be collected by filling a 40-mL glass vial, making an effort to leave no headspace. Both samples containers will be delivered promptly to the on-site laboratory for analysis.

3.2.2 Soil Screening Analytical Methods

The on-site laboratory will utilize a transportable gas chromatograph (GC) to identify and quantify PCE. The GC will be equipped with a wide-bore capillary column and a temperature-programmable column oven for efficient chromatographic separation of PCE. A photoionization detector (PID) will be utilized to detect PCE as it elutes off the column. The PID will be connected to a portable personal computer equipped with chromatography software to integrate and quantify the PCE peak, and to provide raw data storage. A purge and trap system will be connected to the GC and utilized to automatically extract, concentrate, and inject the PCE from the soil sample.

When a soil sample is received in the on-site laboratory, the headspace in the 400 mL container above the soil will be measured with Photovac Micro TIP II (TIP). The TIP responds to total VOCs; however, because PCE is the only VOC present, TIP measurements will be attributed to PCE. Samples determined to have a low PCE concentration by the TIP headspace measurement will be analyzed by placing a weighed aliquot of the soil from the 40-mL sample jar directly into the purge vessel of the purge and trap. Samples determined to have a high PCE concentration by the headspace measurement with the TIP will be prepared by first mixing a weighed aliquot of soil in a known volume of high purity methanol. After mixing, a measured volume of the methanol will be transferred to the purge vessel of the purge and trap.

The QC program for the on-site laboratory will be in accordance with the EPA guidelines for a Level II analytical program. The QC program will consist of the following:

- At the start of the project, develop a four-point calibration curve using commercially-available PCE standards.
- Use toluene as a surrogate.
- Analyze a standard at the start and end of each day.
- Analyze a blank at the start and end of each day.
- Analyze one analytical duplicate for every 20 samples or minimum of three analytical duplicate for the entire project.
- Analyze one matrix spike for every 20 samples or a minimum of three matrix spikes for the entire project.

The results of each of these individual QC checks will be evaluated and appropriate corrective action will be taken, if needed, to bring the analysis back into control.

3.3 Laboratory Analytical Methods

The soil samples collected from the floor and walls of the excavated area and associated trip blanks will be analyzed for EPA's Target Analyte List VOCs according to the EPA's CLP March 1990 SOW.

3.4 Equipment Decontamination

The soil sample collection equipment will be cleaned by the following steps prior to the collection of any soil samples.

- All gross contamination and residual soils will be removed by wiping with a moist towel or wire brush.
- Any equipment that comes into contact with the soil sample will be thoroughly washed internally and externally with a brush and warm water and nonphosphatic laboratory grade detergent.
- All washed equipment will be rinsed thoroughly with clean tap water, followed by a rinse with reagent grade hexane and a second rinse with tap water.
- The cleaned equipment will be wrapped in either clean plastic or aluminum foil for storage and handling until used to collect a sample.

All equipment used for soil excavation and stockpiling will be decontaminated by steam cleaning at the beginning of the interim remediation. The equipment will be decontaminated

by steam cleaning at a steam temperature of 220°F and pressure of 1,000 pounds per square inch (psi) with potable water.

3.5 Investigation Derived Waste

All personnel protective equipment and waste plastic sheeting will be double-bagged and disposed of in a sanitary landfill. A decontamination area will be constructed by lining an appropriate area with 4-millimeter plastic sheeting. Straw bales will be placed around the perimeter of the area (beneath the sheeting) to contain runoff, which will be collected in a shallow sump. The fluids will be pumped from the sump to 55-gallon Department of Transportation approved drums. These will be stored in a secure location at the O'Henry Laundry. The drums will be labelled to indicate contents and volume. Pending chemical analysis and approval of the USVI Department of Planning and Natural Resources, decontamination water will be disposed in the sanitary sewer. Decontamination solvents will be allowed to evaporate from a stainless steel pan (only very small quantities are expected to be used).

4.0 Schedule

Based on regulatory concurrence, soil excavation can begin within 1 month after notice to proceed. Field activities are expected to take approximately 2 weeks. Confirmation sample analysis will be received approximately 3 weeks after the end of field activities. The results of confirmation soil sampling will be transmitted to the EPA once these results have been received.

5.0 References

Geraghty and Miller, Inc. 1993, "Technical Memorandum II, Results of the Field Program, Tutu Service Station Investigation, St. Thomas, U.S. Virgin Islands."

Ravi, V. and J. A. Johnson, 1993, VLEACH Version 2.0, Robert S. Kerr Environmental Research Laboratory.

Rosenbloom, J., P. Mock, P. Lawson, J. Brown and H.J. Turin, 1993, "Application of VLEACH to Vadose Zone Transport of VOCs at an Arizona Superfund Site," *Ground Water Monitoring and Remediation*, Summer 1993, Vol. 13, No. 3, pp. 159-169.

U.S. Environmental Protection Agency (EPA), 1991, *Human Health Evaluation Manual, Part B: Development of Risk-Based Preliminary Remediation Goals*, OSWER Directive 9285.7-01B.

Appendix A

Site Specific Safety and Health Plan

**SITE-SPECIFIC SAFETY AND HEALTH PLAN
INTERIM REMEDIATION OF SOILS
L'HENRI, INC.
TUTU, ST. THOMAS, U.S. VIRGIN ISLANDS**

PREPARED FOR:

**L'HENRI, INC.
ROUTE 38
TUTU, ST. THOMAS, U.S. VIRGIN ISLANDS**

PREPARED BY:

**IT CORPORATION
312 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE**

APRIL 1994

IT PROJECT NUMBER: 409830

Reviews and Approvals _____

Project Manager
IT Corporation

Belinda Rice

4/5/94

Date

Health and Safety Representative
IT Corporation

Melissa G. Smith

4/5/94

Date

Site Health and Safety Plan Acknowledgement _____

I have read, understand and agree to abide by the provisions as detailed in this Site-Specific Health and Safety Plan prepared by IT Corporation. Failure to comply with these provisions may lead to disciplinary action and/or my dismissal from the work site.

Printed Name

Signature

Employee Number

Date

[illegible]

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1.0 Introduction

1.1 Objectives

The objective of the Health and Safety (H&S) Plan is to ensure that safe working conditions exist at the site. The safety organization and procedures have been established based on an analysis of potential hazards, and personnel protection measures have been selected in response to this analysis. This H&S Plan will be implemented and followed by site personnel and contractors during the work activities at the L'Henri, Inc located in St. Thomas, U.S. Virgin Islands.

1.2 Facility and Location Description

L'Henri, Inc. site is an operating dry cleaning establishment located on Highway 38. Four monitoring wells exist on the site in various locations which include an area near the dry cleaning facility, an area in the parking lot, and a vegetated area behind the facility. The facility utilized solvents for dry cleaning operations such as perchloroethylene (PCE), trichloroethylene (TCE), and 1,2-dichloroethylene (DCE). Contamination of the site was a result the processes at the site and preliminary investigative work surveys have indicated that most of the PCE contamination is located in the vicinity of soil boring SS1 which is near the southwest corner of the laundry building.

1.3 Policy Statement

It is the policy of IT Corporation (IT) to provide a safe and healthful work environment for all its employees. IT considers no phase of operations or administration to be of greater importance than injury and illness prevention. Safety takes precedence over expediency or shortcuts. At IT we believe every accident and every injury is preventable. We will take every reasonable step to reduce the possibility of injury, illness, or accident.

This Health and Safety (H&S) Plan prescribes the procedures that must be followed during the activities at L'Henri, Inc. Operational changes which could affect the health or safety of personnel, the community, or the environment will not be made without the prior approval of the IT Project Manager, and the Project H&S Coordinator.

The provisions of this plan are mandatory for all IT personnel and subcontractors assigned to the project. IT requires all visitors to the work site to abide by the requirements of the plan.

1.4 References

This H&S plan complies with applicable Occupational Safety and Health Administration (OSHA) and the U.S. Environmental Protection Agency (U.S. EPA) regulations. This plan follows the guidelines established in the following:

- Standard Operating Safety Guidelines (U.S. EPA, November 1984)
- Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (National Institute of Occupational Safety and Health [NIOSH] 86-116)
- Title 29 of the Code of Federal Regulations (CFR), Part 1910.120, U.S. Department of Labor (U.S. DOL)/OSHA.

The contents of this plan are consistent with the following IT H&S policies and procedures:

- HS001 Safety Policy
- HS002 Safety Policy: International Operations
- HS010 Employee Safety and Health Works Rules
- HS011 Contractor Safety and Health Rules
- HS012 Chemical Hygiene Plan and Safety Manual
- HS013 Health and Safety Procedure Variances
- HS018 Safety Councils
- HS019 Injury and Illness Prevention Program
- HS020 Accident Prevention Program: Reporting, Investigation, and Review
- HS021 Accident Prevention Program: Management Safety Audits and Inspections
- HS022 Accident Prevention Program: Review of New Proposals, Projects, Operations, and Construction
- HS040 Stop Work Authority
- HS041 Embryo-Fetus Protection Program
- HS050 Training Requirements
- HS051 Tailgate Safety Meetings
- HS052 Health and Safety Plans
- HS060 Hazard Communication Program
- HS080 Insurance Claims
- HS090 OSHA Regulatory Inspections

- HS091 Serious Injury and Fatality Reporting Requirements
- HS092 Occupational Injury and Illness Recordkeeping
- HS100 Medical Policies and Procedures
- HS101 Drug and Alcohol Testing
- HS102 Access to Employee Exposure and Medical Records
- HS103 Maintenance of Employee Exposure and Medical Records
- HS104 Employee Notification of Industrial Hygiene Monitoring Results
- HS105 Occupational Injuries/Illnesses Procedures
- HS106 First Aid Kits
- HS300 Confined Spaces, Industrial
- HS301 Confined Spaces, Marine
- HS302 Confined Spaces, Leaded Product
- HS303 Hydroblasting
- HS304 Compressed Gas
- HS305 Pressurized Systems
- HS306 Handling Known Compressed Gas Cylinders
- HS307 Excavation and Trenching
- HS308 Scaffolding
- HS309 Underground Storage Tank Removal
- HS310 Hazardous Waste Operations at Uncontrolled Waste Sites
- HS311 Emergency Response Operations
- HS312 Hazardous Waste Operations at TSD Facilities
- HS313 TSD Facilities - Minimum Staffing Requirements
- HS314 Hot Work in Hazardous Locations
- HS315 Control of Hazardous Energy Sources (Lockout/Tagout)
- HS400 Working in Hot Environments
- HS401 Cold Stress
- HS402 Hearing Conservation Program
- HS500 Handling of PCBs
- HS501 Handling of PCBs in the Laboratory
- HS502 PCB Contaminant and Spill Prevention Requirements for Transport Vehicles
- HS503 Handling of Dioxin and Furan Contaminated Materials
- HS504 Handling of Dioxin in the Laboratory
- HS505 Handling of Inorganic Lead, Inorganic Lead Compounds, and Organic Lead Soaps
- HS506 Handling of Inorganic Arsenic
- HS507 Handling of Dibromochloropropane (DBCP)
- HS508 Handling of Beryllium and Beryllium Contaminated Materials
- HS509 Handling, Removal and Disposal of Asbestos and Asbestos Contaminated Materials
- HS510 Asbestos Work in Schools
- HS511 Handling of Benzene and Benzene Contaminated Materials
- HS512 Handling of Blood or Other Potentially Infectious Materials

- HS513 Handling Radioactive Materials
- HS600 Personal Protective Equipment
- HS601 Respiratory Protective Program
- HS602 Eye Protection - Prescription Safety Glasses
- HS603 Maintenance of Survey Equipment
- HS604 Use and Maintenance of Portable Electrical Equipment
- HS605 Electron Capture Detectors
- HS606 Soil Density Gauges
- HS800 Motor Vehicle Operation: General Requirements
- HS810 Commercial Motor Vehicle Operation and Maintenance
- HS820 Forklift Operation
- HS821 Breathing Air Cylinder Trailer
- HS822 Mobil Crane Inspection.

2.0 Responsibilities

2.1 All Personnel

Each person is responsible for the H&S of themselves and their coworkers, for completing tasks in a safe manner, and reporting any unsafe acts or conditions to their Supervisor and/or the Site Supervisor. All personnel are responsible for continuous adherence to these H&S procedures during the performance of their work. No person may work in a manner that conflicts with the letter or the intent of, or the safety and environmental precautions expressed in these procedures. After due warnings, IT will dismiss from the site any person who violates safety procedures. IT's employees are subject to progressive discipline and may be terminated for blatant or continued violations. All on-site personnel will be trained in accordance with 29 CFR 1910.120 and this document.

2.2 Project Manager

The Project Manager is ultimately responsible for ensuring that all project activities are completed in accordance with requirements set forth in this plan. The Project Manager must perform at least one on-site safety review during the project. The Project Manager is responsible for ensuring all accidents and incidents on the project are reported and thoroughly investigated. The Project Manager must approve in writing any addenda or modifications of the H&S plan.

2.3 Project Health and Safety Coordinator

The Project H&S Coordinator is responsible for the preparation and modification of this H&S plan. Any changes to the H&S plan must be approved by the Project H&S Coordinator. The Project H&S Coordinator will advise the Project Manager on H&S issues, will establish and oversee the project air monitoring program, and will perform at least one comprehensive H&S audit during the project. The H&S Coordinator is the designated regulatory contact on matters related to occupational H&S.

2.4 Site Supervisor

The Site Supervisor will be responsible for field implementation of the H&S plan. This will include communicating site requirements to all on-site project personnel (both IT and subcontractor personnel) and consultation with the Project H&S Coordinator. As required by IT Policy and Procedure HS022, the Site Supervisor will be responsible for informing the

Project H&S Coordinator and the Project Manager of any changes in the work plan, so that those changes may be properly addressed. Other responsibilities include:

- Enforcing the requirements of the H&S plan. This includes performing daily safety inspections of the work site.
- Stopping work, as required, to ensure personal safety and protection of property, or where life or property-threatening noncompliance with safety requirements is found.
- Determining and posting routes to capable medical facilities and emergency telephone numbers (including poison control facilities) and arranging emergency transportation to medical facilities.
- Notifying local public emergency officers of the nature of the site operations, and posting of their telephone numbers in an appropriate location.
- Observing on-site project personnel for signs of chemical or physical trauma.
- Ensuring that all site personnel have been given the proper medical clearance, ensuring that all site personnel have met appropriate training requirements and have the appropriate training documentation on site, and monitoring all team members to ensure compliance with the H&S plan.

2.5 Subcontractors

On-site subcontractors and their personnel are responsible for understanding and complying with all site requirements. Subcontractors are required to follow the guidelines established in IT's Safety Rules for Contractors, provided when qualified, and this H&S plan. Refer to Appendix A.

2.6 On-Site Personnel and Visitors

All IT and subcontractor personnel and visitors are required to read and acknowledge their understanding of this H&S plan. All site project personnel are expected to abide by the requirements of the plan and cooperate with site supervision in ensuring a safe and healthful work site. Site personnel are required to immediately report any of the following to the Site Supervisor:

- Accidents and injuries, no matter how minor
- Unexpected or uncontrolled release of chemical substances
- Any symptoms of chemical exposure
- Any unsafe or malfunctioning equipment
- Any changes in site conditions which may affect the H&S of project personnel.

3.0 Job Hazard Analysis

The Job Hazard Analysis identifies potential safety, health, and environmental hazards and provides for the protection of personnel, the community, and the environment. Because of the complexity and constant change of remedial projects, supervisors must continually inspect the work site to identify hazards which may harm site personnel, the community, or the environment. The PM must be aware of these changing conditions and discuss them with the H&S Coordinator. The PM will keep contractors informed of the changing conditions. The H&S Coordinator will write addenda to change the Job Hazard Analysis and associated hazard controls as necessary.

3.1 Scope of Work

The scope of work is perform excavation and sampling activities at the L'Henri, Inc. site. Soils in the vicinity of soil boring SS1 will be excavated to depths of approximately 7 feet. The soil volume estimate to be removed is 1575 ft³ approximately 15 ft by 15 ft by 7 ft. The excavation will be limited by safety considerations or physical limitations imposed by the nearby building. The excavated soil will be stockpiled within an envelope of 4 millimeter plastic sheeting surrounded by a locked security fence.

3.2 Job Hazard Assessment

3.2.1 Physical Hazards

Anticipated physical hazards of concern:

- Fall, trip, slip
- Heat (high ambient temperature)
- Ultraviolet radiation
- Noise
- Excavation hazards
- Heavy equipment
- Material handling.

The primary safety hazards for this project are associated with the excavation and operation of heavy equipment.

In addition to the primary safety hazards, work activities may pose additional physical hazards such as heat stress, sunburn and hearing impairment.

Heat Stress. Wearing personal protective equipment (PPE) may put site personnel at considerable risk of heat stress. Heat stress effects range from transient heat fatigue to serious illness and death. Heat stress is caused by a number of interacting factors, including environmental conditions, clothing, workload, and the individual characteristics of the worker. Because heat stress is fairly common during late spring, summer and fall, preventive measures and alertness to the symptoms are vital.

Heat stress monitoring should commence when personnel are wearing PPE, including Tyvek coveralls, and the ambient temperature exceeds 70 degrees Fahrenheit (°F). If impermeable garments are not worn, heat stress monitoring should commence at 85°F.

Ultraviolet Radiation. Field operations will be conducted during late spring and summer months when overexposure to direct sunlight may result in sunburn. Lotions/creams that reduce the effects of the sun's rays are to be worn by employees performing activities at the site.

Excavation. The primary hazards of excavation activities for the purpose of sampling (i.e., test pit sampling) or remediation (i.e., removal of contaminated materials for subsequent disposal) include potential cave-ins due to heavy equipment operation or changing soil/weather conditions, slip/trip/fall hazards related to equipment handling and/or uneven or unstable surfaces, and excessive noise from on-site equipment.

Entry of personnel into site excavations presents additional potential hazards of confined-space entry. Potential hazards associated with confined-space entry include the following: the possible buildup of toxic, combustible, or oxygen-deficient/enriched atmospheres; uneven/slippery surfaces; the possibility of liquids or gases being admitted into the space during occupancy; or the physical isolation of the employee(s) when in need of rescue.

A detailed discussion of hazard control procedures for excavation safety and confined-space entry is presented in Sections

Material Handling. Field operations consist of the collection soil samples for subsequent analysis and collection of decontamination water in salvage drums. The physical hazards of these operations are not potentially serious; however, strains/sprains may result from improper body alignment or excessive lifting.

3.2.2 Chemical Hazards

The chemical hazards associated with sampling operations at the L'Henri, Inc (Table 1) are related to inhalation, ingestion, and skin contact with contaminated soils and water (see Section 1.2). The site-specific Material Safety Data Sheets (MSDS) are included in Appendix B.

Some analytical results from previous contaminant investigations are indicated below:

- Concentrations of PCE at SS1 were approximately 5.4 ppm at soil depths from 2.5-4.0 feet; 59 ppm at soil depths 4-6 feet; decreasing concentration as soil depth from 6 feet increased; and non-detected greater than 19 feet depth.
- Concentrations of PCE at SB11 were approximately 0.03 ppm at soil depths from 0-2 feet.
- Concentrations of PCE at SB13 were approximately 0.2 ppm at soil depths 4-6 feet.
- Concentrations of PCE at SB13A were approximately 0.02 ppm at soil depths 0-2 feet.

3.2.3 Noise

Noise exposure at or above the OSHA action level (85 decibels [dBA]) is likely during all excavation and heavy equipment operations. Exposure to noise levels in excess of 90 dBA, the OSHA permissible exposure limits (PEL) for noise, is likely during any excavation operations involving heavy equipment. A hearing conservation program is required for excavation projects.

Exposure to noise over the OSHA action level can cause temporary impairment of hearing; prolonged and repeated exposure can cause permanent damage to hearing. The risk and severity of hearing loss increases with the intensity and duration of exposure to noise. In addition to

Table 1
Chemical Hazard Information
L'HENRI

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Contaminant (Synonym)	Physical/Chemical Characteristics (Target Organs/Route of Entry)	OSHA PEL (ppm)	ACGIH TLV (ppm)	IDLH (ppm)
Perchloroethylene (Tetrachloroethylene)	Colorless liquid with a mild, chloroform-like odor. Volatile, VP=14 mm. Noncombustible liquid. IP=9.32 eV. Animal carcinogen. Target organs include liver, kidneys, and central nervous system. Routes of entry are inhalation, absorption, ingestion, and skin contact. Symptoms of overexposure include nausea, vomiting, abdominal pain; tremor fingers; jaundice, enlarged tender liver; dermatitis; kidney damage.	25 ppm	25 ppm	500 ppm Animal Carcinogen
Trichloroethylene	Colorless liquid with a chloroform-like odor. Very volatile, VP=58 mm. IP=9.45 eV. Flammable liquid. Flashpoint 90°F, UEL=10.5%, LEL=8%. <u>Not</u> a suspected carcinogen, confirmed through numerous epidemiological studies. Target organs include respiratory system, heart, liver, kidneys, central nervous system, and skin. Routes of entry are inhalation, ingestion, and skin contact. Symptoms of overexposure include irritation of nose, eyes; central nervous system depression, liver, kidney damage.	50 ppm	50 ppm	1000 ppm
1,2-Dichloroethylene	Colorless liquid with a slightly acrid, chloroform-like odor. Extremely volatile, VP=180-264 mm. IP=9.65 eV. Flammable liquid. Flashpoint 36°F, UEL=12.8%, LEL=5.6%. Target organs include respiratory system, eyes, and central nervous system. Routes of entry are inhalation, ingestion, and skin contact. Symptoms of overexposure include irritation of eyes, respiratory system; central nervous system depression.	200 ppm	200 ppm	4000 ppm

damaging hearing, noise can impair voice communication; thereby, increasing the risk of accidents on site.

3.3 Anticipated Biological Hazards

3.3.1 Snakes

If sample collection locations are such that the possibility of encountering snakes exists, all personnel shall be cautioned to be alert to the presence of snakes. Should a snake bite occur, attempts should be made to kill the snake for positive identification. The victim should be transported to the nearest hospital within 30 minutes; first aid consists of applying a constriction band, washing the area around the wound to remove any unabsorbed venom, and omit cutting and sucking (unless medical care cannot be obtained within 30 minutes). Snake venoms are complex and include proteins, some of which have enzymatic activity. The effects produced by venoms include neurotoxic effects with sensory, motor, cardiac, and respiratory difficulties; cytotoxic effects on red blood cells, blood vessels, heart muscle, kidneys, and lungs; defects in coagulation, and effects from local release of substances by enzymatic actions. Other noticeable effects of snake bites include swelling, edema and pain around the bite, and the development of ecchymosis (the escape of blood into tissues from ruptured blood vessels).

3.3.2 Insects

All IT personnel and subcontractors should be aware of the potential presence of deer ticks during the months of April through October. Precautionary methods include familiarity with the signs/symptoms and potential health hazards of Lyme disease, and the proper implementation of appropriate work practices.

During the months of April through October, particular caution must be exercised to prevent being bitten by ticks and potentially contracting Lyme disease, Rocky Mountain Fever, and other tick borne diseases. Specific precautions include:

- Cover your body as much as possible. Wear long pants and long-sleeved shirts. Light color clothing makes spotting of ticks easier.
- Try to eliminate possible paths by which the deer tick may reach unprotected skin. For example, tuck bottoms of pants into socks or boots and sleeves into gloves. (Duct tape may be utilized to help seal cuffs and ankles.) If heavy concentrations of ticks or insects are anticipated or encountered, Tyvek coveralls may be utilized.

- Conduct periodic and frequent (e.g., hourly) surveys of your clothing for the presence of ticks. Remove any ticks/insects that become attached to clothing.
- Use insect/tick repellents that contain the chemical DEET (n,n-diethyltoluamide). Apply repellents in accordance with manufacturers' recommendations. These repellents are readily available and include such brands as Deep Woods OFF and Maximum Strength OFF. Check the ingredients of the repellent, as the higher the concentration of DEET, the longer the repellent will be effective.

IT field personnel should check with the Project Manager to ensure use of insect repellents will not interfere with sample collection procedures.

3.3.3 Buried Sharp Objects

Although the potential biological hazards associated with this project are not anticipated to be significant, on-site personnel should be aware of potential bacterial/viral infections (e.g., tetanus) through ingestion following skin contact, or from puncture wounds sustained from stepping on or handling buried sharp objects.

3.3.4 Poisonous Plants

If sample points are located in areas where poisonous plants may be encountered, personnel should wear long pants, long sleeves, and gloves to minimize the possibility of exposure. In some areas, the use of a Tyvek or other protective suit may be advisable.

4.0 Safety Program and Procedures

The following work practices will be observed during all site activities.

4.1 General Practices

- At least one copy of this plan shall be available at the project site, in a location readily available to all personnel, including visitors.
- As practical, personnel should practice contamination avoidance. All solid and liquid samples should be collected in such a manner as to minimize contact with the material.
- Contaminated protective equipment, such as respirators, hoses, boots, etc., shall not be removed from the area of potential contamination until it has been cleaned or properly packaged and labeled.
- Legible and understandable precautionary labels which comply with the hazard communication standard shall be affixed prominently to all containers of contaminated scrap, waste, debris, and clothing.
- Removal of contaminated solids from protective clothing or equipment by blowing, shaking, or any other means that disperse contaminants into the air is prohibited.
- No food or beverages shall be present or consumed in the regulated area.
- No tobacco products shall be present or used in the regulated area.
- Cosmetics shall not be applied within the regulated area.
- Contaminated materials shall be stored in tightly closed containers, in well-ventilated areas.
- Emergency equipment shall be located outside storage areas in readily accessible locations that will remain minimally contaminated in an emergency.
- All areas that have been determined as uncontaminated inside the regulated area will be clearly marked as such. No personnel, equipment, etc., shall be in these areas until they have been decontaminated.

- Ensure that no one is required to lift more than 60 pounds. Drums and containers shall be moved only with proper equipment, and shall be secured to prevent dropping or loss of control during transport.
- Operations shall be organized to minimize the amount of drum and container movement. Standing upon or working from drums or containers is prohibited. Only U.S. DOT-approved drums or containers will be used onsite.
- All crew personnel on site shall use the buddy system (working in pairs or teams). If protective equipment or noise levels impair communications, then prearranged hand signals shall be used for communication. Visual contact shall be maintained between crew members at all times, and crew members must observe each other for signs of toxic exposure. Indication of adverse effects include, but are not limited to:
 - Changes in complexion and skin coloration
 - Changes in coordination
 - Changes in demeanor
 - Excessive salivation and pupillary response
 - Changes in speech pattern.
- Employees shall inform their partners or fellow team members of nonvisible effects of overexposure to toxic materials. The symptoms of such overexposure may include:
 - Headaches
 - Dizziness
 - Nausea
 - Blurred vision
 - Cramps
 - Irritation of eyes, skin, or respiratory tract.
- Visitors to the site shall abide by the following:
 - All visitors shall be instructed to stay outside the contaminated zone (exclusion and decontamination zones) and remain within the clean zone during the extent of their stay. Visitors shall be cautioned to avoid skin contact with contaminated or potentially contaminated surfaces.
 - Visitors requesting to observe work conducted in the exclusion zone (EZ) must wear all appropriate PPE prior to entry into that zone. If respiratory protective devices are necessary, visitors who wish to enter the contaminated zone must produce evidence that they have had a complete physical examination, respirator

training, and have been fit tested for the respirator to be used within the past 12 months.

4.2 Operating Procedures

4.2.1 Excavation Safety

IT Procedure HS307 for excavation and trenching found in Appendix C must be followed. No persons shall be allowed to enter into any excavation greater than 5 feet deep. If persons will enter excavations greater than 5 feet deep, the excavation must be shored, sloped, or otherwise made safe for entry. Personnel are urged to use remote sampling techniques whenever possible. When entry is unavoidable, the IT Procedure HS300 for confined-space entry found in Appendix D must be followed for each such activity.

Shoring or sloping system must be designed by a registered Professional Engineer (P.E.) licensed in the state in which the excavation will take place. The design must be present at the site, and the system must be installed as designed.

All excavation shall be performed from a stable ground position. Daily inspections of the excavation shall be made by a competent person, one who has received training in excavation safety. The inspector shall determine the likelihood of a cave-in, and remedial action (RA) such as sloping or shoring shall be taken if the walls appear to be unstable.

All spoil shall be located at least 2 feet from the edge of the excavation to prevent it from falling back into the excavation. The excavation shall be guarded on all sides by barricades or caution tape at least 2 feet from the edge.

All project personnel shall participate in the daily tailgate safety meetings and be instructed on the following requirements:

- Before excavating, the existence and location of underground pipe, electrical equipment, and gas lines will be determined. This will be done, if possible, by contacting the appropriate utility company and/or client representative to mark the location of the lines. If the client's knowledge of the area is incomplete, an appropriate device, such as a cable avoiding tool, will be used to locate the service line.

- No ignition sources are permitted if the ambient airborne concentration of flammable vapors exceeds 10 percent of the lower explosive limit (LEL) during the excavation. A combustible gas indicator will be used to make this determination.
- Operations must be suspended and the area vented if the airborne flammable concentration reaches 10 percent of the LEL in the area of an ignition source (i.e., sparks from bucket of excavator).
- Combustible gas reading of the general work area will be made regularly.
- If excavating equipment is located in the vicinity of overhead power lines, a distance of 15 feet must be maintained between the lines and any point on the equipment. If the lines have appreciable sag, or if windy conditions exist, this distance shall be 20 feet.

4.2.2 Confined-Space Entry

The collection of post excavation samples may require personnel to enter an excavation. Personnel are urged to use remote sampling techniques whenever possible. When entry is unavoidable, the requirements as specified in Section 12 for confined-space entry must be followed for each such activity.

A confined space is defined as having limited means of egress due to location, size, or number of openings, and has unfavorable natural ventilation. Contaminated soil excavations may pose additional hazards such as air contamination, flammable or explosive atmosphere, and oxygen deficiency. IT has detailed training for confined-space entry, and only personnel properly trained shall supervise and participate in confined-space entry procedures.

All personnel entering a confined space shall be trained in proper procedures and the use of PPE. Only properly trained persons shall initiate confined-space entry procedures, perform tests on confined spaces, and authorize entry. The procedures for such entry are:

- The confined space must be isolated to prevent the introduction of contaminants during entry.
- Mechanical ventilation may be necessary to purge the space of vapors and ensure sufficient oxygen supply.
- The confined space shall be tested prior to entry. Tests shall be performed to determine the level of oxygen, flammable vapors, and toxic contaminants. Tests

shall be repeated as often as necessary to ensure the safety of personnel entering the confined space.

- No entry shall be occur in a space where conditions are immediately dangerous to life and health (IDLH). Examples are oxygen less than 20 percent, greater than 10 percent LEL.
- Proper protective clothing and respiratory protective equipment shall be used for confined-space entry (Chapter 5).
- Personnel entry into any excavation 5 feet deep or greater is only permitted if the walls are properly shored or sloped. A ladder shall be provided and placed at an angle not more than 30 degrees from vertical, and secured as necessary. Ladder side rails shall extend at least 3 feet above the ground surface.

4.3 Heat Illness Prevention

4.3.1 Heat Stress

One or more of the following control measures can be used to help control heat stress and are mandatory if any site worker has a heart rate (measure immediately prior to rest period) in excess of 110 beats per minute:

- Site workers will be encouraged to drink plenty of water throughout the day. They will be advised to slightly increase their salt intake by lightly salting their food.
- On-site drinking water will be kept cool (50 to 60°F) to encourage personnel to drink frequently.
- A work regimen that will provide adequate rest periods for cooling down will be established, as required.
- All personnel will be advised of the dangers and symptoms of heat stroke, heat exhaustion, and heat cramps.
- Cooling devices such as vortex tubes or cooling vests should be used when personnel must wear impermeable clothing in conditions of extreme heat.
- Employees should be instructed to monitor themselves and coworkers for signs of heat stress and to take additional breaks as necessary.
- A shaded rest area must be provided. All breaks should take place in the shaded rest area.

- Employees shall not be assigned to other tasks during breaks.
- Employees shall remove impermeable garments during rest periods. This includes white Tyvek-type garments.
- All employees shall be informed of the importance of adequate rest, acclimation, and proper diet in the prevention of heat stress disorders.

The signs of heat stress disorders are given below.

Heat Cramps. Heat cramps are caused by heavy sweating and inadequate electrolyte replacement. Signs and symptoms include muscle spasms and pain in the hands, feet, and abdomen.

Heat Exhaustion. Heat exhaustion occurs from increased stress on various body organs. Signs and symptoms include:

- Pale, cool, moist skin
- Heavy sweating
- Dizziness, nausea
- Fainting.

Heat Stroke. Heat stroke is the most serious form of heat stress and should always be treated as a medical emergency. The body's temperature regulation system fails, and the body temperature rapidly rises to critical levels. Immediate action must be taken to cool the body before serious death or injury occurs. Signs and symptoms of heat stroke include:

- Red, hot, usually dry skin
- Lack of, or reduced perspiration
- Nausea
- Dizziness and confusion
- Strong, rapid pulse and confusion
- Coma.

4.4 Hearing Conservation

All on-site IT and subcontractor personnel shall wear hearing protection, with a Noise Reduction Rating (NRR) of at least 20, when noise levels exceed 85 dBA. All site personnel who may be

exposed to noise shall also receive baseline and annual audiograms and training as to the causes and prevention of hearing loss. Noise monitoring is discussed in Chapter 8.0.

Whenever possible, equipment that does not generate excessive noise levels will be selected for this project. If the use of noisy equipment is unavoidable, wherever possible, barriers, or increased distance will be used to minimize worker exposure to noise.

4.5 Sanitation

4.5.1 Potable Water

The following rules apply for all project field operations:

- An adequate supply of potable water will be provided at each work site.
- Portable containers used to dispense drinking water shall be capable of being tightly closed, and shall be equipped with a tap dispenser. Water shall not be drunk directly from the container.
- Containers used for drinking water shall be clearly marked and not used for any other purpose
- Disposable cups will be supplied; both a sanitary container for unused cups and a receptacle for disposing of used cups shall be provided.

4.5.2 Non-potable Water

Outlets for non-potable water shall be identified to clearly indicate that the water is unsafe and is not to be used for drinking, washing, or cooking purposes. There shall be no cross connection (open or potential) between potable and nonpotable water systems. Non-potable and potable water systems shall be separated so as to minimize confusion and possible cross contamination.

4.5.3 Toilet Facilities

Toilet facilities shall be available for employees as follows:

Number of Employees	Minimum Number of Facilities
20 or fewer	One
More than 20, fewer than 200	One toilet seat and one urinal
More than 200	One toilet seat and one urinal per 40 employees

If permanent toilet facilities are not available (at sites more than 500 feet from a building with an accessible toilet), then a portable chemical toilet(s) will be provided.

4.5.4 Trash Collection

Trash collected from the contamination reduction zone (CRZ) will be separated as routine hazardous waste. Trash collected in the support and break areas will be disposed of as nonhazardous waste. Labeled trash receptacles will be set up in the CRZ and in the support zone.

5.0 Personal Protective Equipment

Based upon the job hazard analysis, it is expected that project personnel will utilize Level D protective clothing for excavation of the first 4 feet if air monitoring results do not exceed the action levels specified in Table 2. Level C will be worn by all personnel in the immediate vicinity where air monitoring readings are above the action level. Level C or Level B protective clothing may be required for entry into excavations or other operations depending upon the levels of contaminants as measured at the time of entry. It is anticipated that ventilation of any confined spaces will result in atmospheres with no hazardous levels of contaminants. If conditions warrant higher levels of protection, site work will be suspended until such conditions can be rectified.

When working at the site, personnel must wear ultraviolet radiation protective lotions/creams to prevent sunburn.

5.1 Levels of Protection

5.1.1 Level D

The minimum level of protective equipment to be worn on site during this project is:

- Hard hat, American National Standards Institute (ANSI) approved
- Safety glasses, ANSI approved
- Steel-toed boots or shoes, ANSI approved

If noise levels exceed 85 dBA, then hearing protection with a U.S. EPA NRR of at least 20 dBA shall be used.

5.1.2 Level C

Level C protection may only be used when contaminants can be evaluated or controlled, oxygen is at least 20 percent, and LEL is less than 10 percent. Level C protection for this project will consist of the following:

- Hard hat, ANSI approved
- Safety glasses, ANSI approved
- NIOSH-approved, full-face air purifying respirator with NIOSH-approved cartridges for dust and organic vapors
- Steel-toed neoprene boots or overbooties
- Nitrile gloves

- Double polyethylene coated Tyvek hooded coveralls
- Full tape of ankles, wrists, and hood

5.1.3 Level B

Level B protection will be used for all work where atmospheres contain contaminants in excess of 10 times the permissible exposure limit (PEL) or for confined space entry. Level B protection for this project will consist of the following:

- Hard hat, ANSI approved
- Safety glasses, ANSI approved
- NIOSH-approved positive pressure air supply respirator system such as air line or self-contained breathing apparatus (SCBA)
- Steel-toed neoprene boots (ANSI approved) or overbooties
- Nitrile gloves
- Double polyethylene coated Tyvek hooded coveralls
- Full tape of ankles, wrists, and hood

5.2 Respiratory Protection Program

The IT respiratory protection program will apply to all activities requiring the use of respirators at the site. Basic requirements are as follows:

- All site personnel will have an assigned respirator face piece.
- All site personnel will have been medically qualified, fit tested, and qualified in the use of the appropriate respirator within the past 12 months. Fit test and respirator qualification cards must be provided to the Field Operations Coordinator (FOC) prior to commencing site work.
- Only properly cleaned, maintained, NIOSH-approved respirators are to be used on this site.
- If air-purifying respirators are used, the respirator cartridge is to be disposed of at the end of each work shift, or when load-up or breakthrough occurs.
- Contact lenses are not to be worn when a respirator is required.
- All site personnel will be clean shaven in facial areas which touch the sealing surface of the respirator.
- Respirators will be inspected; a positive and negative pressure test will be performed prior to each use.

- After each use, the respirator will be wiped with a disinfectant, cleansing wipe. When used, the respirator will be thoroughly cleaned at the end of the work shift. The respirator will be stored in a clean plastic bag.

5.3 Using Personal Protective Equipment

Depending upon the level of protection selected for this project, specific donning and doffing procedures may or may not be required. The following procedures are mandatory if Level C or higher PPE is selected.

All persons entering the EZ shall put on the required PPE in accordance with the requirements of this plan. When leaving the EZ, PPE will be removed in accordance with the procedures listed, in order to minimize the spread of contamination.

5.3.1 Donning Procedures

These procedures are mandatory, only if Level C or higher PPE is required for the project:

- Remove bulky outerwear. Remove street clothes and store in clean location.
- Put on disposable or IT issue (and laundered) work clothes or coveralls.
- Put on the required chemical protective coveralls or rain gear.
- Put on chemical protective boots or boot covers.
- Tape the legs of the coveralls to the boots with duct tape.
- Put on chemical protective gloves as required by the H&S plan.
- Tape the wrists of the protective coveralls to the gloves.
- Don respirator if required, and perform appropriate fit check.
- Put hood or head covering over head and respirator straps. Tape the hood to the face of the respirator.
- Don remaining PPE, such as safety glasses or goggles and hard hat.

If these procedures are instituted, one person shall remain outside the work area to ensure that each person entering has the proper protective equipment. No persons shall be allowed to enter an EZ if they are not wearing the required PPE.

5.3.2 Doffing Procedures

The following procedures are only mandatory if Level C or higher PPE is required for this project. Whenever a person leaves a Level C or higher work site, the following decontamination sequence will be followed:

- Upon entering the CRZ, rinse contaminated materials from the boots or remove contaminated boot covers.
- Clean reusable protective equipment.
- Remove protective garments, equipment, and respirator. All disposable clothing should be placed in plastic bags, which are labeled with contaminated waste labels.
- Wash face and neck.
- Proceed to clean area and dress in clean clothing.
- Clean and disinfect respirator for next use.
- Proceed to the sign-out point.

All disposable equipment, garments, and PPE shall be bagged in two 6 mil plastic bags, properly labeled for disposal.

5.4 Selection Matrix

The level of personal protection selected will be based upon real-time air monitoring of the work environment and an assessment by the Site Supervisor of the potential for skin contact with contaminated materials. The PPE selection matrix is given in Table 2.

Table 2
PPE Selection Matrix

AIRBORNE CONTAMINANT ACTION LEVELS		
Parameter	Reading Above Background	Required Action
Flammable vapors (LEL)	< 10% LEL	Normal operations
	≥ 10% LEL	Stop work; ventilate area; investigate source of vapors
Total Hydrocarbons	< 5 ppm	Normal operations
	5 to 50 ppm	Stop work; don Level C PPE
	≥ 50 ppm	Stop work; evacuate area; investigate cause of reading

6.0 Site Control

Only personnel who have completed 40 hours of hazardous waste operations as defined under OSHA Regulation 29 CFR 1910.120, have completed their 40-hour training or refresher training within the past 12 months, and have been certified as fit for hazardous waste operations by a physician within the past 12 months shall be allowed within a site area designated as the work zone. Personnel without such training may not enter the designated work zone. The Site Supervisor will maintain a list of authorized persons. That list will be provided to each IT site representative.

6.1 Hazard Briefing

No person will be allowed on any IT field sites during site operations without first being given a site hazard briefing. In general, the briefing will consist of a review of the tailgate safety meeting. All persons on the site, including visitors, must sign the site-specific tailgate safety meeting form.

6.2 Documentation of Certification

A training and medical file will be established for the project and kept on site during all site operations. The 40-hour training, update, and specialty training (first-aid/cardiopulmonary resuscitation [CPR]) certificates, as well as the current annual medical clearance for all project field personnel, will be maintained within that file. All IT and subcontractor personnel must provide their training and medical documentation to the Site Supervisor prior to the start of field work.

6.3 Entry Log

The IT representative at the site shall record on their Field Activity Daily Log (FADL) all visitors to the site. A log-in/log-out sheet shall be maintained at each site. Personnel will sign in and out on the sheet as they enter and leave the work zone. At the end of each shift, the log will be collected by the IT site representative for incorporation into the project file.

6.4 Entry Requirements

In addition to the entry requirements listed above, no personnel will be allowed on any IT field site unless they are wearing the minimum PPE as described in Chapter 5.0. Personnel entering the work zone must wear the required PPE for those locations.

7.0 Decontamination

Contamination control will be maintained in the immediate work area where there is a potential for chemical contaminants to escape to the immediate environment. This control may consist of several techniques that will prevent loss of contamination control. Techniques include establishing a plastic- or paper-covered laydown area adjacent to the sampling point, wearing of PPE, establishing a control boundary by using rope or tape, and implementing other techniques that are readily recognized by client procedures.

Only IT personnel and authorized visitors who have completed 40-hour hazardous waste training and who are wearing the required PPE will be allowed within the work zone.

7.1 Personnel Decontamination

Once clear of the area, the workers should wash exposed skin surfaces (e.g., hands and face) with soap and water to remove any contaminants.

7.2 Equipment Decontamination

Any equipment which have been utilized in contaminated areas will be decontaminated prior to leaving the work zone. If the level of contamination anticipated is low, decontamination for vehicles will be limited to rinsing of tires with water. For sites with significant levels of contamination, steam cleaning or pressure washing of vehicles and equipment will be required.

7.3 Personal Protective Equipment Decontamination

Where and whenever possible, single use, external protective clothing shall be used for work within the EZ or CRZ. This protective clothing shall be disposed of in marked containers. Depending upon subsequent analysis, that protective clothing may require disposal as hazardous waste.

Reusable protective clothing will be rinsed at the site with detergent and water. The rinsate will be collected for possible disposal as hazardous waste.

Respiratory protective equipment will be wiped with a damp cloth while in the CRZ and bagged. Once the respirator has been removed from the CRZ, it will be thoroughly cleaned with soap and water. The respirator face piece will be cleaned at the end of each work shift.

8.0 Site Monitoring

8.1 Air Monitoring

Air monitoring is essential to ensure that all field personnel are adequately protected from airborne contaminants. The levels of organic vapors in the work area will be monitored using a total organics vapors monitoring unit (HNU) PI-101 photoionization analyzer, or equivalent.

Combustible gas readings shall be conducted in the areas of sampling or excavating if flammable contaminants are anticipated.

Integrated air samples, if collected, will be analyzed through an IT industrial hygiene (IH) laboratory and/or other equally accredited American Industrial Hygiene Association (AIHA) laboratories. The specific number of samples and turnaround times will vary and are dependent upon operation requirements and site-specific activities.

8.1.1 Locations to be Monitored

All personal, integrated air monitoring samples and direct reading instrumentation readings taken for the purpose of determining appropriate H&S precautions shall be collected/taken in the approximate "breathing zone" of the IT or subcontractor employees (i.e., readings should be taken at the approximate head-height of the IT or subcontractor employee closest to the sample location or other suspected source of contamination).

If integrate air samples are to be collected, the H&S Representative will be responsible for selecting appropriate individuals anticipated to be at highest risk for potential inhalation of airborne contaminants. All area, integrated air monitoring samples shall be taken from a fixed position at the approximate "breathing zone" height. The H&S Representative shall be responsible for the specific location of these sampling devices, based on prevailing environmental and site conditions and site activities.

8.1.2 Frequency

Continuous or intermittent area monitoring will be required for this project during intrusive work activities (if intermittent, at least every half-hour during intrusive activities). The monitoring equipment will be positioned at approximately "breathing zone" height to estimate personnel exposure. Readings shall be collected where employees are located near the excavation and

recorded on the IT real-time air monitoring log, Field Activity Daily log form, or equivalent to document potential employee exposures.

If used, personal, integrated air monitoring samples shall be collected during the first full day of site remediation/sampling operations. The H&S Representative in consultation with the Site Supervisor will be responsible for identifying a day that is anticipated to be indicative of proposed continued operations for the specific site. All samples should be full-shift samples (i.e., collected over at least six hours during the course of site operations) and analyzed within a 24- to 48-hour period. Based on these initial results, the frequency of additional sample collection and analysis will be determined, and the appropriate level of personal protection will be prescribed.

8.1.3 Air Monitoring Equipment

The following equipment will be available for utilization if required:

- HNU Model PI-101 photoionization detector (PID), or equivalent
- MSA combustible gas and oxygen indicator, or equivalent

All equipment shall be maintained in such quantity and condition to adequately monitor and assess all site operations.

8.1.4 Monitoring Equipment Maintenance and Calibration

All IT HNU PIDs will be calibrated in accordance with manufacturer's specifications. Preventive maintenance and repairs will be conducted in accordance with the respective manufacturers' procedures.

All other IT air monitoring equipment (e.g., combustible gas/oxygen meters and aerosol monitors) will be maintained and calibrated in accordance with the specific manufacturers' procedures.

All personal sampling pumps shall be calibrated in accordance with OSHA sampling protocols and NIOSH methods for the analyte of interest.

All direct reading instrumentation calibrations should be conducted under the approximate environmental conditions the instrument will be used. All air monitoring equipment calibrations and maintenance activities shall be documented on the IT FADL, or equivalent. All completed H&S documentation/forms shall be reviewed by the Project H&S Coordinator and maintained by the Site Supervisor.

If an instrument is found to be inoperative or suspected of giving erroneous readings, the IT H&S Representative shall be responsible for immediately removing the instrument from service and obtaining a replacement unit. The specific IT or subcontractor operation for which this equipment is essential shall cease until an appropriate replacement unit is obtained. The H&S Representative will be responsible for ensuring a replacement unit is obtained and/or repairs are initiated on the defective equipment.

When applicable, only manufacturer-trained and/or authorized IT personnel will be allowed to perform instrument repairs or preventive maintenance (e.g., repairs on the hydrogen handling or electrical components of an organic vapor analyzer [OVA]).

8.2 Noise Monitoring

Noise monitoring is not anticipated on this project, however it may be performed if noise levels in the speech-interfering level are encountered.

8.3 Heat Stress

Heat stress monitoring shall be initiated whenever ambient temperatures on site exceed 85°F. At the discretion of the Project H&S Coordinator, environmental and/or physiologic monitoring will be carried out. Monitoring and interpretation of monitoring results will be in accordance with IT Procedure HS400, "Working in Hot Environments," and Section 4 of this plan.

8.4 Safety Review

At least once during the project, both the Project Manager and an H&S professional will carry out a comprehensive safety review of the project. The Site Supervisor will conduct frequent site safety inspections (no less than once per week). Management safety reviews will be recorded on Safety Inspection Report Forms and will be forwarded to the responsible business unit management for review. The Site Supervisor will record the inspection results on the Safety Inspection Report.

8.5 Monitoring Records

The Project Manager shall ensure that site monitoring records are complete and incorporated into the project file. Any personnel or area air monitoring results will be incorporated into the host office H&S files. The host office H&S Coordinator will be responsible for establishing, maintaining, and forwarding to other IT offices (as necessary) all required monitoring information as described below for placement in individual employee files:

- Employee name, social security number, payroll number
- The date, time, pertinent task information, exposure information
- Description of the analytical methods, equipment used, and calibration data
- Type of PPE worn
- Engineering controls used to reduce exposure.

8.6 Notification

Within five working days after receipt of monitoring results, the project H&S staff and the host office H&S staff will ensure that each employee is informed in writing of the results which represent that employee's exposure. Monitoring results representative of an employee's exposure shall be reported to the affected employee on the IT Employee Notification of Industrial Hygiene Monitoring Results Form.

Whenever the results indicate that the representative employee exposure exceeds the PEL, the Employee Notification of Industrial Hygiene Monitoring Results Form shall state that the PEL was exceeded, and shall provide a description of the corrective action taken to reduce exposure to a level below the PEL.

IT will provide IH monitoring results to subcontractor companies, if the exposure of subcontractor employees to airborne contaminants is elevated. Notification of subcontractor personnel of IH monitoring results is the responsibility of the subcontractor.

Table 3
Calibration and Maintenance of Field Sampling Equipment

Monitor Type	Calibration Method	Calibration Frequency	Maintenance Schedule
Combustible gas indicator/oxygen meter	CGI sensor calibrated against known concentration of hexane (demonstration bottle). Zero setting checked in noncontaminated air. Oxygen sensor calibrated daily to 20.8 percent in fresh noncontaminated air.	CGI span calibrated once per month. CGI zero checked daily. Oxygen sensor calibrated daily.	Instrument cleaned as needed and no less than annually. Oxygen sensor changed annually. CGI sensor checked annually and changed if necessary.
Photoionization detector (PID)	PID zeroed in clean air. Span calibrated using known concentration of isobutylene (demonstration bottle).	PID zeroed and span checked daily at start of work day.	Annual cleaning by qualified representative. Annual calibration of electronics by qualified representative. Clean lamp if sensitivity drops or if used in very dusty environment.
Draeger tube sampling system	Check air tightness of pump by inserting unbroken tube. Compress bellows pump, time for one minute, chain should remain slack. If chain taut, then maintenance required.	Check daily prior to start of workday.	Maintenance required whenever pump fails to pass leak test. Replace seals and/or lubricate per instruction manual.
Air sampling pump	Verify airflow using primary standard (bubble meter) or precalibrated rotameter.	Verify airflow prior to and after use, with sampling head in place. Spot check flow rate throughout sampling period.	Minimum of annual cleaning. Clean whenever pump unable to hold flow rate. Maintenance required if pump will not hold charge or if flow rate is erratic.
Sound level meter	Calibrate using known noise source (manufacturer supplied acoustic calibrator). Check battery level within recommended limits.	Calibrate meter and check battery daily prior to use.	Annual cleaning by qualified representative. Maintenance required if meter fails to calibrate.

9.0 Employee Training

9.1 General

All on-site project personnel shall have completed at least 40 hours of hazardous waste operations-related training, as required by OSHA Regulation 29 CFR 1910.120. All field employees receive a minimum of three days of actual field experience under the direct supervision of a trained, experienced supervisor. Those personnel who completed the 40-hour training more than 12 months prior to the start of the project shall have completed an 8-hour refresher course within the past 12 months. The Site Supervisor shall have completed an additional 8 hours of relevant H&S training and shall have a current first-aid/CPR certificate. Subcontractor personnel must meet the above training requirements (Appendix B).

IT provides each employee who completes the required 40 hours of classroom training and 3 days of field experience with a certificate signed by the instructor. A copy of the certificate is maintained in the employee's home business unit training files. Subcontractors must provide certificates of training for the project file for all employees assigned to the project.

9.1.1 Tailgate Safety Meetings

Prior to the start of the project, all personnel will participate in a tailgate safety meeting. During the tailgate safety meeting, the H&S plan will be discussed. The Site Supervisor will ensure that the anticipated site hazards are summarized and explained to all personnel, and that those personnel are aware of the precautions they must take to minimize their exposure to those hazards. Tailgate safety meetings will be held at the start of each work shift. All new employees must attend the meeting and be familiar with this H&S Plan.

Attendance records and meeting notes are maintained with the project files.

9.1.2 Material Safety Data Sheets

The site-specific H&S plan includes MSDS and occupational health guidelines for chemical substances known to be on site. The H&S plan is maintained on site and is accessible to all site employees. Each employee is required to review and sign the H&S plan before starting work on the site. Refer to Appendix B.

9.1.3 Site-Specific Health and Safety Plan

The IT safety department prepares a site-specific H&S plan for each project falling within the scope and application of 29 CFR 1910.120 and IT Procedure HS052. Injury and illness prevention programs are written for all other projects. The Site Supervisor presents the H&S plan and discusses it with all personnel assigned to the project. All workers and visitors must read and sign the H&S plan acknowledging acceptance of site rules and understanding of site hazards before the start of the site work.

9.2 Site Workers' Basic Course

The following is a list of the topics covered in IT's 40-hour training course:

- General site safety
- Physical hazards (fall protection, noise, heat stress, cold stress)
- Names and titles of key personnel responsible for site H&S
- Safety, health, and other hazards typically present at hazardous waste sites
- Use of PPE
- Work practices by which employees can minimize risks from hazards
- Safe use of engineering controls and equipment on site
- Medical surveillance requirements including recognition of symptoms and signs which might indicate overexposure to hazards
- Worker right-to-know (Hazard Communication OSHA 1910.1200)
- Routes of exposure to contaminants
- Engineering controls and safe work practices
- Components of the site H&S program
- Decontamination practices for personnel and equipment
- Confined-space entry procedures
- Emergency response plan.

9.3 Supervisors' Course Content

Management and supervisors must receive an additional eight hours of training presented by the IT Training Department that includes:

- General site safety and health programs
- PPE programs
- Air monitoring techniques.

9.4 Site-Specific Training

Site-specific training will be accomplished through a review of this H&S plan and the daily tailgate safety meetings.

9.5 First Aid and Cardiopulmonary Resuscitation

At least one employee current in first aid/CPR will be assigned to the work crew and will be on the site whenever operations are ongoing. First-aid and CPR training courses are offered to all IT employees. Annual refresher training in first aid and CPR is required to maintain the currency of the certificate.

9.6 Instructors

The IT Training Department, headquartered in Irvine, California, teaches the 40-hour hazardous waste operations classes using Certified Environmental Trainers (CET). When training needs exceed the capacity of the training division, IT uses outside institutions. IT is recognized by the U.S. EPA and listed in the Federal Register (53 FR 3982). Only similarly recognized outside training institutions may be used with prior approval of the IT Training Department.

10.0 Medical Surveillance Program

10.1 Physical Examinations

All on-site project personnel shall within the past 12 months have completed a comprehensive medical examination that meets the requirements of OSHA's Regulation 29 CFR 1910.120. The annual medical includes the following elements:

- Medical and occupational history questionnaire
- Physical examination
- Complete blood count, with differential
- Liver enzyme profile
- Chest X-ray, once every three years, for non-asbestos workers
- Pulmonary function test
- Audiogram
- Electrocardiogram (EKG) for persons older than 35 years of age, or if indicated during the physical examination
- Drug screening
- Visual acuity
- Follow-up examinations, at the discretion of the examining physician or the corporate medical director.

All employee medical records are maintained by the H&S group, within the worker's home profit center, or for subcontractors at the subcontractor's office. The examining physician provides the employee with a letter summarizing his findings and recommendations. Each employee also has the right to inspect and copy medical records.

The examining physician provides the employer with a letter confirming the worker's fitness for work and ability to wear a respirator. A copy of this letter for all project workers will be kept on site during all project site work.

Subcontractors will certify that all their employees have successfully completed a physical examination by a qualified physician on the Certification Form. The physical examinations shall meet the requirements of 29 CFR 1910.120, 29 CFR 1910.134, HS100 and HS101. Subcontractors will supply copies of the medical examination certificate for each on-site employee.

10.1.1 Preplacement Examination

All employees will receive a preplacement medical examination prior to assignment to field operations.

10.1.2 Annual Examination

Each year subsequent to the placement examination, all employees and subcontractors must undergo an annual examination similar in scope to the placement examination. IT employees hired prior to 1985 are not required to submit to drug screening. Chest X-rays are taken every third year. The medical and occupational history is updated with each examination.

10.1.3 Exit Examination

IT employees receive an exit examination upon leaving the company if they have not been examined within the previous six months. The exit examination consists of the annual examination without drug screen. The employee's immediate supervisor is to notify the home office H&S Assistant within a reasonable time before the termination to allow for the necessary arrangements.

10.2 First-Aid and Medical Treatment

All persons on site must report any near-miss incident, accident, injury, or illness to their immediate supervisor or the Field Supervisor. First aid will be provided by the designated site first aider. Injuries and illnesses requiring medical treatment will be accompanied by an "Authorization for Treatment" Form. The employee's supervisor or the Field Supervisor will complete the "Supervisor's Employee Injury Report" and conduct an accident investigation as soon as emergency conditions no longer exist and first-aid and/or medical treatment has been rendered. The investigation should follow the Accident/Injury Investigation Report. These two reports must be completed and submitted to the H&S Coordinator within 24 hours after the incident.

If first-aid treatment is required, first-aid kits are kept at the CRZ and in all IT vehicles. If treatment beyond first aid is required, the injured should be transported to the medical facility shown in Appendix D. If the injured is not ambulatory or shows any sign of not being in a comfortable and stable condition for transport, then an ambulance/paramedics should be summoned. If there is any doubt as to the injured worker's condition, it is best to let the local paramedic or ambulance service examine and transport the worker.

10.3 Medical Restriction

When a medical care provider identifies a need to restrict work activity, the employee's home office H&S Assistant will communicate the restriction to the employee, their supervisor, and the office H&S professional. The terms of the restriction will be discussed with the employee and his supervisor. Every attempt will be made to keep the employee working, while not violating the terms of the medical restriction.

10.4 Medical Records

Medical and personal exposure monitoring records will be maintained according to the requirements of 29 CFR 1910.20 and HS103, and shall be kept for 30 years post employment. Employee confidentiality shall be maintained. Employees and their authorized representatives have access to these records through the H&S Assistant.

11.0 Emergency Response Plan

This H&S plan has been developed to allow the operation to be conducted without adverse impact to the H&S of project personnel, other personnel, and the environment. Supplementary procedures are included in this section to address extraordinary conditions that might occur at the site.

11.1 General

The Site Supervisor will establish evacuation routes and assembly areas for each site. All personnel entering the site will be informed of these routes and assembly areas. If the site is large and the evacuation routes not clear, a site plan will be made marking the evacuation routes and will be posted at conspicuous locations.

Each site will be evaluated for the potential for fire, explosion, chemical release, or other catastrophic events. Unusual events, activities, chemicals, and conditions will be reported to the Site Supervisor.

11.2 Emergency Procedures

If an incident occurs, the following procedures will be used:

- The Site Supervisor will evaluate the incident and assess the need for assistance
- The Site Supervisor will call for outside assistance as needed
- The Site Supervisor will act as liaison between outside agencies and on-site personnel
- The Site Supervisor will ensure the Project Manager and an H&S Representative at the nearest IT office are notified promptly of the incident
- The Site Supervisor will take appropriate measures to stabilize the incident scene.

11.3 Safety Signals

Vehicle or portable air horns will be used for safety signals as follows:

- One long blast: Emergency evacuation of the site
- Two short blasts: Clear working area around powered or moving equipment.

11.4 Medical Emergency

All employee injuries must be promptly reported to the Site Supervisor. The Site Supervisor will:

- Ensure that the injured employee receives prompt first aid and medical attention
- Ensure that the Project Manager and General Manager are promptly notified of the incident
- Initiate an investigation of the incident.

11.4.1 Chemical Inhalation

Any employee complaining of symptoms of chemical overexposure as described in Chapter 3.0 will be removed from the work area and transported to the designated medical facility for examination and treatment. It is highly unlikely that the chemicals anticipated as being on site, in the concentrations anticipated, would cause situations immediately dangerous to life and health.

11.4.2 Eye Contact

Project personnel who have had contaminants splashed in their eyes or who have experienced eye irritation while in the contaminated zone, shall immediately proceed to the eyewash station, set up in the decontamination zone. Do not decontaminate prior to using the eyewash. Remove whatever protective clothing is necessary to use the eyewash. Flush the eye with clean running water for at least 15 minutes. Arrange prompt transport to the designated medical facility.

11.4.3 Skin Contact

Project personnel who have had skin contact with contaminants will, unless the contact is severe, proceed through the decontamination zone, to the wash-up area. Personnel will remove any contaminated clothing, and then wash the affected area with water for at least 15 minutes. The worker should be transported to the medical facility listed below, if they show any sign of skin reddening, irritation, or if they request a medical examination.

11.4.4 Personal Injury Accident

In the event of a personal injury accident, the Site Supervisor will assess the nature and seriousness of the injury. In the case of serious or life-threatening injuries, normal

decontamination procedures may be ignored. Less serious injuries such as strains, sprains, minor cuts, and contusions may only be treated after the employee has been decontaminated.

Following decontamination, an IT project team member qualified in first aid and CPR will administer suitable first aid. The Site Supervisor will then, if necessary, arrange transport to the appropriate medical facility.

11.5 Fire

In the case of a fire on the site, the Site Supervisor will assess the situation and direct fire-fighting activities. The Site Supervisor will ensure that the client site representative (if there is one) is immediately notified of any fires. IT personnel will attempt to extinguish the fire with available extinguishers, if safe to do so. IT will call the local fire department (911) in the event of a fire that IT is unable to safely and immediately extinguish.

11.6 Emergency Information

Prior to the start of the project, contact will be made with local authorities and emergency services to establish communication channel during an event of emergency and to familiarize the project personnel with the communication procedure and services.

11.6.1 Public Agencies

Fire	921
Ambulance	922
Hospital	766-8311
Toxic Chemical & Oil Spill Reports	(800)424-8802
Water & Power Authority Emergency	773-2250

11.6.2 Key Project and IT Personnel

Project Manager, Belinda Price	(615)690-3211
H&S Coordinator, Melissa Smith	(615)690-3211
Site Supervisor	(615)690-3211
Occupational Physician:	
Peter M. Greaney, M.D.	
Greaney Medical Group	
1103 S. Anaheim Boulevard	
Anaheim, CA 92805	
(714) 535-8221	

David Barnes, M.D.
Environmental Medicine Resources, Inc.
4360 Chamblee Dunwoody Road
Suite 202
Atlanta, GA 30341
(404) 455-0818

12.0 Confined Space Entry

12.1 Introduction

This section contains the requirements and procedures for working in confined spaces. A confined space is defined as a space large enough and so configured that an employee can bodily enter and perform assigned work, has limited means for entry or exit, and is not designed for continuous employee occupancy. Contaminated soil excavations, storage vessel entries and other confined space work may pose additional hazards such as air contamination, flammable or explosive atmosphere, and oxygen deficiency. Excavation entry may pose the possibility of engulfment. IT has detailed training for confined space entry, and only personnel properly trained shall supervise and participate in confined space entry procedures or serve as standby attendants.

All confined spaces are initially considered permit required. Under certain conditions, a space may be reclassified as a non permit confined space provided the IT H&S Professional approves the reclassification, and the space meets the criteria outlined in Section X.2.3.

12.2 Confined Space Identification and Designation

12.2.1 Identification

The IT Supervisor is responsible to identify all confined spaces into which IT employees or subcontractors will enter. Entry is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space. The client is responsible to identify and provide information as to contents, expected atmosphere, and rescue procedures for all confined spaces on his/her property. If a space is not considered permit required by the client but meets the criteria of this procedure, it shall be considered permit required for IT managed entry. If a space does not meet the criteria in this procedure but is considered permit required by the client, this procedure shall apply.

The confined space for this project is any entry into the excavation greater than 5 feet depth.

12.2.2 Classification

A confined space means a space that is large enough and so configured that an employee can bodily enter and perform assigned work, has limited or restricted means for entry or exit, and is not designed for human occupancy.

A permit required confined space is a confined space meeting the above definition and also contains or could contain a hazardous atmosphere, or contains a material that has the potential for engulfing an entrant, or has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section, or contains any other recognized serious safety or health hazard. All confined spaces are initially considered permit required confined spaces.

CLASSIFY CS as permit-required confined space.

12.2.3 Reclassification

Although all confined spaces are initially considered permit required confined spaces, certain spaces can be reclassified as a non permit confined spaces provided the following apply:

- Site-specific approval of an H&S professional;
- All contaminants, vessels containing contaminants, and contaminated soils have been removed;
- All actual or potential atmospheric hazards have been eliminated (verified by testing);
- Ventilation is not required to maintain control of atmospheric hazards;
- All recognized hazards, including engulfment, within the confined space have been eliminated
- The entry permit must be posted at the entrance to the confined space.

The space must be re-evaluated (and reclassified to permit required, if needed) whenever the use or configuration of the space changes in any way that might increase the hazard to entrants. All entrants must exit the space immediately when hazards are noted.

RECLASSIFICATION IS NOT PERMISSIBLE FOR EXCAVATION ENTRY.

12.3 Duties of Personnel

Each confined space being entered shall have a minimum of one (1) dedicated attendant and one other support person (who may have other duties) within sight or call.

12.3.1 Duties of Entrants

A permit required confined space is a confined space meeting the above definition and also contains or could contain a hazardous atmosphere, or contains a material that has the potential for engulfing an entrant, or has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section, or contains any other recognized serious safety or health hazard. All confined spaces are initially considered permit required confined spaces.

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- All actual or potential atmospheric hazards have been eliminated (verified by testing);
- Ventilation is not required to maintain control of atmospheric hazards;
- All recognized hazards, including engulfment, within the confined space have been eliminated
- The entry permit must be posted at the entrance to the confined space.

The space must be re-evaluated (and reclassified to permit required, if needed) whenever the use or configuration of the space changes in any way that might increase the hazard to entrants. All entrants must exit the space immediately when hazards are noted.

RECLASSIFICATION IS NOT PERMISSIBLE FOR EXCAVATION ENTRY.

12.3 Duties of Personnel

Each confined space being entered shall have a minimum of one (1) dedicated attendant and one other support person (who may have other duties) within sight or call.

12.3.1 Duties of Entrants

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space.
- Alert the attendant whenever:
 - (1) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or
 - (2) The entrant detects a prohibited condition; and
- Exit from the permit space as quickly as possible whenever:
 - (1) An order to evacuate is given by the attendant or the entry supervisor,
 - (2) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation,
 - (3) The entrant detects a prohibited condition, or
 - (4) An evacuation alarm is activated.

12.3.2 Duties of Attendants

- Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Is aware of possible behavioral effects of hazard exposure in authorized entrants.
- Continuously maintains an accurate count of authorized entrants in the permit space and accurately identifies who is in the permit space by tagging the lifelines with the entrant's name, and recording the names of the entrants.
- Remains outside the permit space during entry operations until relieved by another attendant.
- Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space.
- Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
 - (1) If the attendant detects a prohibited condition;
 - (2) If the attendant detects the behavioral effects of hazard exposure in an authorized entrant;

- (3) If the attendant detects a situation outside the space that could endanger the authorized entrants, or
 - (4) If the attendant cannot effectively and safely perform all his duties.
- Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
 - Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - (1) Warn the unauthorized persons that they must stay away from the permit space;
 - (2) Advise the unauthorized persons that they must exit immediately if they have entered the permit space; and
 - (3) Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
 - Performs non-entry rescues.
 - Performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

12.3.3 Duties of Entry Supervisors

- Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.
- Terminates the entry and cancels the permit as required.
- Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
- Determines that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.
- Documents on the entry permit any incidents or circumstances requiring review of the confined space entry program. Such incidents include:
 - (1) Unauthorized entry;
 - (2) The detection of a condition/hazard not authorized by the permit;
 - (3) The occurrence of an injury or near-miss during entry;
 - (4) A change in use or configuration of the space; or
 - (5) Employee complaints about the program.

- Prescribes procedures for coordination of entry when personnel from multiple employers will work simultaneously. IT subcontractors shall follow IT procedures.

12.4 Procedures for Permit Space Entry

12.4.1 Acceptable Entry Conditions

The conditions for entry into each space are as follows: **SPECIFY CONDITIONS FOR EACH SPACE.**

AIRBORNE CONTAMINANT ENTRY CONDITIONS AND ACTION LEVELS		
Parameter	Reading	Action/Level of Protection
Total Hydrocarbons	< 5 parts per million (ppm)	Normal operations, Level D
	5 to 25 ppm	Stop work; upgrade to Level C, investigate cause of reading
	≥ 25 ppm	Stop work; evacuate confined space and upgrade to Level B; investigate cause of reading
Flammable Vapors (LEL)	< 10% LEL	Normal operations
	≥ 10% LEL	Stop work, evacuate confined space; ventilate area; investigate source of vapors
Oxygen	> 20%, < 23.5%	Normal operations
	< 20%, > 23.5%	Stop work, evacuate confined space, ventilate, re-sample

12.4.2 Isolation Requirements

The confined space must be isolated to prevent the introduction of contaminants during entry. Isolation must include disconnecting or installing slip blanks into all lines leading to the space.

To prevent injury from physical hazards within the space, lockout, tagout, tryout and return to service procedures (IT Pro HS315) must be implemented for potential sources of hazardous energy.

When isolation is not practical or possible (as in sewer entry) entry conditions must be continuously monitored.

ISOLATION IS NOT PRACTICAL SO CONTINUOUS AIR MONITORING WILL BE NECESSARY FOR CONFINED SPACE ENTRY.

12.4.3 Atmospheric Hazard Control

Atmospheric hazards must be eliminated or controlled to meet the requirements specified in section X.4.1. If necessary the space shall be purged or inerted, then ventilated to the extent necessary to meet the criteria in section X.4.1. Ventilation equipment may be needed to maintain these conditions.

VENTILATION EQUIPMENT SHALL BE USED TO ENSURE REDUCTION OF POTENTIAL FLAMMABLE VAPORS AND THAT SUFFICIENT OXYGEN WILL BE PRESENT.

12.4.4 Inspecting and Testing Procedures

12.4.4.1 Testing Equipment

The following equipment shall be available for testing each confined space:

- HNU Model P1-101 photoionization detector (PID), or equivalent
- MSA combustible gas and oxygen indicator, or equivalent

All equipment shall be maintained in such quantity and condition, per manufacturer recommendations, to adequately monitor and assess all confined space entries.

12.4.4.2 Testing Procedures

Procedures for inspecting, monitoring and testing the confined space to verify that acceptable conditions exist prior to and throughout the entry operation are as follows:

Permit required confined spaces shall be tested no less often than every hour during entry and whenever operations or conditions change.

- For confined spaces that cannot be completely isolated (i.e., sewers), continuous testing with real-time direct reading instruments shall be required.
- Priority for atmospheric hazard testing shall be oxygen, combustible gases, then toxic gases.

TESTING WILL BE CONDUCTED CONTINUOUSLY DURING EXCAVATION ENTRY FOR OXYGEN CONTENT, FLAMMABILITY, AND TOXICITY.

12.4.5 Communications

Provisions for continuous communication between entrants and attendants may consist of the standard system of lifeline "tugs" below, so long as the attendants continuously hold the lifelines in their hands. If this is not practical or possible, portable air horns must be provided to all entrants and attendants. The same code for rope tugs will be used for air horn blasts:

Lifeline "Tug" Signals or Air Horn Signals

- 1 Tug/Horn Blast = Are you OK?
- 2 Tugs/Horn Blast = Yes, I am OK.
- 3 Tugs/Horn Blast = Exit the confined space immediately.

If the lifeline tug system or the air horn system are not feasible, powered communication equipment with the appropriate NEC rating shall be provided.

COMMUNICATIONS SYSTEM WILL BE WRITTEN AND REVIEWED AT EACH TAILGATE SAFETY MEETING PRIOR TO EXCAVATION ENTRY.

12.4.6 Personal Protective Equipment (see Section 5.0 for PPE requirements)

- Protective suits, boots, and gloves - including specifying the material of construction.
- Face, head, and foot protection.

- Specify chest or parachute harness with approved lifelines at least 1/2-inch in diameter and 2,000 pounds test. (NOTE: Wristlets may be used only when a harness presents a greater hazard to the employee and wristlets are the safest, most effective alternative). All lifelines shall be secured to a mechanical device or fixed point outside the confined space. Mechanical devices shall be used for all vertical entry permit spaces greater than five (5) feet deep.
- Respiratory protection.

12.4.7 Other Required Equipment

12.4.7.1 Lighting Equipment

Lighting and electrical shall be of the appropriate National Electrical Code (NEC) rating. Rating should be Class I, Division I unless the space specifically meets other rating requirements.

12.4.7.2 Ingress and Egress Equipment

Protective barriers to be used to protect entrants from external pedestrian, vehicle or equipment hazards.

DETAIL EQUIPMENT -

12.4.7.3 Rescue Equipment

All lifelines must be attached to a mechanical device or a fixed point outside the space such that a rescue can begin as soon as the rescuer becomes aware that a rescue is necessary. A mechanical device must be available to retrieve personnel from vertical type permit spaces more than 5 feet deep.

DETAIL EQUIPMENT -

12.5 Permit System

Before entry is authorized, the Entry Supervisor shall complete and sign an Entry Permit (Attachment 3) to document that all pre-entry requirements have been met and that acceptable entry conditions exist. The complete permit shall be posted at the primary entrance to the confined space.

All Entry Permits are valid for a maximum of one (1) work shift, and shall be cancelled by the Entry Supervisor when the shift ends, confined space operations are complete, or

whenever a prohibited condition arises in or near the space. All confined spaces shall be securely closed or barricaded whenever the entry permit is cancelled.

The IT Entry Permit (attached) must be completely executed and include all required information.

12.6 Emergency Procedures

IT shall provide rescue services unless the client has a qualified rescue team in-plant which is available to IT and has been informed of the hazards of the confined space to be entered.

12.6.1 Client Provided Emergency Rescue Services

When the client provides the emergency rescue services, the IT PM must verify that the emergency personnel have been informed of the potential hazards they may confront, and have had an opportunity to examine the space(s). The PM must also verify all necessary equipment is available, and MSDSs for potential contaminants are provided to the facility treating any injures/exposed entrants.

12.7 Training

12.7.1 General

Prior to assignment to confined space entry work, all employees shall receive training in the hazards of confined spaces, work practices to control these hazards, and duties to be performed. Employee proficiency shall be established by testing and/or practical demonstration.

The IT Training Department shall maintain training records to include employee name and signature, date of training, and signature of the trainer.

12.7.2 Requirements for Entrants, Attendants, Supervisors

Basic training requirements for entrants and attendants shall include Hazards & Protection (or equivalent) and IT Confined Space Entry (CSE) update training if H&P was received prior to 4/1/93.

Basic training for entry supervisors and personnel conducting atmospheric testing shall include Qualified Person (or equivalent) and IT CSE update training if QP was received before 4/1/93.

Equivalent training must be approved by the IT Training Department prior to assignment to entry duties.

Personnel assigned to attendant duties shall be trained in non-entry rescue procedures.

12.7.2 Requirements for Emergency Rescue Personnel

Personnel assigned to provide emergency entry and rescue services shall be trained annually in the proper use of personal protective and rescue equipment. Such training shall include a simulated rescue exercise at least once every 12 months. In addition, rescue personnel shall be trained in the hazards and proper work practices for handling blood or other potentially infectious materials, and comply with other IT procedure HS512 provisions.



Approved by *[Signature]*

PROCEDURE

(subject)

CONFINED SPACES

1.0 PURPOSE AND SUMMARY

This procedure describes the procedures for identifying and working within confined spaces throughout IT and for complying with OSHA regulations 29 CFR 1910.146. Additional requirements for special confined space applications can be found in the following procedures:

- HS301 Confined Spaces, Marine
- HS302 Confined Spaces, Leaded Product

Key provisions of this procedure include the following:

- Identification and posting of confined spaces at IT facilities.
- HASP requirements.
- Entry permit requirements for confined space entries.
- Testing and monitoring.
- Personal protective equipment, including lifelines and harnesses.
- Lighting.
- MSDS requirements.
- Rescue and emergency services and procedures.
- Communication between entrants and attendants.
- Duties of personnel.
- Training requirements.
- Entrant location tracking systems.
- Recordkeeping and retention.
- Annual program review.

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3.0 RESPONSIBILITY MATRIX

- 3.1 Procedure Responsibility.** The Corporate Director, Health and Safety is responsible for the issuance, revision and maintenance of this procedure.
- 3.2 Action/Approval Responsibilities.** The Responsibility Matrix is Attachment 1.

4.0 DEFINITIONS

- 4.1 Acceptable entry conditions** means the conditions that must exist in a permit space to allow entry so that employees involved with a permit-required confined space entry can safely enter into and work within the space.
- 4.2 Attendant** means an individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the IT permit space program.
- 4.3 Authorized entrant** means an employee who is authorized by IT to enter a permit space.
- 4.4 Blanking or blinding** means the absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.
- 4.5 Confined space** means a space that:
- 4.5.1** Is large enough and so configured that an employee can bodily enter and perform assigned work;
 - 4.5.2** Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, pits, and excavations are spaces that may have limited means of entry); and
 - 4.5.3** Is not designed for continuous employee occupancy.
- See also definition 4.21.
- 4.6 Double block and bleed** means the closure of a line, duct, or pipe by closing and locking or tagging two in-line valves and by opening and locking or tagging a drain or vent valve in the line between the two closed valves.
- 4.7 Emergency** means any occurrence (including any failure of hazard control or monitoring equipment) or event, internal or external, to the permit space that could endanger entrants.
- 4.8 Engulfment** means the surrounding and effective capture of a person by a liquid or finely divided (flowable) solid substance that can be aspirated to cause death by filling or plugging the respiratory system or that can exert enough force on the body to cause death by strangulation, constriction, or crushing.

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- 4.9 Entry means the action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.
- 4.10 Entry Permit (Attachment 3) means the written or printed document that is provided by IT to allow and control entry into a permit space and that contains the information specified in Paragraph 4.1 of this section.
- 4.11 Entry Supervisor means the person (such as the supervisor, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this section.
- 4.12 Hazardous atmosphere means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:
- 4.12.1 Flammable gas, vapor, or mist in excess of 10 percent of its lower explosive limit (LEL);
 - 4.12.2 Airborne combustible dust at a concentration that meets or exceeds its LEL;

NOTE: This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less.
 - 4.12.3 Atmospheric oxygen concentration below 20.0 percent or above 23.5 percent.
 - 4.12.4 Atmospheric concentration of any substance for which a dose or a published exposure guideline is available (Permissible Exposure Limit, PEL, from OSHA, Threshold Limit Value, TLV, from ACGIH, and Recommended Exposure Limits, REL, from NIOSH), and which could result in employee exposure in excess of its dose or permissible exposure limit.
 - 4.12.5 Any other atmospheric condition that is immediately dangerous to life or health.
- 4.13 Hot work permit means IT written authorization to perform hot operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition. This is a separate document from the entry permit.
- 4.14 Immediately Dangerous to Life or Health (IDLH) means any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.
- 4.15 Inerting means the displacement of the atmosphere in a permit space by a noncombustible gas (such as nitrogen) to such an extent that the resulting atmosphere is noncombustible.



- 4.16 **Isolation** means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; a double block and bleed system; lockout or tagout of all sources of energy, including hydraulic or electric; blocking or disconnecting all mechanical linkages; or physically restraining moving parts.
- 4.17 **Line breaking** means the intentional opening of a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury.
- 4.18 **Non-permit confined space** means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.
- 4.19 **Oxygen deficient atmosphere** means an atmosphere containing less than 20.0 percent oxygen by volume.
- 4.20 **Oxygen-enriched atmosphere** means an atmosphere containing more than 23.5 percent oxygen by volume.
- 4.21 **Permit-Required Confined Space (PRCS)** means a confined space that has one or more of the following characteristics:
- 4.21.1 Contains or has a potential to contain a hazardous atmosphere;
 - 4.21.2 Contains a material that has the potential for engulfing an entrant;
 - 4.21.3 Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or
 - 4.21.4 Contains any other recognized serious safety or health hazard.
- 4.22 **Prohibited condition** means any condition in a permit space that is not allowed by the permit during the period when entry is authorized.
- 4.23 **Rescue service** means the personnel designated to rescue employees from permit spaces.
- 4.24 **Retrieval system** means the equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.
- 4.25 **Testing** means the process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

5.0 TEXT

5.1 Scope and Applicability

This procedure contains the requirements for performing work in confined spaces throughout IT Corporation, specifically including construction.

5.2 Evaluate the Workplace

All facilities or project locations owned or operated by IT Corporation (including joint ventures) shall be evaluated to identify the presence of permit-required confined spaces. All such spaces shall be posted with a sign bearing the following or similar warning: "DANGER-PERMIT-REQUIRED CONFINED SPACE. DO NOT ENTER".

5.3 Non-Permit Confined Spaces

All confined spaces shall be initially considered permit-required confined spaces. Such spaces can be reclassified as non-permit confined spaces only under the following conditions:

- 5.3.1 Site-specific approval of an IT HS professional;
- 5.3.2 All contaminants, contaminated soils, and vessels containing contaminants have been removed;
- 5.3.3 All actual or potential atmospheric hazards have been eliminated, with testing verification;
- 5.3.4 Ventilation is not required to maintain control of atmospheric hazards;
- 5.3.5 All recognized hazards, including engulfment, within the confined space have been eliminated;
- 5.3.6 The confined space shall be re-evaluated (and reclassified to permit-required, if needed) whenever the use or configuration of the space changes in any way that might increase the hazards to the entrants. All entrants shall exit the space immediately when hazards are noted;
- 5.3.7 The entry supervisor shall make the certification that all hazards have been removed on the Entry Permit (Attachment 3); and
- 5.3.8 The Entry Permit (Attachment 3) shall be posted at the entrance to the confined space.

5.4 Permit-Required Confined Spaces

All confined space entries shall be considered permit-required until/unless the space meets the requirements in section 5.3.

5.4.1**Procedures and Practices for Permit Space Entry**

Prior to beginning any confined space entry operation, a Health and Safety Plan (HASP) shall be developed and approved per IT Procedure HS052 requirements. The HASP must specifically address the following areas:

- Specify acceptable entry conditions. IT requires that combustible vapors shall not exceed 10.0 percent of the LEL and oxygen levels be between 20-23.5 percent by volume. Appropriate toxic gas/vapor action levels shall also be established (Level A or IDLH conditions require Corporate HS approval).
- Confined space isolation procedures.
- Lockout, tagout, tryout and return to service procedures for potential sources of hazardous energy at the specific project location (see also IT procedure HS315 Control of Hazardous Energy Sources).
- Procedures and equipment for purging, inerting, flushing or ventilating the space for the control of atmospheric hazards. Continuous mechanical ventilation shall be used whenever entrants are in the PRCS.
- Procedures for inspecting, monitoring and testing the confined space to verify that acceptable conditions exist prior to and throughout the entry operation. This includes:
 - Specific atmospheric tests to be performed and frequency of tests (NOTE: Confined spaces shall be tested as often as necessary to verify entrant safety, whenever operations or conditions change [e.g., temperature change or product agitation, etc.], and no less often than hourly);
 - Specific testing equipment required;
 - For confined spaces that cannot be completely isolated (e.g., sewers, etc.), continuous testing with real-time direct reading instruments shall be required; and
 - Priority for atmospheric hazard testing shall be oxygen, combustible gases, then toxic gases/vapors.
- Personal Protective Equipment:
 - Protective suits, boots, and gloves - including specification of the material of construction.
 - Face, head, and foot protection.

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- Specify chest or parachute harness with approved lifelines at least one-half inch in diameter and 2,000 pounds test and meeting ANSI A10.14 requirements. (NOTE: Wristlets may be used only when an IT HS professional finds that a harness presents a greater hazard to the employee and wristlets are the safest, most effective alternative.) All lifelines shall be secured to a mechanical device or fixed point outside the confined space. Mechanical extraction devices shall be used for all vertical entry permit spaces greater than five (5) feet deep.

- Respiratory protection, per IT procedure HS601.

- Material Safety Datasheets (MSDS) to be provided to the medical facility when treating injured/exposed entrants.
- Lighting equipment required to safely illuminate the work and provide emergency egress.

NOTE: Lighting and electrical equipment shall be of the appropriate National Electrical Code (NEC) rating. Rating should be Class I, Division I unless the space specifically meets other rating class requirements.

- Protective barriers to be used to protect entrants from external pedestrian, vehicle or equipment hazards.
- Ingress and egress equipment such as ladders.
- Rescue and emergency services, procedures, equipment, and Exposure Control Plan (see IT Procedure HSS12). The HASP must specify whether IT or another source will provide these services and equipment, and how to summon them. IT shall provide rescue services unless the client has a qualified rescue team in-plant which is available to IT and has been informed of the hazards of the confined space to be entered.
- Communications equipment to provide continuous communication between entrants and attendants. This can be done using the standard system of lifeline "tugs" below, so long as the attendants continuously hold the lifelines in their hands.

Lifeline "Tug" Signals

- 1 Tug = Are you OK?
- 2 Tugs = Yes, I am OK.
- 3 Tugs = Exit the confined space immediately.



Any other signal, or an unclear signal, shall require immediate exit of the PRCS.

Other standard hand signals are provided in Attachment 2.

An alternative system would be to provide all entrants and attendants with an air powered horn. Substituting horn blasts for tug, equivalent signals to the lifeline "tug" signals, would be standard. Any other or uncertain signals require immediate exit.

If this is not practical or possible, powered communication equipment with the appropriate NEC rating shall be provided.

- Prescribe the number of attendants and other outside support personnel. Each confined space being entered shall have a minimum of one (1) dedicated attendant and one other support person (who may have other duties) within sight or call.
- Designate the duties of entrants, attendants, and entry supervisors as described below.

Duties of authorized entrants

- Know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space.
- Alert the attendant whenever:
 - (1) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or
 - (2) The entrant detects a prohibited condition; and
- Exit from the permit space as quickly as possible whenever:
 - (1) An order to evacuate is given by the attendant or the entry supervisor,
 - (2) The entrant recognizes any warning sign or symptom of exposure to a dangerous situation,
 - (3) The entrant detects a prohibited condition, or
 - (4) An evacuation alarm is activated.

Duties of attendants

- Know the hazards that may be faced during entry, including

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information on the mode, signs or symptoms, and consequences of the exposure.

- Is aware of possible behavioral effects of hazard exposure in authorized entrants.
- Continuously maintains an accurate count of authorized entrants in the permit space so that the means used to identify authorized entrants accurately identifies who is in the permit space.
- Remains outside the permit space during entry operations until relieved by another attendant.
- Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space.
- Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
 - (1) If the attendant detects a prohibited condition;
 - (2) If the attendant detects the behavioral effects of hazard exposure in an authorized entrant;
 - (3) If the attendant detects a situation outside the space that could endanger the authorized entrants; or
 - (4) If the attendant cannot effectively and safely perform all prescribed duties.
- Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
- Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - (1) Warn the unauthorized persons that they must stay away from the permit space;
 - (2) Advise the unauthorized persons that they must exit immediately if they have entered the permit space; and
 - (3) Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
- Performs non-entry rescues.

- Performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.

Duties of Entry Supervisors

- Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.
- Terminates the entry and cancels the permit as required.
- Verifies that rescue services are available and that the means for summoning them are operable.
- Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
- Determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.
- Documents on the entry permit any incidents or circumstances requiring review of the confined space entry program. Such incidents include:
 - (1) Unauthorized entry;
 - (2) The detection of a condition/hazard not authorized by the permit;
 - (3) The occurrence of an injury or near-miss during entry;
 - (4) A change in use or configuration of the space; or
 - (5) Employee complaints about the program.
- Prescribes procedures for coordination of entry when personnel from multiple employers will work simultaneously. IT subcontractors shall follow IT procedures.

5.4.2

Permit System

Before entry is authorized, the Entry Supervisor shall complete and sign an Entry Permit (Attachment 3) to document that all pre-entry requirements in

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the approved HASP have been met and that acceptable entry conditions exist. The completed permit shall be posted at the primary entrance to the confined space.

All Entry Permits are valid for a maximum of one (1) work shift, and shall be cancelled by the Entry Supervisor when the shift ends, confined space operations are complete, or whenever a prohibited condition arises in or near the space. All confined spaces shall be securely closed or barricaded whenever the entry permit is cancelled.

Entry Permits must be completely executed and include the following information:

- Identify the permit space to be entered;
- Purpose of the entry;
- Date and duration of the permit;
- Authorized entrants by name;
- Authorized attendants by name;
- The name and signature of the Entry Supervisor originally authorizing entry;
- The name and signature of the current Entry Supervisor;
- The hazards of the permit space to be entered;
- Measures used to isolate the permit space and control hazards;
- Acceptable entry conditions;
- Time and results of periodic atmospheric tests with the initials of the tester;
- Available rescue services and equipment, and how to summon;
- Communication procedures;
- Personal protective equipment, testing equipment and communications equipment; and
- Any additional permits issued to authorize work in the permit space.

Supplemental information regarding the location of each entrant shall be provided as described below:

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- The current entry status of all entrants shall be logged on the Field Activity Daily Log (FADL), with a new entry made whenever the entry status of an entrant changes.
- Each entrant shall securely affix a tag bearing their name to the outside lifeline fitting which is attached to a secure point.

5.4.3

Training

- General

Prior to assignment to confined space entry work, all employees shall receive training in the hazards of confined spaces, work practices to control these hazards, and duties to be performed. Employee proficiency shall be established by testing and/or practical demonstration.

The IT Training Department shall maintain training records to include employee name and signature, date of training, and signature of the trainer.

Basic training requirements shall include:

- Entrants/Attendants: Hazards & Protection or Hazards Protection Limited & Site Remediation & Confined Space Update (or equivalent). Note that H&P done prior to April 1993 requires Confined Space Update.
- Entry Supervisors and/or Personnel Conducting Atmospheric Testing: Qualified Person (or equivalent).
- Rescue Service Personnel: Personnel assigned to provide emergency entry and rescue services shall be trained annually in the proper use of personal protective and rescue equipment. Such training shall include a simulated rescue exercise. In addition, rescue personnel shall be trained in the hazards and proper work practices for handling blood or other potentially infectious materials while providing first aid or CPR, and comply with the other requirements of IT Procedure HS512. All rescue personnel shall have current training and certification for first-aid and CPR.

Equivalent training must be approved by the IT Training Department prior to assignment to entry duties.

Personnel assigned to attendant duties shall be trained in non-entry rescue procedures.



• **Site-Specific**

Health and Safety Plan orientation and Tailgate Safety meetings will be used to provide site-specific training.

5.5 Retention of Inspection and Test Logs

A copy of all Entry Permits and other documents related directly to the PRCs entry (e.g., hot work permits, FADLs, etc.) shall be forwarded to the local or project HS Department.

5.6 Confined Space Entry Program Review

Annually in January, the HS professional responsible for each location performing confined space entry operations shall review all entry permits for incidents or problems occurring during entry. Incidents or problems include injuries, accidents, unauthorized entries, or any other event potentially indicating that improvements can be made in the confined space entry program. After review with appropriate operations personnel, recommendations for program

revision shall be forwarded to the Corporate HS office for review by the Corporate Safety Council.

6.0 EXCEPTION PROVISIONS

Variances to this procedure (HS300) may be requested in accordance with the requirements of IT Procedure HS013 Health and Safety Procedure Variance.

7.0 CROSS REFERENCES

HS013 Health and Safety Procedure Variance
HS052 Health and Safety Plans
HS301 Confined Spaces, Marine
HS302 Confined Spaces, Leaded Product
HS315 Control of Hazardous Energy Sources
HS512 Bloodborne Pathogens
HS601 Respiratory Protective Program

8.0 ATTACHMENTS

1. Responsibility Matrix
2. Hand Signals
3. Entry Permit

INTERNATIONAL TECHNOLOGY CORPORATION

CONFINED SPACES Responsibility Matrix

ATTACHMENT 1



Activity	Procedure Section	IDLH	Non-IDLH	Permit-Required	Non-Permit-Required	Entry Supervisor	Authorized Entrant
Identify and post all PRCs at IT facilities	5.2	X			X		
Develop HASP, including establishing acceptable entry conditions	5.4.1	X					X
Approve HASP prior to work:	5.4.1	X					X
If IDLH or Level A:	5.4.1	X	X				X
Provide adequate supplies of required equipment (e.g., rescue, air testing) at location	5.4.1				X		
Train adequate personnel in each category	5.4.3				X		
Retain training records	5.4.3			X	X		
Complete HASP requirements for entry, executive entry permit, and test/monitor	5.4.1					X	
Cancel entry permits	5.4.2					X	
Reclassify PRCs as non-permit-required	5.3					X	
Retain documents	5.5	X					
Program review	5.6	X	X		X		

Procedure No. HS300
 Revision No. 1
 Date 04/29/93
 Page 14 of 21



ATTACHMENT 2

HAND SIGNALS

- **THE VERY NATURE OF OUR WORK REQUIRES THE USE OF PROTECTIVE CLOTHING THAT IN ITSELF MAY RESTRICT OUR ABILITY TO COMMUNICATE ORALLY.**
- **IN AS MUCH AS CERTAIN VITAL COMMUNICATIONS ARE NECESSARY FOR A SAFE EFFICIENT OPERATION, A LIMITED NUMBER OF HAND SIGNALS HAVE BEEN DEVISED TO HELP RESOLVE THIS PROBLEM.**
- **SIGNALS COVERING TWO CATEGORIES, THOSE FOR PERSONAL SAFETY AND FOR OPERATIONAL USE WILL BE DISCUSSED.**

Personal Safety

- **IMMEDIATE PERSONAL SAFETY PROBLEMS COULD INCLUDE BREATHING AIR SYSTEM MALFUNCTION, LIFELINES PROBLEMS AND GENERAL DISTRESS.**
THE FOLLOWING SIGNALS WILL BE USED FOR ALL IT EMPLOYEES
 - **BREATHING AIR PROBLEMS**



**ONE HAND HOLDING THROAT
INDICATES A BREATHING
AIR PROBLEM**



**BOTH HANDS HOLDING THROAT
INDICATES A SERIOUS
BREATHING AIR PROBLEM,
SUCH AS NO AIR ,
VAPORS GETTING THROUGH, ET**

TUT 004 2050 F4



HAND SIGNALS (con't)

● LIFE LINE TEST

ONE TUG ON EITHER END OF A LIFE LINE MUST BE ANSWERED BY TWO TUGS. IF A TUG IS NOT ANSWERED IT INDICATES A FOULED L MAN MUST BE REMOVED AND LINE CLEARED.

THREE TUGS , OR A STEADY PULL ON THE LINE INDICATES THAT THE MAN SHOULD LEAVE THE CONTAMINATED AREA.

● GENERAL PROBLEM



BOTH HANDS RAISED ABOVE THE HEAD ARE INDICATIVE OF SOME TYPE OF PROBLEM WHICH MAY REQUIRES EXIT FROM THE AREA AND REMOVAL OF PROTECTIVE CLOTHING.

ONCE THE SIGNAL IS RECEIVED AND UNDERSTOOD, THE PROBLEM CAN POSSIBLY BE FURTHER CLARIFIED BY POINTING TO AFFECTED AREA.



HAND SIGNALS (con't)



INDEX FINDER TWIRLING IN AN UPWARD
MOTION WHILE OPEN PALM COVERS
THE FINGER: OPEN SLOWLY

INDEX FINDER TWIRLING IN A DOWNWARD
MOTION WHILE OPEN PALM COVERS TH
FINGER : CLOSE SLOWLY



WHILE OPENING OR CLOSING VALVES, VENTS, ETC.,
THE FOLLOWING CAN BE USED:



INDEX FINGER TWIRLING IN
AN UPWARD MOTION:
OPEN NORMALLY



INDEX FINGER TWIRLING IN A
DOWNWARD MOTION:
CLOSE NORMALLY

Operational Safety HAND SIGNALS (con't)



**1 HAND MADE INTO FIST
WITH THUMB DOWN :
CLOSE EMERGENCY**



**1 HAND MADE INTO FIST WITH
THUMB UP: OPEN EMERGENCY**

**CHECKING FOR MATERIAL IN A VESSEL WHILE IN PROTECTIVE
CLOTHING CAN BE ANSWERED AS FOLLOWS:**



**TWO HANDS CLASPED IN FIST
WITH THUMBS POINTING UP:
VESSEL HAS MATERIAL IN IT.**



HAND SIGNALS (con't) Operational Safety

CHECKING FOR MATERIAL IN A VESSEL WHILE IN
PROTECTIVE CLOTHING CAN BE ANSWERED AS FOLLOWS:



UMPIRE SIGNALING RUNNER SAFE:
VESSEL EMPTY

HAND SIGNALS (con't)



**SLASHING SIGNAL ACROSS THROAT:
CLOSE DOWN WHATEVER YOU ARE DOING—STOP**



**FIST IN PUMPING MOTION:
CLOSE DOWN WHATEVER YOU ARE DOING—STOP**



ENTRY PERMIT
PERMIT-REQUIRED CONFINED SPACE (PRCS)

Division/Location _____ Job No. _____
 Customer _____ Address _____
 Location of Job _____ Identity of PRCS _____
 Describe Hazards of PRCS (Chemical, Physical) _____

Chemical Introduced Into Space _____

Purpose This Permit Authorized _____

CHECKLIST	YES	DOES NOT APPLY	PERSONAL PROTECTIVE EQUIPMENT (Circle)
All lines leading to and from confined space have been blinded or disconnected			EYE/FACE Chemical Goggles Face Shield Safety Glasses
Electrical service disconnected or locked out			EXTREMITIES Hard Hat Gloves (Material _____) Hoods Boots (Material _____) Bootties
All grounding and bonding cables in place			BODY Suit (Level _____, Material _____)
All lighting, fittings, power equipment, and extension cords are explosion-proof			RESPIRATORY SCBA Air Line Egress System Air Purifying (Cartridge _____) Powered Air Purifying (Cartridge _____)
Ground Fault Circuit Indicator (GFCI) checked and functioning			OTHER Hearing Protection Harness & Lifeline Chert or Parachute
All ignition sources have been isolate			RESCUE EQUIPMENT Mechanical Extraction Device First Aid Kit SCBA Other (Specify) _____
All respiratory equipment and alarms checked and functional			NON-IT RESCUE TEAM Instructions to Summon Rescue _____
All safety harnesses and life lines checked			COMMUNICATION Lifeline "Tug" Signals (See HASP) Air Powered Horn Signals (See HASP) Other _____
All required PPE checked and in use			_____
All entrants are confined space trained			_____
All entrants are trained in the use, care, and limitations of respirators and PPE			_____
Attendant trained in emergency procedures			_____
Attendant(s) trained in rescue procedures			_____
Outside rescue service will be used and they have been notified of this entry			_____
Appropriate rescue equipment available and checked			_____
Ventilation system in use and effective			_____
Entrant(s) can achieve a gas-tight seal with respirator			_____
Entrant(s) are not wearing contact lenses			_____
All tests have been completed and indicate that entrance requirements have been met			_____
Appropriate warning signs have been posted and unauthorized personnel have been excluded from the PRCS and area			_____
IF THE ANSWER TO ANY OF THE ABOVE QUESTIONS IS NO, ENTRY IS <u>NOT</u> PERMITTED.			
OTHER PERMITS ISSUED FOR WORK IN PRCS: _____			
OTHER HAZARD CONTROL PROCEDURES OR INSTRUCTIONS: _____			

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TEST DATA
Oxygen, Flammability and Toxic Contaminant(s)

Time	Percent Oxygen	Percent LEL	PEG	PEG	PEG	PEG	PEG	Initials	Comments

AUTHORIZED ENTRANTS

AUTHORIZED ATTENDANTS

RESCUE PERSONNEL

Diagram the confined space, indicate location of manways and ventilators. Indicate location(s) where tests conducted.

) (- Manway
= - Ventilator
X - Test Location

ACCEPTABLE ENTRY CONDITIONS

- 1) Entry Permit Completely Filled Out
- 2) Oxygen between 20-23.5%
- 3) Combustible Gases Below 10% LEL
- 4) Permissible Levels of Toxic Gases (List)

5) Other _____

PRCS SAFE FOR ENTRY

DATE/TIME ____/____/____ NAME ENTRY SUPERVISOR _____ SIGNATURE _____

CURRENT ENTRY SUPERVISOR (IF DIFFERENT) _____

ENTRY PERMIT EXPIRES DATE/TIME ____/____/____ (No longer than 1 shift)

ENTRY PERMIT CANCELLED

DATE/TIME ____/____/____ SIGNATURE _____

REASON (✓) _____ Work Complete _____ Authorized Conditions not met _____ Incident _____

DESCRIBE PROBLEMS DURING ENTRY AND RESOLUTION

RECLASSIFICATION TO NON-PERMIT-REQUIRED CONFINED SPACE

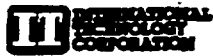
Describe hazard removal methods, without use of ventilation. _____

TESTING VERIFICATION SHOWN AT TIME _____ ON TEST DATA CHART ABOVE.

DATE/TIME ____/____/____ ENTRY SUPERVISOR SIGNATURE _____

REVIEWED BY _____ DATE _____

TUT 004 2050 G2



ENTRY PERMIT PERMIT-REQUIRED CONFINED SPACE (PRCS)

Division/Location _____ Job No. _____
 Customer _____ Address _____
 Location of Job _____ Identity of PRCS _____
 Describe Hazards of PRCS (Chemical, Physical) _____

Chemical Introduced Into Space _____

Purpose This Permit Authorized _____

CHECKLIST	YES	DOES NOT APPLY	PERSONAL PROTECTIVE EQUIPMENT (Circle)
All lines leading to and from confined space have been blinded or disconnected			EYE/FACE Chemical Goggles Face Shield Safety Glasses
Electrical service disconnected or locked out			EXTREMITIES Hard Hat Gloves (Material _____) Hoods Boots (Material _____) Boaties
All grounding and bonding cables in place			BODY Suit (Level _____, Material _____)
All lighting, fittings, power equipment, and extension cords are explosion-proof			RESPIRATORY SCBA Air Line Egress System Air Purifying (Cartridge _____) Powered Air Purifying (Cartridge _____)
Ground Fault Circuit Indicator (GFCI) checked and functioning			OTHER Hearing Protection Harness & Lifeline Chest or Parachute
All ignition sources have been isolated			RESCUE EQUIPMENT Mechanical Extraction Device First Aid Kit SCBA Other (Specify) _____
All respiratory equipment and alarms checked and functional			NON-IT RESCUE TEAM Instructions to Summon Rescue _____
All safety harnesses and life lines checked			COMMUNICATION Lifeline "Tug" Signals (See HASP) Air Powered Horn Signals (See HASP) Other _____
All required PPE checked and in use			_____
All entrants are confined space trained			_____
All entrants are trained in the use, care, and limitations of respirators and PPE			_____
Attendant trained in emergency procedures			_____
Attendant(s) trained in rescue procedures			_____
Outside rescue service will be used and they have been notified of this entry			_____
Appropriate rescue equipment available and checked			_____
Ventilation system in use and effective			_____
Entrant(s) can achieve a gas-tight seal with respirator			_____
Entrant(s) are not wearing contact lenses			_____
All tests have been completed and indicate that entrance requirements have been met			_____
Appropriate warning signs have been posted and unauthorized personnel have been excluded from the PRCS and area			_____
IF THE ANSWER TO ANY OF THE ABOVE QUESTIONS IS NO, ENTRY IS <u>NOT</u> PERMITTED.			
OTHER PERMITS ISSUED FOR WORK IN PRCS: _____			
OTHER HAZARD CONTROL PROCEDURES OR INSTRUCTIONS: _____			

TUT 004 2050 G3

APPENDIX A

SUBCONTRACTOR CERTIFICATION

SUBCONTRACTOR CERTIFICATION

I, _____ as an agent of _____,
do hereby certify that the following employees have successfully completed a 40-hour training
course which complies with the provisions of 29 CFR 1910.120, and respiratory protection
training which complies with 29 CFR 1910.134. Each employee has successfully completed a
medical examination which complies with the above regulations.

Individual copies of certification of successful completion of the required training and medical
examinations are attached for each employee.

Signature

Date

APPENDIX B

CHEMICAL INFORMATION

Material Safety Data Sheet

From Genium's Reference Collection
Genium Publishing Corporation
1145 Catalyn Street
Schenectady, NY 12303-1836 USA
(518) 377-8855



No. 313

PERCHLOROETHYLENE
(Revision D)
Issued: November 1978
Revised: August 1988

SECTION 1. MATERIAL IDENTIFICATION

Material Name: PERCHLOROETHYLENE

Description (Origin/Uses): Used in commercial dry cleaning and metal-degreasing operations; used to a lesser extent in home products and in veterinary anthelmintics (worming).

Other Designations: Ethylene Tetrachloride; Tetrachloroethylene; C_2Cl_4 ; CAS No. 0127-18-4

Manufacturer: Contact your supplier or distributor. Consult the latest edition of the *Chemicalweek Buyers' Guide* (Genium ref. 73) for a list of suppliers.

HMIS

H 1

F 0

R 1

PPG*

*See sect. 8



NFPA

R 1

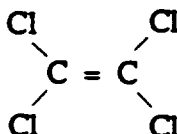
I 3

S 2

K 0

SECTION 2. INGREDIENTS AND HAZARDS

Perchloroethylene, CAS No. 0127-18-4



*See NIOSH, RTECS (No. KX3850000), for additional data with references to reproductive, irritative, tumorigenic, and mutagenic effects.

%

Ca 100

EXPOSURE LIMITS

OSHA PEL

8-Hr TWA: 100 ppm

Ceiling: 200 ppm

Maximum Peak above the Ceiling: 300 ppm
for 5 min. in any 3 Hrs

ACGIH TLVs, 1987-88

TLV-TWA: 50 ppm, 340 mg/m³

TLV-STEL: 200 ppm, 1340 mg/m³

Toxicity Data*

Human, Inhalation, TC_L: 96 ppm/7 Hrs

SECTION 3. PHYSICAL DATA

Boiling Point: 250°F (121°C)

Specific Gravity (H₂O = 1): 1.623

% Volatile by Volume: 100

Water Solubility (%): Insoluble

Molecular Weight: 166 Grams/Mole

Vapor Pressure: 19 Torr at 77°F (25°C)

Vapor Density (Air = 1): 5.83

Appearance and Odor: A clear, colorless liquid; ethereal odor.

SECTION 4. FIRE AND EXPLOSION DATA

Flash Point and Method	Autoignition Temperature	Flammability Limits in Air	LOWER	UPPER
.	.	% by Volume	.	.

Extinguishing Media: *Perchloroethylene does not burn. Use extinguishing agents that will put out the surrounding fire.

Unusual Fire or Explosion Hazards: Perchloroethylene vapor is heavier than air and it collects in low-lying areas such as sumps, wells, and underground piping systems. Enter these low-lying areas with appropriate caution.

Special Fire-fighting Procedures: Wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in the pressure-demand or positive-pressure mode. Use care in selecting safety equipment (see sect. 5, Conditions to Avoid).

SECTION 5. REACTIVITY DATA

Perchloroethylene is stable in closed containers during routine operations. It does not undergo hazardous polymerization.

Chemical Incompatibilities: Hazardous chemical reactions involving perchloroethylene and barium, beryllium, or lithium are reported in Genium reference 84, page 491M-208.

Conditions to Avoid: Prevent contact with incompatible chemicals. Avoid exposure to direct sunlight. Monitor the stabilizer level in the perchloroethylene product; get specifications from your supplier for the proper inhibitor levels. This material forms hydrochloric acid (HCl) if the inhibitor level becomes too low. Do not mix perchloroethylene with caustic soda or potash. This material may degrade or attack rubber and some plastics and coatings, so select protective gear and handling equipment carefully.

Hazardous Products of Decomposition: Although perchloroethylene itself does not burn, it can be very hazardous in fires because of thermooxidative degradation at high temperatures to very toxic phosgene and corrosive hydrogen chloride. Electric arcs and perchloroethylene vapor may also produce these products of hazardous decomposition.

SECTION 6. HEALTH HAZARD INFORMATION

Perchloroethylene is not listed as a carcinogen by the NTP, IARC, or OSHA.

Summary of Risks: Perchloroethylene affects the central nervous system (CNS), causing incoordination, headache, vertigo, light narcosis, dizziness, unconsciousness, and even death. All of these can occur as the level and duration of exposure continues.

Medical Conditions Aggravated by Long-Term Exposure: None reported. **Target Organs:** CNS, eyes, skin.
Primary Entry: Inhalation, skin. **Acute Effects:** Irritation of the skin, eyes, and upper respiratory tract (URT); CNS effects.
Chronic Effects: None reported.

FIRST AID

Eyes: Immediately flush eyes, including under the eyelids, gently but thoroughly with plenty of running water for at least 15 minutes.

Skin: Immediately wash the affected area with soap and water.

Inhalation: Remove the exposed person to fresh air; restore and/or support his or her breathing as needed.

Ingestion: Never give anything by mouth to someone who is unconscious or convulsing. Do not induce vomiting.

GET MEDICAL HELP (IN PLANT, PARAMEDIC, COMMUNITY) FOR ALL EXPOSURES. Seek prompt medical assistance for further treatment, observation, and support after first aid.

SECTION 7. SPILL, LEAK, AND DISPOSAL PROCEDURES

Spill/Leak: Notify safety personnel, provide ventilation, and eliminate all sources of ignition immediately. Cleanup personnel need protection against contact with and inhalation of vapor (see sect. 8). Contain large spills and collect waste or absorb it with an inert material such as sand, earth, or vermiculite. Use nonsparking tools to place waste liquid or absorbent into closable containers for disposal. Keep waste out of sewers, watersheds, and waterways. **Waste Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow Federal, state, and local regulations.

OSHA Designations

Air Contaminant (29 CFR 1910.1000 Subpart Z)

EPA Designations (40 CFR 302.4)

RCRA Hazardous Waste, No. U210

CERCLA Hazardous Substance, Reportable Quantity: 1 lb (0.454 kg), per Clean Water Act (CWA), section 307 (a) and Resource Conservation and Recovery Act (RCRA), section 3001

SECTION 8. SPECIAL PROTECTION INFORMATION

Goggles: Always wear protective eyeglasses or chemical safety goggles. Where splashing of perchloroethylene solution may occur, wear a full face shield/splash guard. Follow OSHA eye- and face-protection regulations (29 CFR 1910.133). **Respirator:** Consult the *NIOSH Pocket Guide to Chemical Hazards* for general recommendations on respirator protection. Follow OSHA respirator regulations (29 CFR 1910.134). For emergency or nonroutine use (e.g., cleaning reactor vessels or storage tanks), wear an SCBA with a full facepiece operated in the pressure-demand or positive-pressure mode. **Warning:** Air-purifying respirators will not protect workers in oxygen-deficient atmospheres. **Other:** Wear impervious gloves, boots, aprons, and gauntlets, etc., to prevent prolonged or repeated skin contact with perchloroethylene. Suggested material includes polyvinyl alcohol, polyethylene, or neoprene. Leather shoes are also appropriate. **Ventilation:** Install and operate general and local ventilation systems that are powerful enough to maintain airborne levels of perchloroethylene dust below the OSHA PEL standard cited in section 2. **Safety Stations:** Make eyewash stations, washing facilities, and safety showers available in areas of use and handling. **Contaminated Equipment:** Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. Do not wear contact lenses in any work area. Remove contaminated clothing and launder it before wearing it again; clean this material from shoes and equipment.

Comments: Practice good personal hygiene; always wash thoroughly after using this material. Avoid transferring it from your hands to your mouth while eating, drinking, or smoking. Do not eat, drink, or smoke in any work area. Avoid inhaling perchloroethylene vapor. Select safety equipment carefully (see sect. 5, Conditions to Avoid).

SECTION 9. SPECIAL PRECAUTIONS AND COMMENTS

Storage/Segregation: Store perchloroethylene in a cool, dry, well-ventilated area away from barium, beryllium, and lithium.

Special Handling/Storage: Protect containers from physical damage. Fit all holding tanks with an air-drying venting system that prevents moist air from entering the tank and allows for perchloroethylene vapor expansion and contraction; airtight storage facilities are not recommended. Aluminum is not recommended for storage facilities.

Transportation Data (49 CFR 172.101-2)

DOT Shipping Name: Tetrachloroethylene

DOT Label: None

IMO Label: Saint Andrew's Cross (X)*

DOT ID No. UN1897

DOT Hazard Class: ORM-A

IMO Class: 6.1

*Harmful-Stow away from Foodstuffs (Materials of IMO Class 6.1, Packaging Group III).

References: 1, 12, 73, 84-94, 100, 103.

Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Genium Publishing Corp. extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

Prepared by PJ Igoe, BS

Industrial Hygiene Review: DJ Wilson, CIH

Medical Review: MJ Hardies, MD

Material Safety Data Sheet

From Genium's Reference Collection
Genium Publishing Corporation
1145 Catalyn Street
Schenectady, NY 12303-1836 USA
(518) 377-8855



GENIUM PUBLISHING CORP.

No. 312
TRICHLOROETHYLENE
(Revision E)

Issued: July 1979
Revised: August 1987

SECTION 1. MATERIAL IDENTIFICATION

MATERIAL NAME: TRICHLOROETHYLENE

DESCRIPTION (Origin/Uses): Prepared from sym-tetrachloroethane by way of eliminating HCl by boiling with lime. Used to manufacture organic chemicals, pharmaceuticals; in degreasing and dry cleaning; and as a solvent for fats, waxes, rubbers, oils, paints, varnishes, ethers, and cellulose esters.

OTHER DESIGNATIONS: Ethylene Trichloride; TCE; Trichloroethene; 1,1,2-Trichloroethylene;

C₂HCl₃; NIOSH RTECS #KX4550000; CAS #0079-01-6

MANUFACTURER/SUPPLIER: Available from several suppliers, including:

Dow Chemical USA, 2020 Dow Center, Midland, MI 48640;

Telephone: (517) 636-1000; (800) 258-CHEM

COMMENTS: Trichloroethylene is a toxic solvent and a suspected occupational carcinogen.

HMIS

H 2

F 1

R 1

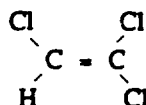
PPE*

* See sect. 8

R 1
I 3
S 1
K 0

SECTION 2. INGREDIENTS AND HAZARDS

Trichloroethylene, CAS #0079-01-6; NIOSH RTECS #KX4550000



- The TLV-TWA is set to control subjective complaints such as headache, fatigue, and irritability.
- The TLV-STEL is set to prevent incoordination and other beginning anesthetic effects from TCE. These levels should provide a wide margin of safety in preventing liver injury.
- The OSHA PEL is 300 ppm for 5 minutes in any 2 hours.

%

100

HAZARD DATA

ACGIH Values 1987-88

TLV-TWA*: 50 ppm, 270 mg/m³

TLV-STEL*: 200 ppm, 1080 mg/m³

OSHA PEL 1986***

8-Hr TWA: 100 ppm

Ceiling: 200 ppm

NIOSH REL 1986

10-Hr TWA: 25 ppm

TOXICITY DATA

Human, Oral, LD₅₀: 7 g/kg

Human, Inhalation, TC_{Lo}: 6900 mg/m³

(10 Min)

Human, Inhalation, TC_{Lo}: 160 ppm/

83 Min

Human, Inhalation, TD_{Lo}: 812 mg/kg

SECTION 3. PHYSICAL DATA

Boiling Point ... 188.6°F (87°C)

Vapor Pressure ... 58 Torr at 68°F (20°C)

Water Solubility ... Insoluble

Vapor Density (Air = 1) ... 4.53

Evaporation Rate ... Not Listed

Specific Gravity ... 1.4649 at 68°F (20°C)

Melting Point ... -120.64°F (-84.8°C)

Molecular Weight ... 131.40 Grams/Mole

Appearance and odor: Colorless, nonflammable mobile liquid; sweetish odor like chloroform.

COMMENTS: TCE is highly soluble in lipids. A high vapor pressure at room temperature provides the potential for TCE vapors to contaminate use areas.

SECTION 4. FIRE AND EXPLOSION DATA

Flash Point and Method

Not Listed

Autoignition Temperature

770°F (410°C)

Flammability Limits in Air

% by Volume

LOWER

8%

UPPER

10.5%

EXTINGUISHING MEDIA: TCE has no flash point in a conventional closed tester at room temperature, but it is moderately flammable at higher temperatures. Use dry chemical, carbon dioxide, alcohol foam, or other extinguishing agents suitable for the surrounding fire.

OSHA Flammability Class (29 CFR 1910.106): Not Regulated

UNUSUAL FIRE/EXPLOSION HAZARDS: During fire conditions TCE emits highly toxic and irritating fumes, including hydrochloric acid and phosgene.

SPECIAL FIRE-FIGHTING PROCEDURES: Wear a self-contained breathing apparatus with a full facepiece operated in a pressure-demand or another positive-pressure mode. At TCE vapor levels of 300-1000 ppm, fire fighters who lack the proper respiratory equipment may experience incoordination and impaired judgment.

DOT Flammability Class (49 CFR 173.115): Not Regulated

SECTION 5. REACTIVITY DATA

Trichloroethylene is stable. Hazardous polymerization can occur under certain circumstances (see Conditions to Avoid and Comments, below).

CHEMICAL INCOMPATIBILITIES include magnesium or aluminum powder, NaOH, KOH, or other strong alkaline materials. Reactions with alkaline materials may lead to the formation of dangerous explosive mixtures of chloroacetylenes.

CONDITIONS TO AVOID: When TCE is heated (as in the case with vapor degreasers) or exposed to sunlight, it requires extra stabilization against oxidation, degradation, and polymerization. It is slowly decomposed by light when moist.

PRODUCTS OF HAZARDOUS DECOMPOSITION include hydrochloric acid and phosgene under certain conditions at elevated temperatures.

COMMENTS: TCE is stable under normal handling and storage conditions, and hazardous polymerization is not expected to occur. However, failure of the stabilizer at elevated temperatures or other extreme conditions may allow polymerization to take place.

SECTION 6. HEALTH HAZARD INFORMATION

Trichloroethylene is listed as a carcinogen by the NTP, IARC, and OSHA. NIOSH recommends that trichloroethylene be treated as an occupational carcinogen. IARC carcinogenic results are animal suspect, animal positive, and human indefinite. **SUMMARY OF RISKS:** Moderate exposures to TCE cause symptoms similar to those of alcohol inebriation. Higher concentrations cause narcotic effects. Ventricular fibrillation has been cited as the cause of death following heavy exposures. TCE-induced hepato cellular carcinomas have been detected in mice during tests conducted by the National Cancer Institute (*Chem & Eng News* 54 [April 5, 1976]:4). Organ systems affected by overexposure to TCE are the central nervous system (euphoria, analgesia, anesthesia), degeneration of the liver and kidneys, the lungs (tachypnea), heart (arrhythmia) and skin (irritation, vesication, and paralysis of fingers when immersed in liquid TCE). Contact with the liquid defats the skin, causing topical dermatitis. Certain people appear to experience synergistic effects from TCE exposure concomitant with exposure to caffeine, alcohol, and other drugs. When combined with alcohol intake, toxic effects are increased and may cause a red, blotchy facial and upper body rash commonly called "degreaser's flush." Other reported symptoms of TCE exposure include abnormal fatigue, headache, irritability, gastric disturbances, and intolerance to alcohol. Toxic effects from testing of TCE on humans include hallucination, distorted perception, somnolence (general depressed activity), and jaundice. **TARGET ORGANS:** Respiratory system, central nervous system, heart, liver, kidneys, and skin. **PRIMARY ENTRY:** Ingestion, inhalation, skin contact. **ACUTE EFFECTS:** Headache, vertigo, visual disturbance, tremors, nausea, vomiting, dermatitis, dizziness, drowsiness, and irritation to the eyes, nose, and throat. **CHRONIC EFFECTS:** None Reported. **MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE:** Diseases of the liver, kidneys, lungs, and central nervous system. **FIRST AID: EYE CONTACT:** Immediately flush eyes, including under the eyelids, gently but thoroughly with plenty of running water for at least 15 minutes. Get medical help.* **SKIN CONTACT:** Wash thoroughly with soap and water. Remove and launder contaminated clothing before wearing it again; clean material from shoes and equipment. Get medical help.* **INHALATION:** Remove victim to fresh air; restore and/or support his breathing as needed. Do not give adrenalin to the victim. Get medical help.* **INGESTION:** Call a poison control center. Never give anything by mouth to someone who is unconscious or convulsing. A professional decision regarding whether or not to induce vomiting is required. Do not give adrenalin to the victim. Get medical help.* **GET MEDICAL ASSISTANCE - IN PLANT, PARAMEDIC, COMMUNITY:** Get prompt medical assistance for further treatment, observation, and support after first aid.

COMMENTS: Workers' responses to TCE vary significantly because of many factors, including age, health status, nutrition, and intake of alcohol, caffeine, and medicines. Do not use these substances before, during, or after exposure to TCE. If a worker displays any of the symptoms of exposure to TCE, thoroughly investigate all the possible contributing factors to determine, if possible, how much the work environment levels of TCE are responsible.

SECTION 7. SPILL, LEAK, AND DISPOSAL PROCEDURES

SPILL/LEAK: Inform safety personnel of any trichloroethylene spill or leak and evacuate the area for large spills. Cleanup personnel must use respiratory and liquid contact protection. Adequate ventilation must be provided. Confine the spilled TCE to as small an area as possible. Do not allow it to run off to sewers or open waterways. Pick up spilled TCE with a vacuum cleaner or an absorbent such as vermiculite.

DISPOSAL: Consider reclamation, recycling, or destruction rather than disposal in a landfill.

Trichloroethylene is designated as a hazardous substance by the EPA (40 CFR 116.4).

Trichloroethylene is reported in the 1983 EPA TSCA Inventory.

EPA Hazardous Waste Number (40 CFR 261.33): U228

EPA Reportable Quantity (40 CFR 117.3): 1000 lbs (454 kgs)

Aquatic Toxicity Rating, TLM 96: Not Listed

SECTION 8. SPECIAL PROTECTION INFORMATION

GOGGLES: Always wear protective eyeglasses or chemical safety goggles. Follow the eye and face protection guidelines of 29 CFR 1910.133. **GLOVES:** Wear impervious gloves. **RESPIRATOR:** Use a NIOSH-approved respirator per the NIOSH Guide to Chemical Hazards (Genium ref. 88) for the maximum-use concentrations and/or the exposure limits cited in section 2. Follow the respirator guidelines in 29 CFR 1910.134. Any detectable concentration of TCE requires an SCBA, full facepiece, and pressure-demand/positive-pressure modes. **WARNING:** Air-purifying respirators will not protect workers from oxygen-deficient atmospheres. **OTHER EQUIPMENT:** Wear rubber boots, aprons, and other suitable body protection appropriate to the existing work environment. **VENTILATION:** Install and operate general and local exhaust ventilation systems of sufficient power to maintain airborne concentrations of TCE below the OSHA PEL standards cited in section 2. **SAFETY STATIONS:** Make eyewash stations, washing facilities, and safety showers available in areas of use and handling. Contact lenses pose a special hazard; soft lenses may absorb irritants, and all lenses concentrate them. **OTHER SPECIAL MODIFICATIONS IN THE WORKPLACE:** Because of the unresolved controversy about the carcinogenic status of TCE, all existing personal protective equipment and engineering technology should be used to prevent any possibility of worker contact with this material.

COMMENTS: Practice good personal hygiene. Keep material off of your clothes and equipment. Avoid transfer of material from hands to mouth while eating, drinking, or smoking. Adhere to the sanitation requirements of 29 CFR 1910.141 and 29 CFR 1910.142.

SECTION 9. SPECIAL PRECAUTIONS AND COMMENTS

STORAGE SEGREGATION: Prevent TCE from coming into contact with strong caustics such as NaOH; KOH; chemically active metal like Ba, Li, Na, Mg, Ti; and powdered aluminum or magnesium in acidic solutions. **SPECIAL HANDLING/STORAGE:** Store this material in a cool, dry, well-ventilated area. Avoid elevated temperatures because products of toxic and corrosive decomposition from TCE may form. Monitor the level of any stabilizer component that may be added to the TCE.

(Consult the technical data from the supplier to determine the specifics of any added stabilizer.) If applicable, follow the supplier's recommendation concerning proper rotation of stock, shelf-life requirements, and levels of stabilizers.

ENGINEERING CONTROLS IN THE WORKPLACE: Avoid collecting aluminum fines (very small particles) or chips in a TCE vapor degreaser. Monitor TCE stabilizer levels regularly. Only trained personnel should operate vapor degreasers.

TRANSPORTATION DATA (per 49 CFR 172.101-2):

DOT Hazard Class: ORM-A

DOT ID No. UN1710

IMO Class: 6.1

IMO Label: St. Andrew's Cross (X)*

DOT Shipping Name: Trichloroethylene

DOT Label: None

* Harmful - Stow away from foodstuffs (IMO Label, Materials of Class 6.1 Packaging Group III).

References: 1-9, 12, 14, 21, 73, 87-94. PI

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Approvals *JOHNSON*

Indust. Hygiene/Safety *JOHNSON*

Medical Review *JOHNSON*

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Material Safety Data Sheets Collection:

Sheet No. 703
1,2-Dichloroethylene

Issued: 4/90

Section 1. Material Identification

1,2-Dichloroethylene Description: An industrial solvent composed of 60% cis- and 40% trans-isomers. Both isomers, cis and trans, are made by partial chlorination of acetylene. Used as a general solvent for organic materials, lacquers, dye extraction, thermoplastics, organic synthesis, and perfumes. The trans-isomer is more widely used in industry than either the cis-isomer or the mixture. Toxicity also varies between the two isomers.

Other Designations: CAS No. 0540-59-0; $C_2H_2Cl_2$; acetylene dichloride; cis-1,2-dichloroethylene; sym-dichloroethylene; trans-1,2-dichloroethylene, dioform.

Manufacturer: Contact your supplier or distributor. Consult the latest *Chemicalweek Buyers' Guide*⁽⁷⁾ for a suppliers list.

R 1
I 2
S 2
K 1

NFPA



HMIS

H 2

F 3

R 1

PPG*

* Sec. 1

Section 2. Ingredients and Occupational Exposure Limits

1,2-Dichloroethylene, ca 100%

OSHA PEL

8-hr TWA: 790 mg/m³, 200 ppm

ACGIH TLV, 1989-90

TLV-TWA: 790 mg/m³, 200 ppm

NIOSH REL, 1987

790 mg/m³, 200 ppm

Toxicity Data*

Rat, oral, LD₅₀: 770 mg/kg; toxic effects not yet reviewed
Frog, inhalation, TC₅₀: 117 mg/m³ inhaled for 1 hr affects the peripheral nerve and sensation (flaccid paralysis without anesthesia); behavior (excitement); lungs, thorax, or respiration (respiratory depression)

* See NIOSH, RTECS (KV9360000), for additional toxicity data.

Section 3. Physical Data

Boiling Point: 119 °F/48 °C

Melting Point: -56 to -115 °F/-49 to -82 °C/

Vapor Pressure: 180 to 264 torr at 68 °F/20 °C

Vapor Density (Air = 1): 3.4

Molecular Weight: 96.95 g/mol

Specific Gravity (H₂O = 1 at 39 °F/4 °C): 1.27 at 77 °F/25 °C

Water Solubility: Insoluble

Appearance and Odor: A colorless, low-boiling liquid with a pleasant odor.

Section 4. Fire and Explosion Data

Flash Point: 37 °F/2.8 °C, CC

Autoignition Temperature: 860 °F/460 °C

LEL: 5.6% v/v

UEL: 12.8% v/v

Extinguishing Media: Use dry chemical, CO₂, halon, water spray, or standard foam. Water may be ineffective unless used to blanket the fire.
Unusual Fire or Explosion Hazards: This material's vapors are a dangerous fire hazard and moderate explosion hazard when exposed to any heat or ignition source or oxidizer.

Special Fire-fighting Procedures: Since fire may produce toxic fumes, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in the pressure-demand or positive-pressure mode and a fully encapsulating suit. Vapors may travel to heat or ignition sources and flash back. Stay upwind and out of low areas. Be aware of runoff from fire control methods. Do not release to sewers or waterways.

Section 5. Reactivity Data

Stability/Polymerization: This material is stable at room temperature in closed containers under normal storage and handling conditions. Hazardous polymerization cannot occur.

Chemical Incompatibilities: This material is incompatible with alkalis, nitrogen tetroxide, difluoromethylene, strong oxidizers, and dihydrofluorite. When in contact with copper or copper alloys or by reaction with potassium hydroxide, explosive chloroacetylene may be released.

Conditions to Avoid: Addition of hot liquid to cold 1,2-dichloroethylene may cause sudden emission of vapor that could flash back to an ignit source.

Hazardous Products of Decomposition: Thermal oxidative decomposition of 1,2-dichloroethylene can produce highly toxic fumes of chlorine (Cl₂).

Section 6. Health Hazard Data

Carcinogenicity: Neither the NTP, IARC, nor OSHA lists 1,2-dichloroethylene as a carcinogen.

Summary of Risks: 1,2-Dichloroethylene's most important effect is its irritation of the central nervous system (CNS) and narcosis. This material is toxic by inhalation, ingestion, and skin contact. It is also irritating to the eyes. The trans-isomer at 2200 ppm causes nausea, vertigo, and burning of the eyes. The trans-isomer is twice as potent as the cis-isomer. If renal effects occur, they are transient.

Medical Conditions Aggravated by Long-Term Exposure: None reported.

Target Organs: Central nervous system, eyes, respiratory system.

Primary Entry Routes: Inhalation, ingestion, skin and eye contact.

Acute Effects: Inhalation of 1,2-dichloroethylene causes narcosis, respiratory tract irritation, nausea, vomiting, tremor, weakness, central nervous depression, and epigastric (the abdomen's upper midregion) cramps. Contact with the liquid causes eye and skin (on prolonged contact) irritation. Ingestion causes slight depression to deep narcosis.

Chronic Effects: None reported.

FIRST AID

Eyes: Flush immediately, including under the eyelids, gently but thoroughly with flooding amounts of running water for at least 15 min.

Skin: Quickly remove contaminated clothing. After rinsing affected skin with flooding amounts of water, wash it with soap and water.

Inhalation: Remove exposed person to fresh air and support breathing as needed. Have trained personnel administer 100% oxygen, preferably with humidification.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. If ingested, have a conscious person drink 1 to 2 glasses of water, then induce repeated vomiting until vomit is clear.

After first aid, get appropriate in-plant, paramedic, or community medical support.

Physician's Note: Intravenous injections of calcium gluconate may relieve cramps and vomiting. Treat central nervous system effects symptomatically.

Section 7. Spill, Leak, and Disposal Procedures

Spill/Leak: Design and practice a 1,2-dichloroethylene spill control and countermeasure plan (SCCP). Notify safety personnel, remove all heat and ignition sources, evacuate hazard area, and provide adequate ventilation. Cleanup personnel should protect against vapor inhalation and skin or eye contact. Absorb small spills on paper towels. After evaporating the 1,2-dichloroethylene from these paper towels in a fume hood, burn the paper in a suitable location away from combustible material. Collect and atomize large quantities in a suitable combustion chamber equipped with an appropriate effluent gas cleaning device. Follow applicable OSHA regulations (29 CFR 1910.120).

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

EPA Designations

Listed as a RCRA Hazardous Waste (40 CFR 261.33)

Listed as a CERCLA Hazardous Substance* (40 CFR 302.4), Reportable Quantity (RQ): 100 lb (45.4 kg) [* per RCRA, Sec. 3001, per Clean Water Act, Sec. 307(a)]†

SARA Extremely Hazardous Substance (40 CFR 355): Not listed

Listed as a SARA Toxic Chemical (40 CFR 372.65)

OSHA Designations

Listed as an Air Contaminant (29 CFR 1910.1000, Table Z-1)

† Listed as 1,2-trans-dichloroethylene.

Section 8. Special Protection Data

Goggles: Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133).

Respirator: Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a NIOSH-approved respirator. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

Warning: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Other: Wear impervious gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. 1,2-dichloroethylene attacks some forms of plastics, rubber, and coatings.

Ventilation: Provide general and local explosion-proof ventilation systems to maintain airborne concentrations below the OSHA PEL and ACGIH TLV (Sec. 2). Local exhaust ventilation is preferred since it prevents contaminant dispersion into the work area by controlling it at its source.⁽¹⁰⁹⁾

Safety Stations: Make available in the work area emergency eyewash stations, safety/quick-drench showers, and washing facilities.

Contaminated Equipment: Never wear contact lenses in the work area: soft lenses may absorb, and all lenses concentrate, irritants. Remove this material from your shoes and equipment. Launder contaminated clothing before wearing.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9. Special Precautions and Comments

Storage Requirements: Store in tightly closed containers in a cool, well-ventilated area away from all incompatible materials (Sec. 5) and oxidizing materials. Outside or detached storage is preferred. If stored inside, place containers in a standard flammable liquids storage cabinet or room. Protect containers from physical damage.

Engineering Controls: Avoid vapor inhalation and skin and eye contact. Use only with adequate ventilation and appropriate personal protective gear. Institute a respiratory protection program that includes regular training, maintenance, inspection, and evaluation. 1,2-dichloroethylene is a dangerous fire hazard. All engineering systems should be of maximum explosion-proof design and electrically grounded and bonded. Provide preplacement questionnaires which emphasize detecting a history of chronic respiratory disease.

Transportation Data (49 CFR 172.101, .102): Not listed

MSDS Collection References: 7, 26, 38, 73, 84, 85, 87, 88, 100, 101, 103, 109, 126, 127, 136, 137

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APPENDIX C

EXCAVATION TRENCHING



INTERNATIONAL
TECHNOLOGY
CORPORATION

Procedure No. HS307
Revision No. 0
Date June 8, 1990
Page 1 of 49

Approved by

Guillermo S. Saez
David J. Papp

PROCEDURE

(subject)

Excavation and Trenching

1.0 Purpose and Summary

This procedure presents the federal requirements for excavation safety. Excavation operations pose unique and serious hazards.

With very few exceptions, protective systems must be designed and installed to protect employees who enter excavations of 5 feet or more in depth. Accepted protective systems include; sloping, shoring and shielding.

The protective system must be designed by a registered professional engineer (civil), and plans must be available for inspections on-site.

In addition to these federal requirements, some states (California) and localities may require notification of trenching/excavation operations prior to beginning work.

Index words: trench, excavation, sloping, shoring, shielding

TUT 004 2050 H

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3.0 Responsibility Matrix

3.1 Procedure Responsibility

The Corporate Director, Health and Safety, is responsible for the issuance, revision, and maintenance of this procedure.

3.2 Action/Approval Responsibilities

The Responsibility Matrix can be found as Attachment 4 in section 8.0.

4.0 Definitions

- A. Accepted Engineering Requirements: Those requirements or practices which are compatible with standards required by a registered professional engineer.
- B. Angle of Repose: The greatest angle above the horizontal plane at which a material will lie without sliding.
- C. Benching: Means a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.
- D. Competent Person (Federal OSHA, 29 CFR 1926.32(f)): A person, such as a supervisor or engineer, who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees and who has the authority to take prompt corrective measures to eliminate them. Nomenclature for responsibilities equivalent to a competent person varies from state to state. For example, in California, the individual with excavation/trenching installation and supervision responsibilities is a "qualified person".
- E. Confined Space: Enclosure having limited means for entry and exit, by reason of location, size, or numbers of openings; and unfavorable natural ventilation that could contain or produce dangerous air contaminants, flammable atmospheres, and/or oxygen deficiency.
- F. Design Engineer: An individual, currently registered as a civil engineer in the applicable state, who, in all other respects, meets the requirements of a pertinent State OSHA Program, or Federal OSHA in terms of his or her ability to design shoring, sloping, benching, or alternate trench/excavation systems.
- G. Excavation: Any man-made cut, cavity, trench, or depression in an earth surface, including its sides, walls, or faces, formed by earth removal.

- H. Project Manager: An individual who is responsible to coordinate and direct the activities of both the Design Engineer and Project Supervisor. The Project Manager is responsible to assure that all pre-excavation requirements are met: site preparation, health and safety office notification, OSHA and/or IT internal project permitting, and employee training.
- I. Project Supervisor: A person, such as a supervisor or engineer, who is familiar with the installation of shoring or sloping/benching systems and the attendant hazards of excavation or trenching operations. Project supervisors shall meet the particular requirements of State OSHA programs, or where applicable, the requirements of a Federal OSHA competent person. Project Supervisors shall assure that excavation/trenching work practices are properly followed.
- J. Sheeting: Means the members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.
- K. Shield: Means a structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Shields may be pre-manufactured or job-built in accordance with 1926.652(c)(3) or (c)(4). Shields used in trenches are usually referred to as "trench boxes" or "trench shields".
- L. Shoring: Means a structure such as a metal hydraulic, mechanical or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.
- M. Sloping: Means a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.
- N. Spoil: The earth material that is removed in the formation of an excavation, or trench.
- O. Support System: Means a structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.
- P. Tabulated Data: Means tables and charts approved by a registered professional engineer and used to design and construct a protective system.
- Q. Trench: An excavation made below the surface of the ground. In general, the depth is greater than the width at the bottom, but the width of a trench at the bottom is not greater than 15 feet.

5.0 Text

5.1 Pre-Excavation Requirements

5.1.1 Underground Installations

Prior to opening an excavation, the estimated location of utility installations such as sewer, telephone, fuel, electric, water lines, or any underground installations that may reasonably be expected to be encountered during the excavation work shall be determined.

Utility companies or owners shall be contacted within established or customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations.

When utility companies or owners cannot respond to a request within 24 hours - excluding weekends and holidays - (or longer if required by state or local law), or if the exact location of installations cannot be established, excavation may proceed with caution, provided detection equipment or other means to locate utility installations are used.

5.1.2 Surface Encumbrances

All surface encumbrances (trees, poles, boulders, etc.) that are located so as to create a hazard to employees shall be removed or supported, as necessary, to safeguard employees.

5.1.3 Training

Employees shall not be assigned, or permitted, to design, supervise, or work in or about excavations until they have completed formal classroom training to include:

- types of hazards associated with excavation operations,
- safe work practices and techniques,
- a review of applicable Federal, state and local regulations, and
- a review of this procedure.

All personnel subject to this procedure shall be periodically retrained in the above subject areas. Proof of training and retraining shall be documented in writing. Training records shall be maintained by the Corporate Training Manager (Ref. ITC PRO HS050).

Tailgate Safety Meetings detailing the specific hazards of the work to be performed and safety precautions and procedures specific for the job shall be conducted by the project supervisor at the beginning of each shift for each job. The meeting shall be documented on the Tailgate Safety Meeting Form (Form HS051-1).

Formal training shall be complemented with on-the-job training and instruction by management as part of standard employee supervision, and to the extent necessary to assure compliance with this procedure, and all other applicable health and safety practices.

5.1.4 Hazard Assessment

During the project planning stage, an assessment of potential hazards shall be made to include:

- the presence and quantity of hazardous substances in the area of the excavation;
- the toxicity and flammability of hazardous substances present, or to be introduced into, the area of the excavation;
- the potential for work meeting the definition of confined space work (ref. ITC PRO HS300);
- the presence of nearby above-ground or overhead utility installations;
- the exposure of the general public to the excavation operations; and
- the potential for surface water runoff into the excavation.

At this time, Form HS307-1, IT Trench/Excavation Project Notification Worksheet is to be completed.

5.2 Excavation Work Practices

5.2.1 General

Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with 29CFR1926.652. The project supervisor shall ensure that the required protective system is installed and maintained per the design specifications.

No employees shall be permitted to enter the excavation unless they are specifically required to do so. Unauthorized persons shall not be allowed access.

5.2.2 Supervision

Work in an excavation shall at all times be supervised by an IT project supervisor. This individual will remain outside of the excavation at all times, and will be responsible for identifying any unusual developments above ground which may warn of impending earth movement.

5.2.3 Access and Egress

Structural ramps that are used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a competent person qualified in structural design, and shall be constructed in accordance with the design. Ramp design and construction shall comply with 29CFR1926.651(c).

A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 more feet in depth so as to require no more than 25 feet of lateral travel for employees.

5.2.4 Protective Systems

Protective systems designed in accordance with 29CFR1926.652(b) or (c) shall be installed except when:

- 1) the excavation is made entirely in stable rock; or
- 2) the excavation is less than 5 feet in depth, and examination of the ground by a competent person provides no indication of a potential cave-in.

Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system. (See Attachments 1, 2 and 3).

5.2.5 Placement of Spoil

All spoil shall be placed at least 2 feet from the edge of the excavation. It is strongly recommended that spoil be placed 4 or more feet from the excavation edge so as not to cover surface indicators of subsidence (such as fissures or cracks). No method that disturbs the soil in place (such as driving stakes) shall be used to contain the spoil material.

5.2.6 Exposure to Falling Loads

No employees shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cabs of vehicles being loaded or unloaded provided the vehicles are equipped with protection as specified in 29CFR1926.601(b)(6).

5.2.7 Warning System for Mobil Equipment

When mobil equipment is operated adjacent to an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs.

5.2.8 Hazardous Atmospheres

Where an oxygen deficient (less than 20.5% O₂) or hazardous atmosphere exists, or could reasonably be expected to exist, the excavation shall be tested before employees enter.

Adequate precautions shall be taken to prevent employee exposure to oxygen deficient or hazardous atmospheres. As appropriate, ventilation and/or respiratory protective devices shall be used.

Adequate precautions, including ventilation, shall be taken to prevent employee exposure to atmospheres containing a concentration of flammable gas in excess of 10 percent of the lower explosive limit (LEL) of the gas.

Testing shall be conducted as often as necessary to ensure that the atmosphere remains safe. See also ITC PRO HS300, for additional requirements for confined space work.

5.2.9 Water Accumulation Hazards

Employees shall not work in excavations in which there is accumulated water, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation.

If water is controlled or prevented from accumulating by the use of water removal equipment. The water removal equipment and operations shall be monitored by a competent person to ensure proper operation.

If the excavation work interrupts the natural drainage of surface water (streams, run-off channels), diversion ditches dikes, or other suitable means shall be used to prevent surface water from entering the excavation and to provide adequate drainage of the area adjacent to the excavation.

Excavations subject to run-off from heavy rains shall be inspected by a competent person in compliance with section 5.2.10 below.

5.2.10 Stability of Adjacent Structures

The stability of structures adjoining the excavation shall be supported to protect employees.

Excavation below the level of the base or footing of any foundation or retaining wall that could reasonably be expected to pose a hazard to employees shall not be permitted except when:

- a support system (underpinning) is provided to ensure the safety of employees and the stability of the structure; or
- the excavation is in stable rock; or
- a registered professional engineer has determined that the structure will be unaffected by the excavation; or
- a registered professional engineer has determined that the structure will be unaffected by the excavation; or
- a registered professional engineer has determined that such excavation will not pose a hazard to employees.

Sidewalks, pavements and appurtenant structure shall not be undermined unless a support system or another method of protection is provided to protect employees from the possible collapse of such structures.

5.2.11 Protection of Employees from Loose Rock or Soil

Employees shall be protected from loose rock or soil which could fall or roll from the excavation face. Such protection could be scaled to remove loose material, or the installation of barriers.

Employees shall be protected from spoil or other materials or equipment which could fall or roll into the excavation. Such materials shall be kept at least 2 feet from the excavation edge, and/or retaining devices shall be used to prevent materials or equipment from falling or rolling into excavations.

5.2.12 Inspections

A competent person shall make daily inspections of excavations, the adjacent areas and protective systems for evidence of conditions that could result in a cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions.

The inspection shall be made prior to the start of work, and as needed throughout the shift. Inspections shall be made after each rainstorm or other hazard-increasing event.

Where the inspection finds evidence of any hazardous condition, exposed employees shall be removed from the hazardous area until necessary precautions have been taken.

5.2.13 Fall Protection

Where employees or equipment are permitted to cross over excavations, walkways or bridges with standard guardrails shall be provided.

Adequate barrier physical protection shall be provided at all remotely located excavations. All wells, pits, shafts, etc., shall be barricaded or covered. Temporary well, pits, shafts, etc., shall be backfilled as soon as possible.

5.3 Requirements for Protective Systems

5.3.1 Protection for Employees in Excavations

Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed and installed in compliance with 29CFR1926.652(b) or 29CFR1926.652(c), except when

- the excavation is made entirely in stable rock; or
- the excavation is less than 5 feet in depth and a competent person determines there is no danger of cave-in.

Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system.

6.0 Exception Provisions

No exceptions to the requirements of this policy are permitted.

7.0 Cross References

29CFR1926 Subpart P - Excavations
§ 650; Scope, application and definitions
§ 651; General requirements
§ 652; Requirements for protective systems
Appendices A - F, mandatory
ITC PRO HS050, Training Requirements
ITC PRO HS051, Tailgate Safety Meetings
ITC PRO HS300, Confined Spaces, Industrial

8.0 Forms and Checklists

Form HS307.1, Trench/Excavation Notification Worksheet. This form is mandatory. It is to be completed by the project manager and/or design engineer. After the form is completed, a copy is submitted to the responsible health and safety professional who will review it, and make any necessary state or local notifications.

Attachment 1, Selection of Protective Systems for Excavations 20 Feet or Less in Depth

Attachment 2, Sloping Options

Attachment 3, Shoring or Shielding Options

Attachment 4, Responsibility Matrix

Attachment 5, 29CFR1926 Subpart P - Excavations

Attachment 6, Form HS307.2, Excavation and Trenching Notification Log. This form is optional. This log format may be used by the local health and safety professional to track excavation projects.



TRENCH/EXCAVATION NOTIFICATION WORKSHEET

Project Number _____ Project Name _____

Customer's Name: _____

Specific Jobsite Location: _____

Nearest Major Cross Street: _____

City: _____ County: _____

Name and Title of Site Supervisor: _____

Starting Date: _____ Estimated Completion Date: _____

High Voltage Lines in Proximity: YES _____ NO _____ How Near _____

Depth Range (ft): _____ Width Range(ft): _____ Length(ft): _____
min max min max

Project Description: _____

Anticipated Soil Condition: Hard Compact _____ Unstable _____ Running _____

Ground Protection Method: Shoring _____ Sloping _____
Trench Shield _____ Alternate _____

ALL METHODS MUST MEET ACCEPTED ENGINEERING REQUIREMENTS.
PLANS MUST BE KEPT ON-SITE.

Describe Chemical Hazards at Site: _____

Subcontractor's Name: _____

Equipment to be Used: _____

Design Engineer: _____ Project Supervisor: _____

Phone: () _____

=====

Health & Safety Use Only

IT Permit Number: _____ Date Issued: _____ Expires: _____

Issued By: _____

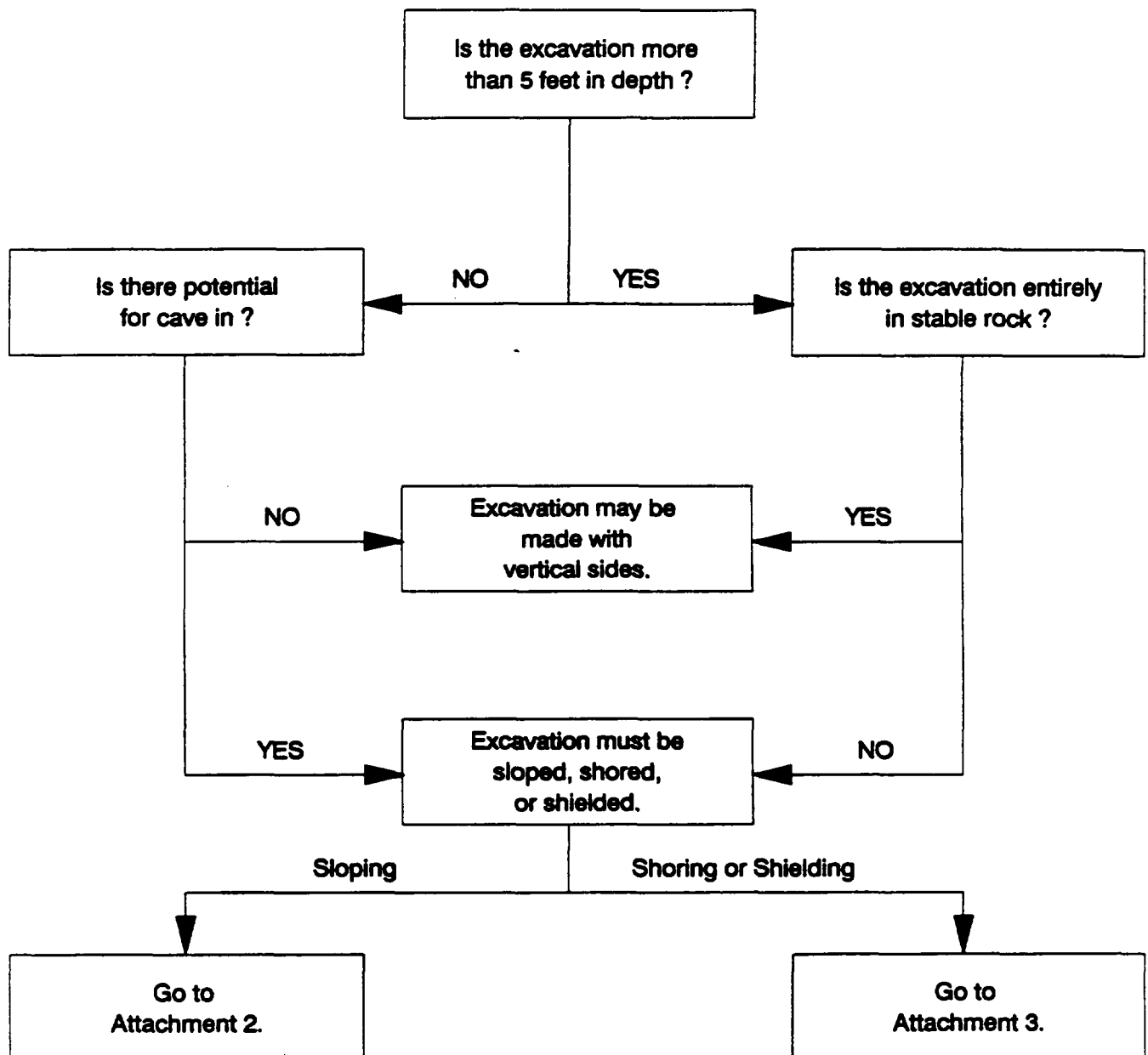
CAL/OSHA Notification: Date: _____ By: _____

District Office: _____ Contact: _____

Form HS307.1

ATTACHMENT 1.

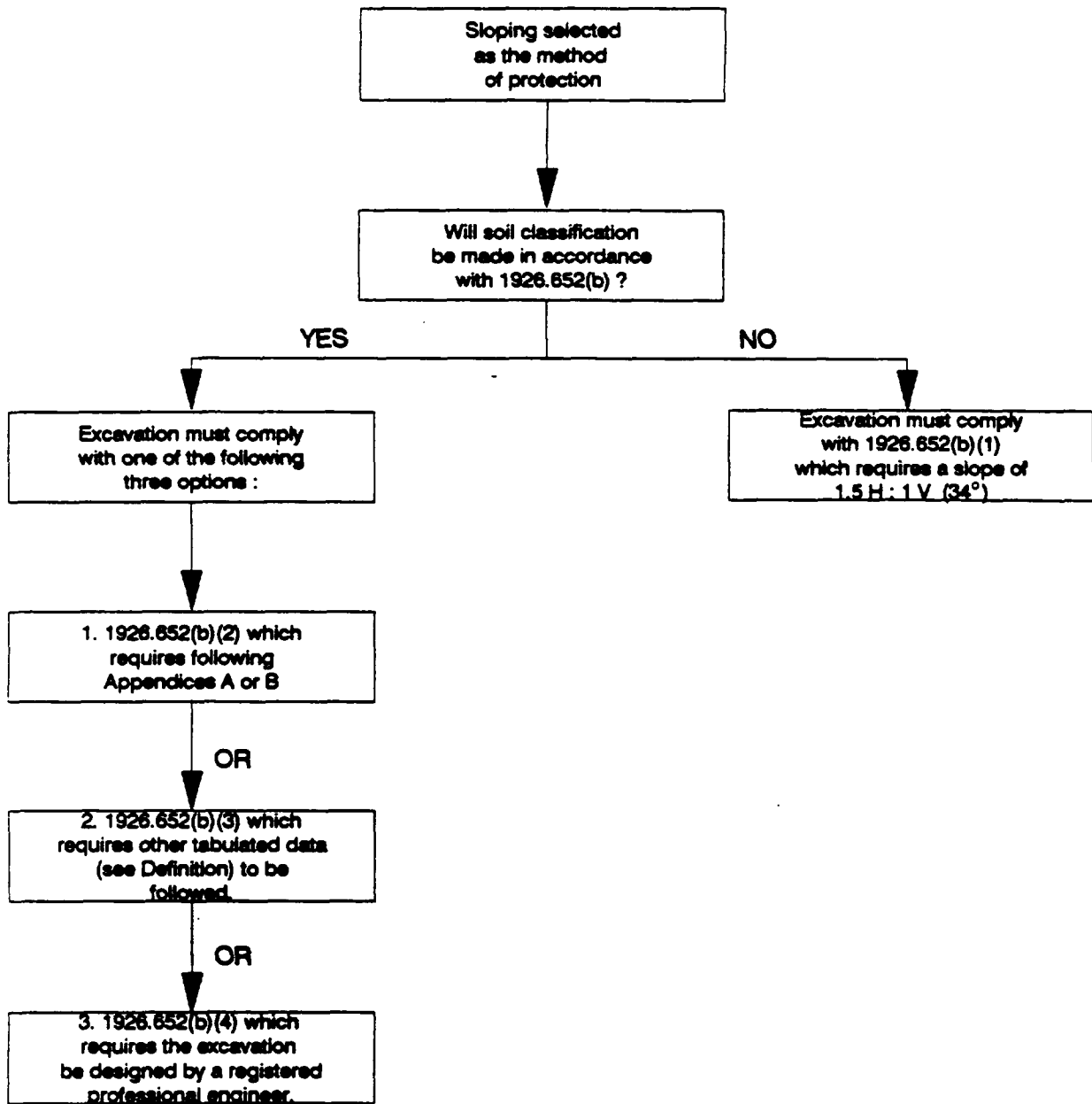
Selection of Protective Systems for Excavations 20 Feet or Less in Depth



For excavations greater than 20 feet in depth,
design by a registered professional engineer in
compliance with 1926.652(b) and (c) is required.

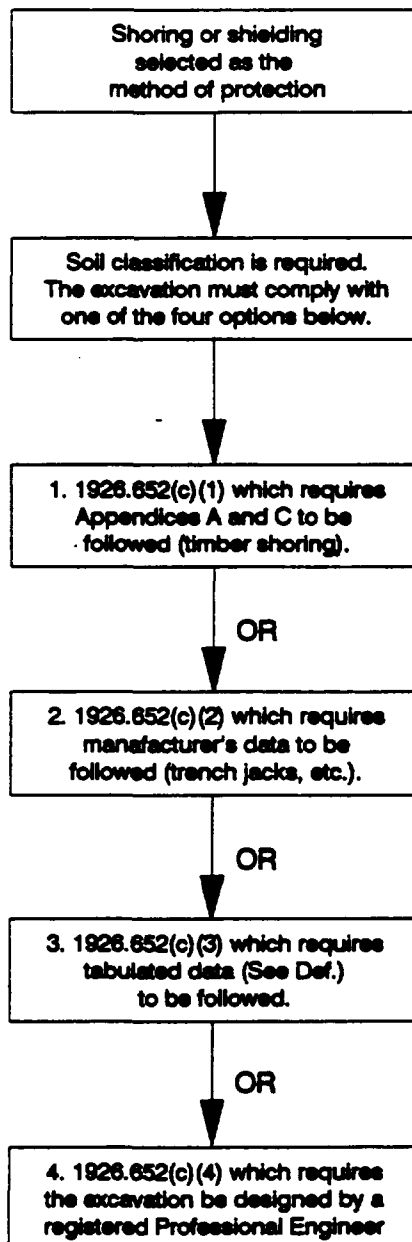
ATTACHMENT 2.

Sloping Options





ATTACHMENT 3.
Shoring or Shielding Options



ATTACHMENT 4
International Technology Corporation
Policy and Procedure
Excavation and Trenching
Responsibility Matrix

	<u>Individual</u>	<u>Leadman/ Supervisor</u>	<u>Design Engineer</u>	<u>Project Manager</u>	<u>Profit Center Manager</u>	<u>Regional General Manager</u>	<u>Division Director</u>	<u>H&S Professional</u>	<u>Regional Purchasing Manager</u>
Understanding and Complying With Procedure	X	X	X	X	X	X	X	X	
Conducting Pre-Work Hazard Assessment			X					X	
Selection and Design of Protective System(s)			X						
Pre-Qualifying Subcontractors				X				X	X
Inspecting Excavation for Hazardous Conditions	X	X	X					X	
Enforcing Safe Work Practices		X	X	X	X	X	X	X	

PART 1926—(AMENDED)**Subpart M—(Amended)**

1. By revising the authority citation for subpart M of part 1926 to read as follows:

Authority: Sec. 107, Contract Work Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 333); Secs. 4, 6, & 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8734), 8-76 (41 FR 25059), or 9-83 (48 FR 38736), as applicable, and 29 CFR part 1911.

2. By revising subpart P of part 1926 to read as follows:

Subpart P—Excavations

Sec.
1926.680 Scope, application, and definitions applicable to this subpart.
1926.651 General requirements.
1926.652 Requirements for protective systems.

Appendix A to Subpart P—Soil Classification**Appendix B to Subpart P—Sloping and Benching****Appendix C to Subpart P—Timber Shoring for Trenches****Appendix D to Subpart P—Aluminum Hydraulic Shoring for Trenches****Appendix E to Subpart P—Alternatives to Timber Shoring****Appendix F to Subpart P—Selection of Protective Systems****Subpart P—Excavations**

Authority: Sec. 107, Contract Worker Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 333); Secs. 4, 6, & 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8734), 8-76 (41 FR 25059), or 9-83 (48 FR 38736), as applicable, and 29 CFR part 1911.

§ 1926.680 Scope, application, and definitions applicable to this subpart.

(a) *Scope and application.* This subpart applies to all open excavations made in the earth's surface. Excavations are defined to include trenches.

(b) *Definitions applicable to this subpart.*

Accepted engineering practices means those requirements which are compatible with standards of practice required by a registered professional engineer.

Aluminum Hydraulic Shoring means a pre-engineered shoring system comprised of aluminum hydraulic cylinders (crossbraces) used in conjunction with vertical rails (uprights) or horizontal rails (walers). Such system is designed, specifically to support the

sidewalls of an excavation and prevent cave-ins.

Bell-bottom pier hole means a type of shaft or footing excavation, the bottom of which is made larger than the cross section above to form a belled shape.

Benching (Benching system) means a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

Cave-in means the separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.

Competent person means one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Cross braces mean the horizontal members of a shoring system installed perpendicular to the sides of the excavation, the ends of which bear against either uprights or walers.

Excavation means any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

Faces or sides means the vertical or inclined earth surfaces formed as a result of excavation work.

Failure means the breakage, displacement, or permanent deformation of a structural member or connection so as to reduce its structural integrity and its supportive capabilities.

Hazardous atmosphere means an atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness, or injury.

Kickout means the accidental release or failure of a cross brace.

Protective system means a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

Ramp means an inclined walking or working surface that is used to gain access to one point from another, and is constructed from earth or from

structural materials such as steel or wood.

Registered Professional Engineer means a person who is registered as a professional engineer in the state where the work is to be performed. However, a professional engineer, registered in any state is deemed to be a "registered professional engineer" within the meaning of this standard when approving designs for "manufactured protective systems" or "tabulated data" to be used in interstate commerce.

Sheeting means the members of a shoring system that retain the earth in position and in turn are supported by other members of the shoring system.

Shield (Shield system) means a structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Additionally, shields can be either premanufactured or job-built in accordance with § 1926.652 (c)(3) or (c)(4). Shields used in trenches are usually referred to as "trench boxes" or "trench shields."

Shoring (Shoring system) means a structure such as a metal hydraulic, mechanical or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.

Sides. See "Faces."

Sloping (Sloping system) means a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

Stable rock means natural solid mineral material that can be excavated with vertical sides and will remain intact while exposed. Unstable rock is considered to be stable when the rock material on the side or sides of the excavation is secured against caving-in or movement by rock bolts or by another protective system that has been designed by a registered professional engineer.

Structural ramp means a ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock are not considered structural ramps.

Support system means a structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground

installation, or the sides of an excavation.

Tabulated data means tables and charts approved by a registered professional engineer and used to design and construct a protective system.

Trench (Trench excavation) means a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6 m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

Trench box. See "Shield."

Trench shield. See "Shield."

Uprights means the vertical members of a trench shoring system placed in contact with the earth and usually positioned so that individual members do not contact each other. Uprights placed so that individual members are closely spaced, in contact with or interconnected to each other, are often called "sheeting."

Wales means horizontal members of a shoring system placed parallel to the excavation face whose sides bear against the vertical members of the shoring system or earth.

§ 1926.651 General requirements.

(a) *Surface encumbrances.* All surface encumbrances that are located so as to create a hazard to employees shall be removed or supported, as necessary, to safeguard employees.

(b) *Underground installations.* (1) The estimated location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation.

(2) Utility companies or owners shall be contacted within established or customary local response times, advised of the proposed work, and asked to establish the location of the utility underground installations prior to the start of actual excavation. When utility companies or owners cannot respond to a request to locate underground utility installations within 24 hours (unless a longer period is required by state or local law), or cannot establish the exact location of these installations, the employer may proceed, provided the employer does so with caution, and provided detection equipment or other

acceptable means to locate utility installations are used.

(3) When excavation operations approach the estimated location of underground installations, the exact location of the installations shall be determined by safe and acceptable means.

(4) While the excavation is open, underground installations shall be protected, supported or removed as necessary to safeguard employees.

(c) *Access and egress—(1) Structural ramps.* (i) Structural ramps that are used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a competent person qualified in structural design, and shall be constructed in accordance with the design.

(ii) Ramps and runways constructed of two or more structural members shall have the structural members connected together to prevent displacement.

(iii) Structural members used for ramps and runways shall be of uniform thickness.

(iv) Cleats or other appropriate means used to connect runway structural members shall be attached to the bottom of the runway or shall be attached in a manner to prevent tripping.

(v) Structural ramps used in lieu of steps shall be provided with cleats or other surface treatments on the top surface to prevent slipping.

(2) *Means of egress from trench excavations.* A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are 4 feet (1.22 m) or more in depth so as to require no more than 25 feet (7.62 m) of lateral travel for employees.

(d) *Exposure to vehicular traffic.* Employees exposed to public vehicular traffic shall be provided with, and shall wear, warning vests or other suitable garments marked with or made of reflectorized or high-visibility material.

(e) *Exposure to falling loads.* No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid being struck by any spillage or falling materials. Operators may remain in the cab of vehicles being loaded or unloaded when the vehicles are equipped, in accordance with § 1926.601(b)(6), to provide adequate protection for the operator during loading and unloading operations.

(f) *Warning system for mobile equipment.* When mobile equipment is operated adjacent to an excavation, or

when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs. If possible, the grade should be away from the excavation.

(g) *Hazardous atmospheres—(1) Testing and controls.* In addition to the requirements set forth in subparts D and E of this part (29 CFR 1926.50–1926.107) to prevent exposure to harmful levels of atmospheric contaminants and to assure acceptable atmospheric conditions, the following requirements shall apply:

(i) Where oxygen deficiency (atmospheres containing less than 19.5 percent oxygen) or a hazardous atmosphere exists or could reasonably be expected to exist, such as in excavations in landfill areas or excavations in areas where hazardous substances are stored nearby, the atmospheres in the excavation shall be tested before employees enter excavations greater than 4 feet (1.22 m) in depth.

(ii) Adequate precautions shall be taken to prevent employee exposure to atmospheres containing less than 19.5 percent oxygen and other hazardous atmospheres. These precautions include providing proper respiratory protection or ventilation in accordance with subparts D and E of this part respectively.

(iii) Adequate precaution shall be taken such as providing ventilation, to prevent employee exposure to an atmosphere containing a concentration of a flammable gas in excess of 20 percent of the lower flammable limit of the gas.

(iv) When controls are used that are intended to reduce the level of atmospheric contaminants to acceptable levels, testing shall be conducted as often as necessary to ensure that the atmosphere remains safe.

(2) *Emergency rescue equipment.* (i) Emergency rescue equipment, such as breathing apparatus, a safety harness and line, or a basket stretcher, shall be readily available where hazardous atmospheric conditions exist or may reasonably be expected to develop during work in an excavation. This equipment shall be attended when in use.

(ii) Employees entering bell-bottom pier holes, or other similar deep and confined footing excavations, shall wear a harness with a life-line securely attached to it. The lifeline shall be separate from any line used to handle materials, and shall be individually

attended at all times while the employee wearing the lifeline is in the excavation.

(h) *Protection from hazards associated with water accumulation.* (1) Employees shall not work in excavations in which there is accumulated water, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazards posed by water accumulation. The precautions necessary to protect employees adequately vary with each situation, but could include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of a safety harness and lifeline.

(2) If water is controlled or prevented from accumulating by the use of water removal equipment, the water removal equipment and operations shall be monitored by a competent person to ensure proper operation.

(3) If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering the excavation and to provide adequate drainage of the area adjacent to the excavation. Excavations subject to runoff from heavy rains will require an inspection by a competent person and compliance with paragraphs (h)(1) and (h)(2) of this section.

(i) *Stability of adjacent structures.* (1) Where the stability of adjoining buildings, walls, or other structures is endangered by excavation operations, support systems such as shoring, bracing, or underpinning shall be provided to ensure the stability of such structures for the protection of employees.

(2) Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees shall not be permitted except when:

(i) A support system, such as underpinning, is provided to ensure the safety of employees and the stability of the structure; or

(ii) The excavation is in stable rock; or
(iii) A registered professional engineer has approved the determination that the structure is sufficiently removed from the excavation so as to be unaffected by the excavation activity; or

(iv) A registered professional engineer has approved the determination that such excavation work will not pose a hazard to employees.

(3) Sidewalks, pavements, and appurtenant structure shall not be undermined unless a support system or another method of protection is

provided to protect employees from the possible collapse of such structures.

(j) *Protection of employees from loose rock or soil.* (1) Adequate protection shall be provided to protect employees from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection shall consist of scaling to remove loose material; installation of protective barricades at intervals as necessary on the face to stop and contain falling material; or other means that provide equivalent protection.

(2) Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into excavations. Protection shall be provided by placing and keeping such materials or equipment at least 2 feet (.61 m) from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.

(k) *Inspections.* (1) Daily inspections of excavations, the adjacent areas, and protective systems shall be made by a competent person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard increasing occurrence. These inspections are only required when employee exposure can be reasonably anticipated.

(2) Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

(l) *Fall protection.* (1) Where employees or equipment are required or permitted to cross over excavations, walkways or bridges with standard guardrails shall be provided.

(2) Adequate barrier physical protection shall be provided at all remotely located excavations. All wells, pits, shafts, etc., shall be barricaded or covered. Upon completion of exploration and similar operations, temporary wells, pits, shafts, etc., shall be backfilled.

§ 1926.852 Requirements for protective systems.

(a) *Protection of employees in excavations.* (1) Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with paragraph (b) or (c) of this section except when:

(i) Excavations are made entirely in stable rock; or

(ii) Excavations are less than 5 feet (1.52m) in depth and examination of the ground by a competent person provides no indication of a potential cave-in.

(2) Protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied or transmitted to the system.

(b) *Design of sloping and benching systems.* The slopes and configurations of sloping and benching systems shall be selected and constructed by the employer or his designee and shall be in accordance with the requirements of paragraph (b)(1); or, in the alternative, paragraph (b)(2); or, in the alternative, paragraph (b)(3); or, in the alternative, paragraph (b)(4), as follows:

(1) *Option (1)—Allowable configurations and slopes.* (i) Excavations shall be sloped at an angle not steeper than one and one-half horizontal to one vertical (34 degrees measured from the horizontal), unless the employer uses one of the other options listed below.

(ii) Slopes specified in paragraph (b)(1)(i) of this section, shall be excavated to form configurations that are in accordance with the slopes shown for Type C soil in Appendix B to this subpart.

(2) *Option (2)—Determination of slopes and configurations using Appendices A and B.* Maximum allowable slopes, and allowable configurations for sloping and benching systems, shall be determined in accordance with the conditions and requirements set forth in appendices A and B to this subpart.

(3) *Option (3)—Designs using other tabulated data.* (i) Designs of sloping or benching systems shall be selected from and be in accordance with tabulated data, such as tables and charts.

(ii) The tabulated data shall be in written form and shall include all of the following:

(A) Identification of the parameters that affect the selection of a sloping or benching system drawn from such data;

(B) Identification of the limits of use of the data, to include the magnitude and configuration of slopes determined to be safe;

(C) Explanatory information as may be necessary to aid the user in making a correct selection of a protective system from the data.

(iii) At least one copy of the tabulated data which identifies the registered professional engineer who approved the data, shall be maintained at the jobsite during construction of the protective system. After that time the data may be stored off the jobsite, but a copy of the data shall be made available to the Secretary upon request.

(4) *Option (4)—Design by a registered professional engineer.* (i) Sloping and benching systems not utilizing Option (1) or Option (2) or Option (3) under paragraph (b) of this section shall be approved by a registered professional engineer.

(ii) Designs shall be in written form and shall include at least the following:

(A) The magnitude of the slopes that were determined to be safe for the particular project;

(B) The configurations that were determined to be safe for the particular project; and

(C) The identity of the registered professional engineer approving the design.

(iii) At least one copy of the design shall be maintained at the jobsite while the slope is being constructed. After that time the design need not be at the jobsite, but a copy shall be made available to the Secretary upon request.

(c) *Design of support systems, shield systems, and other protective systems.* Designs of support systems shield systems, and other protective systems shall be selected and constructed by the employer or his designee and shall be in accordance with the requirements of paragraph (c)(1); or, in the alternative, paragraph (c)(2); or, in the alternative, paragraph (c)(3); or, in the alternative, paragraph (c)(4) as follows:

(1) *Option (1)—Designs using appendices A, C and D.* Designs for timber shoring in trenches shall be determined in accordance with the conditions and requirements set forth in appendices A and C to this subpart. Designs for aluminum hydraulic shoring shall be in accordance with paragraph (c)(2) of this section, but if manufacturer's tabulated data cannot be utilized, designs shall be in accordance with appendix D.

(2) *Option (2)—Designs Using Manufacturer's Tabulated Data.* (i) Design of support systems, shield systems, or other protective systems that are drawn from manufacturer's tabulated data shall be in accordance with all specifications, recommendations, and limitations issued or made by the manufacturer.

(ii) Deviation from the specifications, recommendations, and limitations issued or made by the manufacturer shall only be allowed after the manufacturer issues specific written approval.

(iii) Manufacturer's specifications, recommendations, and limitations, and manufacturer's approval to deviate from the specifications, recommendations, and limitations shall be in written form at the jobsite during construction of the protective system. After that time this data may be stored off the jobsite, but a copy shall be made available to the Secretary upon request.

(3) *Option (3)—Designs using other tabulated data.* (i) Designs of support systems, shield systems, or other protective systems shall be selected from and be in accordance with tabulated data, such as tables and charts.

(ii) The tabulated data shall be in written form and include all of the following:

(A) Identification of the parameters that affect the selection of a protective system drawn from such data;

(B) Identification of the limits of use of the data;

(C) Explanatory information as may be necessary to aid the user in making a correct selection of a protective system from the data.

(iii) At least one copy of the tabulated data, which identifies the registered professional engineer who approved the data, shall be maintained at the jobsite during construction of the protective system. After that time the data may be stored off the jobsite, but a copy of the data shall be made available to the Secretary upon request.

(4) *Option (4)—Design by a registered professional engineer.* (i) Support systems, shield systems, and other protective systems not utilizing Option 1, Option 2 or Option 3, above, shall be approved by a registered professional engineer.

(ii) Designs shall be in written form and shall include the following:

(A) A plan indicating the sizes, types, and configurations of the materials to be used in the protective system; and

(B) The identity of the registered professional engineer approving the design.

(iii) At least one copy of the design shall be maintained at the jobsite during construction of the protective system. After that time, the design may be stored off the jobsite, but a copy of the design shall be made available to the Secretary upon request.

(d) *Materials and equipment.* (1) Materials and equipment used for protective systems shall be free from

damage or defects that might impair their proper function.

(2) Manufactured materials and equipment used for protective systems shall be used and maintained in a manner that is consistent with the recommendations of the manufacturer, and in a manner that will prevent employee exposure to hazards.

(3) When material or equipment that is used for protective systems is damaged, a competent person shall examine the material or equipment and evaluate its suitability for continued use. If the competent person cannot assure the material or equipment is able to support the intended loads or is otherwise suitable for safe use, then such material or equipment shall be removed from service, and shall be evaluated and approved by a registered professional engineer before being returned to service.

(e) *Installation and removal of support—(1) General.* (i) Members of support systems shall be securely connected together to prevent sliding, falling, kickouts, or other predictable failure.

(ii) Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.

(iii) Individual members of support systems shall not be subjected to loads exceeding those which those members were designed to withstand.

(iv) Before temporary removal of individual members begins, additional precautions shall be taken to ensure the safety of employees, such as installing other structural members to carry the loads imposed on the support system.

(v) Removal shall begin at, and progress from, the bottom of the excavation. Members shall be released slowly so as to note any indication of possible failure of the remaining members of the structure or possible cave-in of the sides of the excavation.

(vi) Backfilling shall progress together with the removal of support systems from excavations.

(2) *Additional requirements for support systems for trench excavations.* (i) Excavation of material to a level no greater than 2 feet (.61 m) below the bottom of the members of a support system shall be permitted, but only if the system is designed to resist the forces calculated for the full depth of the trench, and there are no indications while the trench is open of a possible loss of soil from behind or below the bottom of the support system.

(ii) Installation of a support system shall be closely coordinated with the excavation of trenches.

(f) *Sloping and benching systems.* Employees shall not be permitted to work on the faces of sloped or benched excavations at levels above other employees except when employees at the lower levels are adequately protected from the hazard of falling, rolling, or sliding material or equipment.

(g) *Shield systems—(1) General.* (i) Shield systems shall not be subjected to loads exceeding those which the system was designed to withstand.

(ii) Shields shall be installed in a manner to restrict lateral or other hazardous movement of the shield in the event of the application of sudden lateral loads.

(iii) Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.

(iv) Employees shall not be allowed in shields when shields are being installed, removed, or moved vertically.

(2) *Additional requirement for shield systems used in trench excavations.* Excavations of earth material to a level not greater than 2 feet (.61 m) below the bottom of a shield shall be permitted, but only if the shield is designed to resist the forces calculated for the full depth of the trench, and there are no indications while the trench is open of a possible loss of soil from behind or below the bottom of the shield.

Appendix A to Subpart P

Soil Classification

(a) *Scope and application—(1) Scope.* This appendix describes a method of classifying soil and rock deposits based on site and environmental conditions, and on the structure and composition of the earth deposits. The appendix contains definitions, sets forth requirements, and describes acceptable visual and manual tests for use in classifying soils.

(2) *Application.* This appendix applies when a sloping or benching system is designed in accordance with the requirements set forth in § 1926.652(b)(2) as a method of protection for employees from cave-ins. This appendix also applies when timber shoring for excavations is designed as a method of protection from cave-ins in accordance with appendix C to subpart P of part 1926, and when aluminum hydraulic shoring is designed in accordance with appendix D. This Appendix also applies if other protective systems are designed and selected for use from data prepared in accordance with the requirements set forth in § 1926.652(c), and the use of the data is predicated on the use of the soil classification system set forth in this appendix.

(b) *Definitions.* The definitions and examples given below are based on, in whole or in part, the following: American Society for

Testing Materials (ASTM) Standards D653-85 and D2488: The Unified Soils Classification System. The U.S. Department of Agriculture (USDA) Textural Classification Scheme; and The National Bureau of Standards Report BSS-121.

Cemented soil means a soil in which the particles are held together by a chemical agent, such as calcium carbonate, such that a hand-size sample cannot be crushed into powder or individual soil particles by finger pressure.

Cohesive soil means clay (fine grained soil), or soil with a high clay content, which has cohesive strength. Cohesive soil does not crumble, can be excavated with vertical sideslopes, and is plastic when moist. Cohesive soil is hard to break up when dry, and exhibits significant cohesion when submerged. Cohesive soils include clayey silt, sandy clay, silty clay, clay and organic clay.

Dry soil means soil that does not exhibit visible signs of moisture content.

Fissured means a soil material that has a tendency to break along definite planes of fracture with little resistance, or a material that exhibits open cracks, such as tension cracks, in an exposed surface.

Granular soil means gravel, sand, or silt (coarse grained soil) with little or no clay content. Granular soil has no cohesive strength. Some moist granular soils exhibit apparent cohesion. Granular soil cannot be molded when moist and crumbles easily when dry.

Layered system means two or more distinctly different soil or rock types arranged in layers. Micaceous seams or weakened planes in rock or shale are considered layered.

Moist soil means a condition in which a soil looks and feels damp. Moist cohesive soil can easily be shaped into a ball and rolled into small diameter threads before crumbling. Moist granular soil that contains some cohesive material will exhibit signs of cohesion between particles.

Plastic means a property of a soil which allows the soil to be deformed or molded without cracking, or appreciable volume change.

Saturated soil means a soil in which the voids are filled with water. Saturation, or near saturation, is necessary for the proper use of instruments such as a pocket penetrometer or shear vane.

Soil classification system means, for the purpose of this subpart, a method of categorizing soil and rock deposits in a hierarchy of Stable Rock, Type A, Type B, and Type C, in decreasing order of stability. The categories are determined based on an analysis of the properties and performance characteristics of the deposits and the environmental conditions of exposure.

Stable rock means natural solid mineral matter that can be excavated with vertical sides and remain intact while exposed.

Submerged soil means soil which is underwater or is free seeping.

Type A means cohesive soils with an unconfined compressive strength of 1.5 ton per square foot (tsf) (144 kPa) or greater. Examples of cohesive soils are: clay, silty clay, sandy clay, clay loam and, in some

cases, silty clay loam and sandy clay loam. Cemented soils such as caliche and hardpan are also considered Type A. However, no soil is Type A if:

(i) The soil is fissured; or
(ii) The soil is subject to vibration from heavy traffic, pile driving, or similar effects; or

(iii) The soil has been previously disturbed; or

(iv) The soil is part of a sloped, layered system where the layers dip into the excavation on a slope of four horizontal to one vertical (4H:1V) or greater; or

(v) The material is subject to other factors that would require it to be classified as a less stable material.

Type B means:

(i) Cohesive soil with an unconfined compressive strength greater than 0.5 tsf (48 kPa) but less than 1.5 tsf (144 kPa); or

(ii) Granular cohesionless soils including: angular gravel (similar to crushed rock), silt, silt loam, sandy loam and, in some cases, silty clay loam and sandy clay loam.

(iii) Previously disturbed soils except those which would otherwise be classed as Type C soil.

(iv) Soil that meets the unconfined compressive strength or cementation requirements for Type A, but is fissured or subject to vibration; or

(v) Dry rock that is not stable; or

(vi) Material that is part of a sloped, layered system where the layers dip into the excavation on a slope less steep than four horizontal to one vertical (4H:1V), but only if the material would otherwise be classified as Type B.

Type C means:

(i) Cohesive soil with an unconfined compressive strength of 0.5 tsf (48 kPa) or less; or

(ii) Granular soils including gravel, sand, and loamy sand; or

(iii) Submerged soil or soil from which water is freely seeping; or

(iv) Submerged rock that is not stable; or

(v) Material in a sloped, layered system where the layers dip into the excavation or a slope of four horizontal to one vertical (4H:1V) or steeper.

Unconfined compressive strength means the load per unit area at which a soil will fail in compression. It can be determined by laboratory testing, or estimated in the field using a pocket penetrometer, by thumb penetration tests, and other methods.

Wet soil means soil that contains significantly more moisture than moist soil, but in such a range of values that cohesive material will slump or begin to flow when vibrated. Granular material that would exhibit cohesive properties when moist will lose those cohesive properties when wet.

(c) *Requirements—(1) Classification of soil and rock deposits.* Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C in accordance with the definitions set forth in paragraph (b) of this appendix.

(2) *Basis of classification.* The classification of the deposits shall be made based on the results of at least one visual and at least one manual analysis. Such analyses

shall be conducted by a competent person using tests described in paragraph (d) below, or in other recognized methods of soil classification and testing such as those adopted by the American Society for Testing Materials, or the U.S. Department of Agriculture textural classification system.

(3) *Visual and manual analyses.* The visual and manual analyses, such as those noted as being acceptable in paragraph (d) of this appendix, shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properly the properties, factors, and conditions affecting the classification of the deposits.

(4) *Layered systems.* In a layered system, the system shall be classified in accordance with its weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.

(5) *Reclassification.* If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the changes shall be evaluated by a competent person. The deposit shall be reclassified as necessary to reflect the changed circumstances.

(d) *Acceptable visual and manual tests.*—

(1) *Visual tests.* Visual analysis is conducted to determine qualitative information regarding the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken as samples from excavated material.

(i) Observe samples of soil that are excavated and soil in the sides of the excavation. Estimate the range of particle sizes and the relative amounts of the particle sizes. Soil that is primarily composed of fine-grained material is cohesive material. Soil composed primarily of coarse-grained sand or gravel is granular material.

(ii) Observe soil as it is excavated. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.

(iii) Observe the side of the opened excavation and the surface area adjacent to the excavation. Crack-like openings such as tension cracks could indicate fissured material. If chunks of soil spill off a vertical side, the soil could be fissured. Small spalls are evidence of moving ground and are indications of potentially hazardous situations.

(iv) Observe the area adjacent to the excavation and the excavation itself for evidence of existing utility and other underground structures, and to identify previously disturbed soil.

(v) Observe the opened side of the excavation to identify layered systems. Examine layered systems to identify if the layers slope toward the excavation. Estimate the degree of slope of the layers.

(vi) Observe the area adjacent to the excavation and the sides of the opened excavation for evidence of surface water, water seeping from the sides of the excavation, or the location of the level of the water table.

(vii) Observe the area adjacent to the excavation and the area within the excavation for sources of vibration that may affect the stability of the excavation face.

(2) *Manual tests.* Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly.

(i) *Plasticity.* Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8-inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch (50 mm) length of 1/8-inch thread can be held on one end without tearing, the soil is cohesive.

(ii) *Dry strength.* If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.

(iii) *Thumb penetration.* The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. (This test is based on the thumb penetration test described in American Society for Testing and Materials (ASTM) Standard designation D2488—"Standard Recommended Practice for Description of Soils (Visual—Manual Procedure).") Type A soils with an unconfined compressive strength of 1.5 tsf can be readily indented by the thumb; however, they can be penetrated by the thumb only with very great effort. Type C soils with an unconfined compressive strength of 0.5 tsf can be easily penetrated several inches by the thumb, and can be molded by light finger pressure. This test should be conducted on an undisturbed soil sample, such as a large clump of spoil, as soon as practicable after excavation to keep to a minimum the effects of exposure to drying influences. If the excavation is later exposed to wetting influences (rain, flooding), the classification of the soil must be changed accordingly.

(iv) *Other strength tests.* Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated shearvane.

(v) *Drying test.* The basic purpose of the drying test is to differentiate between cohesive material with fissures, unfissured cohesive material, and granular material. The procedure for the drying test involves drying a sample of soil that is approximately one inch thick (2.54 cm) and six inches (15.24 cm) in diameter until it is thoroughly dry:

(A) If the sample develops cracks as it dries, significant fissures are indicated.

(B) Samples that dry without cracking are to be broken by hand. If considerable force is necessary to break a sample, the soil has significant cohesive material content. The soil can be classified as a unfissured cohesive material and the unconfined compressive strength should be determined.

(C) If a sample breaks easily by hand, it is either a fissured cohesive material or a

granular material. To distinguish between the two, pulverize the dried clumps of the sample by hand or by stepping on them. If the clumps do not pulverize easily, the material is cohesive with fissures. If they pulverize easily into very small fragments, the material is granular.

Appendix B to Subpart P

Sloping and Benching

(a) *Scope and application.* This appendix contains specifications for sloping and benching when used as methods of protecting employees working in excavations from cave-ins. The requirements of this appendix apply when the design of sloping and benching protective systems is to be performed in accordance with the requirements set forth in § 1926.652(b)(2).

(b) Definitions.

Actual slope means the slope to which an excavation face is excavated.

Distress means that the soil is in a condition where a cave-in is imminent or is likely to occur. Distress is evidenced by such phenomena as the development of fissures in the face or adjacent to an open excavation; the subsidence of the edge of an excavation; the slumping of material from the face or the bulging or heaving of material from the bottom of an excavation; the spalling of material from the face of an excavation; and ravelling, i.e., small amounts of material such as pebbles or little clumps of material suddenly separating from the face of an excavation and trickling or rolling down into the excavation.

Maximum allowable slope means the steepest incline of an excavation face that is acceptable for the most favorable site conditions as protection against cave-ins, and is expressed as the ratio of horizontal distance to vertical rise (H:V).

Short term exposure means a period of time less than or equal to 24 hours that an excavation is open.

(c) *Requirements.*—(1) *Soil classification.* Soil and rock deposits shall be classified in accordance with appendix A to subpart P of part 1926.

(2) *Maximum allowable slope.* The maximum allowable slope for a soil or rock deposit shall be determined from Table B-1 of this appendix.

(3) *Actual slope.* (i) The actual slope shall not be steeper than the maximum allowable slope.

(ii) The actual slope shall be less steep than the maximum allowable slope, when there are signs of distress. If that situation occurs, the slope shall be cut back to an actual slope which is at least 1/2 horizontal to one vertical (1/2H:1V) less steep than the maximum allowable slope.

(iii) When surcharge loads from stored material or equipment, operating equipment, or traffic are present, a competent person shall determine the degree to which the actual slope must be reduced below the maximum allowable slope, and shall assure that such reduction is achieved. Surcharge loads from adjacent structures shall be evaluated in accordance with § 1926.651(i).

(4) *Configurations.* Configurations of sloping and benching systems shall be in accordance with Figure B-1.

TABLE B-1
MAXIMUM ALLOWABLE SLOPES

SOIL OR ROCK TYPE	MAXIMUM ALLOWABLE SLOPES (H:V) [1] FOR EXCAVATIONS LESS THAN 20 FEET DEEP [3]
STABLE ROCK TYPE A [2] TYPE B TYPE C	VERTICAL (90°) 3/4 : 1 (53°) 1:1 (45°) 1½ : 1 (34°)

NOTES:

1. Numbers shown in parentheses next to maximum allowable slopes are angles expressed in degrees from the horizontal. Angles have been rounded off.
2. A short-term maximum allowable slope of 1/2H:1V (63°) is allowed in excavations in Type A soil that are 12 feet (3.67 m) or less in depth. Short-term maximum allowable slopes for excavations greater than 12 feet (3.67 m) in depth shall be 3/4H:1V (53°).
3. Sloping or benching for excavations greater than 20 feet deep shall be designed by a registered professional engineer.

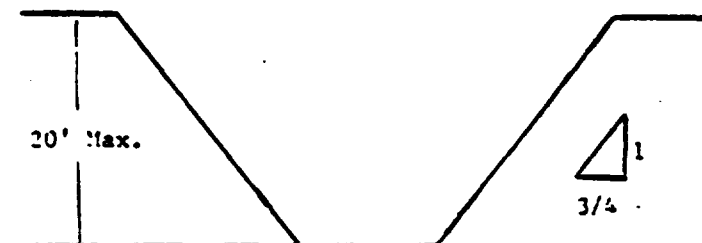
Figure B-1

Slope Configurations

(All slopes stated below are in the horizontal to vertical ratio)

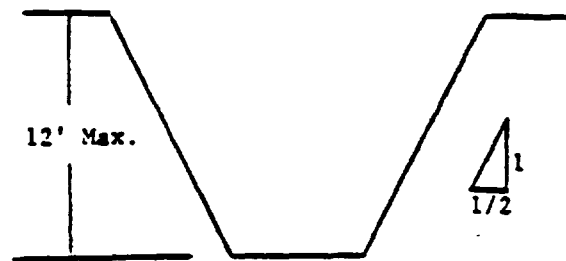
B-1.1 Excavations made in Type A soil.

1. All simple slope excavation 20 feet or less in depth shall have a maximum allowable slope of ¾:1.



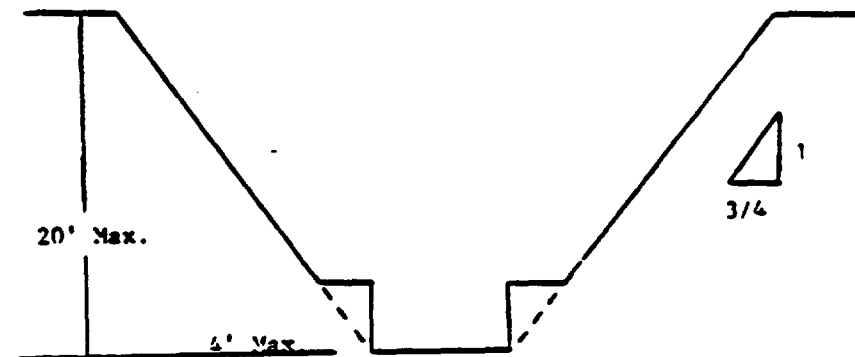
Simple Slope—General

Exception: Simple slope excavations which are open 24 hours or less (short term) and which are 12 feet or less in depth shall have a maximum allowable slope of ¾:1.

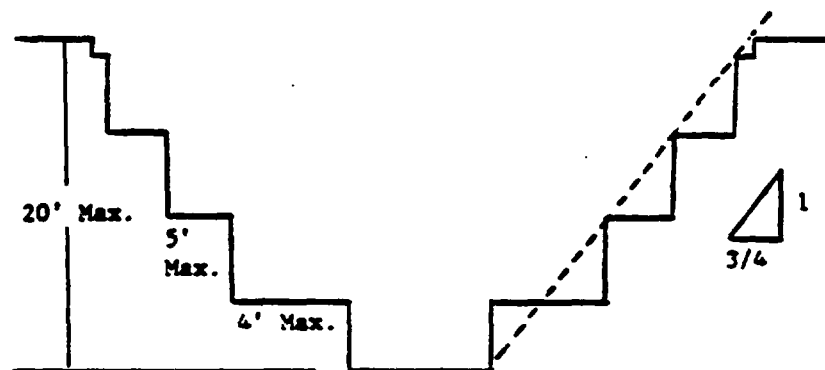


Simple Slope—Short Term

2. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of $\frac{3}{4}$ to 1 and maximum bench dimensions as follows:

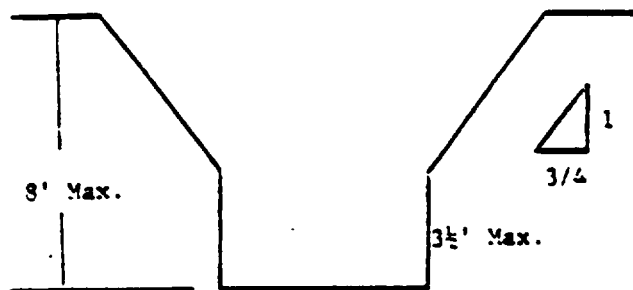


Simple Bench



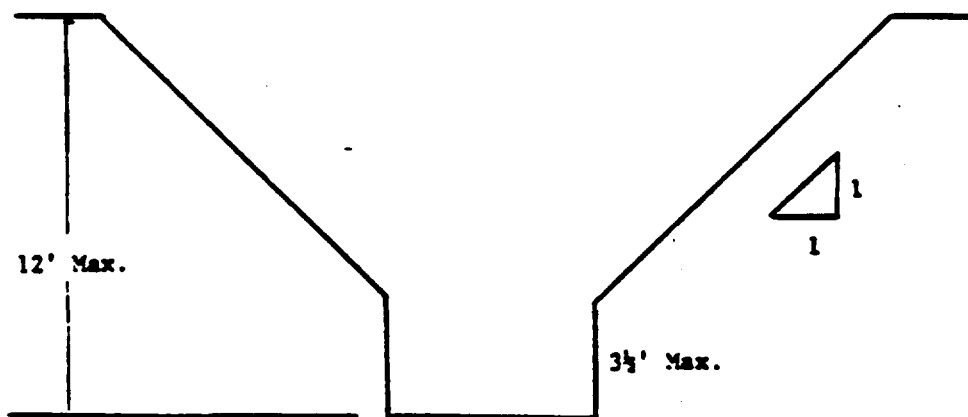
Multiple Bench

3. All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of $3\frac{1}{2}$ feet.



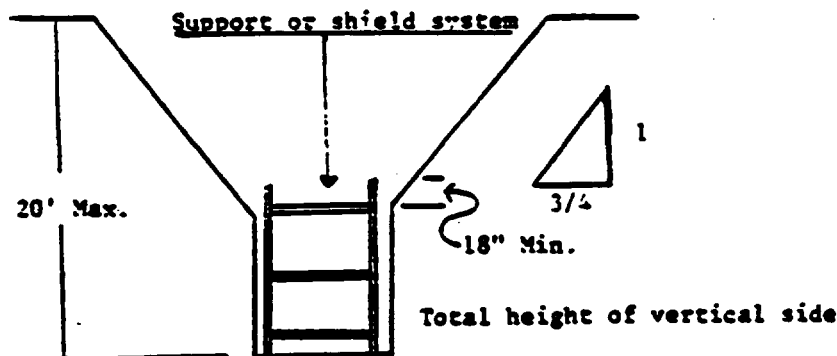
Unsupported Vertically Sided Lower Portion—Maximum 8 Feet in Depth

All excavations more than 8 feet but not more than 12 feet in depth which unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of 3 1/4 feet.



Unsupported Vertically Sided Lower Portion—Maximum 12 Feet in Depth

All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of 3/4:1. The support or shield system must extend at least 18 inches above the top of the vertical side.

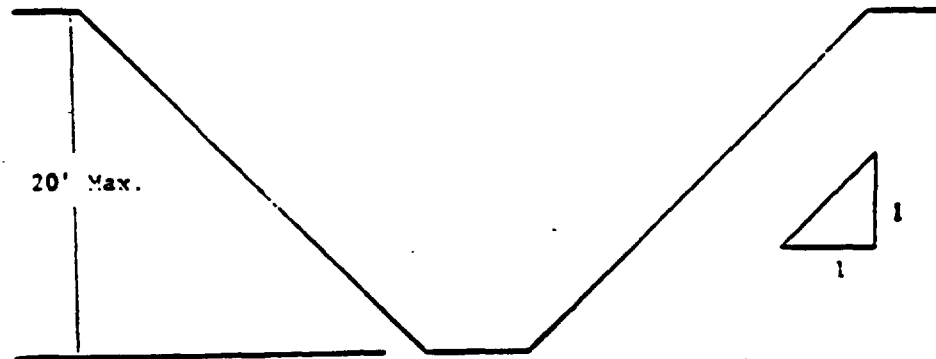


Supported or Shielded Vertically Sided Lower Portion

4. All other simple slope, compound slope, and vertically sided lower portion excavations shall be in accordance with the other options permitted under § 1926.852(b).

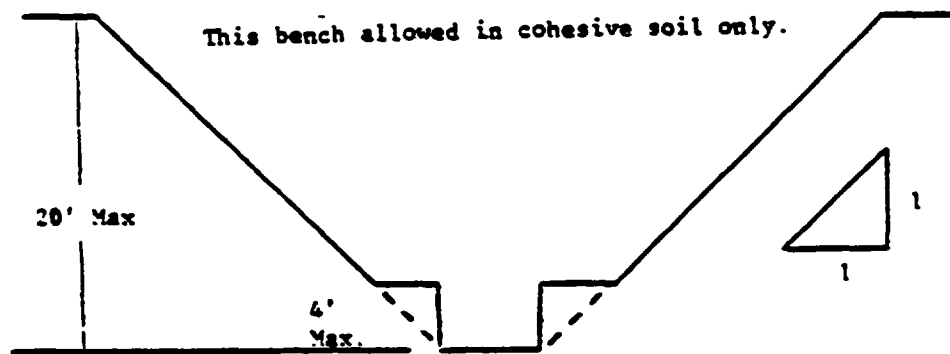
B-1.2 Excavations Made in Type B Soil

1. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.

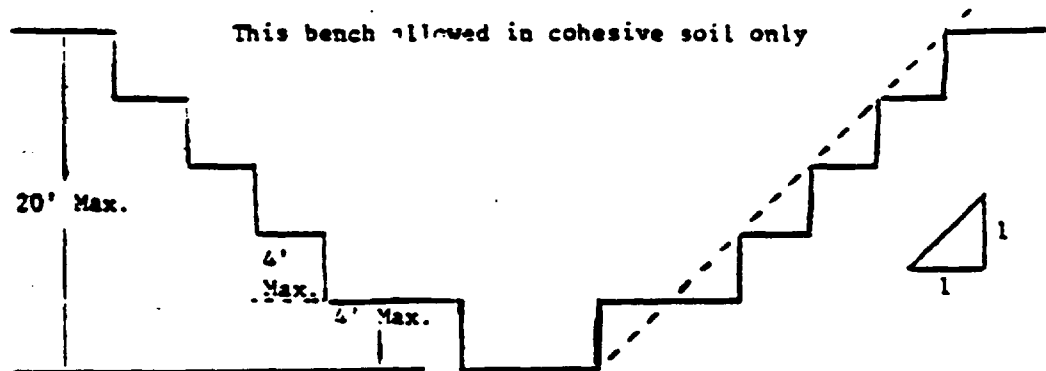


Simple Slope

2. All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 and maximum bench dimensions as follows:

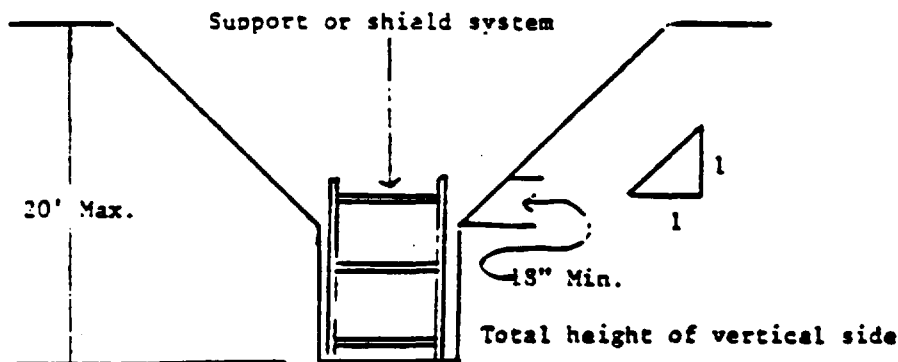


Single Bench



Multiple Bench

3. All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1:1.

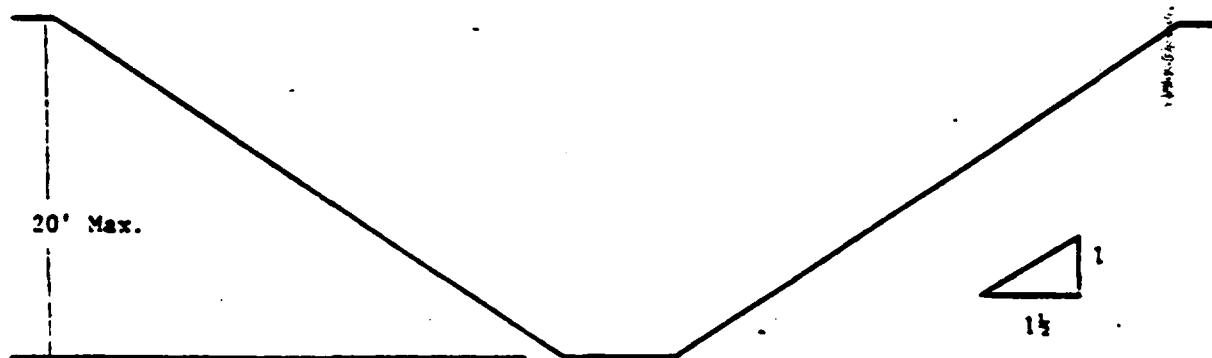


Vertically Sided Lower Portion

4. All other sloped excavations shall be in accordance with the other options permitted in § 1928.652(b).

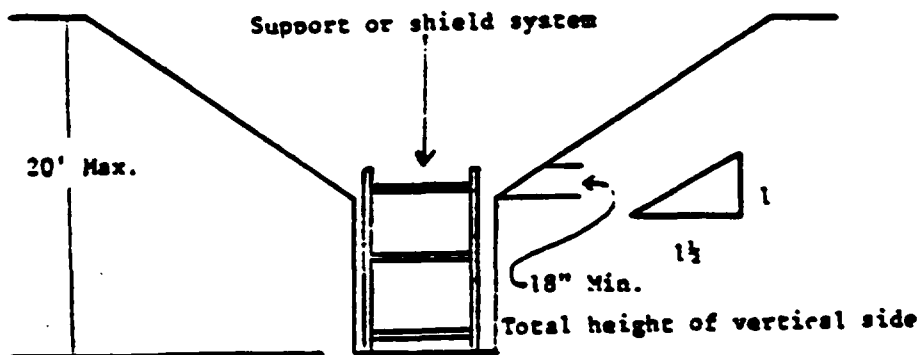
B-1.3 Excavations Made in Type C Soil

1. All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1½:1.



Simple Slope

2. All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1½:1.



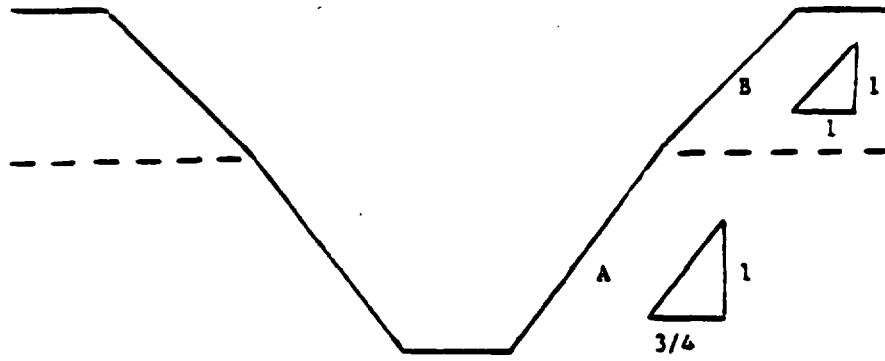
Vertically Sided Lower Portion

3. All other sloped excavations shall be in accordance with the other options permitted in § 1928.652(b).

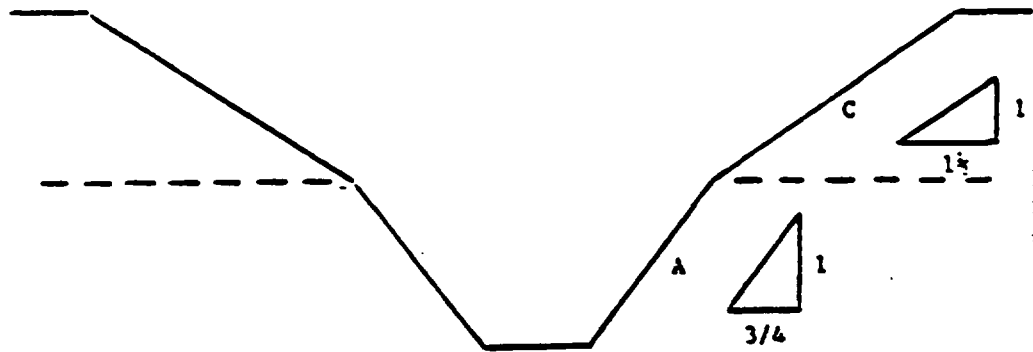
B-1.4 Excavations Made in Layered Soils

1. All excavations 20 feet or less in depth made in layered soils shall have a maximum allowable slope for each layer as set forth below.

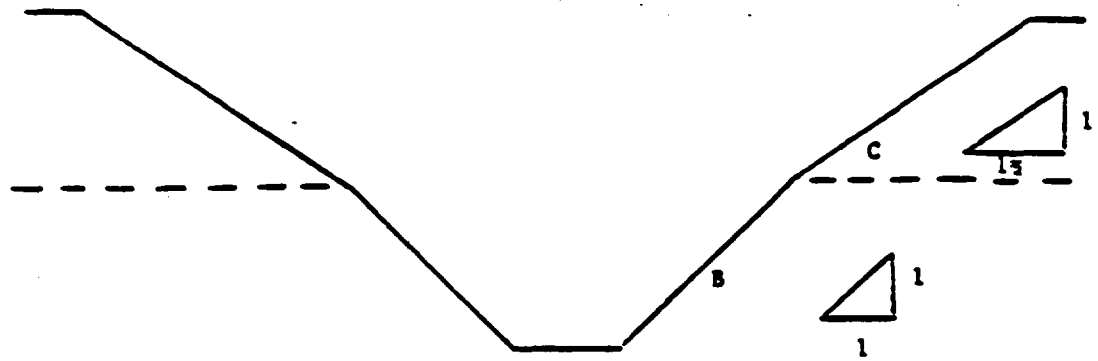
45970 Federal Register / Vol. 54, No. 209 / Tuesday, October 31, 1989 / Rules and Regulations



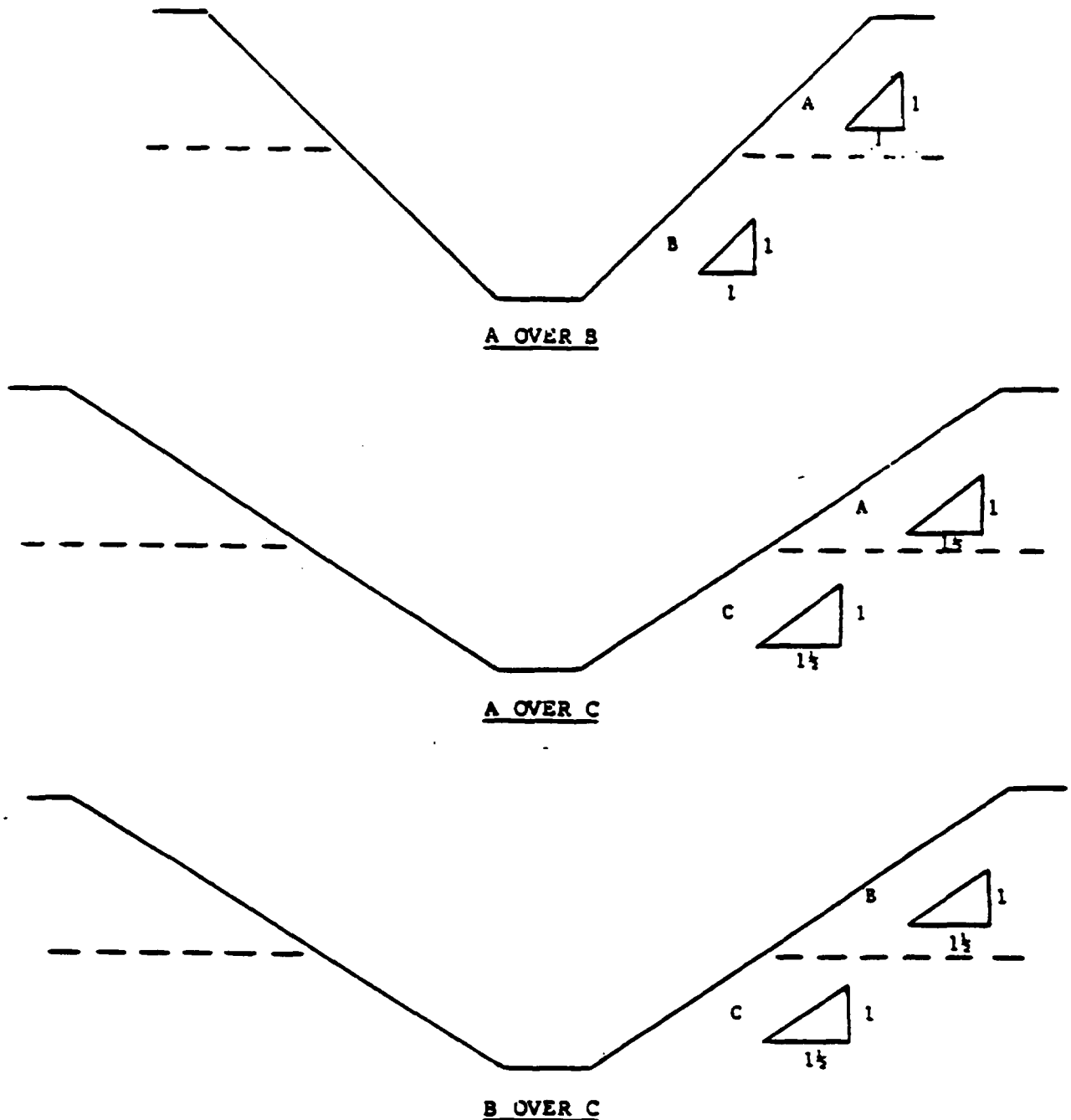
B OVER A



C OVER A



C OVER B



2. All other sloped excavations shall be in accordance with the other options permitted in § 1926.652(b).

Appendix C to Subpart P

Timber Shoring for Trenches

(a) *Scope.* This appendix contains information that can be used timber shoring is provided as a method of protection from cave-ins in trenches that do not exceed 20

feet (6.1 m) in depth. This appendix must be used when design of timber shoring protective systems is to be performed in accordance with § 1926.652(c)(1). Other timber shoring configurations; other systems of support such as hydraulic and pneumatic systems; and other protective systems such as sloping, benching, shielding, and freezing

systems must be designed in accordance with the requirements set forth in § 1926.652(b) and § 1926.652(c).

(b) *Soil Classification.* In order to use the data presented in this appendix, the soil type or types in which the excavation is made must first be determined using the soil

classification method set forth in appendix A of subpart P of this part.

(c) *Presentation of Information.* Information is presented in several forms as follows:

(1) Information is presented in tabular form in Tables C-1.1, C-1.2, and C-1.3, and Tables C-2.1, C-2.2 and C-2.3 following paragraph (g) of the appendix. Each table presents the minimum sizes of timber members to use in a shoring system, and each table contains data only for the particular soil type in which the excavation or portion of the excavation is made. The data are arranged to allow the user the flexibility to select from among several acceptable configurations of members based on varying the horizontal spacing of the crossbraces. Stable rock is exempt from shoring requirements and therefore, no data are presented for this condition.

(2) Information concerning the basis of the tabular data and the limitations of the data is presented in paragraph (d) of this appendix, and on the tables themselves.

(3) Information explaining the use of the tabular data is presented in paragraph (e) of this appendix.

(4) Information illustrating the use of the tabular data is presented in paragraph (f) of this appendix.

(5) Miscellaneous notations regarding Tables C-1.1 through C-1.3 and Tables C-2.1 through C-2.3 are presented in paragraph (g) of this Appendix.

(d) *Basis and limitations of the data.*—(1) *Dimensions of timber members.* (i) The sizes of the timber members listed in Tables C-1.1 through C-1.3 are taken from the National Bureau of Standards (NBS) report, "Recommended Technical Provisions for Construction Practice in Shoring and Sloping of Trenches and Excavations." In addition, where NBS did not recommend specific sizes of members, member sizes are based on an analysis of the sizes required for use by existing codes and on empirical practice.

(ii) The required dimensions of the members listed in Tables C-1.1 through C-1.3 refer to actual dimensions and not nominal dimensions of the timber. Employers wanting to use nominal size shoring are directed to Tables C-2.1 through C-2.3, or have this choice under § 1926.652(c)(3), and are referred to The Corps of Engineers, The Bureau of Reclamation or data from other acceptable sources.

(2) *Limitation of application.* (i) It is not intended that the timber shoring specification apply to every situation that may be experienced in the field. These data were developed to apply to the situations that are most commonly experienced in current trenching practice. Shoring systems for use in situations that are not covered by the data in this appendix must be designed as specified in § 1926.652(c).

(ii) When any of the following conditions are present, the members specified in the tables are not considered adequate. Either an alternate timber shoring system must be designed or another type of protective system designed in accordance with § 1926.652.

(A) When loads imposed by structures or by stored material adjacent to the trench weigh in excess of the load imposed by a two-foot soil surcharge. The term "adjacent"

as used here means the area within a horizontal distance from the edge of the trench equal to the depth of the trench.

(B) When vertical loads imposed on cross braces exceed a 240-pound gravity load distributed on a one-foot section of the center of the crossbrace.

(C) When surcharge loads are present from equipment weighing in excess of 20,000 pounds.

(D) When only the lower portion of a trench is shored and the remaining portion of the trench is sloped or benched unless: The sloped portion is sloped at an angle less steep than three horizontal to one vertical; or the members are selected from the tables for use at a depth which is determined from the top of the overall trench, and not from the toe of the sloped portion.

(e) *Use of Tables.* The members of the shoring system that are to be selected using this information are the cross braces, the uprights, and the wales, where wales are required. Minimum sizes of members are specified for use in different types of soil. There are six tables of information, two for each soil type. The soil type must first be determined in accordance with the soil classification system described in appendix A to subpart P of part 1926. Using the appropriate table, the selection of the size and spacing of the members is then made. The selection is based on the depth and width of the trench where the members are to be installed and, in most instances, the selection is also based on the horizontal spacing of the crossbraces. Instances where a choice of horizontal spacing of crossbracing is available, the horizontal spacing of the crossbraces must be chosen by the user before the size of any member can be determined. When the soil type, the width and depth of the trench, and the horizontal spacing of the crossbraces are known, the size and vertical spacing of the crossbraces, the size and vertical spacing of the wales, and the size and horizontal spacing of the uprights can be read from the appropriate table.

(f) *Examples to Illustrate the Use of Tables C-1.1 through C-1.3.*

(1) *Example 1.*

A trench dug in Type A soil is 13 feet deep and five feet wide.

From Table C-1.1, for acceptable arrangements of timber can be used.

Arrangement #1

Space 4×4 crossbraces at six feet horizontally and four feet vertically.

Wales are not required.

Space 3×8 uprights at six feet horizontally. This arrangement is commonly called "skip shoring."

Arrangement #2

Space 4×6 crossbraces at eight feet horizontally and four feet vertically.

Space 8×6 wales at four feet vertically.

Space 2×6 uprights at four feet horizontally.

Arrangement #3

Space 6×6 crossbraces at 10 feet horizontally and four feet vertically.

Space 8×10 wales at four feet vertically.

Space 2×6 uprights at five feet horizontally.

Arrangement #4

Space 6×6 crossbraces at 12 feet horizontally and four feet vertically.

Space 10×10 wales at four feet vertically.

Spaces 3×8 uprights at six feet horizontally.

(2) *Example 2.*

A trench dug in Type B soil in 13 feet deep and five feet wide. From Table C-1.2 three acceptable arrangements of members are listed.

Arrangement #1

Space 6×6 crossbraces at six feet horizontally and five feet vertically.

Space 8×8 wales at five feet vertically.

Space 2×6 uprights at two feet horizontally.

Arrangement #2

Space 8×8 crossbraces at eight feet horizontally and five feet vertically.

Space 10×10 wales at five feet vertically.

Space 2×6 uprights at two feet horizontally.

Arrangement #3

Space 8×8 crossbraces at 10 feet horizontally and five feet vertically.

Space 10×12 wales at five feet vertically.

Space 2×6 uprights at two feet vertically.

(3) *Example 3.*

A trench dug in Type C soil is 13 feet deep and five feet wide.

From Table C-1.3 two acceptable arrangements of members can be used.

Arrangement #1

Space 8×8 crossbraces at six feet horizontally and five feet vertically.

Space 10×12 wales at five feet vertically.

Position 2×6 uprights as closely together as possible.

If water must be retained use special tongue and groove uprights to form tight sheeting.

Arrangement #2

Space 8×10 crossbraces at eight feet horizontally and five feet vertically.

Space 12×12 wales at five feet vertically.

Position 2×6 uprights in a close sheeting configuration unless water pressure must be resisted. Tight sheeting must be used where water must be retained.

(4) *Example 4.*

A trench dug in Type C soil is 20 feet deep and 11 feet wide. The size and spacing of members for the section of trench that is over 15 feet in depth is determined using Table C-1.3. Only one arrangement of members is provided.

Space 8×10 crossbraces at six feet horizontally and five feet vertically.

Space 12×12 wales at five feet vertically.

Use 3×6 tight sheeting.

Use of Tables C-2.1 through C-2.3 would follow the same procedures.

(g) *Notes for all Tables.*

1. Member sizes at spacings other than indicated are to be determined as specified in § 1926.652(c), "Design of Protective Systems."

2. When conditions are saturated or submerged use Tight Sheeting. Tight Sheeting refers to the use of specially-edged timber planks (e.g., tongue and groove) at least three inches thick, steel sheet piling, or similar construction that when driven or placed in position provide a tight wall to resist the lateral pressure of water and to prevent the loss of backfill material. Close Sheeting refers to the placement of planks side-by-side allowing as little space as possible between them.

3. All spacing indicated is measured center to center.

4. Wales to be installed with greater dimension horizontal.

5. If the vertical distance from the center of the lowest crossbrace to the bottom of the trench exceeds two and one-half feet, uprights shall be firmly embedded or a mudsill shall be used. Where uprights are embedded, the vertical distance from the center of the lowest crossbrace to the bottom of the trench shall not exceed 36 inches. When mudsills are used, the vertical distance

shall not exceed 42 inches. Mudsills are wales that are installed at the toe of the trench side.

6. Trench jacks may be used in lieu of or in combination with timber crossbraces.

7. Placement of crossbraces. When the vertical spacing of crossbraces is four feet, place the top crossbrace no more than two feet below the top of the trench. When the vertical spacing of crossbraces is five feet, place the top crossbrace no more than 2.5 feet below the top of the trench.

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TABLE C-1.1

TIMBER TRENCH SHORING -- MINIMUM TIMBER REQUIREMENTS *

SOIL TYPE A $P_a = 25 \times H + 72 \text{ psf}$ (2 ft Surcharge)

DEPTH OF TRENCH (FEET)	SIZE (ACTUAL) AND SPACING OF MEMBERS **													
	CROSS BRACES							HALES		UPRIGHTS				
	HORIZ. SPACING (FEET)	WIDTH OF TRENCH (FEET)					VERT. SPACING (FEET)	SIZE (IN)	VERT. SPACING (FEET)	MAXIMUM ALLOWABLE HORIZONTAL SPACING (FEET)				
		UP TO 4	UP TO 6	UP TO 9	UP TO 12	UP TO 15				CLOSE	4	5	6	8
5 TO 10	UP TO 6	4X4	4X4	4X6	6X6	6X6	4	Not Req'd	---				2X6	
	UP TO 8	4X4	4X4	4X6	6X6	6X6	4	Not Req'd	---					2X8
	UP TO 10	4X6	4X6	4X6	6X6	6X6	4	8X8	4			2X6		
	UP TO 12	4X6	4X6	6X6	6X6	6X6	4	8X8	4				2X6	
10 TO 15	UP TO 6	4X4	4X4	4X6	6X6	6X6	4	Not Req'd	---				3X8	
	UP TO 8	4X6	4X6	6X6	6X6	6X6	4	8X8	4		2X6			
	UP TO 10	6X6	6X6	6X6	6X8	6X8	4	8X10	4			2X6		
	UP TO 12	6X6	6X6	6X6	6X8	6X8	4	10X10	4				3X8	
15 TO 20	UP TO 6	6X6	6X6	6X6	6X8	6X8	4	6X8	4	3X6				
	UP TO 8	6X6	6X6	6X6	6X8	6X8	4	8X8	4	3X6				
	UP TO 10	8X8	8X8	8X8	8X8	8X10	4	8X10	4	3X6				
	UP TO 12	8X8	8X8	8X8	8X8	8X10	4	10X10	4	3X6				
OVER 20	SEE NOTE 1													

* Mixed oak or equivalent with a bending strength not less than 850 psi.

** Manufactured members of equivalent strength may be substituted for wood.

TABLE C-1.2

TIMBER TRENCH SHORING -- MINIMUM TIMBER REQUIREMENTS *

SOIL TYPE B $P_a = 45 \times H + 72 \text{ psf (2 ft. Surcharge)}$

DEPTH OF TRENCH (FEET)	SIZE (ACTUAL) AND SPACING OF MEMBERS**												
	CROSS BRACES							WALES		UPRIGHTS			
	HORIZ. SPACING (FEET)	WIDTH OF TRENCH (FEET)					VERT. SPACING (FEET)	SIZE (IN)	VERT. SPACING (FEET)	MAXIMUM ALLOWABLE HORIZONTAL SPACING (FEET)			
		UP TO 4	UP TO 6	UP TO 9	UP TO 12	UP TO 15				CLOSE	2	3	
5 TO 10	UP TO 6	4X6	4X6	6X6	6X6	6X6	5	6X8	5			2X6	
	UP TO 8	6X6	6X6	6X6	6X8	6X8	5	8X10	5			2X6	
	UP TO 10	6X6	6X6	6X6	6X8	6X8	5	10X10	5			2X6	
	See Note 1												
10 TO 15	UP TO 6	6X6	6X6	6X6	6X8	6X8	5	8X8	5		2X6		
	UP TO 8	6X8	6X8	6X8	8X8	8X8	5	10X10	5		2X6		
	UP TO 10	8X8	8X8	8X8	8X8	8X10	5	10X12	5		2X6		
	See Note 1												
15 TO 20	UP TO 6	6X8	6X8	6X8	8X8	8X8	5	8X10	5	3X6			
	UP TO 8	8X8	8X8	8X8	8X8	8X10	5	10X12	5	3X6			
	UP TO 10	8X10	8X10	8X10	8X10	10X10	5	12X12	5	3X6			
	See Note 1												
OVER 20	SEE NOTE 1												

* Mixed oak or equivalent with a bending strength not less than 850 psi.

** Manufactured members of equivalent strength may be substituted for wood.

TABLE C-1.3

TIMBER TRENCH SHORING -- MINIMUM TIMBER REQUIREMENTS *

SOIL TYPE C $P_a = 80 \times H + 72$ psf (2 ft. Surcharge)

DEPTH OF TRENCH (FEET)	SIZE (ACTUAL) AND SPACING OF MEMBERS**									
	CROSS BRACES							UPRIGHTS		
	HORIZ. SPACING (FEET)	WIDTH OF TRENCH (FEET)					VERT. SPACING (FEET)	SIZE (IN)	VERT. SPACING (FEET)	MAXIMUM ALLOWABLE HORIZONTAL SPACING (FEET) (See Note 2)
		UP TO 4	UP TO 6	UP TO 9	UP TO 12	UP TO 15				
5 TO 10	UP TO 6	6X8	6X8	6X8	8X8	8X8	5	8X10	5	2X6
	UP TO 8	8X8	8X8	8X8	8X8	8X10	5	10X12	5	2X6
	UP TO 10	8X10	8X10	8X10	8X10	10X10	5	12X12	5	2X6
	See Note 1									
10 TO 15	UP TO 6	8X8	8X8	8X8	8X8	8X10	5	10X12	5	2X6
	UP TO 8	8X10	8X10	8X10	8X10	10X10	5	12X12	5	2X6
	See Note 1									
	See Note 1									
15 TO 20	UP TO 6	8X10	8X10	8X10	8X10	10X10	5	12X12	5	3X6
	See Note 1									
	See Note 1									
	See Note 1									
OVER 20	SEE NOTE 1									

* Mixed Oak or equivalent with a bending strength not less than 850 psi.

** Manufactured members of equivalent strength may be substituted for wood.

TABLE C-2.1

TIMBER TRENCH SHORING -- MINIMUM TIMBER REQUIREMENTS *
SOIL TYPE A $P_u = 25 \times H + 72$ psf (2 ft. Surcharge)

DEPTH OF TRENCH (FEET)	SIZE (S4S) AND SPACING OF MEMBERS **													
	CROSS BRACES							WALES		UPRIGHTS				
	HORIZ. SPACING (FEET)	WIDTH OF TRENCH (FEET)					VERT. SPACING (FEET)	SIZE (IN)	VERT. SPACING (FEET)	MAXIMUM ALLOWABLE HORIZONTAL SPACING (FEET)				
		UP TO 4	UP TO 6	UP TO 9	UP TO 12	UP TO 15				CLOSE	4	5	6	8
5 TO 10	UP TO 6	4X4	4X4	4X4	4X4	4X6	4	Not Req'd	Not Req'd				4X6	
	UP TO 8	4X4	4X4	4X4	4X6	4X6	4	Not Req'd	Not Req'd					4X8
	UP TO 10	4X6	4X6	4X6	6X6	6X6	4	8X8	4			4X6		
	UP TO 12	4X6	4X6	4X6	6X6	6X6	4	8X8	4				4X6	
10 TO 15	UP TO 6	4X4	4X4	4X4	6X6	6X6	4	Not Req'd	Not Req'd				4X10	
	UP TO 8	4X6	4X6	4X6	6X6	6X6	4	6X8	4		4X6			
	UP TO 10	6X6	6X6	6X6	6X6	6X6	4	8X8	4			4X8		
	UP TO 12	6X6	6X6	6X6	6X6	6X6	4	8X10	4		4X6		4X10	
15 TO 20	UP TO 6	6X6	6X6	6X6	6X6	6X6	4	6X8	4	3X6				
	UP TO 8	6X6	6X6	6X6	6X6	6X6	4	8X8	4	3X6	4X12			
	UP TO 10	6X6	6X6	6X6	6X6	6X8	4	8X10	4	3X6				
	UP TO 12	6X6	6X6	6X6	6X8	6X8	4	8X12	4	3X6	4X12			
OVER 20	SEE NOTE 1													

* Douglas fir or equivalent with a bending strength not less than 1500 psi.
 ** Manufactured members of equivalent strength may be substituted for wood.

TABLE C-2.2

TIMBER TRENCH SHORING -- MINIMUM TIMBER REQUIREMENTS *
SOIL TYPE B P_a = 45 X H + 72 psf (2 ft. Surcharge)

DEPTH OF TRENCH (FEET)	SIZE (S4S) AND SPACING OF MEMBERS **													
	HORIZ. SPACING (FEET)	CROSS BRACES						WALES		UPRIGHTS				
		WIDTH OF TRENCH (FEET)					VERT. SPACING (FEET)	SIZE (IN)	VERT. SPACING (FEET)	MAXIMUM ALLOWABLE HORIZONTAL SPACING (FEET)				
		UP TO 4	UP TO 6	UP TO 9	UP TO 12	UP TO 15				CLOSE	2	3	4	6
5 TO 10	UP TO 6	4X6	4X6	4X6	6X6	6X6	5	6X8	5			3X12 4X8		4X12
	UP TO 8	4X6	4X6	6X6	6X6	6X6	5	8X8	5		3X8		4X8	
	UP TO 10	4X6	4X6	6X6	6X6	6X8	5	8X10	5			4X8		
	See Note 1													
10 TO 15	UP TO 6	6X6	6X6	6X6	6X8	6X8	5	8X8	5	3X6	4X10			
	UP TO 8	6X8	6X8	6X8	8X8	8X8	5	10X10	5	3X6	4X10			
	UP TO 10	6X8	6X8	8X8	8X8	8X8	5	10X12	5	3X6	4X10			
	See Note 1													
15 TO 20	UP TO 6	6X8	6X8	6X8	6X8	8X8	5	8X10	5	4X6				
	UP TO 8	6X8	6X8	6X8	8X8	8X8	5	10X12	5	4X6				
	UP TO 10	8X8	8X8	8X8	8X8	8X8	5	12X12	5	4X6				
	See Note 1													
OVER 20	SEE NOTE 1													

* Douglas fir or equivalent with a bending strength not less than 1500 psi.
 ** Manufactured members of equivalent strength may be substituted for wood.

TABLE C-2.3

TIMBER TRENCH SHORING -- MINIMUM TIMBER REQUIREMENTS *

SOIL TYPE C $P_a = 80 \times H + 72$ psf (2 ft. Surcharge)

DEPTH OF TRENCH (FEET)	SIZE (S4S) AND SPACING OF MEMBERS **												
	CROSS BRACES							WALES		UPRIGHTS			
	HORIZ. SPACING (FEET)	WIDTH OF TRENCH (FEET)					VERT. SPACING (FEET)	SIZE (IN)	VERT. SPACING (FEET)	MAXIMUM ALLOWABLE HORIZONTAL SPACING (FEET)			
		UP TO 4	UP TO 6	UP TO 9	UP TO 12	UP TO 15				CLOSE			
5 TO 10	UP TO 6	6X6	6X6	6X6	6X6	8X8	5	8X8	5	3X6			
	UP TO 8	6X6	6X6	6X6	8X8	8X8	5	10X10	5	3X6			
	UP TO 10	6X6	6X6	8X8	8X8	8X8	5	10X12	5	3X6			
	See Note 1												
10 TO 15	UP TO 6	6X8	6X8	6X8	8X8	8X8	5	10X10	5	4X6			
	UP TO 8	8X8	8X8	8X8	8X8	8X8	5	12X12	5	4X6			
	See Note 1												
	See Note 1												
15 TO 20	UP TO 6	8X8	8X8	8X8	8X10	8X10	5	10X12	5	4X6			
	See Note 1												
	See Note 1												
	See Note 1												
OVER 20	SEE NOTE 1												

* Douglas fir or equivalent with a bending strength not less than 1500 psi.

** Manufactured members of equivalent strength may be substituted for wood.

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Appendix D to Subpart P

Aluminum Hydraulic Shoring for Trenches

(a) *Scope.* This appendix contains information that can be used when aluminum hydraulic shoring is provided as a method of protection against cave-ins in trenches that do not exceed 20 feet (6.1m) in depth. This appendix must be used when design of the aluminum hydraulic protective system cannot be performed in accordance with § 1926.652(c)(2).

(b) *Soil Classification.* In order to use data presented in this appendix, the soil type or types in which the excavation is made must first be determined using the soil classification method set forth in appendix A of subpart P of part 1926.

(c) *Presentation of Information.* Information is presented in several forms as follows:

(1) Information is presented in tabular form in Tables D-1.1, D-1.2, D-1.3 and D-1.4. Each table presents the maximum vertical and horizontal spacings that may be used with various aluminum member sizes and various hydraulic cylinder sizes. Each table contains data only for the particular soil type in which the excavation or portion of the excavation is made. Tables D-1.1 and D-1.2 are for vertical shores in Types A and B soil. Tables D-1.3 and D-1.4 are for horizontal waler systems in Types B and C soil.

(2) Information concerning the basis of the tabular data and the limitations of the data is presented in paragraph (d) of this appendix.

(3) Information explaining the use of the tabular data is presented in paragraph (e) of this appendix.

(4) Information illustrating the use of the tabular data is presented in paragraph (f) of this appendix.

(5) Miscellaneous notations (footnotes) regarding Table D-1.1 through D-1.4 are presented in paragraph (g) of this appendix.

(6) Figures illustrating typical installations of hydraulic shoring, are included just prior to the Tables. The illustrations page is entitled "Aluminum Hydraulic Shoring: Typical Installations."

(d) *Basis and limitations of the data.*

(1) Vertical shore rails and horizontal wales are those that meet the Section Modulus requirements in the D-1 Tables. Aluminum material is 6061-T6 or material of equivalent strength and properties.

(2) Hydraulic cylinders specifications. (i) 2-inch cylinders shall be a minimum 2-inch inside diameter with a minimum safe working capacity of not less than 18,000 pounds axial compressive load at maximum extension. Maximum extension is to include full range of cylinder extensions as recommended by product manufacturer.

(ii) 3-inch cylinders shall be a minimum 3-inch inside diameter with a safe working capacity of not less than 30,000 pounds axial compressive load at extensions as recommended by product manufacturer.

(3) *Limitation of application.*

(i) It is not intended that the aluminum hydraulic specification apply to every situation that may be experienced in the field. These data were developed to apply to the situations that are most commonly

experienced in current trenching practice. Shoring systems for use in situations that are not covered by the data in this appendix must be otherwise designed as specified in § 1926.652(c).

(ii) When any of the following conditions are present, the members specified in the Tables are not considered adequate. In this case, an alternative aluminum hydraulic shoring system or other type of protective system must be designed in accordance with § 1926.652.

(A) When vertical loads imposed on cross braces exceed a 100 Pound gravity load distributed on a one foot section of the center of the hydraulic cylinder.

(B) When surcharge loads are present from equipment weighing in excess of 20,000 pounds.

(C) When only the lower portion of a trench is shored and the remaining portion of the trench is sloped or benched unless: The sloped portion is sloped at an angle less steep than three horizontal to one vertical; or the members are selected from the tables for use at a depth which is determined from the top of the overall trench, and not from the toe of the sloped portion.

(e) *Use of Tables D-1.1, D-1.2, D-1.3 and D-1.4.* The members of the shoring system that are to be selected using this information are the hydraulic cylinders, and either the vertical shores or the horizontal wales. When a waler system is used the vertical timber sheeting to be used is also selected from these tables. The Tables D-1.1 and D-1.2 for vertical shores are used in Type A and B soils that do not require sheeting. Type B soils that may require sheeting, and Type C soils that always require sheeting are found in the horizontal wale Tables D-1.3 and D-1.4. The soil type must first be determined in accordance with the soil classification system described in appendix A to subpart P of part 1926. Using the appropriate table, the selection of the size and spacing of the members is made. The selection is based on the depth and width of the trench where the members are to be installed. In these tables the vertical spacing is held constant at four feet on center. The tables show the maximum horizontal spacing of cylinders allowed for each size of wale in the waler system tables, and in the vertical shore tables, the hydraulic cylinder horizontal spacing is the same as the vertical shore spacing.

(f) *Example to Illustrate the Use of the Tables:*

(1) *Example 1:*

A trench dug in Type A soil is 6 feet deep and 3 feet wide. From Table D-1.1: Find vertical shores and 2 inch diameter cylinders spaced 8 feet on center (o.c.) horizontally and 4 feet on center (o.c.) vertically. (See Figures 1 & 3 for typical installations.)

(2) *Example 2:*

A trench is dug in Type B soil that does not require sheeting, 13 feet deep and 5 feet wide. From Table D-1.2: Find vertical shores and 2 inch diameter cylinders spaced 6.5 feet o.c. horizontally and 4 feet o.c. vertically. (See Figures 1 & 3 for typical installations.)

(3) A trench is dug in Type B soil that does not require sheeting, but does experience some minor raveling of the trench face. The trench is 18 feet deep and 9 feet wide. From

Table D-1.2: Find vertical shores and 2 inch diameter cylinder (with special oversleeves as designated by footnote #2) spaced 5.5 feet o.c. horizontally and 4 feet o.c. vertically, plywood (per footnote (g)(7) to the D-1 Table) should be used behind the shores. (See Figures 2 & 3 for typical installations.)

(4) *Example 4:* A trench is dug in previously disturbed Type B soil, with characteristics of a Type C soil, and will require sheeting. The trench is 18 feet deep and 12 feet wide. 8 foot horizontal spacing between cylinders is desired for working space. From Table D-1.3: Find horizontal wale with a section modulus of 14.0 spaced at 4 feet o.c. vertically and 3 inch diameter cylinder spaced at 9 feet maximum o.c. horizontally. 3x12 timber sheeting is required at close spacing vertically. (See Figure 4 for typical installation.)

(5) *Example 5:* A trench is dug in Type C soil, 9 feet deep and 4 feet wide. Horizontal cylinder spacing in excess of 8 feet is desired for working space. From Table D-1.4: Find horizontal wale with a section modulus of 7.0 and 2 inch diameter cylinders spaced at 8.5 feet o.c. horizontally. Or, find horizontal wale with a 14.0 section modulus and 3 inch diameter cylinder spaced at 10 feet o.c. horizontally. Both wales are spaced 4 feet o.c. vertically. 3x12 timber sheeting is required at close spacing vertically. (See Figure 4 for typical installation.)

(g) *Footnotes, and general notes, for Tables D-1.1, D-1.2, D-1.3, and D-1.4.*

(1) For applications other than those listed in the tables, refer to § 1926.652(c)(2) for use of manufacturer's tabulated data. For trench depths in excess of 20 feet, refer to § 1926.652(c)(2) and § 1926.652(c)(3).

(2) 2 inch diameter cylinders, at this width, shall have structural steel tube (3.5x3.5x0.1875) oversleeves, or structural oversleeves of manufacturer's specification, extending the full, collapsed length.

(3) Hydraulic cylinders capacities. (i) 2 inch cylinders shall be a minimum 2-inch inside diameter with a safe working capacity of not less than 18,000 pounds axial compressive load at maximum extension. Maximum extension is to include full range of cylinder extensions as recommended by product manufacturer.

(ii) 3-inch cylinders shall be a minimum 3-inch inside diameter with a safe work capacity of not less than 30,000 pounds axial compressive load at maximum extension. Maximum extension is to include full range of cylinder extensions as recommended by product manufacturer.

(4) All spacing indicated is measured center to center.

(5) Vertical shoring rails shall have a minimum section modulus of 0.40 inch.

(6) When vertical shores are used, there must be a minimum of three shores spaced equally, horizontally, in a group.

(7) Plywood shall be 1.125 in. thick softwood or 0.75 inch. thick, 14 ply, arctic white birch (Finland form). Please note that plywood is not intended as a structural member, but only for prevention of local raveling (sloughing of the trench face) between shores.

(8) See appendix C for timber specifications.

(9) Wales are calculated for simple span conditions.

(10) See appendix D, item (d), for basis and limitations of the data.

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ALUMINUM HYDRAULIC SHORING TYPICAL INSTALLATIONS

FIGURE NO. 1

VERTICAL ALUMINUM
HYDRAULIC SHORING
(SPOT BRACING)

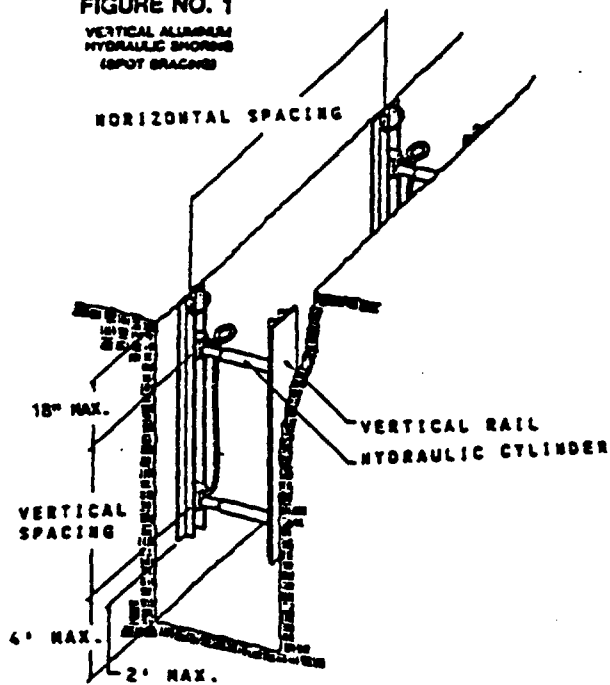


FIGURE NO. 2

VERTICAL ALUMINUM
HYDRAULIC SHORING
(WITH PLYWOOD)

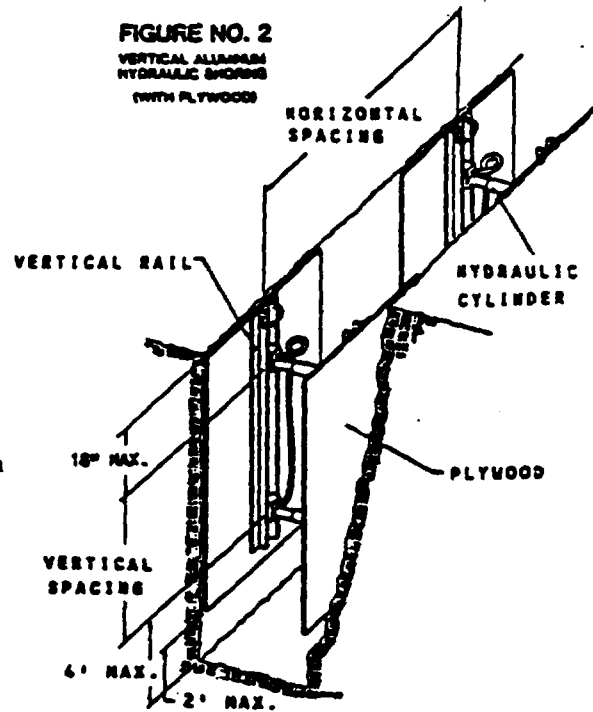


FIGURE NO. 3

VERTICAL ALUMINUM
HYDRAULIC SHORING
(STACKED)

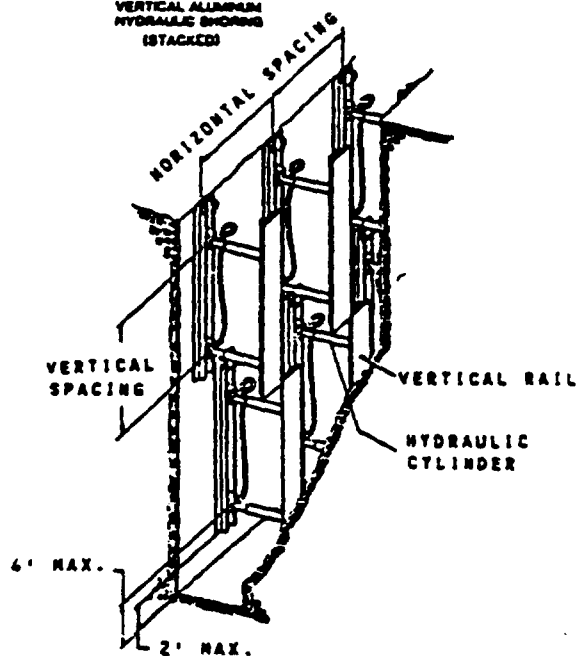


FIGURE NO. 4

ALUMINUM HYDRAULIC SHORING
WALL SYSTEM
(TYPICAL)

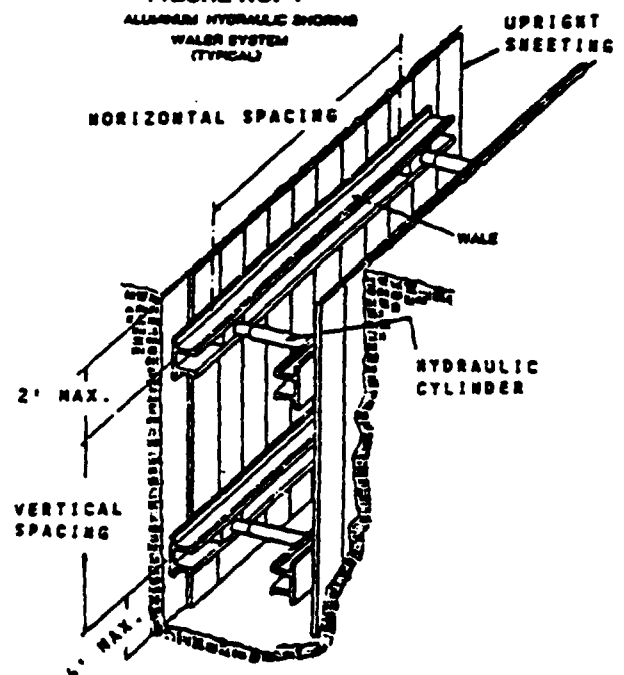


**TABLE D - 1.1
ALUMINUM HYDRAULIC SHORING
VERTICAL SHORES
FOR SOIL TYPE A**

DEPTH OF TRENCH (FEET)	HYDRAULIC CYLINDERS				
	MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)	WIDTH OF TRENCH (FEET)		
			UP TO 8	OVER 8 UP TO 12	OVER 12 UP TO 15
OVER 5 UP TO 10	8	4	2 INCH DIAMETER	2 INCH DIAMETER NOTE (2)	3 INCH DIAMETER
OVER 10 UP TO 15	8				
OVER 15 UP TO 20	7				
OVER 20	NOTE (1)				

Footnotes to tables, and general notes on hydraulic shoring, are found in Appendix D, Item (g)

Note (1): See Appendix D, Item (g) (1)

Note (2): See Appendix D, Item (g) (2)

**TABLE D - 1.2
ALUMINUM HYDRAULIC SHORING
VERTICAL SHORES
FOR SOIL TYPE B**

DEPTH OF TRENCH (FEET)	HYDRAULIC CYLINDERS				
	MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)	WIDTH OF TRENCH (FEET)		
			UP TO 8	OVER 8 UP TO 12	OVER 12 UP TO 15
OVER 5 UP TO 10	8	4	2 INCH DIAMETER	2 INCH DIAMETER NOTE (2)	3 INCH DIAMETER
OVER 10 UP TO 15	6.5				
OVER 15 UP TO 20	5.5				
OVER 20	NOTE (1)				

Footnotes to tables, and general notes on hydraulic shoring, are found in Appendix D, Item (g)

Note (1): See Appendix D, Item (g) (1)

Note (2): See Appendix D, Item (g) (2)

**TABLE D - 1.3
ALUMINUM HYDRAULIC SHORING
WALER SYSTEMS
FOR SOIL TYPE B**

DEPTH OF TRENCH (FEET)	WALES		HYDRAULIC CYLINDERS						TIMBER UPRIGHTS		
	VERTICAL SPACING (FEET)	SECTION MODULUS (IN³)	WIDTH OF TRENCH (FEET)						MAX.HORIZ.SPACING (ON CENTER)		
			UP TO 8		OVER 8 UP TO 12		OVER 12 UP TO 15		SOLID SHEET	2 FT.	3 FT.
			HORIZ. SPACING	CYLINDER DIAMETER	HORIZ. SPACING	CYLINDER DIAMETER	HORIZ. SPACING	CYLINDER DIAMETER			
OVER 5 UP TO 10	4	3.5	8.0	2 IN	8.0	2 IN NOTE(2)	8.0	3 IN	—	—	3x12
		7.0	9.0	2 IN	9.0	2 IN NOTE(2)	9.0	3 IN			
		14.0	12.0	3 IN	12.0	3 IN	12.0	3 IN			
OVER 10 UP TO 15	4	3.5	6.0	2 IN	6.0	2 IN NOTE(2)	6.0	3 IN	—	3x12	—
		7.0	8.0	3 IN	8.0	3 IN	8.0	3 IN			
		14.0	10.0	3 IN	10.0	3 IN	10.0	3 IN			
OVER 15 UP TO 20	4	3.5	5.5	2 IN	5.5	2 IN NOTE(2)	5.5	3 IN	3x12	—	—
		7.0	6.0	3 IN	6.0	3 IN	6.0	3 IN			
		14.0	9.0	3 IN	9.0	3 IN	9.0	3 IN			
OVER 20	NOTE (1)										

Footnotes to tables, and general notes on hydraulic shoring, are found in Appendix D, Item (g)

Notes (1): See Appendix D, item (g) (1)

Notes (2): See Appendix D, item (g) (2)

* Consult product manufacturer and/or qualified engineer for Section Modulus of available wales.

**TABLE D - 1.4
ALUMINUM HYDRAULIC SHORING
WALER SYSTEMS
FOR SOIL TYPE C**

DEPTH OF TRENCH (FEET)	WALES		HYDRAULIC CYLINDERS						TIMBER UPRIGHTS		
	VERTICAL SPACING (FEET)	SECTION MODULUS (IN ³)	WIDTH OF TRENCH (FEET)						MAX. HORIZ SPACING (ON CENTER)		
			UP TO 8		OVER 8 UP TO 12		OVER 12 UP TO 15		SOLID SHEET	2 FT.	3 FT.
			HORIZ. SPACING	CYLINDER DIAMETER	HORIZ. SPACING	CYLINDER DIAMETER	HORIZ. SPACING	CYLINDER DIAMETER			
OVER 5 UP TO 10	4	3.5	6.0	2 IN	6.0	2 IN NOTE(2)	6.0	3 IN	3x12	—	—
		7.0	6.5	2 IN	6.5	2 IN NOTE(2)	6.5	3 IN			
		14.0	10.0	3 IN	10.0	3 IN	10.0	3 IN			
OVER 10 UP TO 15	4	3.5	4.0	2 IN	4.0	2 IN NOTE(2)	4.0	3 IN	3x12	—	—
		7.0	5.5	3 IN	5.5	3 IN	5.5	3 IN			
		14.0	8.0	3 IN	8.0	3 IN	8.0	3 IN			
OVER 15 UP TO 20	4	3.5	3.5	2 IN	3.5	2 IN NOTE(2)	3.5	3 IN	3x12	—	—
		7.0	5.0	3 IN	5.0	3 IN	5.0	3 IN			
		14.0	6.0	3 IN	6.0	3 IN	6.0	3 IN			
OVER 20	NOTE (1)										

Footnotes to tables, and general notes on hydraulic shoring, are found in Appendix D, Item (g)

Notes (1): See Appendix D, item (g) (1)

Notes (2): See Appendix D, item (g) (2)

* Consult product manufacturer and/or qualified engineer for Section Modulus of available wales.

BILLING CODE 4610-26-C

45986

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Revision No. 0
Date June 8, 1990
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TUT 004 2061

Appendix E to Subpart P—Alternatives to Timber Shoring

Figure 1. Aluminum Hydraulic Shoring

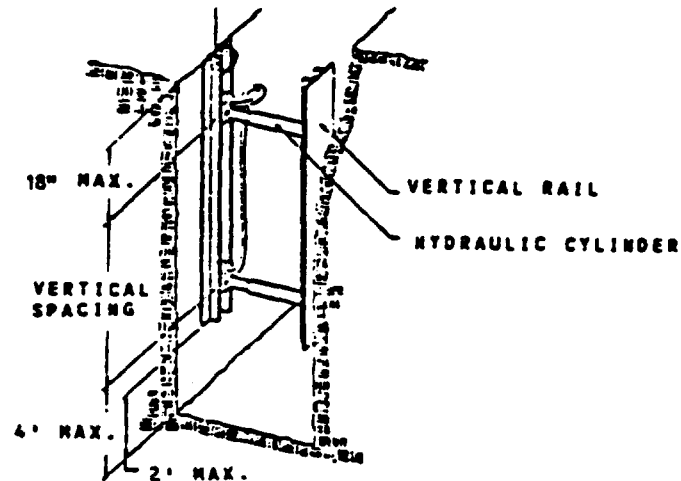
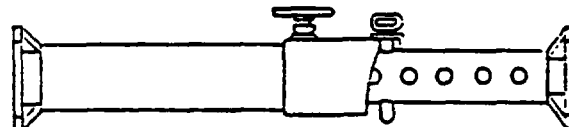
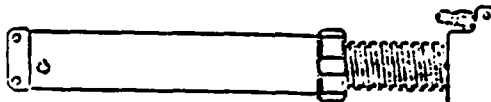


Figure 2. Pneumatic/hydraulic Shoring



BILLING CODE 4810-02-01

45988 Federal Register / Vol. 54, No. 209 / Tuesday, October 31, 1989 / Rules and Regulations

Figure 3. Trench Jacks (Screw Jacks)

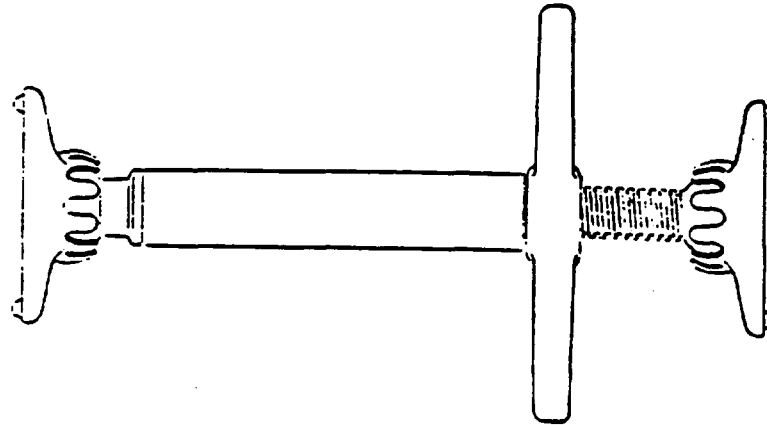
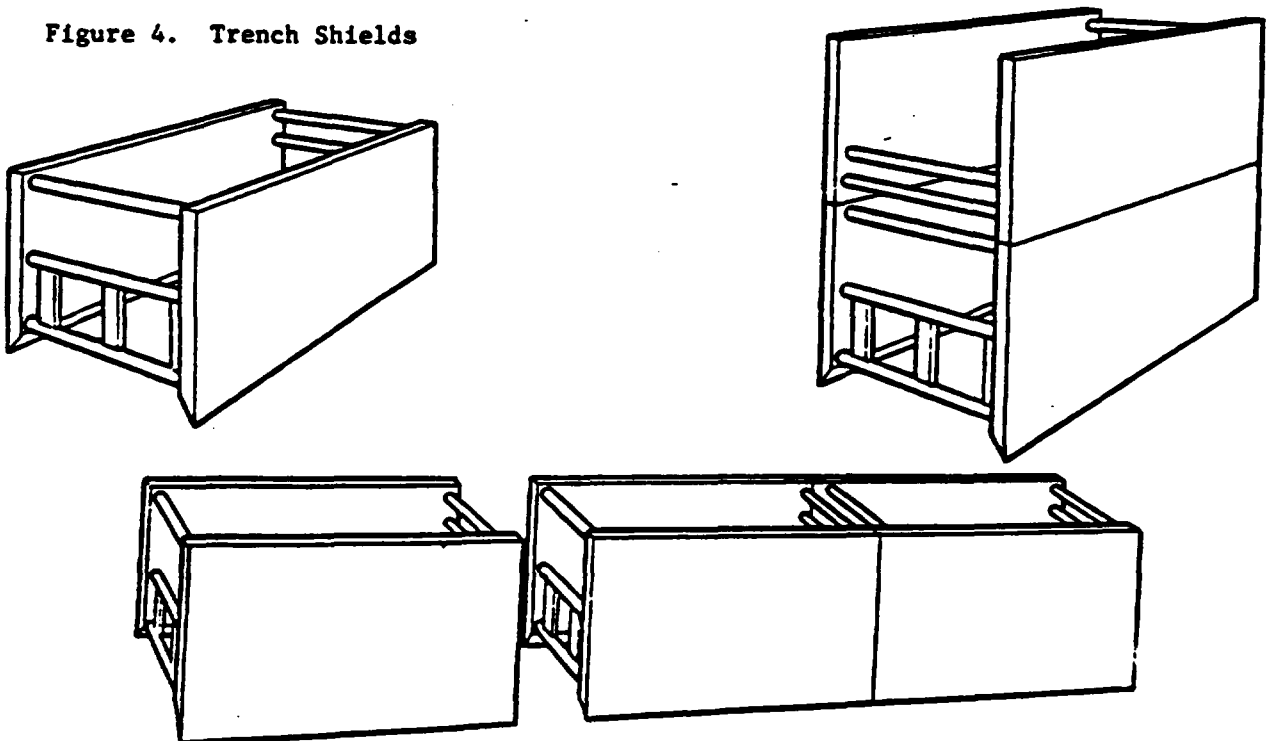


Figure 4. Trench Shields



BILLING CODE 4510-25-C

Appendix F to Subpart P—Selection of Protective Systems

The following figures are a graphic summary of the requirements contained in subpart P for excavations 20 feet or less in depth. Protective systems for use in excavations more than 20 feet in depth must be designed by a registered professional engineer in accordance with § 1926.652 (b) and (c).

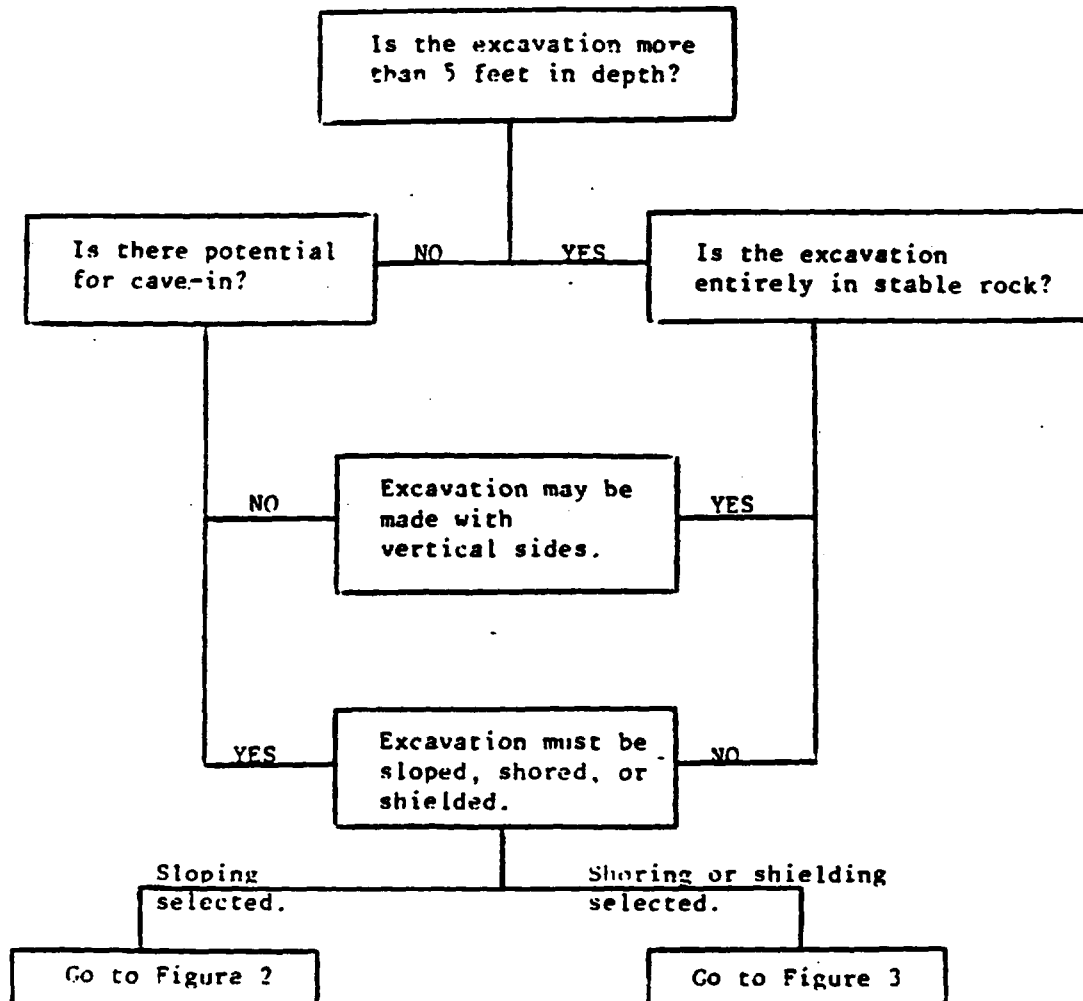


FIGURE 1 - PRELIMINARY DECISIONS

BILLING CODE: 4610-26-00

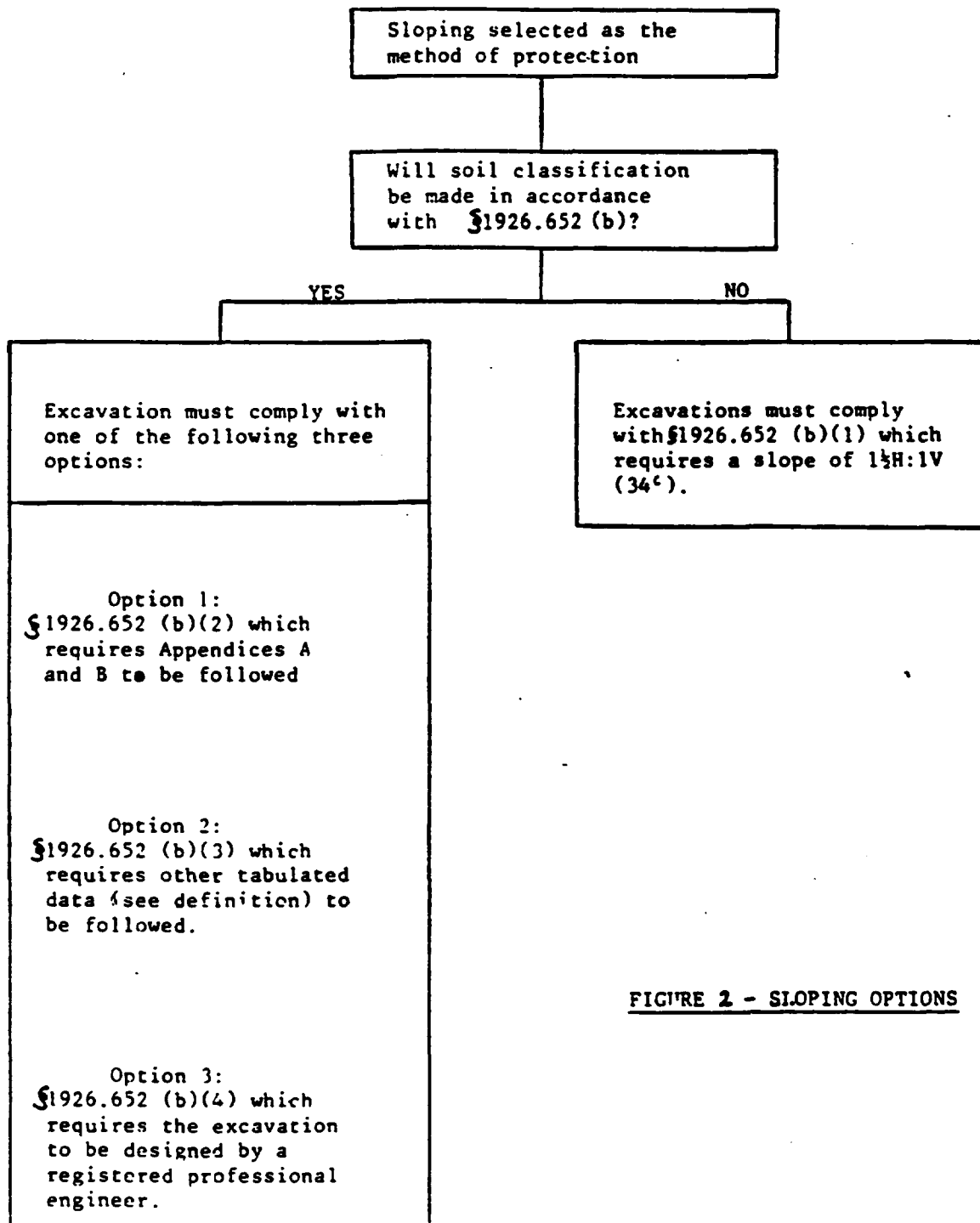


FIGURE 2 - SLOPING OPTIONS

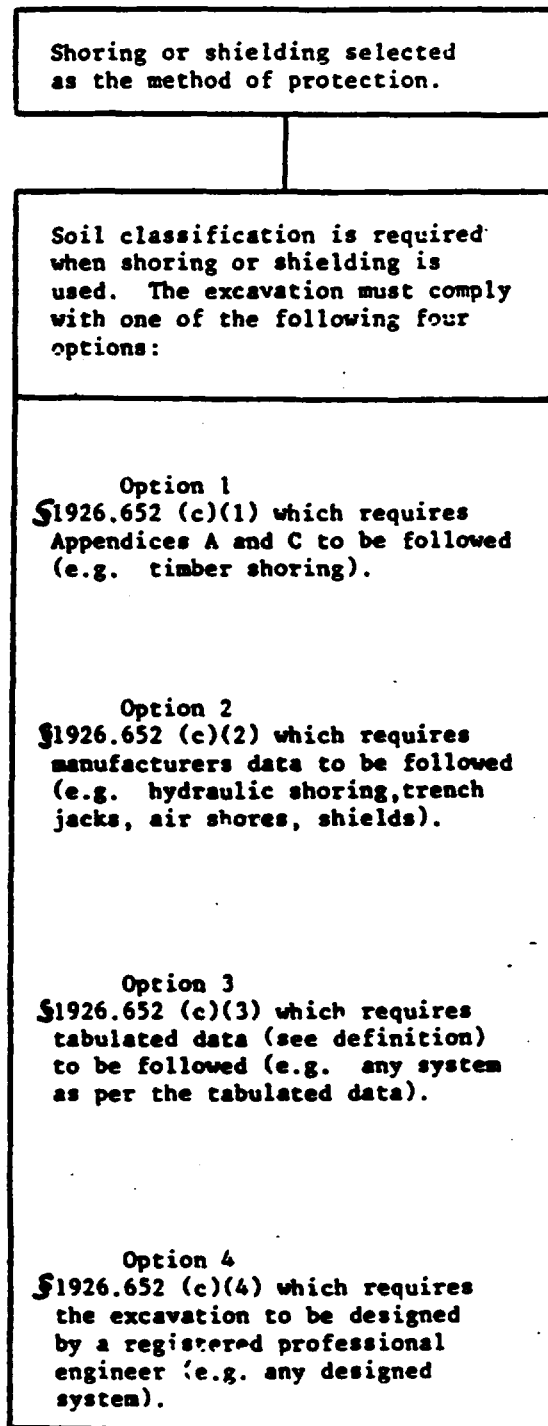


FIGURE 3 - SHORING AND SHIELDING OPTIONS

[FR Doc. 89-25217 Filed 10-30-89; 8:45 am]

BILLING CODE 4910-20-C

**EXCAVATION AND TRENCHING
NOTIFICATION LOG**

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Form HS307.2



TRENCH/EXCAVATION NOTIFICATION WORKSHEET

Project Number _____ Project Name _____

Customer's Name: _____

Specific Jobsite Location: _____

Nearest Major Cross Street: _____

City: _____ County: _____

Name and Title of Site Supervisor: _____

Starting Date: _____ Estimated Completion Date: _____

High Voltage Lines in Proximity: YES _____ NO _____ How Near _____

Depth Range (ft): _____ Width Range(ft): _____ Length(ft): _____
min max min max

Project Description: _____

Anticipated Soil Condition: Hard Compact _____ Unstable _____ Running _____

Ground Protection Method: Shoring _____ Sloping _____
Trench Shield _____ Alternate _____

ALL METHODS MUST MEET ACCEPTED ENGINEERING REQUIREMENTS.
PLANS MUST BE KEPT ON-SITE.

Describe Chemical Hazards at Site: _____

Subcontractor's Name: _____

Equipment to be Used: _____

Design Engineer: _____ Project Supervisor: _____

Phone: () _____

=====

Health & Safety Use Only

IT Permit Number: _____ Date Issued: _____ Expires: _____

Issued By: _____

CAL/OSHA Notification: Date: _____ By: _____

District Office: _____ Contact: _____

Form HS307.1

**EXCAVATION AND TRENCHING
NOTIFICATION LOG**

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Form HS307.2



TRENCH/EXCAVATION NOTIFICATION WORKSHEET

Project Number _____ Project Name _____

Customer's Name: _____

Specific Jobsite Location: _____

Nearest Major Cross Street: _____

City: _____ County: _____

Name and Title of Site Supervisor: _____

Starting Date: _____ Estimated Completion Date: _____

High Voltage Lines in Proximity: YES _____ NO _____ How Near _____

Depth Range (ft): _____ Width Range(ft): _____ Length(ft): _____
min max min max

Project Description: _____

Anticipated Soil Condition: Hard Compact _____ Unstable _____ Running _____

Ground Protection Method: Shoring _____ Sloping _____
Trench Shield _____ Alternate _____

ALL METHODS MUST MEET ACCEPTED ENGINEERING REQUIREMENTS.
PLANS MUST BE KEPT ON-SITE.

Describe Chemical Hazards at Site: _____

Subcontractor's Name: _____

Equipment to be Used: _____

Design Engineer: _____ Project Supervisor: _____

Phone: () _____

Health & Safety Use Only

IT Permit Number: _____ Date Issued: _____ Expires: _____

Issued By: _____

CAL/OSHA Notification: Date: _____ By: _____

District Office: _____ Contact: _____

Form HS307.1



EXCAVATION AND TRENCHING
NOTIFICATION LOG

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

Date: _____ IT Project Number: _____
Profit Center: _____ OSHA Permit Required: YES _____ NO _____
Customer: _____ Project Manager: _____
IT H & S Internal Permit Number: _____
Comments: _____

APPENDIX D

EXPOSURE CONTROL PLAN

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Attachments

ATTACHMENTS

1. Exposure Control Plan Acknowledgment Form
2. Bloodborne Pathogens Employee Training Quiz

X.0 Introduction

This Exposure Control Plan presents health and safety guidelines for designated first aid and cardiopulmonary resuscitation (CPR) care providers. In order to meet the requirements of Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) §1910.151, during day shift operations, at least one person on site will be designated and adequately trained in first aid and CPR, in the requirements of the Bloodborne Pathogens Standard as listed in 29 CFR §1910.1030, IT Procedure HS512, and in the contents of this plan.

X.1 Definition

Bloodborne pathogens are those agents (i.e., bacteria, virus, fungi) found in blood, blood components, certain body fluids, and other materials, objects, or surfaces that have had contact with blood that are capable of causing human disease or death to unprotected people who came into contact with blood or blood-affected items. Diseases caused by bloodborne pathogens include, but are not limited to, hepatitis B virus (HBV), human immunodeficiency virus (HIV), hepatitis C, malaria, and syphilis. The most significant and of greatest concern are HBV and HIV.

X.1.1 Hepatitis B Virus

HBV is the major bloodborne pathogen hazard that first aid/CPR care providers are more likely to encounter. The HBV can remain infectious for up to 10 days even in dried blood. The virus adversely affects 8,000 to 10,000 workers annually resulting in approximately 200 deaths each year.

X.1.1.1 Hepatitis Exposure Symptoms

Hepatitis means "inflammation of the liver" causing severe liver damage or cirrhosis. Exposure symptoms include fever, fatigue, nausea, vomiting, muscle aches, loss of appetite, and jaundice (yellowing of the eyes or skin). Hepatitis diagnosis is difficult because some symptoms are similar to the flu and may remain mild for an extended period of time.

Presently, no cure exists for hepatitis, but it can be prevented with a vaccination.

X.1.2 Human Immunodeficiency Virus

HIV attacks and deteriorates the body's immune system and eventually weakens it to the point that infection sets in causing the disease Acquired Immune Deficiency Syndrome (AIDS). HIV is primarily transmitted through sexual contact, but may also be transmitted through contact with

blood and body fluids. HIV is not transmitted by touching or working with people who are HIV-positive.

X.1.2.1 Human Immunodeficiency Virus Exposure Symptoms

HIV leads to AIDS-related illnesses which eventually cause neurological problems, cancer, pneumonia, and death. People carry the virus for many years of their lives without experiencing any symptoms. Upon development, symptoms may include weight loss, skin lesions, dry cough, fever, fatigue, diarrhea, or swelling of the lymph glands.

Presently, no cure exists for HIV or AIDS and no vaccination is currently available.

X.2 Exposure Determination

The purpose of the guidelines in this plan are designed to limit occupational exposure of site workers to infectious blood materials which could result in disease or possibly death. The contents of this plan are intended to protect the designated IT employees trained in first aid and CPR that are responsible for administering medical assistance to site workers.

The designated IT employees governed by this plan are those currently trained in First Aid/CPR practices.

X.2.1 Means of Transmission

The major activity that may expose any of these designated IT employees to bloodborne pathogens is their response and care to on-site personal injuries, or decontamination of equipment/surfaces contaminated by blood or other potentially infectious materials during the incident.

These designated IT employees could be subject to bloodborne pathogens during rendering of first aid or CPR by accidental exposure due to:

- Punctures through the skin with a contaminated sharp object (i.e., scissors)
- Contact or absorption of blood or blood-contaminated objects through open or broken skin (i.e., cuts, scratches, rashes)
- Blood splashes to their eyes, nose, or mouth or other mucous membranes.

Workers can reduce their risk of contacting HBV or HIV by implementing the recommended work practices (outlined in this plan) before, during, and after responding to emergency medical incidents involving personal injuries.

X.3 Measures for Prevention

The establishment of work practice controls is an integral part of an effective exposure control plan in preventing accidental infection of employees. These work practices are designed to protect employees from reasonably foreseeable occupational exposures to bloodborne pathogens from blood and other potentially infectious material. The work practice controls outlined in this section are applicable to the administration of first aid in emergency situations and subsequent cleanup only.

X.3.1 Universal Precautions

Universal precautions is an approach to infection control which operates on the assumption that all human blood and bodily fluids are to be treated as if they are known to be contaminated with HIV, HBV, or other infectious diseases. Universal precautions shall be implemented whenever there exists a foreseeable potential for contact with blood or bodily fluids.

X.3.2 Engineering Controls

Due to the remote location of the worksite, the nature of work in outdoor locations with potential exposure to airborne chemical contaminants, and the potential for exposure being limited to emergency situations, the implementation of engineering controls is not feasible. Exposure control shall be accomplished through implementation of work practice controls and use of personal protective equipment.

X.3.3 Work Practice Controls

Work practice controls shall be instituted whenever foreseeable potential contact with, or exposure to, blood and bodily fluid exists. Examples of situations in which these controls are to be implemented include, but are not limited to, accidents or injuries in which administration of first aid is required, application of bandages to minor cuts and abrasions of another person, and contact with sores, wounds, or broken skin.

Following are specific work practice controls that shall be implemented:

- Open wounds or cuts will be promptly bandaged.

- Wash hands and face as soon as possible after administering first aid or CPR. If wash facilities are not readily available, stock disposable one-time use towelettes.
- No eating, drinking, or smoking is allowed in any work area where a potential exists for occupational exposure to blood borne pathogens.
- Non-disposable equipment or materials that have or may have blood or infectious fluid contact must be washed immediately after their use. (A 1 to 10 solution of bleach and water is recommended proper decontamination.)
- Any clothing that becomes contacted with blood or infectious fluids shall be removed as soon as possible after administering first aid or CPR.
- No personal clothing that becomes contacted with blood or infectious fluids shall be laundered off-site.
- Ensure that first-aid kits on-site are equipped with a pair of surgical gloves and CPR mouthpieces.

X.3.3.1 Minimization of Contact

Direct contact with blood and bodily fluids should be kept to an absolute minimum, as required in a particular situation. In situations where direct contact is likely, personal protective equipment shall be worn to help prevent infection.

Based upon professional judgment, an employee may choose to temporarily forego the use of PPE if he determines that the use of PPE will further jeopardize his well-being or that of the injured worker. This limited application must be carefully evaluated by the employee.

If this does occur, IT is obligated to investigate and document the circumstances in an effort to provide alternative means to avoid further occurrence.

X.3.4 Personal Protective Equipment

The following are specific personal protective equipment items that shall be implemented:

- Always wear hand (i.e. latex or nitrile surgical gloves) and eye (i.e. safety glasses, goggles) protection to administer or apply first aid or CPR.
- Always use CPR mouthpieces or ventilation devices.
- Inspect PPE prior to use to ensure it is in good working order and without flaws.
- Do not reuse gloves once removed.

- After use, remove gloves from top to bottom inside-out, not allowing unprotected skin to contact the exterior of the gloves.

X.3.5 Waste Handling

Disposable items that have or may have blood contact must be bagged separately from other trash. These wastes must be placed in leak proof containers or bags and labeled.

A collection container for contaminated articles will be available on-site. Wastes used in medical emergency treatment (i.e. gloves, towels, gauze) shall be disposed in the infectious waste container(s). The container will be replaced as needed and not be overfilled.

X.3.6 Waste Disposal

The waste will remain on site in approved container(s) until an approved disposal facility capable of receiving medical wastes is identified. Disposal of the infectious waste container(s) shall be in accordance with applicable local, state, and federal regulations.

X.4 Medical Requirements

The medical requirements of the exposure control plan include provision of a Hepatitis B vaccination to all exposed employees and post-exposure procedures and evaluation.

X.4.1 Hepatitis B Vaccination

All potentially exposed employees will have made available to them at no cost a Hepatitis B vaccination. The employee will also receive training as to the vaccine's efficacy, safety, benefits, and consequences prior to administration. The vaccination series shall be initiated prior to assignment and shall be administered under the supervision of a licensed physician. Employees may at their own discretion decline the vaccination, in which case documentation of declination will be completed and employees may be assigned immediately. If an employee covered by this exposure plan decides to accept the vaccination at a later date, the vaccination will be offered at that time at no cost to the employee.

X.4.2 Post-Exposure Procedures and Evaluation

Subsequent to all reported exposure incidents, a confidential medical evaluation and follow-up shall be made available to each employee exposed in the incidents.

X.4.2.1 Documentation Procedures

Documentation of the exposure incident shall be recorded as soon as possible, and include the route(s) of exposure, the circumstances surrounding the incident, and the identification of the source individual.

X.4.2.2 Blood Testing

X.4.2.2.1 Source Individuals

As soon as feasible, the source individual in an exposure incident will be asked to consent to a blood test to determine HBV and HIV infectivity. Where applicable laws require employee consent, documented consent shall be obtained prior to testing. If an employee refuses the blood test, documentation of the refusal will be made. Documentation of the test results shall be made available to the exposed employee(s). All results should be kept confidential, as criminal and civil penalties may be charged against persons negligently or wilfully releasing such information, depending on local laws.

X.4.2.2.2 Exposed Employees

Exposed employees will be asked to consent to a blood test for HBV and HIV serological status. If consent to HIV testing is denied, the blood sample will be preserved for 90 days, within such time the employee may elect to consent to the HIV test.

X.4.3 Post-Exposure Medical Evaluations

Exposed employees shall receive a healthcare professional's written opinion for post-exposure evaluations. The written opinion shall include the results of the evaluation and any medical conditions resulting from the exposure incident which requires further medical treatment.

X.5 Hazard Communication

X.5.1 Warning Labels

Containers used for disposal of blood contaminated supplies and waste will be labeled in accordance with the word "biohazard."

X.5.2 Warning Signs

There are no designated areas for medical treatment on site, since first aid will be provided on an emergency basis only, and therefore warning signs are not applicable. In cases of potential

exposure observers and non essential personnel should be verbally warned to keep a safe distance from injured personnel.

X.5.3 Employee Training Program

Employee training will be provided at the time of initial assignment and annually thereafter. Additional training will be given as changes in or modification to procedures occur.

The training program includes the following elements:

- A copy of 29 CFR §1910.1030 for review
- Explanations of epidemiology of bloodborne diseases, modes of transport, symptoms of infection
- Explanation of the exposure control plan, methods used to recognize tasks with potential exposure
- Explanations of use and limitations of control measures
- Information on the Hepatitis B vaccination, medical evaluation, post-exposure follow-up
- Explanation of warning signs and labels.

X.6 Recordkeeping

X.6.1 Training Records

All employees selected to attend the training program that covers the contents of this plan shall sign the Acknowledgment Form and the Training Attendance Form.

The training record will contain the date; training outline; name and qualifications of the trainer, and names and job titles of attendees.

At the completion of the training program, all participants must take and pass the training quiz.

The training records will be maintained by the IT Training Department for at least three years from the training date.

X.6.2 Medical Records

Medical records necessary for IT designated employees must include documentation on HBV vaccination status, medical follow-up, post-exposure testing, and a medical professional's written evaluation.

X.6.2.1 Confidentiality

The employee medical records will be forwarded to EMR for inclusion in the employee's medical file:

ENVIRONMENTAL MEDICINE RESOURCES, INC.
4360 Chamblee Dunwoody Road, Suite 202
Atlanta, GA 30341

X.6.2.2 Maintenance and Transfer of Records

IT Corporation shall maintain the employee medical records for the duration of the employee's employment plus 30 years thereafter.

If, for whatever reason, IT Corporation no longer does business and no successor exists, IT Corporation will notify the Director of NIOSH in writing three months prior to the disposal of records. If so directed, the records shall be transferred to the Director of NIOSH.

X.6.3 Incident Recording

An incident that occurs as a result of rendering emergency medical care will be recorded on the OSHA 200 log as OSHA defines work-related injuries and illnesses.

TABLES

Exposure Control Plan Acknowledgment Form

I have read, understand, and will abide by the procedures set forth in this Exposure Control Plan.

I will comply with all of the provisions of this Exposure Control Plan and with any additional health and safety requirements which may be required by IT Corporation.

[illegible]

Bloodborne Pathogens Employee Training Quiz

Name (Print): _____ Date: _____

Job Title/Position: _____

Trainer's Name/Qualifications: _____

Check the correct responses (T = True; F = False).

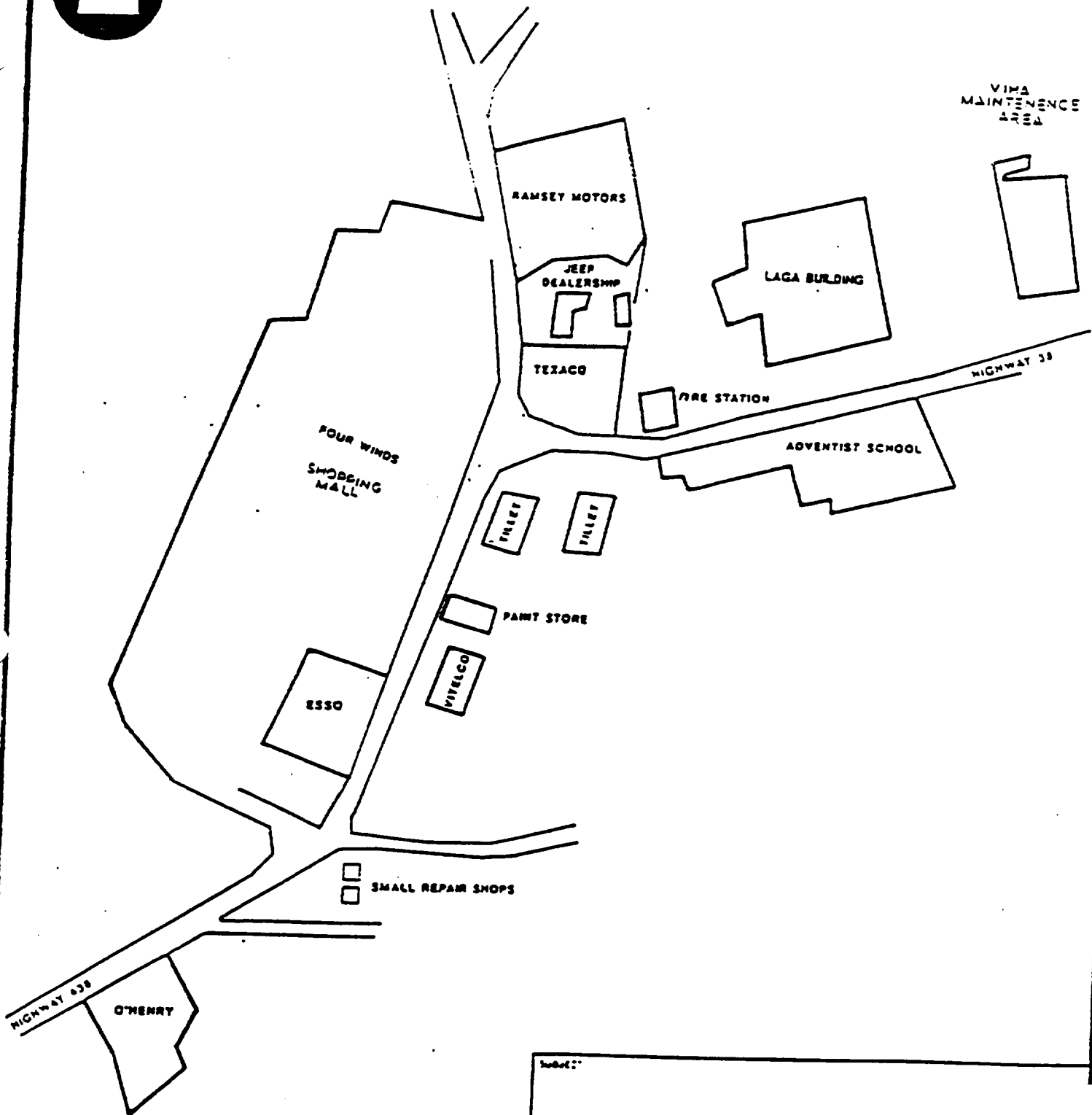
T	F	1. It is the responsibility of the employer to provide personal protective equipment to employees who have occupational exposure to blood or body fluids.
T	F	2. The most common communicable bloodborne disease today is Human Immunodeficiency Virus (HIV).
T	F	3. Persons at risk for exposure to Hepatitis B (HBV) may include emergency responders, residential and nursing home workers, custodians/janitors, law enforcement/corrections personnel, and health care workers.
T	F	4. The HBV vaccination is the best way to prevent AIDS.
T	F	5. Universal Precautions means that you must use Personal Protective Equipment only when you come into direct contact with the blood and/or body fluids of someone you don't know.
T	F	6. An Exposure Incident means that blood or body fluids have entered through the skin or mucous membranes.
T	F	7. Washing your hands often with soap and warm water is a good way to reduce spreading diseases.
T	F	8. All potentially infectious waste is to be disposed of in a clear plastic bag so that any bloody materials may be readily seen by the custodian.
T	F	9. You should always report an Exposure Incident to your supervisor or First Aid Attendant.

Signature: _____ Score: _____

Signature of Trainer: _____

APPENDIX E

SITE AND HOSPITAL LOCATION MAPS



**SITE PLAN
TUTU WELLS SITE SAMPLING,
ANALYSIS, AND MONITORING PLAN,
ST. THOMAS, U.S. VIRGIN ISLANDS**

Subplot

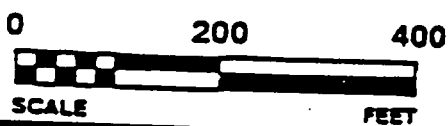
DATE: 8/91

TEIC

Geraghty
& Miller, Inc.

DESIGNED BY: **DANAHY**
DRAWN BY: **PADULA**
PROJECT NO: **DANAHY**

SCALE: **SHOWN**
DATE: **8/91**
FIGURE: **3**





Esso invites you to enjoy our
beautiful island, and to fill your tank at
any of our convenient service stations



enjoy creative treats such as seafood
crust at Fiddle Leaf (6), one of the island's
by Gourmet, among others. Open 6:30 to 10, closed Sundays. 775-2811.

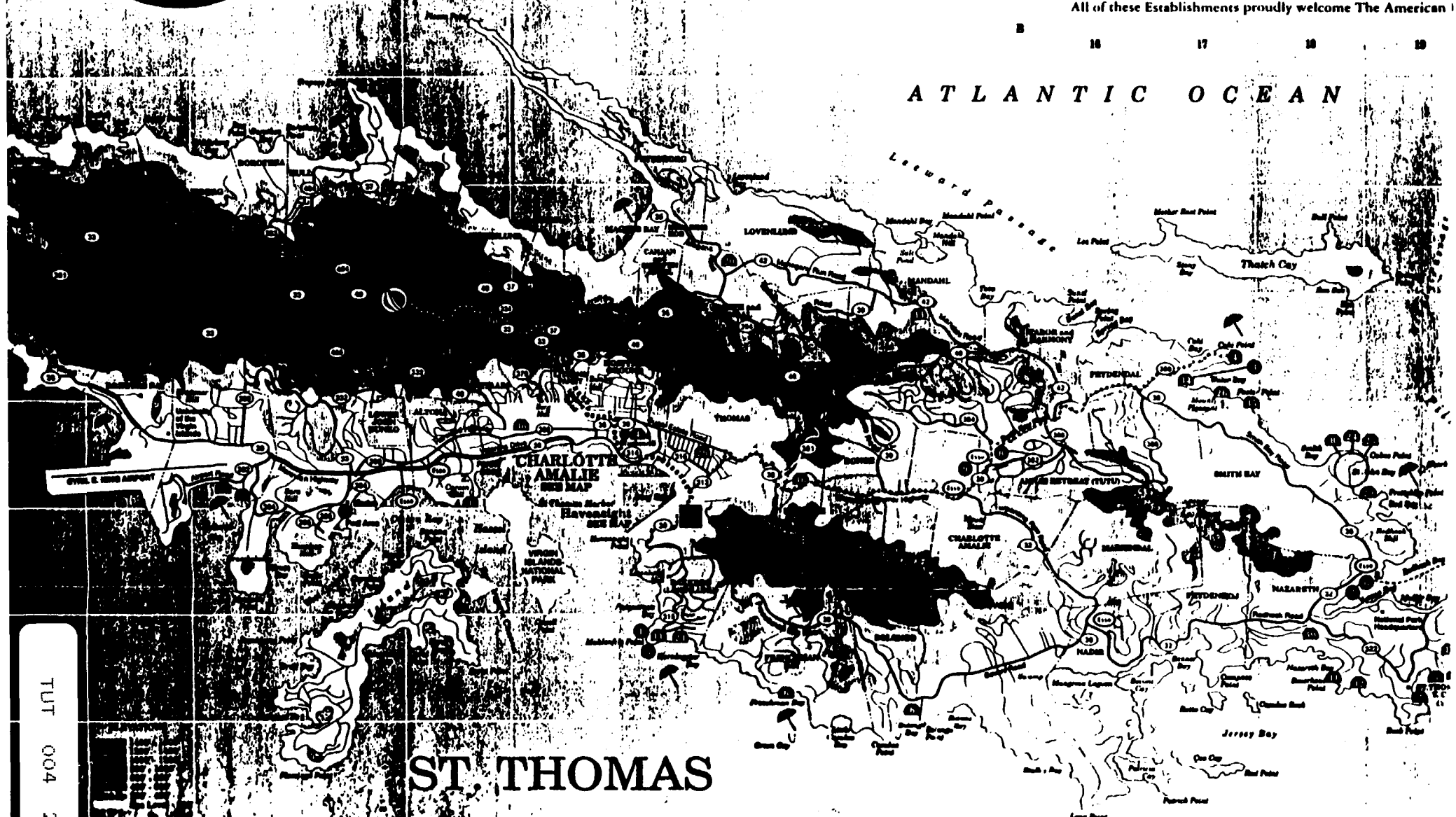
The restaurant of the Hotel 1829 (7) is considered one of the
the Caribbean; their award-winning chef has been noted in Gourmet Magazine.
a drink and game of backgammon at the bar in the old Danish kitchen
seven days, 6:30 to 10; seating at 5:30. Reservations at 776-1829.

Lunch or dinner on the deck at Piccola Marina (8) lets you watch
Hook harbor as you enjoy their popular fare, including homemade pasta
Sunday brunch. Happy hour 4:30 to 6. Lunch 11 to 3; Dinner 6 to 10. 776-7777.

Virgilio's (9) in downtown Charlotte Amalie offers superb Italian
cable service in its charming European-style dining room. Seafood a specialty
11:30 to 6:30; Dinner 6:30 to 9:30. 776-4920.

All of these Establishments proudly welcome The American

ATLANTIC OCEAN



ST. THOMAS

CARIBBEAN SEA

TUT 004 2088

Published by
Earle Publishing
Suite 310, 168 Cro.
St. Thomas, USVI
Telephone: 809 77

Appendix B

VLEACH Model

L'Henri Interim Soil Remediation - VLEACH Model

I. Objectives

- (1) Estimate the potential impact on the underlying groundwater due to the mobilization and migration of tetrachloroethane (PCE) in the vadose zone at O'Henry Laundry, St. Thomas; U.S. Virgin Islands (USVI).
- (2) Determine soil clean up levels in the vadose zone that will not impact the underlying groundwater above U.S. Environmental Protection Agency (EPA) action limits (5 $\mu\text{g/L}$) at the O'Henry Laundry site.

II. Method

Groundwater impact was estimated using the computer program VLEACH Version 2.0 (Ravi, et al., 1993). VLEACH is a one-dimensional vadose zone leaching model that predicts contaminants behavior within the vadose zone using a finite difference method.

III. Model Development

The modelling procedures were similar to those described in Rosenbloom, et al., 1993.

A. Assumptions:

- (1) The vadose zone is assumed to be 20 feet thick and to have an effective porosity of 30 percent.
- (2) The entire thickness of the vadose zone is homogenous and behaves as a uniform porous media (effective porosity is 30 percent).
- (3) Recharge rate and moisture content in the vadose zone is constant with depth and time.
- (4) Instantaneous equilibrium between liquid, vapor, and solid phases.
- (5) Liquid phase dispersion is neglected.
- (6) The contaminant is not subject to in situ production or degradation.

- (7) Nonaqueous phase liquids or any flow conditions derived from variable density are not accounted for in the model.
- (8) The overburden aquifer is assumed to be 10 feet thick.

B. Model Input Parameters:

Table B-1
Input Parameters in VLEACH Model

Chemical Parameters (Ravi, et al., 1993, Appendix A)

Organic Carbon Partition Coefficient (K_{oc})	= 375 ml/g
Henry's Law Constant (K_h)	= 0.923 (Dimensionless)
Free Air Diffusion Coefficient (D_{ia}) - (Calculated)	= 0.66 m ² /day
Water Solubility (C_{sol})	= 150 mg/L

Soil Parameters

Bulk Density (ρ_b)	= 1.35 g/mL
Effective Porosity (ϕ) (assumed)	= 0.3
Volumetric Water Content (ϕ)	= 0.2
Fraction Organic Carbon Content f_{oc}	= 0.0002, 0.001, 0.002

Environmental Parameters

Recharge rate (q)	= 0.45 ft/year
Concentration of PCE in Recharge Water	= 0 mg/L
Concentration of PCE in Atmospheric Water	= 0 mg/L
Concentration of PCE at the Water Table	= 0 mg/L

Computational Parameters

Length of Simulation Period	= 180 years
Time Step	= 1 year
Output Time Interval	= 10 years
Profile Time Interval	= 10 years
Size of Cell	= 0.2 ft
Number of Cells	= 100
Number of Polygons	= 1

These parameters are summarized in the input files (attached).

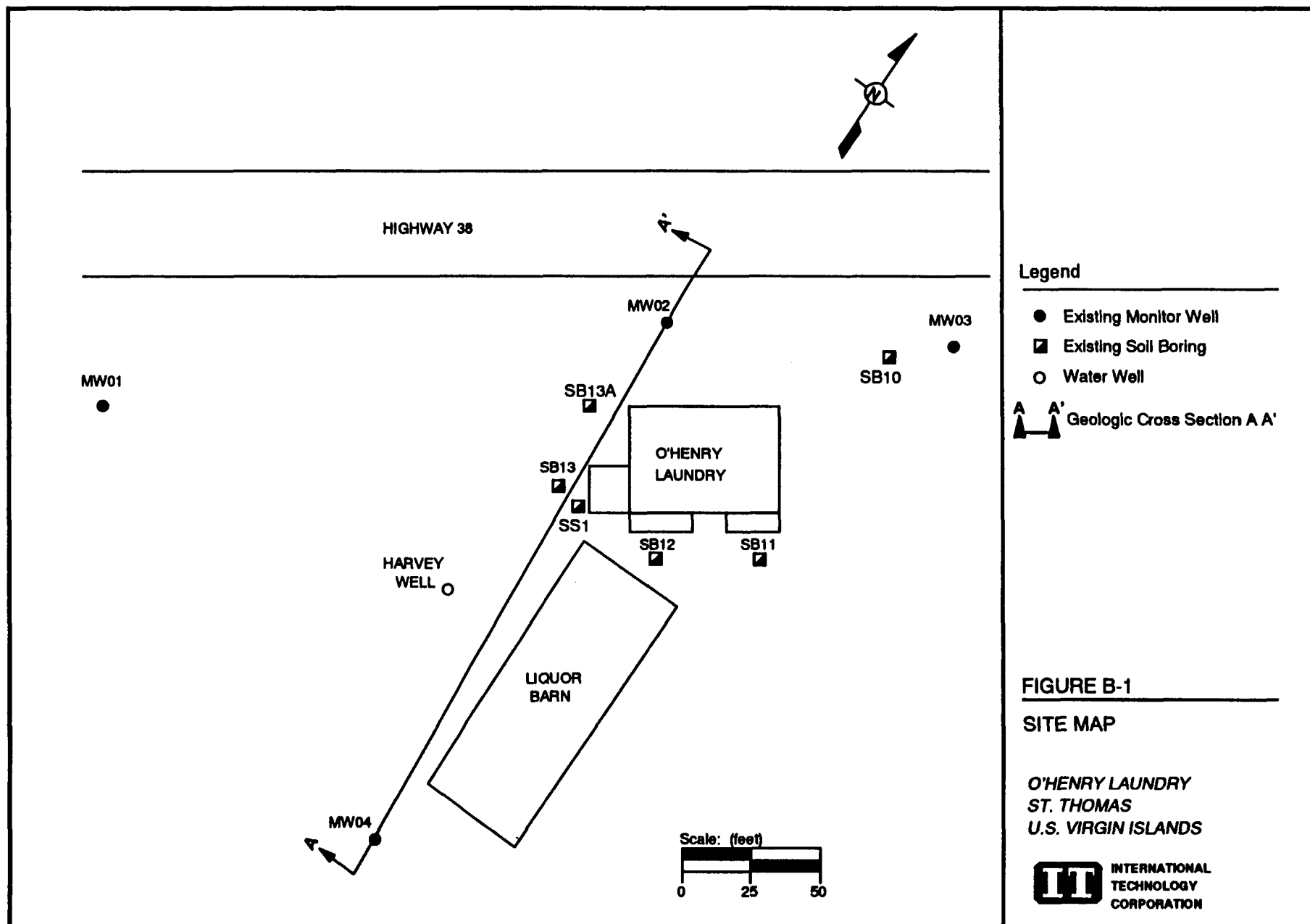
Values for chemical parameters were taken from the VLEACH Manual (Ravi, et al., 1993) except for the free air diffusion coefficient. Free air diffusion coefficient for PCE was calculated using the Fuller, Schettler, and Giddings method (Lynmann, et al., 1990 - refer to calculation sheet attached).

Figure B-1 shows the locations of soil borings and monitoring wells at the O'Henry Laundry. Boring logs from monitoring wells MW02 and MW03 were used to construct a geologic cross section through the modeled area (Figure B-2). Soil boring SS1 is located near the center of the modeled area. Soil types were not logged in soil boring SS1, therefore, soil types and groundwater depths were interpolated from data collected from MW02 and MW04. As shown in the cross section (Figure B-2), auger refusal occurred at a depth of 42 feet in MW02 and at 52 feet in MW04. This implies that depth to bedrock near soil boring SS1 falls within the range of approximately 42 feet to 52 feet. The minimum observed depth to water (measured relative to ground surface) in MW02 is approximately 17 feet. The minimum observed depth to groundwater in MW04 is approximately 29 feet (Figure B-2). This implies that the depth to groundwater near soil boring SS1 is approximately 20 feet. Therefore, the vadose zone thickness assumed in the VLEACH model is 20 feet.

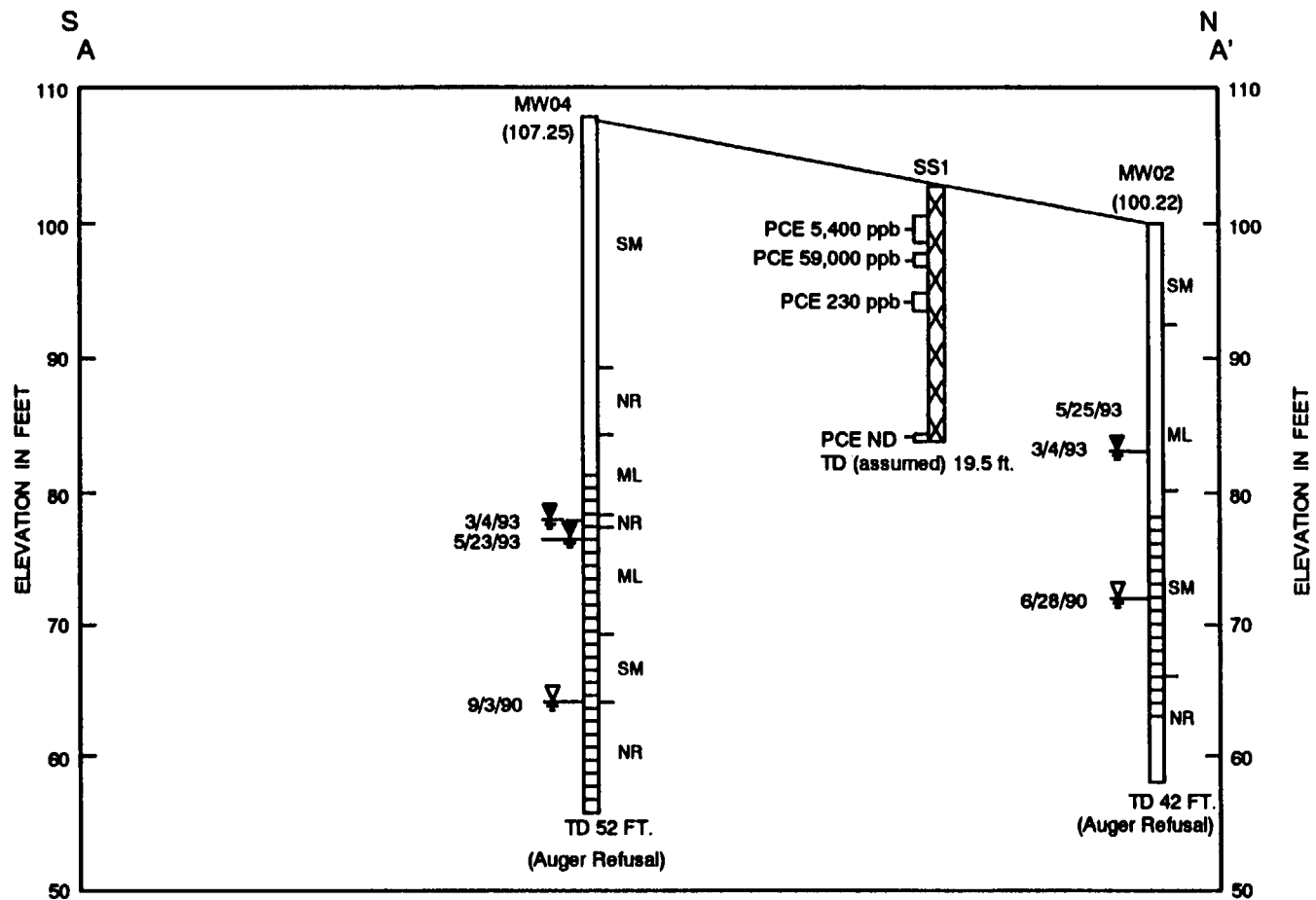
Also, based on the depth to groundwater and depth to bedrock inferred from auger refusal (Figure B-2), the thickness of the overburden aquifer appears to be approximately 23 feet. However, because of the possibility that depth to bedrock may be variable, it is assumed that the average thickness of the overburden aquifer is 10 feet. This assumption is considered conservative since, when calculating PCE concentrations in groundwater, decreasing assumed aquifer thickness results in a proportional increase in PCE concentrations in groundwater. This results in a more stringent cleanup level for vadose zone soils.

The soil type at O'Henry Laundry is predominantly a sandy clay loam soil. Soil parameters were taken from Ravi, et al. (1993). For the soil type, a range of soil organic carbon fractions (f_{oc}) were used in the modeling to ascertain the effect this parameter has on the migration of the contaminant (PCE) from the vadose zone to the groundwater. Values used for f_{oc} were 0.002, 0.001, and 0.0002. The investigation by Rawls (1983) provides an f_{oc} for sandy clay loam soils of 0.19 percent. However, the soil profile at the O'Henry Laundry site indicates that the organic rich portion of the soil comprises less than 0.19 percent of the column; therefore, a lower f_{oc} would be more representative of the bulk soil properties. Further, high values of f_{oc} resulted in unreasonably low concentrations of PCE in groundwater and in excessive time for PCE to be transported through the vadose zone to groundwater.

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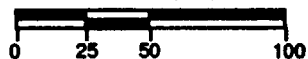
8TTHOMAS\FIGB1.DRW/1/4-6-94



Legend:

- (100.22) Monitor Well Ground Surface Elevation
 [Symbol] Screen Interval
 [Symbol] Initial Groundwater Level with date measured
 [Symbol] Groundwater Static Level with dates measured
 CL Silty Clay
 SM Silty Sand
 ML Clayey Silt
 GM Silty Gravel
 NR No Recovery

Horizontal Scale (feet)



Notes:

- Elevations are relative to MW02 top of casing, which was assigned an elevation of 100 feet.
- Soil types were not logged in soil boring SS1.

FIGURE B-2

SITE PROFILE A-A'

O'HENRY LAUNDRY
 ST. THOMAS
 U.S. VIRGIN ISLANDS



The recharge rate was estimated to be 10 percent of the average annual rainfall at the O'Henry Laundry site. Published records indicate an annual precipitation of 53.99 inches (Bair, 1992). Hence a recharge rate of 0.45 feet per year was used in the model.

Analytical data of soil samples collected at varying depth/intervals during advancement of soil boring SS1 (Figures B-1 and B-2) were used to estimate the vertical distribution of soil PCE concentrations at the site at the beginning of the model run. Soil analytical results are summarized in Table B-2. VLEACH was applied to simulate continued transport of PCE from the vadose zone using the initial PCE soil concentration distribution. The observed distribution, based on data from soil boring SS1, was found to result in groundwater contamination in excess of the EPA action limit (5 µg/L). Therefore, in each subsequent model run, the initial soil concentration of PCE was taken to be a fraction of the observed PCE concentration in soil. This procedure was followed until the flux of PCE through vadose zone soils was less than that necessary to produce groundwater contamination in excess of the EPA action limit. The concentration profiles used in each of the model runs are summarized in Table B-3.

VLEACH estimated the mass rate of PCE loadings using the concentration profiles and a one-cell mixing model for the aquifer directly below the area of the contaminated vadose zone.

PCE concentrations in groundwater due to the impact of leachate were estimated using VLEACH/mass loading estimates and a one-cell mixing model for the aquifer directly below the contaminated vadose zone. The mixing model assumed complete mixing in the water column and used:

- (1) Full thickness of the aquifer (t) = 10 feet.
- (2) A geometric mean hydraulic conductivity for the site = 1.59 ft/day and hydraulic gradient ranging from 0.005 to 0.03 feet/feet. Resulting flow velocities range from 2.9 to 17.42 feet per year with a mean flow velocity of 10.16 feet per year.
- (3) Porosity (ϕ) = 0.3 (assumed).
- (4) A unit cross - sectional width.

PCE concentration in groundwater, $[M]_{GW}^{PCE}$, was calculated using:

$$[M]_{GW}^{PCE} = \frac{[M]_{Leachate}^{PCE}/year}{Volume\ of\ water\ flowing\ thru\ unit\ width\ per\ year}$$

Table B-2
Summary of Soil Analytical Results From Boring SS-1
June 1990
O'Henry Laundry
St. Thomas, U.S. Virgin Islands

Compound (ppb ^a)	Sample Number and Depth					
	TW2	TW5	TW5DUP	TW8MS	TW8MSD	TW20
	2.5 - 4.0 ft.	5.0 - 6.5 ft	5.0 - 6.5 ft.	8.5 - 10 ft.	8.5 - 10 ft.	19.0 - 19.5 ft
Acetone	ND ^b	3000 DJ	ND	2000	1900	ND
Methylene Chloride	270 DBJ ^c	3100 DBJ	3000 BJ	880 B	ND	1300 BJ
2-Butanone	370 DBJ	ND	ND	440 BJ	310 BJ	ND
Tetrachloroethene	5400 D	59000 D	22000	230 J	150 J	ND
Xylenes (Total)	280 DBJ	11000 DB	4700 BJ	450 BJ	520 BJ	630 BJ

^appb - Parts per billion (g/kg)

^bND - Not detected

^cD - Compound analyzed at secondary dilution factor

B - Compound detected in method blank

J - Compound detected below contract required detection limit

Table B-3
Concentration Profile Used In The Model
O'Henry Laundry
St. Thomas, U.S. Virgin Islands
(Concentration units in ppb)

Concentration Profile Number	Depth Interval (ft)			
	0-5	5 - 8.5	8.5 - 19	19 - 20
1	5400	59,000	230	0
2	108	1180	5	0
3	60	655	3	0
4	30	328	1	0

$$\begin{aligned}
 \text{Where water volume} &= \Phi \times t \times L \times W \\
 &= 0.3 \times 10 \text{ ft} \times 10.16 \text{ ft} \times 1 \text{ ft} \\
 &= 30.48 \text{ ft}^3 \\
 &= 863.1 \text{ L}
 \end{aligned}$$

IV. Model Results

The incremental increase in PCE concentrations in groundwater for the site using the initial soil PCE concentration and the various f_{oc} values are shown in Figures B-3 through B-5. Table B-4 summarizes the highest groundwater PCE concentrations and the time at which the peak impact occurs. The output files LHENRI*.OUT provides information on the amount of PCE released to the groundwater in terms of gram per year at every time step. Figures B-6 through B-8 show that PCE concentrations in groundwater fall below EPA action limits when the contaminant concentrations in the vadose zone decrease to soil cleanup levels.

The groundwater PCE concentrations presented in Table B-4 assume no in situ degradation of the contaminant. Lower concentrations are anticipated due to the natural biodegradation of the contaminant in the vadose zone.

V. Conclusions and Recommendations

Based on the model result the following conclusions can be made:

- Groundwater at the O'Henry Laundry site will be impacted above the EPA action limit (5 $\mu\text{g/L}$) due to the migration of PCE in the vadose zone. The peak groundwater impact will range from PCE concentrations of 887 $\mu\text{g/L}$ for the most stringent soil parameters to 225 $\mu\text{g/L}$ for less stringent soil parameters. The peak impact will occur at about 26 and 8 years respectively.
- Without vadose zone remediation groundwater impact will continue for up to 120 years (assuming no degradation).
- Vadose zone remediation (of the zone with the highest PCE concentrations) to reduce groundwater impact below 5 $\mu\text{g/L}$ ranges from 1,180 ppb for least stringent soil parameters to 328 ppb for the most stringent soil parameters.

It is recommended that the zone with the highest PCE concentrations be cleaned to approximately 328 ppb. The above soil cleanup goal is based on the most stringent soil conditions and the assumption that the area of contamination is localized around soil boring SS1.

Table B-4
Highest Groundwater PCE Concentrations
O'Henry Laundry
St. Thomas, U.S. Virgin Islands

Simulation No.	Concentration Profile No. (Refer Table 2)	Fraction Organic Carbon (f_{oc})	Highest Groundwater PCE Concentration ($\mu\text{g/L}$)	Time for Peak Impact (Years)
CURRENT SOIL PCE CONCENTRATIONS				
1	1	0.002	225	26
2	1	0.001	383	16
3	1	0.0002	887	8
SOIL CLEANUP LEVELS				
4	2	0.002	4.5	26
5	3	0.001	4.3	16
6	4	0.0002	4.9	8

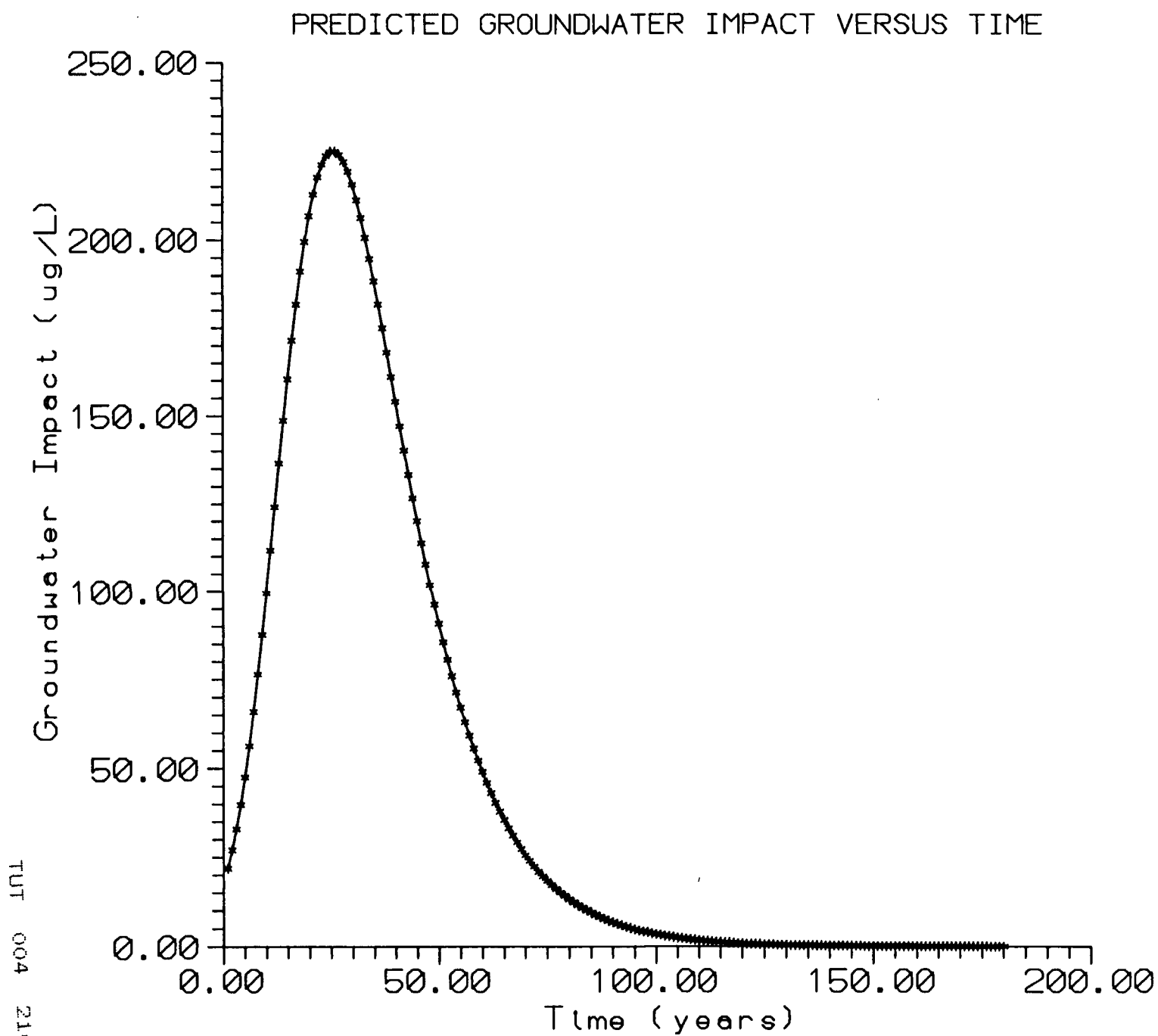


Figure B-3: Predicted Groundwater Impact Versus Time

PREDICTED GROUNDWATER IMPACT VERSUS TIME

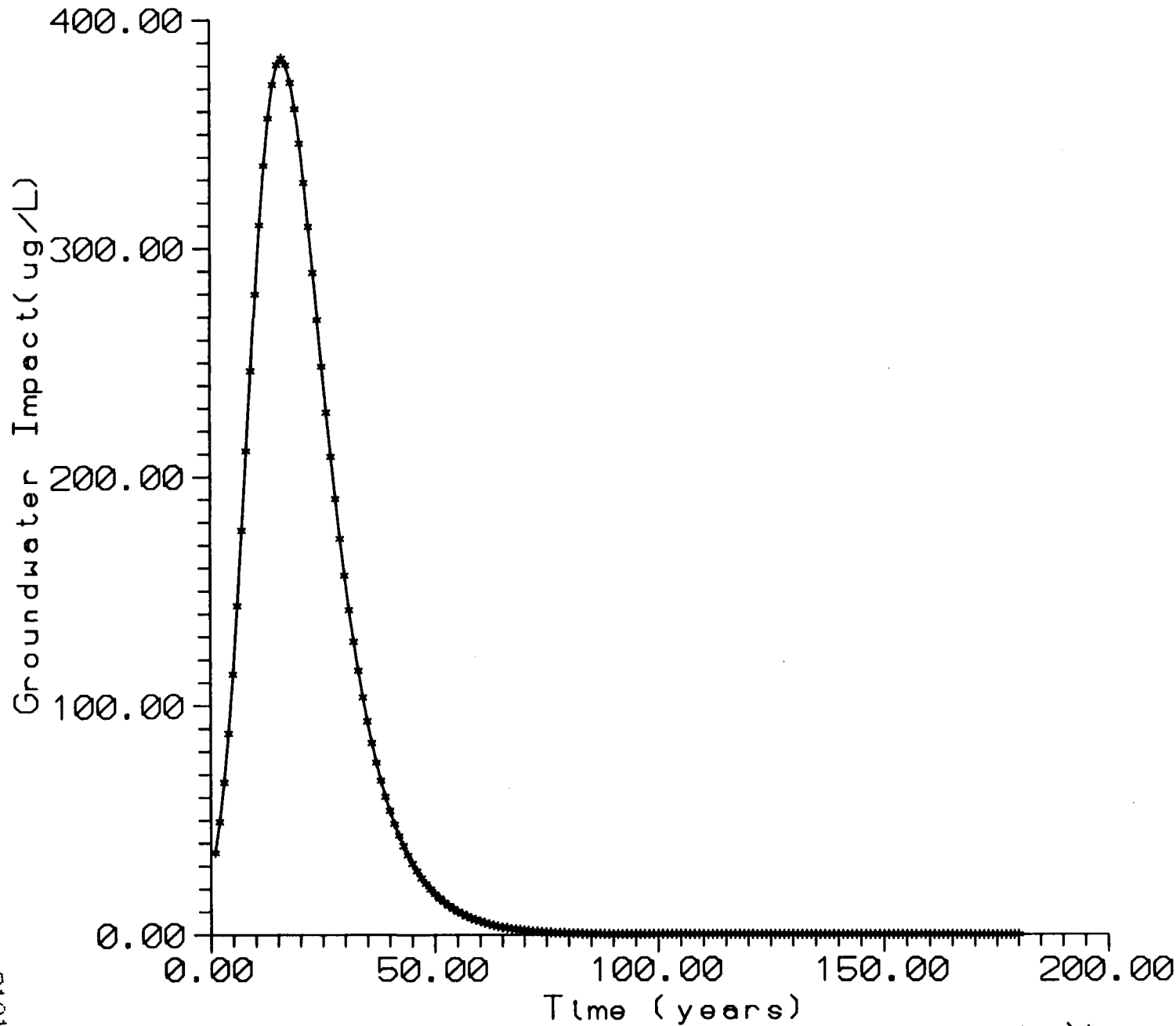


Figure B-4; Predicted Groundwater Impact Versus Time
(for current and forecast soil PCE concentrations)

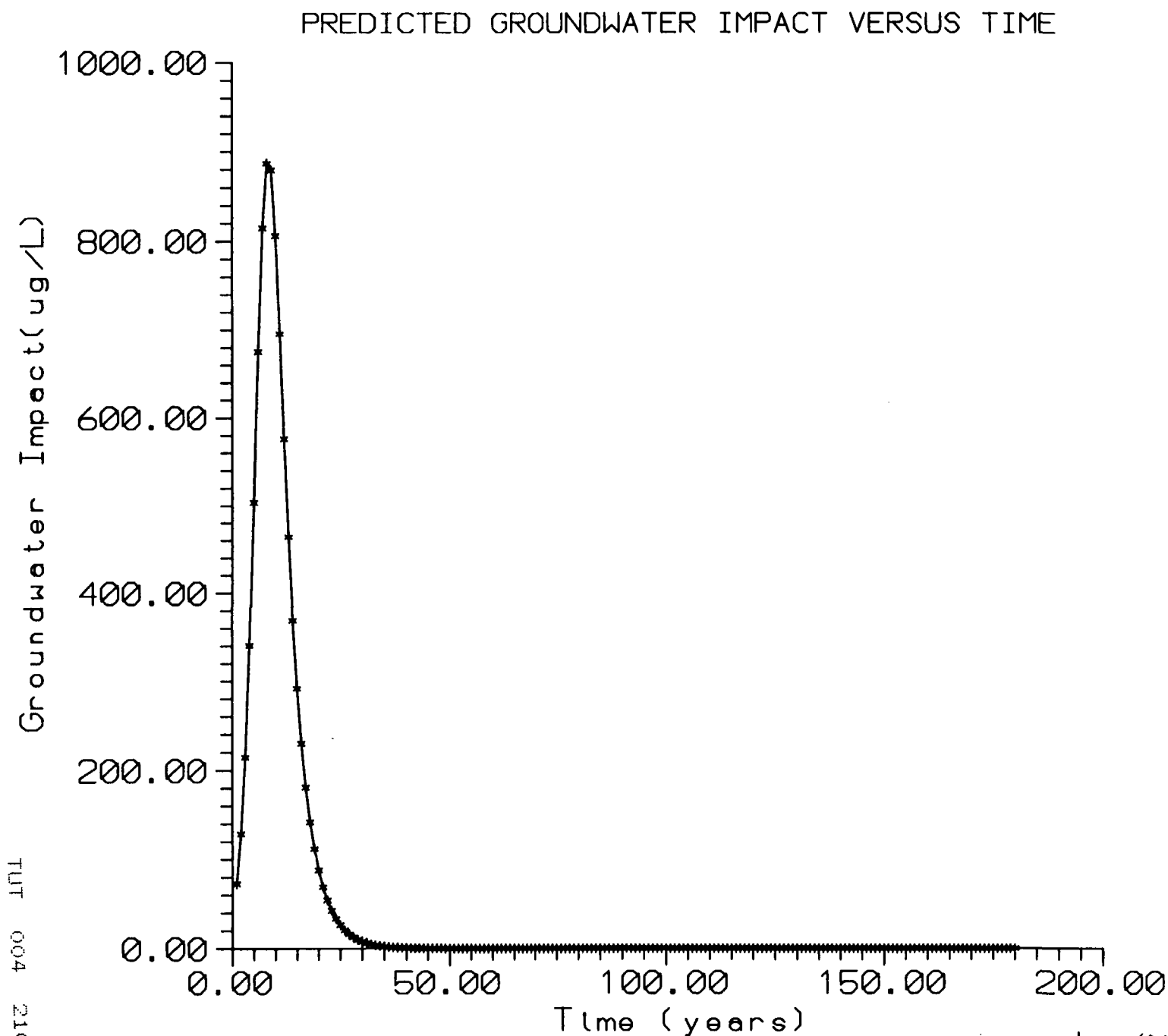


Figure B-5: Predicted Groundwater impact versus Time

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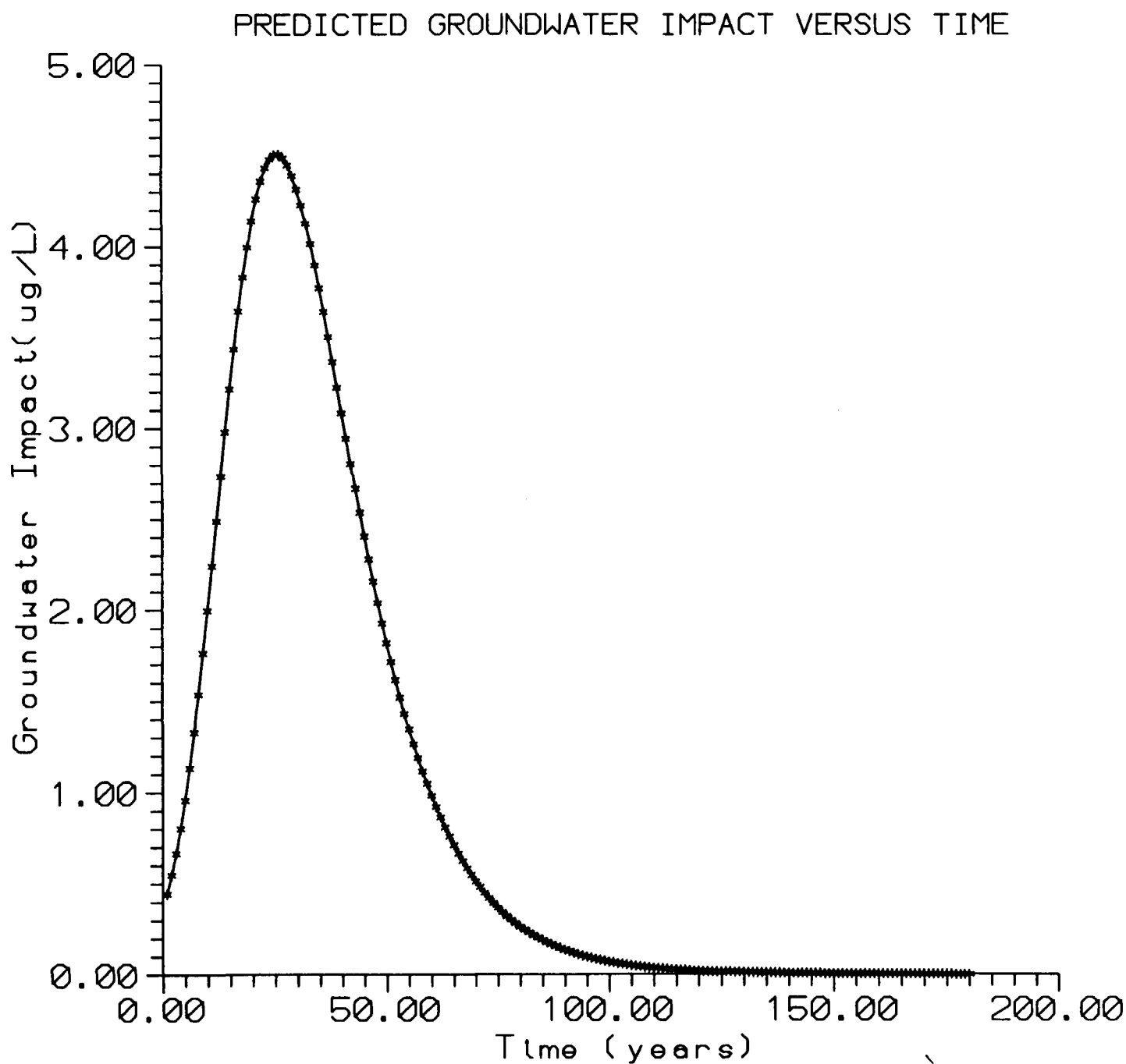


Figure B-6: Predicted Groundwater impact vs Time

PREDICTED GROUNDWATER IMPACT VERSUS TIME

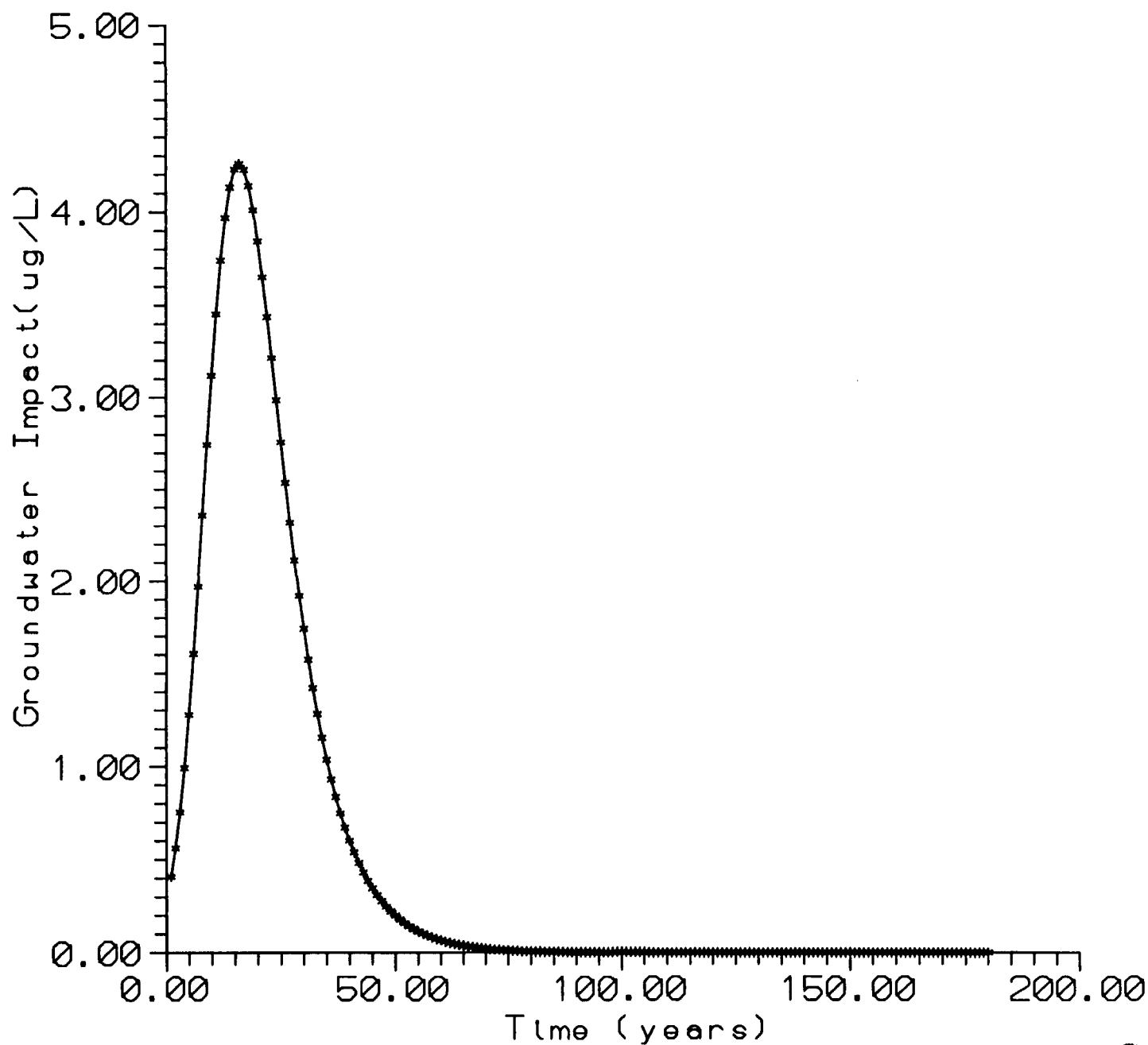


Figure B-7: Predicted groundwater impact vs Time.
(with and without soil cleanup of 1000 mg)

PREDICTED GROUNDWATER IMPACT VERSUS TIME

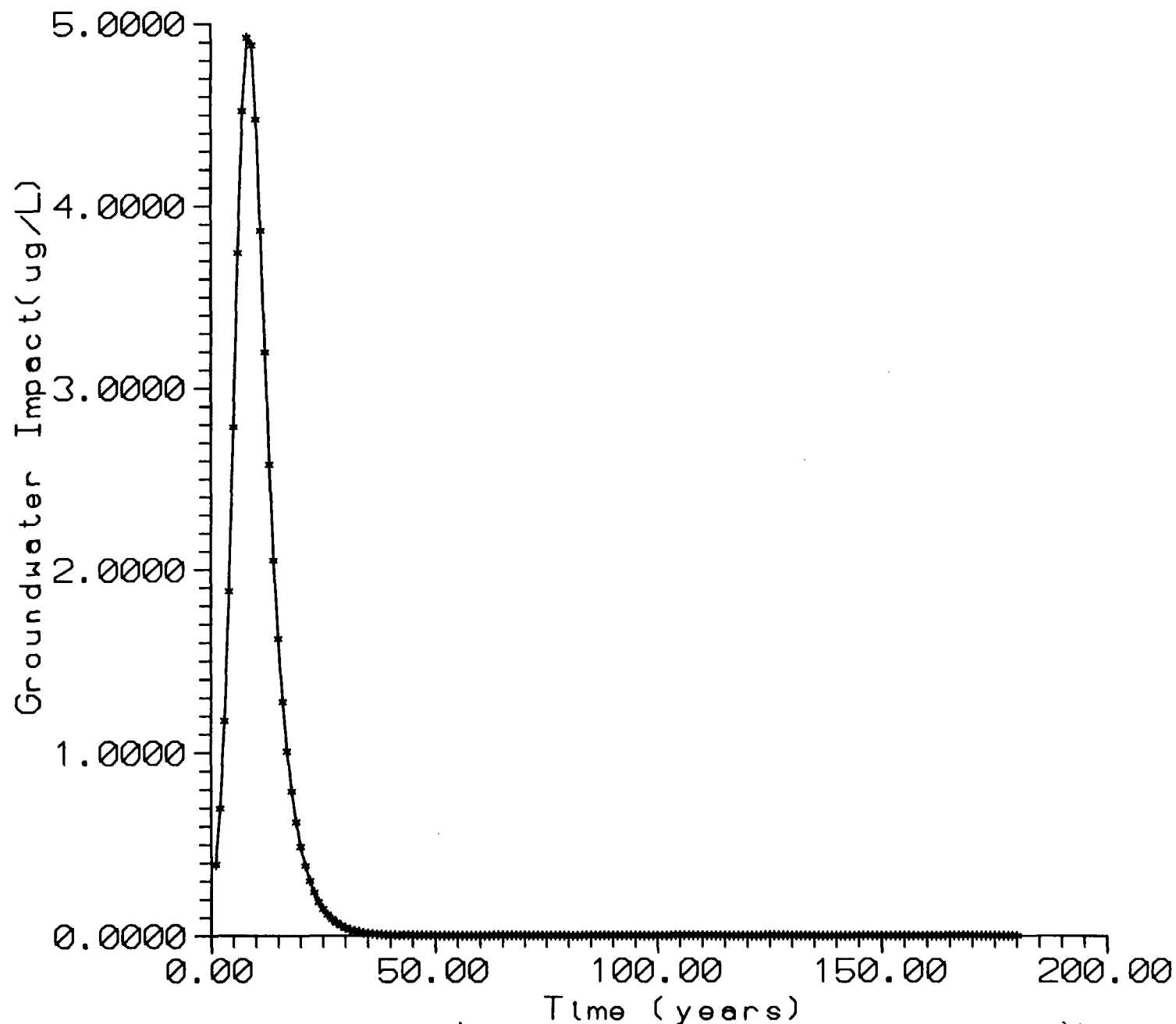


Figure B-8: Predicted Groundwater Impact Versus Time
(Concentration and soil cleanup PCE concentrations)

VI. Attachments

B1. Tetrachloroethane Free Air Diffusion Coefficient Calculation sheet.

B2. VLEACH Input and Output files.

VII. References

Bair F.E., eds., 1992, *Weather of U.S. Cities, 4th Edition*, Gale Research, Inc.

Lynmann, W. J., F. R. William, and D. H. Rosenblatt, eds., 1990, *Handbook of Chemical Property Estimation Methods: Environmental Behavior of Organic Compounds*, American Chemical Society

Ravi, V., and J. A. Johnson, 1993, VLEACH, Version 2.0., Robert S. Kerr Environmental Research Laboratory.

Rawls, W. J., 1983, "Estimating Bulk Density From Particle Size Analysis and Organic Matter Content," *Soil Science*, Volume 135, No 2., pp 123-125.

Rosenbloom, J., P. Mock, P. Lawson, J. Brown, and H. J. Turin, 1993, "Application of VLEACH to Vadose Zone Transportation of VOCs at an Arizona Superfund Site," *Ground Water Monitoring and Remediation*, Volume 13, No. 3., pp 159-169.

ATTACHMENT B1

Tetrachloroethane Free Air Diffusion Coefficient Calculation

Objective: Calculate Free Air Diffusion Coefficient for Tetrachloroethane

Method: The method of Fuller, Schettler and Giddings (Lynmann, et al., 1990) was used to calculate the free air diffusion coefficient based on the correlation:

$$D_{TA} = \frac{10^{-3} T^{1.75} \sqrt{M_r}}{P(V_A^{1/3} + V_t^{1/3})^2}$$

and $M_T = (M_A + M_T) / M_A M_T$

Where: M_A = molecular weight of air (28.97 g/mol)
 M_T = Molecular weight of tetrachlorethane (165.83 g/mol)
 V_A = Molar volume for air (20.1 cm³/mol)
 V_t = Molar volume for tetrachloroethene (111 cm³/mol)
 T = Temperature (298°K)

Using equation (ii)

$$M_T = (28.97 + 165.83) / (28.97)(165.83) \\ = 0.0405 \text{ g/mol}$$

V_t for tetrachloroethane:

$$2(C) = 2(16.5) \\ \frac{4(Cl) = 4(19.5)}{V_t = 111 \text{ cm}^3/\text{mol}}$$

Using equation (ii) at 25°C

$$D_{t_a} = \frac{10^{-3} (298)^{1.75} \sqrt{0.0405}}{1[(20.1)^{1/3} + (111)^{1/3}]^2}$$

$$= 0.076 \text{ cm}^2/\text{S} \\ = 0.66 \text{ m}^2/\text{day}$$

ATTACHMENT B2
VLEACH INPUT/OUTPUT

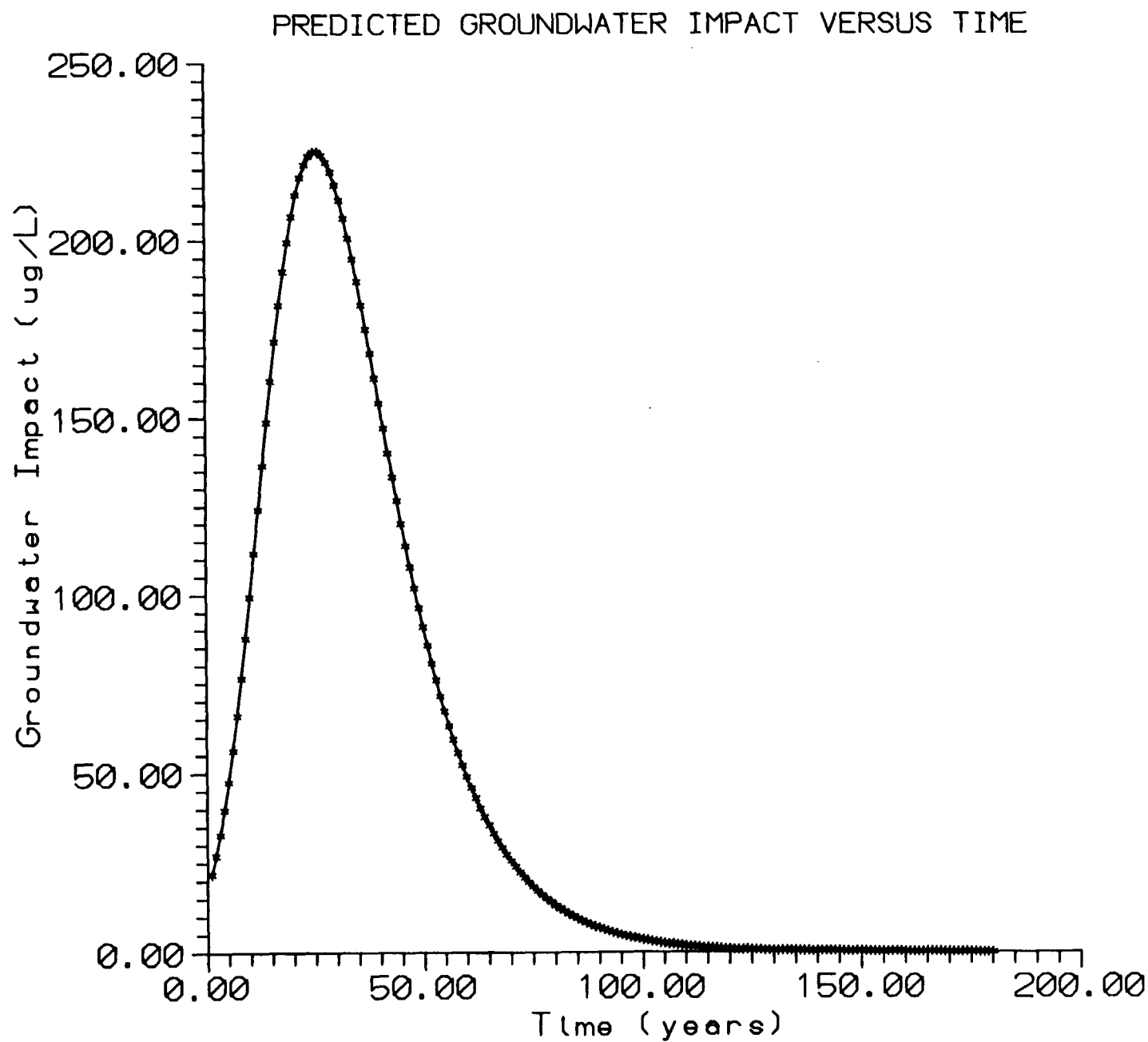


Figure B-3: Predicted Groundwater Impact versus Time

VLEACH
version 2.0, 1993.

Developed by :

Varadhan Ravi and Jeffrey A. Johnson (Dynamac)
Center for Subsurface Modeling Support
Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

LHENRI SIMULATION I

1 polygons.
Timestep = 1.00 years. Simulation length = 180.00 years.
Printout every 10.00 years. Vertical profile stored every 10.00 years.
Koc = 375.00 ml/g, 0.13243E-01cu.ft./g
Kh = 0.92300 (dimensionless).
Aqueous solubility = 150.00 mg/l, 4.2476 g/cu.ft
Free air diffusion coefficient = .66000 sq. m/day, 2593.1 sq.ft./yr

Polygon 1

POLYGON 1

Polygon area = 1.0000 sq. ft.

100 cells, each cell 0.200 ft. thick.

Soil Properties:

Bulk density = 1.3500 g/ml, 38228. g/cu.ft.

Porosity = 0.3000 Volumetric water content = 0.2000

Organic carbon content = 0.00200000

Recharge Rate = 0.46000001 ft/yr

Conc. in recharge water = 0.00000 mg/l, 0.00000 g/cu.ft

Atmospheric concentration = 0.00000 mg/l, 0.00000 g/cu.ft

Water table has a fixed concentration of 0.00000 mg/l, 0.00000 g/cu.ft.
with respect to gas diffusion.

VLEACH
version 2.0, 1993.

Developed by :

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Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

LEHREI SIMULATION I

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Kh = 0.92300 (dimensionless).
Aqueous solubility = 150.00 mg/l, 4.2476 g/cu.ft
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Atmospheric concentration = 0.00000 mg/l, 0.00000 g/cu.ft

Water table has a fixed concentration of 0.00000 mg/l, 0.00000 g/cu.ft.
with respect to gas diffusion.

VLEACH
version 2.0, 1993.

Developed by :

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LNENRI SIMULATION I

Polygon 1
At time = 0.00, total mass in vadose zone = 9.2429 g/sq.ft.
Mass in gas phase = 0.65383 g/sq.ft.
Mass in liquid phase = 1.4168 g/sq.ft.
Mass sorbed = 7.1723 g/sq.ft.

Polygon 1
At time = 10.00, total mass in vadose zone = 7.8773 g/sq.ft.
Mass in gas phase = 0.55723 g/sq.ft.
Mass in liquid phase = 1.2074 g/sq.ft.
Mass sorbed = 6.1127 g/sq.ft.

Since last printout at time = 0.00
Change in Total Mass = -1.3656 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.12413 g/sq.ft.
Diffusion in from atmosphere = -0.88639 g/sq.ft.
Diffusion in from water table = -0.35504 g/sq.ft.
Total inflow at boundaries = -1.3656 g/sq.ft.
Mass discrepancy = -0.13828E-04g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -1.3656 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.12413 g/sq.ft.
Diffusion in from atmosphere = -0.88639 g/sq.ft.
Diffusion in from water table = -0.35504 g/sq.ft.
Total inflow at boundaries = -1.3656 g/sq.ft.
Mass discrepancy = -0.13828E-04g/sq.ft.

Polygon 1
At time = 20.00, total mass in vadose zone = 6.0815 g/sq.ft.
Mass in gas phase = 0.43020 g/sq.ft.
Mass in liquid phase = 0.93217 g/sq.ft.
Mass sorbed = 4.7191 g/sq.ft.

Since last printout at time = 10.00
Change in Total Mass = -1.7958 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.64182 g/sq.ft.
Diffusion in from atmosphere = -0.38769 g/sq.ft.
Diffusion in from water table = -0.76632 g/sq.ft.
Total inflow at boundaries = -1.7958 g/sq.ft.
Mass discrepancy = -0.66757E-05g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -3.1614 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.76595 g/sq.ft.
Diffusion in from atmosphere = -1.2741 g/sq.ft.
Diffusion in from water table = -1.1214 g/sq.ft.
Total inflow at boundaries = -3.1614 g/sq.ft.
Mass discrepancy = -0.20742E-04g/sq.ft.

Polygon 1
At time = 30.00, total mass in vadose zone = 3.9904 g/sq.ft.
Mass in gas phase = 0.28227 g/sq.ft.
Mass in liquid phase = 0.61165 g/sq.ft.
Mass sorbed = 3.0965 g/sq.ft.

Since last printout at time = 20.00
Change in Total Mass = -2.0911 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -1.0379 g/sq.ft.
Diffusion in from atmosphere = -0.18748 g/sq.ft.
Diffusion in from water table = -0.86572 g/sq.ft.
Total inflow at boundaries = -2.0911 g/sq.ft.
Mass discrepancy = -0.50068E-05g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -5.2525 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -1.8038 g/sq.ft.
 Diffusion in from atmosphere = -1.4616 g/sq.ft.
 Diffusion in from water table = -1.9871 g/sq.ft.
 Total inflow at boundaries = -5.2525 g/sq.ft.
 Mass discrepancy = -0.25749E-04g/sq.ft.

Polygon 1

At time = 40.00, total mass in vadose zone = 2.3075 g/sq.ft.
 Mass in gas phase = 0.16323 g/sq.ft.
 Mass in liquid phase = 0.35369 g/sq.ft.
 Mass sorbed = 1.7906 g/sq.ft.

Since last printout at time = 30.00

Change in Total Mass = -1.6829 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.93003 g/sq.ft.
 Diffusion in from atmosphere = -0.94468E-01g/sq.ft.
 Diffusion in from water table = -0.65839 g/sq.ft.
 Total inflow at boundaries = -1.6829 g/sq.ft.
 Mass discrepancy = -0.33379E-05g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -6.9354 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -2.7339 g/sq.ft.
 Diffusion in from atmosphere = -1.5560 g/sq.ft.
 Diffusion in from water table = -2.6455 g/sq.ft.
 Total inflow at boundaries = -6.9354 g/sq.ft.
 Mass discrepancy = -0.28610E-04g/sq.ft.

Polygon 1

At time = 50.00, total mass in vadose zone = 1.2429 g/sq.ft.
 Mass in gas phase = 0.87925E-01g/sq.ft.
 Mass in liquid phase = 0.19052 g/sq.ft.
 Mass sorbed = 0.96451 g/sq.ft.

Since last printout at time = 40.00

Change in Total Mass = -1.0645 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.61363 g/sq.ft.
 Diffusion in from atmosphere = -0.48225E-01g/sq.ft.
 Diffusion in from water table = -0.40268 g/sq.ft.
 Total inflow at boundaries = -1.0645 g/sq.ft.
 Mass discrepancy = -0.19073E-05g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -8.0000 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -3.3475 g/sq.ft.
 Diffusion in from atmosphere = -1.6043 g/sq.ft.
 Diffusion in from water table = -3.0482 g/sq.ft.
 Total inflow at boundaries = -7.9999 g/sq.ft.
 Mass discrepancy = -0.30994E-04g/sq.ft.

Polygon 1

At time = 60.00, total mass in vadose zone = 0.64846 g/sq.ft.
 Mass in gas phase = 0.45871E-01g/sq.ft.
 Mass in liquid phase = 0.99395E-01g/sq.ft.
 Mass sorbed = 0.50319 g/sq.ft.

Since last printout at time = 50.00

Change in Total Mass = -0.59449 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.34846 g/sq.ft.
 Diffusion in from atmosphere = -0.24700E-01g/sq.ft.
 Diffusion in from water table = -0.22134 g/sq.ft.
 Total inflow at boundaries = -0.59449 g/sq.ft.
 Mass discrepancy = -0.83447E-06g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -8.5945 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -3.6960 g/sq.ft.
 Diffusion in from atmosphere = -1.6290 g/sq.ft.
 Diffusion in from water table = -3.2695 g/sq.ft.
 Total inflow at boundaries = -8.5944 g/sq.ft.
 Mass discrepancy = -0.31471E-04g/sq.ft.

Polygon 1

At time = 70.00, total mass in vadose zone = 0.33424 g/sq.ft.
 Mass in gas phase = 0.23644E-01g/sq.ft.
 Mass in liquid phase = 0.51232E-01g/sq.ft.
 Mass sorbed = 0.25936 g/sq.ft.

Since last printout at time = 60.00
 Change in Total Mass = -0.31422 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.18531 g/sq.ft.
 Diffusion in from atmosphere = -0.12660E-01g/sq.ft.
 Diffusion in from water table = -0.11625 g/sq.ft.
 Total inflow at boundaries = -0.31422 g/sq.ft.
 Mass discrepancy = -0.53644E-06g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -8.9087 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -3.8813 g/sq.ft.
 Diffusion in from atmosphere = -1.6416 g/sq.ft.
 Diffusion in from water table = -3.3857 g/sq.ft.
 Total inflow at boundaries = -8.9086 g/sq.ft.
 Mass discrepancy = -0.32425E-04g/sq.ft.

Polygon 1
 At time = 80.00, total mass in vadose zone = 0.17160 g/sq.ft.
 Mass in gas phase = 0.12139E-01g/sq.ft.
 Mass in liquid phase = 0.26302E-01g/sq.ft.
 Mass sorbed = 0.13316 g/sq.ft.

Since last printout at time = 70.00
 Change in Total Mass = -0.16264 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.96110E-01g/sq.ft.
 Diffusion in from atmosphere = -0.64897E-02g/sq.ft.
 Diffusion in from water table = -0.60041E-01g/sq.ft.
 Total inflow at boundaries = -0.16264 g/sq.ft.
 Mass discrepancy = -0.28312E-06g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.0713 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -3.9774 g/sq.ft.
 Diffusion in from atmosphere = -1.6481 g/sq.ft.
 Diffusion in from water table = -3.4458 g/sq.ft.
 Total inflow at boundaries = -9.0713 g/sq.ft.
 Mass discrepancy = -0.32425E-04g/sq.ft.

Polygon 1
 At time = 90.00, total mass in vadose zone = 0.87995E-01g/sq.ft.
 Mass in gas phase = 0.62247E-02g/sq.ft.
 Mass in liquid phase = 0.13488E-01g/sq.ft.
 Mass sorbed = 0.68283E-01g/sq.ft.

Since last printout at time = 80.00
 Change in Total Mass = -0.83602E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.49433E-01g/sq.ft.
 Diffusion in from atmosphere = -0.33267E-02g/sq.ft.
 Diffusion in from water table = -0.30842E-01g/sq.ft.
 Total inflow at boundaries = -0.83602E-01g/sq.ft.
 Mass discrepancy = -0.17136E-06g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.1549 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0268 g/sq.ft.
 Diffusion in from atmosphere = -1.6514 g/sq.ft.
 Diffusion in from water table = -3.4766 g/sq.ft.
 Total inflow at boundaries = -9.1549 g/sq.ft.
 Mass discrepancy = -0.32425E-04g/sq.ft.

Polygon 1
 At time = 100.00, total mass in vadose zone = 0.45110E-01g/sq.ft.
 Mass in gas phase = 0.31910E-02g/sq.ft.
 Mass in liquid phase = 0.69145E-02g/sq.ft.
 Mass sorbed = 0.35005E-01g/sq.ft.

Since last printout at time = 90.00
 Change in Total Mass = -0.42885E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.25362E-01g/sq.ft.
 Diffusion in from atmosphere = -0.17053E-02g/sq.ft.
 Diffusion in from water table = -0.15818E-01g/sq.ft.
 Total inflow at boundaries = -0.42885E-01g/sq.ft.
 Mass discrepancy = -0.74506E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.1978 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0522 g/sq.ft.
 Diffusion in from atmosphere = -1.6531 g/sq.ft.
 Diffusion in from water table = -3.4924 g/sq.ft.

Total inflow at boundaries = -9.1978 g/sq.ft.
Mass discrepancy = -0.33379E-04g/sq.ft.

Polygon 1
At time = 110.00, total mass in vadose zone = 0.23124E-01g/sq.ft.
Mass in gas phase = 0.16358E-02g/sq.ft.
Mass in liquid phase = 0.35444E-02g/sq.ft.
Mass sorbed = 0.17944E-01g/sq.ft.

Since last printout at time = 100.00
Change in Total Mass = -0.21986E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.13003E-01g/sq.ft.
Diffusion in from atmosphere = -0.87412E-03g/sq.ft.
Diffusion in from water table = -0.81093E-02g/sq.ft.
Total inflow at boundaries = -0.21986E-01g/sq.ft.
Mass discrepancy = -0.40978E-07g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -9.2198 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0652 g/sq.ft.
Diffusion in from atmosphere = -1.6540 g/sq.ft.
Diffusion in from water table = -3.5006 g/sq.ft.
Total inflow at boundaries = -9.2198 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
At time = 120.00, total mass in vadose zone = 0.11853E-01g/sq.ft.
Mass in gas phase = 0.83849E-03g/sq.ft.
Mass in liquid phase = 0.18169E-02g/sq.ft.
Mass sorbed = 0.91979E-02g/sq.ft.

Since last printout at time = 110.00
Change in Total Mass = -0.11271E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.66656E-02g/sq.ft.
Diffusion in from atmosphere = -0.44807E-03g/sq.ft.
Diffusion in from water table = -0.41569E-02g/sq.ft.
Total inflow at boundaries = -0.11271E-01g/sq.ft.
Mass discrepancy = -0.18626E-07g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -9.2311 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0718 g/sq.ft.
Diffusion in from atmosphere = -1.6545 g/sq.ft.
Diffusion in from water table = -3.5047 g/sq.ft.
Total inflow at boundaries = -9.2310 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
At time = 130.00, total mass in vadose zone = 0.60760E-02g/sq.ft.
Mass in gas phase = 0.42981E-03g/sq.ft.
Mass in liquid phase = 0.93133E-03g/sq.ft.
Mass sorbed = 0.47149E-02g/sq.ft.

Since last printout at time = 120.00
Change in Total Mass = -0.57773E-02g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.34168E-02g/sq.ft.
Diffusion in from atmosphere = -0.22968E-03g/sq.ft.
Diffusion in from water table = -0.21308E-02g/sq.ft.
Total inflow at boundaries = -0.57773E-02g/sq.ft.
Mass discrepancy = -0.88476E-08g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -9.2368 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0753 g/sq.ft.
Diffusion in from atmosphere = -1.6547 g/sq.ft.
Diffusion in from water table = -3.5068 g/sq.ft.
Total inflow at boundaries = -9.2368 g/sq.ft.
Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1
At time = 140.00, total mass in vadose zone = 0.31145E-02g/sq.ft.
Mass in gas phase = 0.22032E-03g/sq.ft.
Mass in liquid phase = 0.47740E-03g/sq.ft.
Mass sorbed = 0.24168E-02g/sq.ft.

Since last printout at time = 130.00
Change in Total Mass = -0.29614E-02g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.17514E-02g/sq.ft.
Diffusion in from atmosphere = -0.11773E-03g/sq.ft.

Diffusion in from water table = -0.10923E-02g/sq.ft.
Total inflow at boundaries = -0.29614E-02g/sq.ft.
Mass discrepancy = -0.51223E-08g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2398 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0770 g/sq.ft.
Diffusion in from atmosphere = -1.6548 g/sq.ft.
Diffusion in from water table = -3.5079 g/sq.ft.
Total inflow at boundaries = -9.2398 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1

At time = 150.00, total mass in vadose zone = 0.15965E-02g/sq.ft.
Mass in gas phase = 0.11294E-03g/sq.ft.
Mass in liquid phase = 0.24471E-03g/sq.ft.
Mass sorbed = 0.12389E-02g/sq.ft.

Since last printout at time = 140.00

Change in Total Mass = -0.15180E-02g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.89778E-03g/sq.ft.
Diffusion in from atmosphere = -0.60351E-04g/sq.ft.
Diffusion in from water table = -0.55990E-03g/sq.ft.
Total inflow at boundaries = -0.15180E-02g/sq.ft.
Mass discrepancy = -0.23283E-08g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2413 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0779 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5085 g/sq.ft.
Total inflow at boundaries = -9.2413 g/sq.ft.
Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1

At time = 160.00, total mass in vadose zone = 0.81837E-03g/sq.ft.
Mass in gas phase = 0.57891E-04g/sq.ft.
Mass in liquid phase = 0.12544E-03g/sq.ft.
Mass sorbed = 0.63504E-03g/sq.ft.

Since last printout at time = 150.00

Change in Total Mass = -0.77814E-03g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.46020E-03g/sq.ft.
Diffusion in from atmosphere = -0.30936E-04g/sq.ft.
Diffusion in from water table = -0.28700E-03g/sq.ft.
Total inflow at boundaries = -0.77814E-03g/sq.ft.
Mass discrepancy = -0.12806E-08g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2421 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0784 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5088 g/sq.ft.
Total inflow at boundaries = -9.2421 g/sq.ft.
Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1

At time = 170.00, total mass in vadose zone = 0.41950E-03g/sq.ft.
Mass in gas phase = 0.29675E-04g/sq.ft.
Mass in liquid phase = 0.64301E-04g/sq.ft.
Mass sorbed = 0.32552E-03g/sq.ft.

Since last printout at time = 160.00

Change in Total Mass = -0.39888E-03g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.23590E-03g/sq.ft.
Diffusion in from atmosphere = -0.15858E-04g/sq.ft.
Diffusion in from water table = -0.14712E-03g/sq.ft.
Total inflow at boundaries = -0.39888E-03g/sq.ft.
Mass discrepancy = -0.61118E-09g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2425 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0786 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5089 g/sq.ft.
Total inflow at boundaries = -9.2425 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1

At time = 180.00, total mass in vadose zone = 0.21503E-03g/sq.ft.
 Mass in gas phase = 0.15211E-04g/sq.ft.
 Mass in liquid phase = 0.32961E-04g/sq.ft.
 Mass sorbed = 0.16686E-03g/sq.ft.

Since last printout at time = 170.00
 Change in Total Mass = -0.20446E-03g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.12092E-03g/sq.ft.
 Diffusion in from atmosphere = -0.81286E-05g/sq.ft.
 Diffusion in from water table = -0.75412E-04g/sq.ft.
 Total inflow at boundaries = -0.20446E-03g/sq.ft.
 Mass discrepancy = -0.32014E-09g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2427 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0787 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5090 g/sq.ft.
 Total inflow at boundaries = -9.2427 g/sq.ft.
 Mass discrepancy = -0.35286E-04g/sq.ft.

GROUNDWATER IMPACT OF POLYGON 1

Time	Mass per area (g/sq.ft.)	Total Mass (g)
10.00	0.47917	0.47917
20.00	1.4081	1.4081
30.00	1.9036	1.9036
40.00	1.5884	1.5884
50.00	1.0163	1.0163
60.00	0.56979	0.56979
70.00	0.30156	0.30156
80.00	0.15615	0.15615
90.00	0.80275E-01	0.80275E-01
100.00	0.41180E-01	0.41180E-01
110.00	0.21112E-01	0.21112E-01
120.00	0.10822E-01	0.10822E-01
130.00	0.55476E-02	0.55476E-02
140.00	0.28437E-02	0.28437E-02
150.00	0.14577E-02	0.14577E-02
160.00	0.74721E-03	0.74721E-03
170.00	0.38302E-03	0.38302E-03
180.00	0.19633E-03	0.19633E-03

TOTAL GROUNDWATER IMPACT

Time (yr)	Mass (g)	Cumulative Mass (g)
10.00	0.47917	0.47917
20.00	1.4081	1.8873
30.00	1.9036	3.7909
40.00	1.5884	5.3794
50.00	1.0163	6.3957
60.00	0.56979	6.9655
70.00	0.30156	7.2670
80.00	0.15615	7.4232
90.00	0.80275E-01	7.5034
100.00	0.41180E-01	7.5446
110.00	0.21112E-01	7.5657
120.00	0.10822E-01	7.5766
130.00	0.55476E-02	7.5821
140.00	0.28437E-02	7.5850
150.00	0.14577E-02	7.5864
160.00	0.74721E-03	7.5872
170.00	0.38302E-03	7.5875
180.00	0.19633E-03	7.5877

VLEACH
version 2.0, 1993.

Developed by :

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POLYGON I

Time:	0.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.14602	0.15820	0.41902E-05
2	0.14602	0.15820	0.41902E-05
3	0.14602	0.15820	0.41902E-05
4	0.14602	0.15820	0.41902E-05
5	0.14602	0.15820	0.41902E-05
6	0.14602	0.15820	0.41902E-05
7	0.14602	0.15820	0.41902E-05
8	0.14602	0.15820	0.41902E-05
9	0.14602	0.15820	0.41902E-05
10	0.14602	0.15820	0.41902E-05
11	0.14602	0.15820	0.41902E-05
12	0.14602	0.15820	0.41902E-05
13	0.14602	0.15820	0.41902E-05
14	0.14602	0.15820	0.41902E-05
15	0.14602	0.15820	0.41902E-05
16	0.14602	0.15820	0.41902E-05
17	0.14602	0.15820	0.41902E-05
18	0.14602	0.15820	0.41902E-05
19	0.14602	0.15820	0.41902E-05
20	0.14602	0.15820	0.41902E-05
21	0.14602	0.15820	0.41902E-05
22	0.14602	0.15820	0.41902E-05
23	0.14602	0.15820	0.41902E-05
24	0.14602	0.15820	0.41902E-05
25	0.14602	0.15820	0.41902E-05
26	1.5954	1.7285	0.45781E-04
27	1.5954	1.7285	0.45781E-04
28	1.5954	1.7285	0.45781E-04
29	1.5954	1.7285	0.45781E-04
30	1.5954	1.7285	0.45781E-04
31	1.5954	1.7285	0.45781E-04
32	1.5954	1.7285	0.45781E-04
33	1.5954	1.7285	0.45781E-04
34	1.5954	1.7285	0.45781E-04
35	1.5954	1.7285	0.45781E-04
36	1.5954	1.7285	0.45781E-04
37	1.5954	1.7285	0.45781E-04
38	1.5954	1.7285	0.45781E-04
39	1.5954	1.7285	0.45781E-04
40	1.5954	1.7285	0.45781E-04
41	1.5954	1.7285	0.45781E-04
42	1.5954	1.7285	0.45781E-04
43	1.5954	1.7285	0.45781E-04
44	0.62195E-02	0.67383E-02	0.17847E-06
45	0.62195E-02	0.67383E-02	0.17847E-06
46	0.62195E-02	0.67383E-02	0.17847E-06
47	0.62195E-02	0.67383E-02	0.17847E-06
48	0.62195E-02	0.67383E-02	0.17847E-06
49	0.62195E-02	0.67383E-02	0.17847E-06
50	0.62195E-02	0.67383E-02	0.17847E-06
51	0.62195E-02	0.67383E-02	0.17847E-06
52	0.62195E-02	0.67383E-02	0.17847E-06
53	0.62195E-02	0.67383E-02	0.17847E-06
54	0.62195E-02	0.67383E-02	0.17847E-06
55	0.62195E-02	0.67383E-02	0.17847E-06
56	0.62195E-02	0.67383E-02	0.17847E-06
57	0.62195E-02	0.67383E-02	0.17847E-06
58	0.62195E-02	0.67383E-02	0.17847E-06
59	0.62195E-02	0.67383E-02	0.17847E-06
60	0.62195E-02	0.67383E-02	0.17847E-06
61	0.62195E-02	0.67383E-02	0.17847E-06
62	0.62195E-02	0.67383E-02	0.17847E-06
63	0.62195E-02	0.67383E-02	0.17847E-06
64	0.62195E-02	0.67383E-02	0.17847E-06
65	0.62195E-02	0.67383E-02	0.17847E-06
66	0.62195E-02	0.67383E-02	0.17847E-06
67	0.62195E-02	0.67383E-02	0.17847E-06
68	0.62195E-02	0.67383E-02	0.17847E-06
69	0.62195E-02	0.67383E-02	0.17847E-06
70	0.62195E-02	0.67383E-02	0.17847E-06
71	0.62195E-02	0.67383E-02	0.17847E-06
72	0.62195E-02	0.67383E-02	0.17847E-06

73	0.62195E-02	0.67383E-02	0.17847E-06
74	0.62195E-02	0.67383E-02	0.17847E-06
75	0.62195E-02	0.67383E-02	0.17847E-06
76	0.62195E-02	0.67383E-02	0.17847E-06
77	0.62195E-02	0.67383E-02	0.17847E-06
78	0.62195E-02	0.67383E-02	0.17847E-06
79	0.62195E-02	0.67383E-02	0.17847E-06
80	0.62195E-02	0.67383E-02	0.17847E-06
81	0.62195E-02	0.67383E-02	0.17847E-06
82	0.62195E-02	0.67383E-02	0.17847E-06
83	0.62195E-02	0.67383E-02	0.17847E-06
84	0.62195E-02	0.67383E-02	0.17847E-06
85	0.62195E-02	0.67383E-02	0.17847E-06
86	0.62195E-02	0.67383E-02	0.17847E-06
87	0.62195E-02	0.67383E-02	0.17847E-06
88	0.62195E-02	0.67383E-02	0.17847E-06
89	0.62195E-02	0.67383E-02	0.17847E-06
90	0.62195E-02	0.67383E-02	0.17847E-06
91	0.62195E-02	0.67383E-02	0.17847E-06
92	0.62195E-02	0.67383E-02	0.17847E-06
93	0.62195E-02	0.67383E-02	0.17847E-06
94	0.62195E-02	0.67383E-02	0.17847E-06
95	0.62195E-02	0.67383E-02	0.17847E-06
96	0.00000	0.00000	0.00000
97	0.00000	0.00000	0.00000
98	0.00000	0.00000	0.00000
99	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000

POLYGON 1

Time:	10.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.47491E-02	0.51453E-02	0.13628E-06
2	0.86869E-02	0.94116E-02	0.24928E-06
3	0.13060E-01	0.14150E-01	0.37477E-06
4	0.17835E-01	0.19323E-01	0.51179E-06
5	0.22979E-01	0.24896E-01	0.65940E-06
6	0.28459E-01	0.30833E-01	0.81664E-06
7	0.34243E-01	0.37100E-01	0.98262E-06
8	0.40302E-01	0.43665E-01	0.11565E-05
9	0.46609E-01	0.50497E-01	0.13375E-05
10	0.53136E-01	0.57569E-01	0.15248E-05
11	0.59860E-01	0.64854E-01	0.17177E-05
12	0.66761E-01	0.72330E-01	0.19157E-05
13	0.73818E-01	0.79976E-01	0.21182E-05
14	0.81015E-01	0.87773E-01	0.23248E-05
15	0.88337E-01	0.95707E-01	0.25349E-05
16	0.95773E-01	0.10376	0.27482E-05
17	0.10331	0.11193	0.29646E-05
18	0.11095	0.12020	0.31836E-05
19	0.11867	0.12857	0.34053E-05
20	0.12648	0.13703	0.36294E-05
21	0.13437	0.14558	0.38559E-05
22	0.14235	0.15423	0.40848E-05
23	0.15041	0.16296	0.43162E-05
24	0.15856	0.17179	0.45501E-05
25	0.16681	0.18072	0.47866E-05
26	0.20084	0.21759	0.57631E-05
27	0.22408	0.24277	0.64301E-05
28	0.24898	0.26976	0.71447E-05
29	0.27529	0.29826	0.78996E-05
30	0.30274	0.32800	0.86873E-05
31	0.33108	0.35870	0.95004E-05
32	0.36005	0.39009	0.10332E-04
33	0.38942	0.42190	0.11174E-04
34	0.41895	0.45390	0.12022E-04
35	0.44844	0.48585	0.12868E-04
36	0.47768	0.51753	0.13707E-04
37	0.50649	0.54875	0.14534E-04
38	0.53470	0.57931	0.15344E-04
39	0.56216	0.60906	0.16131E-04
40	0.58872	0.63783	0.16894E-04
41	0.61426	0.66551	0.17627E-04
42	0.63868	0.69196	0.18327E-04
43	0.66186	0.71708	0.18992E-04
44	0.65557	0.71026	0.18812E-04
45	0.65983	0.71488	0.18934E-04
46	0.66094	0.71608	0.18966E-04
47	0.65914	0.71413	0.18914E-04
48	0.65468	0.70930	0.18786E-04
49	0.64781	0.70185	0.18589E-04
50	0.63879	0.69208	0.18330E-04
51	0.62787	0.68025	0.18017E-04
52	0.61529	0.66662	0.17656E-04
53	0.60128	0.65144	0.17254E-04
54	0.58606	0.63495	0.16817E-04
55	0.56984	0.61738	0.16352E-04
56	0.55282	0.59894	0.15863E-04
57	0.53517	0.57982	0.15357E-04
58	0.51706	0.56019	0.14837E-04

59	0.49863	0.54023	0.14308E-04
60	0.48002	0.52007	0.13774E-04
61	0.46135	0.49984	0.13239E-04
62	0.44273	0.47966	0.12704E-04
63	0.42424	0.45963	0.12174E-04
64	0.40598	0.43984	0.11650E-04
65	0.38800	0.42037	0.11134E-04
66	0.37037	0.40127	0.10628E-04
67	0.35315	0.38261	0.10134E-04
68	0.33636	0.36442	0.96521E-05
69	0.32005	0.34675	0.91839E-05
70	0.30423	0.32961	0.87301E-05
71	0.28893	0.31304	0.82911E-05
72	0.27416	0.29704	0.78672E-05
73	0.25993	0.28161	0.74588E-05
74	0.24623	0.26678	0.70658E-05
75	0.23308	0.25252	0.66883E-05
76	0.22045	0.23885	0.63260E-05
77	0.20836	0.22574	0.59789E-05
78	0.19677	0.21319	0.56465E-05
79	0.18570	0.20119	0.53286E-05
80	0.17511	0.18971	0.50247E-05
81	0.16499	0.17875	0.47345E-05
82	0.15533	0.16829	0.44573E-05
83	0.14611	0.15830	0.41927E-05
84	0.13731	0.14877	0.39402E-05
85	0.12891	0.13967	0.36992E-05
86	0.12090	0.13099	0.34693E-05
87	0.11325	0.12270	0.32498E-05
88	0.10595	0.11478	0.30402E-05
89	0.98967E-01	0.10722	0.28399E-05
90	0.92296E-01	0.99996E-01	0.26485E-05
91	0.85914E-01	0.93081E-01	0.24653E-05
92	0.79803E-01	0.86460E-01	0.22900E-05
93	0.73944E-01	0.80113E-01	0.21219E-05
94	0.68321E-01	0.74021E-01	0.19605E-05
95	0.62917E-01	0.68165E-01	0.18054E-05
96	0.57604E-01	0.62410E-01	0.16530E-05
97	0.52524E-01	0.56906E-01	0.15072E-05
98	0.47608E-01	0.51580E-01	0.13661E-05
99	0.42842E-01	0.46416E-01	0.12294E-05
100	0.38212E-01	0.41400E-01	0.10965E-05

POLYGON I

Time: 20.000

Cell	Cgas(g/cu.ft)	Clq(g/cu.ft)	Csol(g/g)
1	0.10666E-02	0.11556E-02	0.30608E-07
2	0.22938E-02	0.24851E-02	0.65821E-07
3	0.36971E-02	0.40056E-02	0.10609E-06
4	0.52810E-02	0.57215E-02	0.15154E-06
5	0.70491E-02	0.76371E-02	0.20228E-06
6	0.90048E-02	0.97560E-02	0.25840E-06
7	0.11151E-01	0.12081E-01	0.31998E-06
8	0.13490E-01	0.14616E-01	0.38711E-06
9	0.16024E-01	0.17361E-01	0.45982E-06
10	0.18754E-01	0.20319E-01	0.53816E-06
11	0.21681E-01	0.23489E-01	0.62214E-06
12	0.24804E-01	0.26873E-01	0.71177E-06
13	0.28124E-01	0.30471E-01	0.80704E-06
14	0.31640E-01	0.34280E-01	0.90793E-06
15	0.35351E-01	0.38300E-01	0.10144E-05
16	0.39254E-01	0.42529E-01	0.11264E-05
17	0.43348E-01	0.46964E-01	0.12439E-05
18	0.47630E-01	0.51604E-01	0.13668E-05
19	0.52098E-01	0.56444E-01	0.14950E-05
20	0.56749E-01	0.61483E-01	0.16284E-05
21	0.61580E-01	0.66717E-01	0.17671E-05
22	0.66587E-01	0.72142E-01	0.19107E-05
23	0.71768E-01	0.77755E-01	0.20594E-05
24	0.77118E-01	0.83552E-01	0.22129E-05
25	0.82635E-01	0.89529E-01	0.23713E-05
26	0.88771E-01	0.96177E-01	0.25473E-05
27	0.95136E-01	0.10307	0.27300E-05
28	0.10186	0.11036	0.29230E-05
29	0.10897	0.11807	0.31271E-05
30	0.11648	0.12620	0.33425E-05
31	0.12440	0.13478	0.35697E-05
32	0.13273	0.14380	0.38088E-05
33	0.14148	0.15329	0.40599E-05
34	0.15065	0.16322	0.43229E-05
35	0.16022	0.17359	0.45976E-05
36	0.17019	0.18439	0.48837E-05
37	0.18054	0.19560	0.51805E-05
38	0.19124	0.20719	0.54877E-05
39	0.20227	0.21914	0.58042E-05
40	0.21360	0.23142	0.61294E-05
41	0.22520	0.24399	0.64622E-05
42	0.23703	0.25680	0.68016E-05
43	0.24904	0.26982	0.71463E-05
44	0.26070	0.28245	0.74808E-05

45	0.27238	0.29510	0.78160E-05
46	0.28388	0.30757	0.81461E-05
47	0.29514	0.31976	0.84691E-05
48	0.30607	0.33161	0.87829E-05
49	0.31662	0.34303	0.90855E-05
50	0.32671	0.35397	0.93752E-05
51	0.33630	0.36436	0.96503E-05
52	0.34533	0.37413	0.99093E-05
53	0.35374	0.38325	0.10151E-04
54	0.36151	0.39167	0.10374E-04
55	0.36860	0.39935	0.10577E-04
56	0.37497	0.40625	0.10760E-04
57	0.38061	0.41236	0.10922E-04
58	0.38550	0.41766	0.11062E-04
59	0.38963	0.42213	0.11180E-04
60	0.39299	0.42577	0.11277E-04
61	0.39558	0.42858	0.11351E-04
62	0.39741	0.43056	0.11404E-04
63	0.39848	0.43172	0.11435E-04
64	0.39882	0.43209	0.11444E-04
65	0.39842	0.43166	0.11433E-04
66	0.39733	0.43047	0.11401E-04
67	0.39554	0.42854	0.11350E-04
68	0.39311	0.42590	0.11280E-04
69	0.39004	0.42257	0.11192E-04
70	0.38636	0.41859	0.11087E-04
71	0.38212	0.41399	0.10965E-04
72	0.37733	0.40881	0.10828E-04
73	0.37203	0.40307	0.10676E-04
74	0.36626	0.39681	0.10510E-04
75	0.36003	0.39007	0.10331E-04
76	0.35340	0.38288	0.10141E-04
77	0.34638	0.37527	0.99394E-05
78	0.33900	0.36728	0.97278E-05
79	0.33131	0.35895	0.95070E-05
80	0.32332	0.35029	0.92778E-05
81	0.31507	0.34135	0.90409E-05
82	0.30657	0.33215	0.87973E-05
83	0.29787	0.32272	0.85475E-05
84	0.28898	0.31308	0.82923E-05
85	0.27992	0.30327	0.80323E-05
86	0.27071	0.29330	0.77682E-05
87	0.26138	0.28319	0.75005E-05
88	0.25195	0.27297	0.72298E-05
89	0.24242	0.26265	0.69564E-05
90	0.23282	0.25225	0.66809E-05
91	0.22316	0.24178	0.64037E-05
92	0.21345	0.23125	0.61250E-05
93	0.20370	0.22069	0.58451E-05
94	0.19391	0.21009	0.55644E-05
95	0.18411	0.19947	0.52830E-05
96	0.17428	0.18882	0.50011E-05
97	0.16445	0.17816	0.47188E-05
98	0.15460	0.16750	0.44363E-05
99	0.14474	0.15682	0.41535E-05
100	0.13488	0.14613	0.38704E-05

POLYGON 1

Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.50224E-03	0.54414E-03	0.14412E-07
2	0.10796E-02	0.11697E-02	0.30980E-07
3	0.17336E-02	0.18782E-02	0.49747E-07
4	0.24658E-02	0.26715E-02	0.70756E-07
5	0.32777E-02	0.35511E-02	0.94054E-07
6	0.41711E-02	0.45191E-02	0.11969E-06
7	0.51478E-02	0.55773E-02	0.14772E-06
8	0.62097E-02	0.67278E-02	0.17819E-06
9	0.73588E-02	0.79727E-02	0.21116E-06
10	0.85969E-02	0.93140E-02	0.24669E-06
11	0.99260E-02	0.10754E-01	0.28483E-06
12	0.11348E-01	0.12295E-01	0.32564E-06
13	0.12865E-01	0.13938E-01	0.36917E-06
14	0.14479E-01	0.15687E-01	0.41548E-06
15	0.16192E-01	0.17542E-01	0.46463E-06
16	0.18005E-01	0.19507E-01	0.51665E-06
17	0.19920E-01	0.21582E-01	0.57161E-06
18	0.21939E-01	0.23769E-01	0.62954E-06
19	0.24063E-01	0.26070E-01	0.69049E-06
20	0.26293E-01	0.28487E-01	0.75449E-06
21	0.28631E-01	0.31020E-01	0.82159E-06
22	0.31078E-01	0.33671E-01	0.89180E-06
23	0.33635E-01	0.36441E-01	0.96516E-06
24	0.36302E-01	0.39330E-01	0.10417E-05
25	0.39080E-01	0.42340E-01	0.11214E-05
26	0.41977E-01	0.45479E-01	0.12045E-05
27	0.44992E-01	0.48745E-01	0.12911E-05
28	0.48128E-01	0.52143E-01	0.13810E-05
29	0.51388E-01	0.55675E-01	0.14746E-05
30	0.54775E-01	0.59345E-01	0.15718E-05

31	0.58292E-01	0.63155E-01	0.16727E-05
32	0.61943E-01	0.67110E-01	0.17775E-05
33	0.65729E-01	0.71212E-01	0.18861E-05
34	0.69654E-01	0.75465E-01	0.19987E-05
35	0.73720E-01	0.79870E-01	0.21154E-05
36	0.77930E-01	0.84431E-01	0.22362E-05
37	0.82284E-01	0.89149E-01	0.23612E-05
38	0.86785E-01	0.94025E-01	0.24903E-05
39	0.91432E-01	0.99060E-01	0.26237E-05
40	0.96225E-01	0.10425	0.27612E-05
41	0.10116	0.10960	0.29029E-05
42	0.10625	0.11511	0.30488E-05
43	0.11147	0.12077	0.31987E-05
44	0.11682	0.12657	0.33522E-05
45	0.12230	0.13250	0.35093E-05
46	0.12789	0.13856	0.36698E-05
47	0.13358	0.14473	0.38332E-05
48	0.13937	0.15100	0.39994E-05
49	0.14524	0.15736	0.41678E-05
50	0.15118	0.16379	0.43381E-05
51	0.15716	0.17027	0.45098E-05
52	0.16318	0.17679	0.46824E-05
53	0.16921	0.18332	0.48555E-05
54	0.17523	0.18985	0.50284E-05
55	0.18123	0.19635	0.52006E-05
56	0.18719	0.20281	0.53715E-05
57	0.19308	0.20919	0.55406E-05
58	0.19889	0.21548	0.57071E-05
59	0.20458	0.22165	0.58705E-05
60	0.21015	0.22768	0.60303E-05
61	0.21556	0.23355	0.61857E-05
62	0.22081	0.23923	0.63362E-05
63	0.22586	0.24470	0.64812E-05
64	0.23070	0.24995	0.66201E-05
65	0.23531	0.25494	0.67524E-05
66	0.23967	0.25967	0.68775E-05
67	0.24377	0.26410	0.69949E-05
68	0.24757	0.26823	0.71043E-05
69	0.25108	0.27203	0.72050E-05
70	0.25428	0.27549	0.72967E-05
71	0.25715	0.27860	0.73790E-05
72	0.25968	0.28134	0.74515E-05
73	0.26185	0.28370	0.75140E-05
74	0.26367	0.28567	0.75662E-05
75	0.26512	0.28723	0.76077E-05
76	0.26619	0.28839	0.76383E-05
77	0.26687	0.28914	0.76580E-05
78	0.26717	0.28946	0.76665E-05
79	0.26707	0.28935	0.76637E-05
80	0.26658	0.28882	0.76495E-05
81	0.26568	0.28785	0.76239E-05
82	0.26439	0.28645	0.75868E-05
83	0.26270	0.28461	0.75382E-05
84	0.26061	0.28235	0.74782E-05
85	0.25811	0.27965	0.74067E-05
86	0.25523	0.27652	0.73238E-05
87	0.25194	0.27296	0.72297E-05
88	0.24827	0.26898	0.71243E-05
89	0.24421	0.26459	0.70078E-05
90	0.23977	0.25977	0.68803E-05
91	0.23495	0.25455	0.67419E-05
92	0.22975	0.24891	0.65927E-05
93	0.22418	0.24288	0.64330E-05
94	0.21825	0.23645	0.62627E-05
95	0.21195	0.22964	0.60821E-05
96	0.20530	0.22243	0.58913E-05
97	0.19830	0.21485	0.56904E-05
98	0.19096	0.20689	0.54796E-05
99	0.18327	0.19855	0.52589E-05
100	0.17523	0.18985	0.50284E-05

POLYGON I

Time:	40.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.25386E-03	0.27504E-03	0.72846E-08
2	0.54517E-03	0.59065E-03	0.15644E-07
3	0.87445E-03	0.94740E-03	0.25093E-07
4	0.12423E-02	0.13459E-02	0.35648E-07
5	0.16494E-02	0.17870E-02	0.47329E-07
6	0.20963E-02	0.22712E-02	0.60154E-07
7	0.25839E-02	0.27994E-02	0.74146E-07
8	0.31129E-02	0.33726E-02	0.89325E-07
9	0.36841E-02	0.39914E-02	0.10572E-06
10	0.42984E-02	0.46570E-02	0.12334E-06
11	0.49566E-02	0.53701E-02	0.14223E-06
12	0.56598E-02	0.61320E-02	0.16241E-06
13	0.64088E-02	0.69435E-02	0.18390E-06
14	0.72047E-02	0.78057E-02	0.20674E-06
15	0.80483E-02	0.87197E-02	0.23095E-06
16	0.89408E-02	0.96866E-02	0.25656E-06

17	0.98830E-02	0.10707E-01	0.28360E-06
18	0.10876E-01	0.11783E-01	0.31209E-06
19	0.11921E-01	0.12915E-01	0.34207E-06
20	0.13018E-01	0.14105E-01	0.37357E-06
21	0.14170E-01	0.15352E-01	0.40661E-06
22	0.15376E-01	0.16659E-01	0.44122E-06
23	0.16638E-01	0.18026E-01	0.47743E-06
24	0.17956E-01	0.19454E-01	0.51525E-06
25	0.19332E-01	0.20944E-01	0.55473E-06
26	0.20766E-01	0.22498E-01	0.59588E-06
27	0.22259E-01	0.24116E-01	0.63872E-06
28	0.23812E-01	0.25798E-01	0.68329E-06
29	0.25425E-01	0.27547E-01	0.72959E-06
30	0.27101E-01	0.29362E-01	0.77767E-06
31	0.28838E-01	0.31244E-01	0.82753E-06
32	0.30639E-01	0.33195E-01	0.87919E-06
33	0.32503E-01	0.35214E-01	0.93268E-06
34	0.34431E-01	0.37303E-01	0.98801E-06
35	0.36424E-01	0.39463E-01	0.10452E-05
36	0.38483E-01	0.41693E-01	0.11043E-05
37	0.40607E-01	0.43994E-01	0.11652E-05
38	0.42797E-01	0.46367E-01	0.12281E-05
39	0.45054E-01	0.48812E-01	0.12928E-05
40	0.47377E-01	0.51329E-01	0.13595E-05
41	0.49767E-01	0.53918E-01	0.14281E-05
42	0.52223E-01	0.56579E-01	0.14986E-05
43	0.54745E-01	0.59312E-01	0.15709E-05
44	0.57333E-01	0.62116E-01	0.16452E-05
45	0.59986E-01	0.64991E-01	0.17213E-05
46	0.62703E-01	0.67934E-01	0.17993E-05
47	0.65483E-01	0.70946E-01	0.18791E-05
48	0.68324E-01	0.74023E-01	0.19606E-05
49	0.71223E-01	0.77165E-01	0.20438E-05
50	0.74180E-01	0.80369E-01	0.21286E-05
51	0.77191E-01	0.83631E-01	0.22150E-05
52	0.80253E-01	0.86948E-01	0.23029E-05
53	0.83363E-01	0.90318E-01	0.23921E-05
54	0.86517E-01	0.93734E-01	0.24826E-05
55	0.89710E-01	0.97194E-01	0.25743E-05
56	0.92938E-01	0.10069	0.26669E-05
57	0.96195E-01	0.10422	0.27604E-05
58	0.99476E-01	0.10777	0.28545E-05
59	0.10277	0.11135	0.29492E-05
60	0.10608	0.11493	0.30441E-05
61	0.10940	0.11852	0.31392E-05
62	0.11271	0.12211	0.32341E-05
63	0.11600	0.12568	0.33288E-05
64	0.11928	0.12923	0.34228E-05
65	0.12253	0.13275	0.35161E-05
66	0.12574	0.13623	0.36082E-05
67	0.12890	0.13966	0.36990E-05
68	0.13201	0.14302	0.37881E-05
69	0.13505	0.14632	0.38754E-05
70	0.13801	0.14953	0.39604E-05
71	0.14089	0.15264	0.40429E-05
72	0.14367	0.15565	0.41226E-05
73	0.14634	0.15854	0.41992E-05
74	0.14888	0.16130	0.42723E-05
75	0.15130	0.16392	0.43417E-05
76	0.15358	0.16639	0.44070E-05
77	0.15570	0.16869	0.44679E-05
78	0.15766	0.17082	0.45242E-05
79	0.15945	0.17275	0.45755E-05
80	0.16105	0.17449	0.46214E-05
81	0.16246	0.17601	0.46618E-05
82	0.16366	0.17731	0.46962E-05
83	0.16464	0.17838	0.47245E-05
84	0.16540	0.17920	0.47462E-05
85	0.16592	0.17976	0.47612E-05
86	0.16620	0.18006	0.47691E-05
87	0.16622	0.18008	0.47697E-05
88	0.16597	0.17982	0.47627E-05
89	0.16546	0.17926	0.47478E-05
90	0.16466	0.17839	0.47249E-05
91	0.16357	0.17721	0.46936E-05
92	0.16218	0.17571	0.46538E-05
93	0.16049	0.17387	0.46052E-05
94	0.15848	0.17170	0.45476E-05
95	0.15615	0.16918	0.44808E-05
96	0.15349	0.16630	0.44046E-05
97	0.15050	0.16306	0.43188E-05
98	0.14717	0.15945	0.42231E-05
99	0.14349	0.15546	0.41175E-05
100	0.13946	0.15109	0.40018E-05

POLYGON I

Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12974E-03	0.14057E-03	0.37230E-08
2	0.27857E-03	0.30181E-03	0.79936E-08

3	0.44673E-03	0.48400E-03	0.12819E-07
4	0.63451E-03	0.68744E-03	0.18207E-07
5	0.84220E-03	0.91246E-03	0.24167E-07
6	0.10701E-02	0.11594E-02	0.30708E-07
7	0.13187E-02	0.14287E-02	0.37840E-07
8	0.15882E-02	0.17207E-02	0.45574E-07
9	0.18791E-02	0.20358E-02	0.53921E-07
10	0.21917E-02	0.23745E-02	0.62892E-07
11	0.25265E-02	0.27373E-02	0.72500E-07
12	0.28840E-02	0.31244E-02	0.82757E-07
13	0.32645E-02	0.35368E-02	0.93676E-07
14	0.36685E-02	0.39746E-02	0.10527E-06
15	0.40966E-02	0.44384E-02	0.11755E-06
16	0.45492E-02	0.49287E-02	0.13054E-06
17	0.50267E-02	0.54461E-02	0.14424E-06
18	0.55298E-02	0.59911E-02	0.15868E-06
19	0.60588E-02	0.65642E-02	0.17386E-06
20	0.66142E-02	0.71660E-02	0.18980E-06
21	0.71967E-02	0.77970E-02	0.20651E-06
22	0.78066E-02	0.84578E-02	0.22401E-06
23	0.84444E-02	0.91489E-02	0.24232E-06
24	0.91107E-02	0.98707E-02	0.26144E-06
25	0.98059E-02	0.10624E-01	0.28138E-06
26	0.10530E-01	0.11409E-01	0.30218E-06
27	0.11285E-01	0.12226E-01	0.32382E-06
28	0.12069E-01	0.13076E-01	0.34634E-06
29	0.12885E-01	0.13960E-01	0.36973E-06
30	0.13731E-01	0.14877E-01	0.39402E-06
31	0.14609E-01	0.15828E-01	0.41921E-06
32	0.15519E-01	0.16813E-01	0.44531E-06
33	0.16460E-01	0.17833E-01	0.47233E-06
34	0.17434E-01	0.18889E-01	0.50028E-06
35	0.18441E-01	0.19979E-01	0.52917E-06
36	0.19481E-01	0.21106E-01	0.55900E-06
37	0.20553E-01	0.22268E-01	0.58978E-06
38	0.21659E-01	0.23466E-01	0.62152E-06
39	0.22798E-01	0.24700E-01	0.65421E-06
40	0.23971E-01	0.25971E-01	0.68785E-06
41	0.25177E-01	0.27277E-01	0.72245E-06
42	0.26416E-01	0.28620E-01	0.75801E-06
43	0.27688E-01	0.29998E-01	0.79452E-06
44	0.28994E-01	0.31412E-01	0.83198E-06
45	0.30332E-01	0.32862E-01	0.87038E-06
46	0.31702E-01	0.34347E-01	0.90971E-06
47	0.33105E-01	0.35866E-01	0.94995E-06
48	0.34539E-01	0.37420E-01	0.99111E-06
49	0.36004E-01	0.39007E-01	0.10331E-05
50	0.37499E-01	0.40627E-01	0.10761E-05
51	0.39024E-01	0.42279E-01	0.11198E-05
52	0.40577E-01	0.43962E-01	0.11644E-05
53	0.42158E-01	0.45675E-01	0.12097E-05
54	0.43765E-01	0.47416E-01	0.12558E-05
55	0.45397E-01	0.49184E-01	0.13027E-05
56	0.47052E-01	0.50978E-01	0.13502E-05
57	0.48730E-01	0.52795E-01	0.13983E-05
58	0.50427E-01	0.54634E-01	0.14470E-05
59	0.52143E-01	0.56493E-01	0.14963E-05
60	0.53875E-01	0.58370E-01	0.15460E-05
61	0.55621E-01	0.60261E-01	0.15961E-05
62	0.57378E-01	0.62164E-01	0.16465E-05
63	0.59143E-01	0.64077E-01	0.16971E-05
64	0.60914E-01	0.65996E-01	0.17480E-05
65	0.62688E-01	0.67917E-01	0.17988E-05
66	0.64460E-01	0.69838E-01	0.18497E-05
67	0.66229E-01	0.71754E-01	0.19005E-05
68	0.67989E-01	0.73661E-01	0.19510E-05
69	0.69737E-01	0.75555E-01	0.20011E-05
70	0.71469E-01	0.77431E-01	0.20508E-05
71	0.73180E-01	0.79285E-01	0.20999E-05
72	0.74865E-01	0.81110E-01	0.21483E-05
73	0.76520E-01	0.82904E-01	0.21958E-05
74	0.78139E-01	0.84658E-01	0.22422E-05
75	0.79718E-01	0.86368E-01	0.22875E-05
76	0.81250E-01	0.88028E-01	0.23315E-05
77	0.82730E-01	0.89632E-01	0.23740E-05
78	0.84152E-01	0.91173E-01	0.24148E-05
79	0.85510E-01	0.92644E-01	0.24537E-05
80	0.86797E-01	0.94038E-01	0.24907E-05
81	0.88007E-01	0.95349E-01	0.25254E-05
82	0.89133E-01	0.96569E-01	0.25577E-05
83	0.90169E-01	0.97691E-01	0.25874E-05
84	0.91106E-01	0.98707E-01	0.26143E-05
85	0.91939E-01	0.99609E-01	0.26382E-05
86	0.92660E-01	0.10039	0.26589E-05
87	0.93260E-01	0.10104	0.26761E-05
88	0.93734E-01	0.10155	0.26897E-05
89	0.94073E-01	0.10192	0.26995E-05
90	0.94269E-01	0.10213	0.27051E-05
91	0.94314E-01	0.10218	0.27064E-05
92	0.94202E-01	0.10206	0.27032E-05

93	0.93923E-01	0.10176	0.26951E-05
94	0.93469E-01	0.10127	0.26821E-05
95	0.92833E-01	0.10058	0.26639E-05
96	0.92006E-01	0.99682E-01	0.26402E-05
97	0.90981E-01	0.98571E-01	0.26107E-05
98	0.89749E-01	0.97236E-01	0.25754E-05
99	0.88301E-01	0.95668E-01	0.25338E-05
100	0.86631E-01	0.93858E-01	0.24859E-05

POLYGON 1

Time:	60.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.66471E-04	0.72016E-04	0.19074E-08
2	0.14271E-03	0.15462E-03	0.40952E-08
3	0.22885E-03	0.24794E-03	0.65670E-08
4	0.32503E-03	0.35215E-03	0.93269E-08
5	0.43140E-03	0.46739E-03	0.12379E-07
6	0.54813E-03	0.59386E-03	0.15729E-07
7	0.67540E-03	0.73174E-03	0.19381E-07
8	0.81338E-03	0.88124E-03	0.23340E-07
9	0.96229E-03	0.10426E-02	0.27613E-07
10	0.11223E-02	0.12159E-02	0.32205E-07
11	0.12937E-02	0.14016E-02	0.37122E-07
12	0.14766E-02	0.15998E-02	0.42371E-07
13	0.16713E-02	0.18107E-02	0.47958E-07
14	0.18780E-02	0.20346E-02	0.53889E-07
15	0.20969E-02	0.22718E-02	0.60172E-07
16	0.23284E-02	0.25226E-02	0.66813E-07
17	0.25725E-02	0.27871E-02	0.73819E-07
18	0.28297E-02	0.30657E-02	0.81198E-07
19	0.31000E-02	0.33587E-02	0.88957E-07
20	0.33839E-02	0.36662E-02	0.97102E-07
21	0.36815E-02	0.39886E-02	0.10564E-06
22	0.39930E-02	0.43261E-02	0.11458E-06
23	0.43188E-02	0.46791E-02	0.12393E-06
24	0.46590E-02	0.50477E-02	0.13369E-06
25	0.50140E-02	0.54322E-02	0.14388E-06
26	0.53838E-02	0.58330E-02	0.15449E-06
27	0.57689E-02	0.62501E-02	0.16554E-06
28	0.61693E-02	0.66839E-02	0.17703E-06
29	0.65853E-02	0.71347E-02	0.18897E-06
30	0.70171E-02	0.76025E-02	0.20136E-06
31	0.74649E-02	0.80877E-02	0.21421E-06
32	0.79289E-02	0.85904E-02	0.22752E-06
33	0.84092E-02	0.91108E-02	0.24131E-06
34	0.89061E-02	0.96490E-02	0.25556E-06
35	0.94195E-02	0.10205E-01	0.27030E-06
36	0.99497E-02	0.10780E-01	0.28551E-06
37	0.10497E-01	0.11372E-01	0.30121E-06
38	0.11061E-01	0.11983E-01	0.31739E-06
39	0.11642E-01	0.12613E-01	0.33406E-06
40	0.12240E-01	0.13261E-01	0.35122E-06
41	0.12855E-01	0.13927E-01	0.36887E-06
42	0.13487E-01	0.14612E-01	0.38700E-06
43	0.14135E-01	0.15315E-01	0.40562E-06
44	0.14801E-01	0.16036E-01	0.42473E-06
45	0.15484E-01	0.16775E-01	0.44431E-06
46	0.16183E-01	0.17533E-01	0.46437E-06
47	0.16898E-01	0.18308E-01	0.48491E-06
48	0.17630E-01	0.19101E-01	0.50590E-06
49	0.18378E-01	0.19911E-01	0.52736E-06
50	0.19141E-01	0.20738E-01	0.54926E-06
51	0.19919E-01	0.21581E-01	0.57160E-06
52	0.20713E-01	0.22441E-01	0.59436E-06
53	0.21520E-01	0.23316E-01	0.61754E-06
54	0.22342E-01	0.24206E-01	0.64111E-06
55	0.23177E-01	0.25110E-01	0.66506E-06
56	0.24024E-01	0.26028E-01	0.68938E-06
57	0.24883E-01	0.26959E-01	0.71404E-06
58	0.25754E-01	0.27902E-01	0.73902E-06
59	0.26635E-01	0.28857E-01	0.76430E-06
60	0.27525E-01	0.29821E-01	0.78984E-06
61	0.28424E-01	0.30795E-01	0.81563E-06
62	0.29330E-01	0.31777E-01	0.84163E-06
63	0.30242E-01	0.32765E-01	0.86781E-06
64	0.31159E-01	0.33759E-01	0.89412E-06
65	0.32080E-01	0.34756E-01	0.92055E-06
66	0.33003E-01	0.35756E-01	0.94703E-06
67	0.33927E-01	0.36757E-01	0.97354E-06
68	0.34849E-01	0.37757E-01	0.10000E-05
69	0.35770E-01	0.38754E-01	0.10264E-05
70	0.36685E-01	0.39745E-01	0.10527E-05
71	0.37594E-01	0.40730E-01	0.10788E-05
72	0.38495E-01	0.41706E-01	0.11046E-05
73	0.39384E-01	0.42670E-01	0.11302E-05
74	0.40261E-01	0.43620E-01	0.11553E-05
75	0.41123E-01	0.44553E-01	0.11800E-05
76	0.41966E-01	0.45467E-01	0.12042E-05
77	0.42789E-01	0.46358E-01	0.12278E-05
78	0.43588E-01	0.47224E-01	0.12508E-05

79	0.44361E-01	0.48061E-01	0.12729E-05
80	0.45104E-01	0.48867E-01	0.12943E-05
81	0.45814E-01	0.49636E-01	0.13147E-05
82	0.46489E-01	0.50367E-01	0.13340E-05
83	0.47124E-01	0.51055E-01	0.13522E-05
84	0.47716E-01	0.51697E-01	0.13692E-05
85	0.48261E-01	0.52287E-01	0.13849E-05
86	0.48755E-01	0.52823E-01	0.13991E-05
87	0.49195E-01	0.53299E-01	0.14117E-05
88	0.49576E-01	0.53712E-01	0.14226E-05
89	0.49893E-01	0.54056E-01	0.14317E-05
90	0.50143E-01	0.54326E-01	0.14389E-05
91	0.50321E-01	0.54519E-01	0.14440E-05
92	0.50422E-01	0.54629E-01	0.14469E-05
93	0.50442E-01	0.54650E-01	0.14474E-05
94	0.50375E-01	0.54577E-01	0.14455E-05
95	0.50216E-01	0.54405E-01	0.14410E-05
96	0.49961E-01	0.54129E-01	0.14337E-05
97	0.49604E-01	0.53742E-01	0.14234E-05
98	0.49140E-01	0.53239E-01	0.14101E-05
99	0.48563E-01	0.52614E-01	0.13935E-05
100	0.47867E-01	0.51861E-01	0.13736E-05

POLYGON I

Time:	70.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.34071E-04	0.36913E-04	0.97768E-09
2	0.73149E-04	0.79252E-04	0.20991E-08
3	0.11730E-03	0.12709E-03	0.33660E-08
4	0.16660E-03	0.18049E-03	0.47806E-08
5	0.22112E-03	0.23956E-03	0.63450E-08
6	0.28094E-03	0.30438E-03	0.80618E-08
7	0.34617E-03	0.37505E-03	0.99335E-08
8	0.41689E-03	0.45167E-03	0.11963E-07
9	0.49320E-03	0.53434E-03	0.14153E-07
10	0.57521E-03	0.62319E-03	0.16506E-07
11	0.66302E-03	0.71833E-03	0.19026E-07
12	0.75675E-03	0.81989E-03	0.21715E-07
13	0.85652E-03	0.92797E-03	0.24578E-07
14	0.96244E-03	0.10427E-02	0.27617E-07
15	0.10746E-02	0.11643E-02	0.30837E-07
16	0.11932E-02	0.12927E-02	0.34239E-07
17	0.13183E-02	0.14283E-02	0.37829E-07
18	0.14500E-02	0.15710E-02	0.41610E-07
19	0.15886E-02	0.17211E-02	0.45584E-07
20	0.17340E-02	0.18786E-02	0.49757E-07
21	0.18864E-02	0.20438E-02	0.54131E-07
22	0.20460E-02	0.22167E-02	0.58710E-07
23	0.22128E-02	0.23975E-02	0.63499E-07
24	0.23871E-02	0.25862E-02	0.68499E-07
25	0.25689E-02	0.27832E-02	0.73715E-07
26	0.27583E-02	0.29884E-02	0.79150E-07
27	0.29555E-02	0.32020E-02	0.84808E-07
28	0.31605E-02	0.34241E-02	0.90692E-07
29	0.33735E-02	0.36549E-02	0.96804E-07
30	0.35946E-02	0.38945E-02	0.10315E-06
31	0.38238E-02	0.41428E-02	0.10973E-06
32	0.40614E-02	0.44002E-02	0.11654E-06
33	0.43073E-02	0.46666E-02	0.12360E-06
34	0.45616E-02	0.49421E-02	0.13090E-06
35	0.48244E-02	0.52268E-02	0.13844E-06
36	0.50957E-02	0.55209E-02	0.14622E-06
37	0.53757E-02	0.58242E-02	0.15426E-06
38	0.56644E-02	0.61369E-02	0.16254E-06
39	0.59617E-02	0.64590E-02	0.17107E-06
40	0.62677E-02	0.67906E-02	0.17985E-06
41	0.65824E-02	0.71316E-02	0.18889E-06
42	0.69058E-02	0.74819E-02	0.19817E-06
43	0.72379E-02	0.78417E-02	0.20770E-06
44	0.75786E-02	0.82109E-02	0.21747E-06
45	0.79279E-02	0.85893E-02	0.22750E-06
46	0.82857E-02	0.89770E-02	0.23776E-06
47	0.86519E-02	0.93737E-02	0.24827E-06
48	0.90264E-02	0.97794E-02	0.25902E-06
49	0.94091E-02	0.10194E-01	0.27000E-06
50	0.97997E-02	0.10617E-01	0.28121E-06
51	0.10198E-01	0.11049E-01	0.29264E-06
52	0.10604E-01	0.11489E-01	0.30430E-06
53	0.11018E-01	0.11937E-01	0.31616E-06
54	0.11439E-01	0.12393E-01	0.32823E-06
55	0.11866E-01	0.12856E-01	0.34050E-06
56	0.12300E-01	0.13326E-01	0.35296E-06
57	0.12740E-01	0.13803E-01	0.36559E-06
58	0.13186E-01	0.14287E-01	0.37839E-06
59	0.13638E-01	0.14776E-01	0.39135E-06
60	0.14094E-01	0.15270E-01	0.40444E-06
61	0.14555E-01	0.15770E-01	0.41767E-06
62	0.15020E-01	0.16273E-01	0.43101E-06
63	0.15489E-01	0.16781E-01	0.44445E-06
64	0.15960E-01	0.17291E-01	0.45797E-06

65	0.16433E-01	0.17804E-01	0.47155E-06
66	0.16908E-01	0.18318E-01	0.48517E-06
67	0.17383E-01	0.18833E-01	0.49882E-06
68	0.17859E-01	0.19348E-01	0.51244E-06
69	0.18333E-01	0.19862E-01	0.52607E-06
70	0.18806E-01	0.20375E-01	0.53964E-06
71	0.19276E-01	0.20884E-01	0.55313E-06
72	0.19742E-01	0.21389E-01	0.56651E-06
73	0.20204E-01	0.21889E-01	0.57975E-06
74	0.20659E-01	0.22383E-01	0.59282E-06
75	0.21108E-01	0.22869E-01	0.60570E-06
76	0.21548E-01	0.23346E-01	0.61833E-06
77	0.21979E-01	0.23812E-01	0.63069E-06
78	0.22399E-01	0.24267E-01	0.64273E-06
79	0.22806E-01	0.24708E-01	0.65442E-06
80	0.23199E-01	0.25135E-01	0.66572E-06
81	0.23577E-01	0.25544E-01	0.67657E-06
82	0.23938E-01	0.25935E-01	0.68692E-06
83	0.24281E-01	0.26306E-01	0.69674E-06
84	0.24602E-01	0.26655E-01	0.70597E-06
85	0.24901E-01	0.26979E-01	0.71455E-06
86	0.25176E-01	0.27276E-01	0.72244E-06
87	0.25424E-01	0.27545E-01	0.72956E-06
88	0.25644E-01	0.27783E-01	0.73587E-06
89	0.25833E-01	0.27988E-01	0.74129E-06
90	0.25989E-01	0.28157E-01	0.74577E-06
91	0.26110E-01	0.28288E-01	0.74924E-06
92	0.26193E-01	0.28378E-01	0.75163E-06
93	0.26236E-01	0.28425E-01	0.75286E-06
94	0.26236E-01	0.28425E-01	0.75286E-06
95	0.26191E-01	0.28376E-01	0.75156E-06
96	0.26097E-01	0.28274E-01	0.74887E-06
97	0.25953E-01	0.28118E-01	0.74472E-06
98	0.25754E-01	0.27902E-01	0.73902E-06
99	0.25498E-01	0.27625E-01	0.73168E-06
100	0.25183E-01	0.27283E-01	0.72263E-06

POLYGON I

Time: 80.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17465E-04	0.18922E-04	0.50117E-09
2	0.37497E-04	0.40625E-04	0.10760E-08
3	0.60129E-04	0.65145E-04	0.17254E-08
4	0.85398E-04	0.92522E-04	0.24505E-08
5	0.11335E-03	0.12280E-03	0.32525E-08
6	0.14401E-03	0.15603E-03	0.41325E-08
7	0.17745E-03	0.19225E-03	0.50919E-08
8	0.21370E-03	0.23152E-03	0.61321E-08
9	0.25281E-03	0.27390E-03	0.72546E-08
10	0.29485E-03	0.31945E-03	0.84609E-08
11	0.33986E-03	0.36822E-03	0.97525E-08
12	0.38791E-03	0.42027E-03	0.11131E-07
13	0.43905E-03	0.47567E-03	0.12599E-07
14	0.49334E-03	0.53449E-03	0.14157E-07
15	0.55084E-03	0.59679E-03	0.15807E-07
16	0.61162E-03	0.66265E-03	0.17551E-07
17	0.67575E-03	0.73212E-03	0.19391E-07
18	0.74327E-03	0.80528E-03	0.21328E-07
19	0.81427E-03	0.88220E-03	0.23366E-07
20	0.88880E-03	0.96294E-03	0.25504E-07
21	0.96693E-03	0.10476E-02	0.27746E-07
22	0.10487E-02	0.11362E-02	0.30093E-07
23	0.11342E-02	0.12289E-02	0.32547E-07
24	0.12235E-02	0.13256E-02	0.35110E-07
25	0.13167E-02	0.14266E-02	0.37784E-07
26	0.14138E-02	0.15317E-02	0.40569E-07
27	0.15148E-02	0.16412E-02	0.43469E-07
28	0.16199E-02	0.17550E-02	0.46484E-07
29	0.17291E-02	0.18733E-02	0.49616E-07
30	0.18424E-02	0.19961E-02	0.52868E-07
31	0.19599E-02	0.21234E-02	0.56239E-07
32	0.20816E-02	0.22552E-02	0.59732E-07
33	0.22076E-02	0.23917E-02	0.63348E-07
34	0.23379E-02	0.25329E-02	0.67087E-07
35	0.24726E-02	0.26788E-02	0.70951E-07
36	0.26116E-02	0.28295E-02	0.74942E-07
37	0.27551E-02	0.29849E-02	0.79058E-07
38	0.29030E-02	0.31452E-02	0.83302E-07
39	0.30553E-02	0.33102E-02	0.87674E-07
40	0.32121E-02	0.34801E-02	0.92173E-07
41	0.33734E-02	0.36548E-02	0.96801E-07
42	0.35391E-02	0.38343E-02	0.10156E-06
43	0.37092E-02	0.40187E-02	0.10644E-06
44	0.38838E-02	0.42078E-02	0.11145E-06
45	0.40628E-02	0.44017E-02	0.11658E-06
46	0.42461E-02	0.46003E-02	0.12184E-06
47	0.44337E-02	0.48036E-02	0.12723E-06
48	0.46256E-02	0.50114E-02	0.13273E-06
49	0.48216E-02	0.52239E-02	0.13836E-06
50	0.50218E-02	0.54407E-02	0.14410E-06

51	0.52259E-02	0.56619E-02	0.14996E-06
52	0.54340E-02	0.58874E-02	0.15593E-06
53	0.56459E-02	0.61169E-02	0.16201E-06
54	0.58614E-02	0.63504E-02	0.16820E-06
55	0.60805E-02	0.65878E-02	0.17448E-06
56	0.63029E-02	0.68287E-02	0.18086E-06
57	0.65285E-02	0.70732E-02	0.18734E-06
58	0.67571E-02	0.73208E-02	0.19390E-06
59	0.69885E-02	0.75715E-02	0.20054E-06
60	0.72225E-02	0.78250E-02	0.20725E-06
61	0.74587E-02	0.80810E-02	0.21403E-06
62	0.76971E-02	0.83392E-02	0.22087E-06
63	0.79372E-02	0.85993E-02	0.22776E-06
64	0.81787E-02	0.88610E-02	0.23469E-06
65	0.84214E-02	0.91240E-02	0.24166E-06
66	0.86649E-02	0.93878E-02	0.24864E-06
67	0.89089E-02	0.96521E-02	0.25564E-06
68	0.91528E-02	0.99164E-02	0.26264E-06
69	0.93964E-02	0.10180E-01	0.26963E-06
70	0.96391E-02	0.10443E-01	0.27660E-06
71	0.98805E-02	0.10705E-01	0.28352E-06
72	0.10120E-01	0.10964E-01	0.29040E-06
73	0.10357E-01	0.11221E-01	0.29721E-06
74	0.10592E-01	0.11475E-01	0.30393E-06
75	0.10822E-01	0.11725E-01	0.31055E-06
76	0.11049E-01	0.11971E-01	0.31706E-06
77	0.11271E-01	0.12211E-01	0.32343E-06
78	0.11488E-01	0.12446E-01	0.32964E-06
79	0.11698E-01	0.12674E-01	0.33568E-06
80	0.11901E-01	0.12894E-01	0.34151E-06
81	0.12097E-01	0.13106E-01	0.34713E-06
82	0.12284E-01	0.13309E-01	0.35250E-06
83	0.12462E-01	0.13501E-01	0.35760E-06
84	0.12629E-01	0.13683E-01	0.36240E-06
85	0.12786E-01	0.13852E-01	0.36689E-06
86	0.12929E-01	0.14008E-01	0.37102E-06
87	0.13060E-01	0.14150E-01	0.37477E-06
88	0.13177E-01	0.14276E-01	0.37811E-06
89	0.13278E-01	0.14385E-01	0.38101E-06
90	0.13362E-01	0.14477E-01	0.38343E-06
91	0.13429E-01	0.14549E-01	0.38535E-06
92	0.13477E-01	0.14601E-01	0.38672E-06
93	0.13504E-01	0.14631E-01	0.38751E-06
94	0.13510E-01	0.14637E-01	0.38768E-06
95	0.13493E-01	0.14619E-01	0.38719E-06
96	0.13452E-01	0.14574E-01	0.38600E-06
97	0.13385E-01	0.14501E-01	0.38407E-06
98	0.13290E-01	0.14399E-01	0.38136E-06
99	0.13167E-01	0.14265E-01	0.37782E-06
100	0.13013E-01	0.14098E-01	0.37341E-06

POLYGON 1

Time:	90.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.89527E-05	0.96995E-05	0.25690E-09
2	0.19221E-04	0.20825E-04	0.55156E-09
3	0.30822E-04	0.33394E-04	0.88446E-09
4	0.43776E-04	0.47428E-04	0.12562E-08
5	0.58101E-04	0.62948E-04	0.16672E-08
6	0.73822E-04	0.79980E-04	0.21183E-08
7	0.90960E-04	0.98548E-04	0.26101E-08
8	0.10954E-03	0.11868E-03	0.31434E-08
9	0.12959E-03	0.14040E-03	0.37187E-08
10	0.15114E-03	0.16375E-03	0.43371E-08
11	0.17422E-03	0.18875E-03	0.49992E-08
12	0.19884E-03	0.21543E-03	0.57059E-08
13	0.22506E-03	0.24383E-03	0.64581E-08
14	0.25289E-03	0.27398E-03	0.72567E-08
15	0.28236E-03	0.30592E-03	0.81025E-08
16	0.31352E-03	0.33968E-03	0.89966E-08
17	0.34639E-03	0.37529E-03	0.99398E-08
18	0.38100E-03	0.41279E-03	0.10933E-07
19	0.41740E-03	0.45222E-03	0.11977E-07
20	0.45560E-03	0.49361E-03	0.13074E-07
21	0.49565E-03	0.53700E-03	0.14223E-07
22	0.53757E-03	0.58242E-03	0.15426E-07
23	0.58141E-03	0.62991E-03	0.16684E-07
24	0.62719E-03	0.67951E-03	0.17997E-07
25	0.67494E-03	0.73125E-03	0.19368E-07
26	0.72470E-03	0.78516E-03	0.20796E-07
27	0.77650E-03	0.84128E-03	0.22282E-07
28	0.83036E-03	0.89963E-03	0.23828E-07
29	0.88632E-03	0.96026E-03	0.25433E-07
30	0.94439E-03	0.10232E-02	0.27100E-07
31	0.10046E-02	0.10884E-02	0.28828E-07
32	0.10670E-02	0.11560E-02	0.30618E-07
33	0.11316E-02	0.12260E-02	0.32471E-07
34	0.11984E-02	0.12984E-02	0.34388E-07
35	0.12674E-02	0.13731E-02	0.36369E-07
36	0.13387E-02	0.14504E-02	0.38414E-07

37	0.14122E-02	0.15300E-02	0.40524E-07
38	0.14880E-02	0.16122E-02	0.42700E-07
39	0.15661E-02	0.16968E-02	0.44940E-07
40	0.16465E-02	0.17838E-02	0.47246E-07
41	0.17291E-02	0.18734E-02	0.49618E-07
42	0.18141E-02	0.19654E-02	0.52055E-07
43	0.19013E-02	0.20599E-02	0.54558E-07
44	0.19907E-02	0.21568E-02	0.57125E-07
45	0.20825E-02	0.22562E-02	0.59757E-07
46	0.21764E-02	0.23580E-02	0.62453E-07
47	0.22726E-02	0.24622E-02	0.65213E-07
48	0.23709E-02	0.25687E-02	0.68034E-07
49	0.24714E-02	0.26776E-02	0.70918E-07
50	0.25740E-02	0.27887E-02	0.73862E-07
51	0.26786E-02	0.29021E-02	0.76864E-07
52	0.27853E-02	0.30176E-02	0.79925E-07
53	0.28939E-02	0.31353E-02	0.83041E-07
54	0.30043E-02	0.32550E-02	0.86211E-07
55	0.31166E-02	0.33766E-02	0.89432E-07
56	0.32306E-02	0.35001E-02	0.92703E-07
57	0.33462E-02	0.36254E-02	0.96021E-07
58	0.34634E-02	0.37523E-02	0.99384E-07
59	0.35820E-02	0.38808E-02	0.10279E-06
60	0.37019E-02	0.40107E-02	0.10623E-06
61	0.38230E-02	0.41419E-02	0.10970E-06
62	0.39452E-02	0.42743E-02	0.11321E-06
63	0.40682E-02	0.44076E-02	0.11674E-06
64	0.41921E-02	0.45418E-02	0.12029E-06
65	0.43165E-02	0.46766E-02	0.12386E-06
66	0.44413E-02	0.48118E-02	0.12744E-06
67	0.45663E-02	0.49473E-02	0.13103E-06
68	0.46914E-02	0.50828E-02	0.13462E-06
69	0.48163E-02	0.52181E-02	0.13821E-06
70	0.49407E-02	0.53529E-02	0.14178E-06
71	0.50645E-02	0.54870E-02	0.14533E-06
72	0.51874E-02	0.56201E-02	0.14885E-06
73	0.53090E-02	0.57519E-02	0.15235E-06
74	0.54292E-02	0.58822E-02	0.15579E-06
75	0.55477E-02	0.60105E-02	0.15919E-06
76	0.56640E-02	0.61365E-02	0.16253E-06
77	0.57779E-02	0.62599E-02	0.16580E-06
78	0.58890E-02	0.63803E-02	0.16899E-06
79	0.59970E-02	0.64973E-02	0.17209E-06
80	0.61015E-02	0.66105E-02	0.17508E-06
81	0.62020E-02	0.67194E-02	0.17797E-06
82	0.62982E-02	0.68237E-02	0.18073E-06
83	0.63897E-02	0.69227E-02	0.18335E-06
84	0.64758E-02	0.70161E-02	0.18583E-06
85	0.65563E-02	0.71032E-02	0.18814E-06
86	0.66305E-02	0.71836E-02	0.19026E-06
87	0.66980E-02	0.72568E-02	0.19220E-06
88	0.67582E-02	0.73220E-02	0.19393E-06
89	0.68105E-02	0.73787E-02	0.19543E-06
90	0.68545E-02	0.74263E-02	0.19669E-06
91	0.68894E-02	0.74641E-02	0.19769E-06
92	0.69146E-02	0.74914E-02	0.19842E-06
93	0.69295E-02	0.75076E-02	0.19885E-06
94	0.69334E-02	0.75118E-02	0.19896E-06
95	0.69257E-02	0.75034E-02	0.19873E-06
96	0.69055E-02	0.74816E-02	0.19816E-06
97	0.68722E-02	0.74455E-02	0.19720E-06
98	0.68249E-02	0.73942E-02	0.19584E-06
99	0.67629E-02	0.73271E-02	0.19406E-06
100	0.66854E-02	0.72431E-02	0.19184E-06

POLYGON I

Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.45891E-05	0.49720E-05	0.13169E-09
2	0.98528E-05	0.10675E-04	0.28273E-09
3	0.15800E-04	0.17118E-04	0.45338E-09
4	0.22439E-04	0.24311E-04	0.64391E-09
5	0.29783E-04	0.32267E-04	0.85463E-09
6	0.37841E-04	0.40998E-04	0.10859E-08
7	0.46626E-04	0.50516E-04	0.13380E-08
8	0.56152E-04	0.60836E-04	0.16113E-08
9	0.66430E-04	0.71972E-04	0.19062E-08
10	0.77476E-04	0.83939E-04	0.22232E-08
11	0.89303E-04	0.96753E-04	0.25626E-08
12	0.10193E-03	0.11043E-03	0.29249E-08
13	0.11536E-03	0.12499E-03	0.33104E-08
14	0.12963E-03	0.14044E-03	0.37198E-08
15	0.14474E-03	0.15682E-03	0.41534E-08
16	0.16071E-03	0.17412E-03	0.46117E-08
17	0.17756E-03	0.19237E-03	0.50952E-08
18	0.19530E-03	0.21160E-03	0.56043E-08
19	0.21396E-03	0.23181E-03	0.61396E-08
20	0.23354E-03	0.25302E-03	0.67016E-08
21	0.25407E-03	0.27527E-03	0.72907E-08
22	0.27556E-03	0.29855E-03	0.79074E-08

23	0.29803E-03	0.32290E-03	0.85522E-08
24	0.32150E-03	0.34832E-03	0.92256E-08
25	0.34598E-03	0.37484E-03	0.99280E-08
26	0.37148E-03	0.40248E-03	0.10660E-07
27	0.39804E-03	0.43124E-03	0.11422E-07
28	0.42564E-03	0.46115E-03	0.12214E-07
29	0.45433E-03	0.49223E-03	0.13037E-07
30	0.48410E-03	0.52448E-03	0.13891E-07
31	0.51497E-03	0.55793E-03	0.14777E-07
32	0.54695E-03	0.59258E-03	0.15695E-07
33	0.58005E-03	0.62844E-03	0.16645E-07
34	0.61429E-03	0.66554E-03	0.17627E-07
35	0.64968E-03	0.70388E-03	0.18643E-07
36	0.68621E-03	0.74346E-03	0.19691E-07
37	0.72390E-03	0.78430E-03	0.20773E-07
38	0.76276E-03	0.82639E-03	0.21888E-07
39	0.80279E-03	0.86976E-03	0.23036E-07
40	0.84398E-03	0.91439E-03	0.24218E-07
41	0.88635E-03	0.96029E-03	0.25434E-07
42	0.92988E-03	0.10075E-02	0.26683E-07
43	0.97458E-03	0.10559E-02	0.27966E-07
44	0.10204E-02	0.11056E-02	0.29282E-07
45	0.10675E-02	0.11565E-02	0.30631E-07
46	0.11156E-02	0.12087E-02	0.32013E-07
47	0.11649E-02	0.12621E-02	0.33428E-07
48	0.12153E-02	0.13167E-02	0.34874E-07
49	0.12668E-02	0.13725E-02	0.36352E-07
50	0.13194E-02	0.14295E-02	0.37861E-07
51	0.13730E-02	0.14876E-02	0.39400E-07
52	0.14277E-02	0.15468E-02	0.40969E-07
53	0.14834E-02	0.16071E-02	0.42566E-07
54	0.15400E-02	0.16685E-02	0.44191E-07
55	0.15975E-02	0.17308E-02	0.45842E-07
56	0.16560E-02	0.17941E-02	0.47519E-07
57	0.17152E-02	0.18583E-02	0.49220E-07
58	0.17753E-02	0.19234E-02	0.50943E-07
59	0.18361E-02	0.19893E-02	0.52687E-07
60	0.18976E-02	0.20559E-02	0.54451E-07
61	0.19596E-02	0.21231E-02	0.56232E-07
62	0.20222E-02	0.21909E-02	0.58029E-07
63	0.20853E-02	0.22593E-02	0.59839E-07
64	0.21488E-02	0.23281E-02	0.61661E-07
65	0.22126E-02	0.23972E-02	0.63491E-07
66	0.22766E-02	0.24665E-02	0.65327E-07
67	0.23407E-02	0.25359E-02	0.67166E-07
68	0.24048E-02	0.26054E-02	0.69006E-07
69	0.24688E-02	0.26747E-02	0.70842E-07
70	0.25326E-02	0.27438E-02	0.72673E-07
71	0.25960E-02	0.28126E-02	0.74494E-07
72	0.26590E-02	0.28808E-02	0.76301E-07
73	0.27214E-02	0.29484E-02	0.78091E-07
74	0.27830E-02	0.30152E-02	0.79859E-07
75	0.28437E-02	0.30809E-02	0.81601E-07
76	0.29033E-02	0.31456E-02	0.83313E-07
77	0.29617E-02	0.32088E-02	0.84988E-07
78	0.30187E-02	0.32706E-02	0.86624E-07
79	0.30741E-02	0.33306E-02	0.88213E-07
80	0.31277E-02	0.33886E-02	0.89750E-07
81	0.31792E-02	0.34445E-02	0.91230E-07
82	0.32286E-02	0.34979E-02	0.92646E-07
83	0.32755E-02	0.35487E-02	0.93991E-07
84	0.33197E-02	0.35966E-02	0.95260E-07
85	0.33610E-02	0.36414E-02	0.96444E-07
86	0.33991E-02	0.36826E-02	0.97538E-07
87	0.34337E-02	0.37202E-02	0.98532E-07
88	0.34646E-02	0.37537E-02	0.99419E-07
89	0.34916E-02	0.37828E-02	0.10019E-06
90	0.35142E-02	0.38073E-02	0.10084E-06
91	0.35321E-02	0.38268E-02	0.10136E-06
92	0.35452E-02	0.38409E-02	0.10173E-06
93	0.35529E-02	0.38493E-02	0.10195E-06
94	0.35550E-02	0.38516E-02	0.10201E-06
95	0.35512E-02	0.38474E-02	0.10190E-06
96	0.35410E-02	0.38364E-02	0.10161E-06
97	0.35241E-02	0.38180E-02	0.10112E-06
98	0.35000E-02	0.37920E-02	0.10043E-06
99	0.34684E-02	0.37578E-02	0.99527E-07
100	0.34289E-02	0.37149E-02	0.98393E-07

POLYGON I

Time:	110.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.23524E-05	0.25486E-05	0.67503E-10
2	0.50505E-05	0.54719E-05	0.14493E-09
3	0.80989E-05	0.87745E-05	0.23240E-09
4	0.11502E-04	0.12462E-04	0.33007E-09
5	0.15267E-04	0.16540E-04	0.43808E-09
6	0.19397E-04	0.21016E-04	0.55662E-09
7	0.23901E-04	0.25895E-04	0.68584E-09
8	0.28783E-04	0.31185E-04	0.82595E-09

9	0.34052E-04	0.36893E-04	0.97714E-09
10	0.39714E-04	0.43027E-04	0.11396E-08
11	0.45777E-04	0.49596E-04	0.13136E-08
12	0.52248E-04	0.56607E-04	0.14993E-08
13	0.59136E-04	0.64070E-04	0.16969E-08
14	0.66449E-04	0.71992E-04	0.19068E-08
15	0.74194E-04	0.80384E-04	0.21290E-08
16	0.82381E-04	0.89253E-04	0.23639E-08
17	0.91017E-04	0.98610E-04	0.26118E-08
18	0.10011E-03	0.10846E-03	0.28728E-08
19	0.10968E-03	0.11882E-03	0.31472E-08
20	0.11971E-03	0.12970E-03	0.34352E-08
21	0.13024E-03	0.14110E-03	0.37372E-08
22	0.14125E-03	0.15304E-03	0.40533E-08
23	0.15277E-03	0.16552E-03	0.43838E-08
24	0.16480E-03	0.17855E-03	0.47290E-08
25	0.17735E-03	0.19214E-03	0.50891E-08
26	0.19042E-03	0.20631E-03	0.54643E-08
27	0.20403E-03	0.22105E-03	0.58548E-08
28	0.21819E-03	0.23639E-03	0.62609E-08
29	0.23289E-03	0.25232E-03	0.66828E-08
30	0.24815E-03	0.26885E-03	0.71207E-08
31	0.26397E-03	0.28599E-03	0.75748E-08
32	0.28037E-03	0.30376E-03	0.80452E-08
33	0.29734E-03	0.32214E-03	0.85322E-08
34	0.31489E-03	0.34116E-03	0.90358E-08
35	0.33302E-03	0.36081E-03	0.95563E-08
36	0.35175E-03	0.38110E-03	0.10094E-07
37	0.37107E-03	0.40203E-03	0.10648E-07
38	0.39099E-03	0.42361E-03	0.11220E-07
39	0.41151E-03	0.44584E-03	0.11808E-07
40	0.43263E-03	0.46872E-03	0.12414E-07
41	0.45434E-03	0.49225E-03	0.13038E-07
42	0.47666E-03	0.51642E-03	0.13678E-07
43	0.49957E-03	0.54125E-03	0.14335E-07
44	0.52308E-03	0.56672E-03	0.15010E-07
45	0.54718E-03	0.59283E-03	0.15702E-07
46	0.57187E-03	0.61958E-03	0.16410E-07
47	0.59713E-03	0.64695E-03	0.17135E-07
48	0.62297E-03	0.67494E-03	0.17876E-07
49	0.64937E-03	0.70355E-03	0.18634E-07
50	0.67633E-03	0.73275E-03	0.19408E-07
51	0.70382E-03	0.76254E-03	0.20196E-07
52	0.73184E-03	0.79290E-03	0.21001E-07
53	0.76037E-03	0.82381E-03	0.21819E-07
54	0.78940E-03	0.85525E-03	0.22652E-07
55	0.81890E-03	0.88721E-03	0.23499E-07
56	0.84885E-03	0.91966E-03	0.24358E-07
57	0.87923E-03	0.95258E-03	0.25230E-07
58	0.91002E-03	0.98593E-03	0.26113E-07
59	0.94118E-03	0.10197E-02	0.27007E-07
60	0.97268E-03	0.10538E-02	0.27912E-07
61	0.10045E-02	0.10883E-02	0.28825E-07
62	0.10366E-02	0.11231E-02	0.29746E-07
63	0.10689E-02	0.11581E-02	0.30673E-07
64	0.11015E-02	0.11934E-02	0.31607E-07
65	0.11342E-02	0.12288E-02	0.32545E-07
66	0.11670E-02	0.12643E-02	0.33486E-07
67	0.11998E-02	0.12999E-02	0.34429E-07
68	0.12327E-02	0.13355E-02	0.35372E-07
69	0.12655E-02	0.13711E-02	0.36314E-07
70	0.12982E-02	0.14065E-02	0.37252E-07
71	0.13307E-02	0.14417E-02	0.38185E-07
72	0.13630E-02	0.14767E-02	0.39112E-07
73	0.13950E-02	0.15113E-02	0.40029E-07
74	0.14266E-02	0.15456E-02	0.40935E-07
75	0.14577E-02	0.15793E-02	0.41828E-07
76	0.14882E-02	0.16124E-02	0.42706E-07
77	0.15182E-02	0.16448E-02	0.43565E-07
78	0.15474E-02	0.16765E-02	0.44403E-07
79	0.15758E-02	0.17072E-02	0.45218E-07
80	0.16032E-02	0.17370E-02	0.46006E-07
81	0.16297E-02	0.17656E-02	0.46764E-07
82	0.16550E-02	0.17930E-02	0.47490E-07
83	0.16790E-02	0.18191E-02	0.48180E-07
84	0.17017E-02	0.18436E-02	0.48830E-07
85	0.17228E-02	0.18666E-02	0.49438E-07
86	0.17424E-02	0.18877E-02	0.49998E-07
87	0.17601E-02	0.19070E-02	0.50508E-07
88	0.17760E-02	0.19242E-02	0.50963E-07
89	0.17898E-02	0.19391E-02	0.51359E-07
90	0.18014E-02	0.19517E-02	0.51692E-07
91	0.18106E-02	0.19617E-02	0.51957E-07
92	0.18173E-02	0.19689E-02	0.52149E-07
93	0.18213E-02	0.19732E-02	0.52263E-07
94	0.18224E-02	0.19744E-02	0.52295E-07
95	0.18204E-02	0.19723E-02	0.52239E-07
96	0.18152E-02	0.19667E-02	0.52089E-07
97	0.18066E-02	0.19573E-02	0.51840E-07
98	0.17943E-02	0.19440E-02	0.51487E-07

99	0.17781E-02	0.19264E-02	0.51023E-07
100	0.17579E-02	0.19045E-02	0.50442E-07

POLYGON 1

Time:	120.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.12058E-05	0.13064E-05	0.34602E-10
2	0.25889E-05	0.28049E-05	0.74289E-10
3	0.41515E-05	0.44978E-05	0.11913E-09
4	0.58962E-05	0.63880E-05	0.16919E-09
5	0.78257E-05	0.84786E-05	0.22456E-09
6	0.99431E-05	0.10773E-04	0.28532E-09
7	0.12252E-04	0.13274E-04	0.35156E-09
8	0.14754E-04	0.15985E-04	0.42338E-09
9	0.17455E-04	0.18911E-04	0.50088E-09
10	0.20357E-04	0.22056E-04	0.58416E-09
11	0.23465E-04	0.25423E-04	0.67335E-09
12	0.26782E-04	0.29017E-04	0.76853E-09
13	0.30313E-04	0.32842E-04	0.86985E-09
14	0.34062E-04	0.36903E-04	0.97741E-09
15	0.38032E-04	0.41205E-04	0.10913E-08
16	0.42228E-04	0.45751E-04	0.12118E-08
17	0.46656E-04	0.50548E-04	0.13388E-08
18	0.51318E-04	0.55599E-04	0.14726E-08
19	0.56219E-04	0.60909E-04	0.16132E-08
20	0.61365E-04	0.66484E-04	0.17609E-08
21	0.66759E-04	0.72329E-04	0.19157E-08
22	0.72406E-04	0.78447E-04	0.20777E-08
23	0.78311E-04	0.84844E-04	0.22472E-08
24	0.84477E-04	0.91524E-04	0.24241E-08
25	0.90909E-04	0.98493E-04	0.26087E-08
26	0.97611E-04	0.10575E-03	0.28010E-08
27	0.10459E-03	0.11331E-03	0.30012E-08
28	0.11184E-03	0.12117E-03	0.32094E-08
29	0.11938E-03	0.12934E-03	0.34256E-08
30	0.12720E-03	0.13781E-03	0.36501E-08
31	0.13531E-03	0.14660E-03	0.38828E-08
32	0.14372E-03	0.15570E-03	0.41240E-08
33	0.15241E-03	0.16513E-03	0.43736E-08
34	0.16141E-03	0.17488E-03	0.46318E-08
35	0.17071E-03	0.18495E-03	0.48985E-08
36	0.18031E-03	0.19535E-03	0.51740E-08
37	0.19021E-03	0.20608E-03	0.54582E-08
38	0.20042E-03	0.21714E-03	0.57512E-08
39	0.21094E-03	0.22854E-03	0.60530E-08
40	0.22176E-03	0.24026E-03	0.63636E-08
41	0.23290E-03	0.25232E-03	0.66830E-08
42	0.24434E-03	0.26472E-03	0.70113E-08
43	0.25608E-03	0.27744E-03	0.73483E-08
44	0.26813E-03	0.29050E-03	0.76941E-08
45	0.28049E-03	0.30388E-03	0.80486E-08
46	0.29314E-03	0.31759E-03	0.84118E-08
47	0.30609E-03	0.33163E-03	0.87834E-08
48	0.31934E-03	0.34598E-03	0.91635E-08
49	0.33287E-03	0.36064E-03	0.95518E-08
50	0.34669E-03	0.37561E-03	0.99483E-08
51	0.36078E-03	0.39088E-03	0.10353E-07
52	0.37514E-03	0.40644E-03	0.10765E-07
53	0.38977E-03	0.42228E-03	0.11185E-07
54	0.40465E-03	0.43840E-03	0.11611E-07
55	0.41977E-03	0.45479E-03	0.12045E-07
56	0.43512E-03	0.47142E-03	0.12486E-07
57	0.45069E-03	0.48829E-03	0.12933E-07
58	0.46647E-03	0.50539E-03	0.13386E-07
59	0.48245E-03	0.52269E-03	0.13844E-07
60	0.49860E-03	0.54019E-03	0.14307E-07
61	0.51491E-03	0.55786E-03	0.14775E-07
62	0.53136E-03	0.57569E-03	0.15248E-07
63	0.54793E-03	0.59364E-03	0.15723E-07
64	0.56461E-03	0.61171E-03	0.16202E-07
65	0.58137E-03	0.62987E-03	0.16683E-07
66	0.59818E-03	0.64808E-03	0.17165E-07
67	0.61502E-03	0.66633E-03	0.17648E-07
68	0.63187E-03	0.68458E-03	0.18132E-07
69	0.64868E-03	0.70280E-03	0.18614E-07
70	0.66545E-03	0.72096E-03	0.19095E-07
71	0.68212E-03	0.73902E-03	0.19574E-07
72	0.69867E-03	0.75695E-03	0.20049E-07
73	0.71506E-03	0.77471E-03	0.20519E-07
74	0.73125E-03	0.79225E-03	0.20983E-07
75	0.74720E-03	0.80953E-03	0.21441E-07
76	0.76287E-03	0.82651E-03	0.21891E-07
77	0.77822E-03	0.84314E-03	0.22331E-07
78	0.79319E-03	0.85936E-03	0.22761E-07
79	0.80774E-03	0.87512E-03	0.23178E-07
80	0.82182E-03	0.89038E-03	0.23582E-07
81	0.83537E-03	0.90506E-03	0.23971E-07
82	0.84833E-03	0.91911E-03	0.24343E-07
83	0.86066E-03	0.93246E-03	0.24697E-07
84	0.87228E-03	0.94505E-03	0.25030E-07

85	0.88313E-03	0.95680E-03	0.25342E-07
86	0.89314E-03	0.96765E-03	0.25629E-07
87	0.90225E-03	0.97752E-03	0.25890E-07
88	0.91038E-03	0.98632E-03	0.26124E-07
89	0.91745E-03	0.99399E-03	0.26327E-07
90	0.92340E-03	0.10004E-02	0.26497E-07
91	0.92813E-03	0.10056E-02	0.26633E-07
92	0.93156E-03	0.10093E-02	0.26731E-07
93	0.93360E-03	0.10115E-02	0.26790E-07
94	0.93417E-03	0.10121E-02	0.26806E-07
95	0.93317E-03	0.10110E-02	0.26778E-07
96	0.93050E-03	0.10081E-02	0.26701E-07
97	0.92606E-03	0.10033E-02	0.26574E-07
98	0.91975E-03	0.99648E-03	0.26393E-07
99	0.91147E-03	0.98751E-03	0.26155E-07
100	0.90109E-03	0.97627E-03	0.25857E-07

POLYGON 1

Time: 130.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.61811E-06	0.66968E-06	0.17737E-10
2	0.13271E-05	0.14378E-05	0.38081E-10
3	0.21281E-05	0.23056E-05	0.61065E-10
4	0.30224E-05	0.32745E-05	0.86728E-10
5	0.40115E-05	0.43461E-05	0.11511E-09
6	0.50968E-05	0.55220E-05	0.14626E-09
7	0.62801E-05	0.68040E-05	0.18021E-09
8	0.75631E-05	0.81940E-05	0.21703E-09
9	0.89475E-05	0.96939E-05	0.25675E-09
10	0.10435E-04	0.11306E-04	0.29944E-09
11	0.12028E-04	0.13032E-04	0.34516E-09
12	0.13729E-04	0.14874E-04	0.39395E-09
13	0.15539E-04	0.16835E-04	0.44588E-09
14	0.17460E-04	0.18917E-04	0.50102E-09
15	0.19495E-04	0.21121E-04	0.55942E-09
16	0.21646E-04	0.23452E-04	0.62115E-09
17	0.23916E-04	0.25911E-04	0.68627E-09
18	0.26305E-04	0.28500E-04	0.75485E-09
19	0.28818E-04	0.31222E-04	0.82695E-09
20	0.31456E-04	0.34080E-04	0.90264E-09
21	0.34221E-04	0.37076E-04	0.98198E-09
22	0.37116E-04	0.40212E-04	0.10650E-08
23	0.40142E-04	0.43491E-04	0.11519E-08
24	0.43303E-04	0.46915E-04	0.12426E-08
25	0.46600E-04	0.50487E-04	0.13372E-08
26	0.50035E-04	0.54210E-04	0.14358E-08
27	0.53612E-04	0.58084E-04	0.15384E-08
28	0.57330E-04	0.62113E-04	0.16451E-08
29	0.61193E-04	0.66298E-04	0.17560E-08
30	0.65203E-04	0.70643E-04	0.18710E-08
31	0.69361E-04	0.75147E-04	0.19903E-08
32	0.73669E-04	0.79814E-04	0.21139E-08
33	0.78128E-04	0.84645E-04	0.22419E-08
34	0.82739E-04	0.89642E-04	0.23742E-08
35	0.87505E-04	0.94805E-04	0.25110E-08
36	0.92426E-04	0.10014E-03	0.26522E-08
37	0.97503E-04	0.10564E-03	0.27979E-08
38	0.10274E-03	0.11131E-03	0.29481E-08
39	0.10813E-03	0.11715E-03	0.31028E-08
40	0.11368E-03	0.12316E-03	0.32620E-08
41	0.11938E-03	0.12934E-03	0.34257E-08
42	0.12525E-03	0.13569E-03	0.35940E-08
43	0.13127E-03	0.14222E-03	0.37668E-08
44	0.13744E-03	0.14891E-03	0.39440E-08
45	0.14378E-03	0.15577E-03	0.41257E-08
46	0.15026E-03	0.16280E-03	0.43119E-08
47	0.15690E-03	0.16999E-03	0.45024E-08
48	0.16369E-03	0.17735E-03	0.46972E-08
49	0.17063E-03	0.18486E-03	0.48963E-08
50	0.17771E-03	0.19254E-03	0.50995E-08
51	0.18494E-03	0.20036E-03	0.53068E-08
52	0.19230E-03	0.20834E-03	0.55181E-08
53	0.19979E-03	0.21646E-03	0.57332E-08
54	0.20742E-03	0.22473E-03	0.59520E-08
55	0.21517E-03	0.23312E-03	0.61745E-08
56	0.22304E-03	0.24165E-03	0.64003E-08
57	0.23103E-03	0.25030E-03	0.66294E-08
58	0.23911E-03	0.25906E-03	0.68615E-08
59	0.24730E-03	0.26793E-03	0.70964E-08
60	0.25558E-03	0.27690E-03	0.73340E-08
61	0.26394E-03	0.28596E-03	0.75739E-08
62	0.27237E-03	0.29510E-03	0.78159E-08
63	0.28087E-03	0.30430E-03	0.80597E-08
64	0.28942E-03	0.31356E-03	0.83050E-08
65	0.29801E-03	0.32287E-03	0.85515E-08
66	0.30663E-03	0.33221E-03	0.87988E-08
67	0.31526E-03	0.34156E-03	0.90465E-08
68	0.32389E-03	0.35091E-03	0.92943E-08
69	0.33251E-03	0.36025E-03	0.95417E-08
70	0.34111E-03	0.36956E-03	0.97882E-08

71	0.34965E-03	0.37882E-03	0.10033E-07
72	0.35814E-03	0.38801E-03	0.10277E-07
73	0.36654E-03	0.39712E-03	0.10518E-07
74	0.37484E-03	0.40611E-03	0.10756E-07
75	0.38301E-03	0.41497E-03	0.10991E-07
76	0.39105E-03	0.42367E-03	0.11221E-07
77	0.39891E-03	0.43219E-03	0.11447E-07
78	0.40659E-03	0.44051E-03	0.11667E-07
79	0.41405E-03	0.44859E-03	0.11881E-07
80	0.42126E-03	0.45641E-03	0.12088E-07
81	0.42821E-03	0.46393E-03	0.12288E-07
82	0.43486E-03	0.47113E-03	0.12478E-07
83	0.44117E-03	0.47798E-03	0.12660E-07
84	0.44713E-03	0.48443E-03	0.12831E-07
85	0.45269E-03	0.49045E-03	0.12990E-07
86	0.45782E-03	0.49602E-03	0.13137E-07
87	0.46249E-03	0.50107E-03	0.13271E-07
88	0.46666E-03	0.50559E-03	0.13391E-07
89	0.47029E-03	0.50952E-03	0.13495E-07
90	0.47333E-03	0.51282E-03	0.13582E-07
91	0.47576E-03	0.51545E-03	0.13652E-07
92	0.47751E-03	0.51735E-03	0.13702E-07
93	0.47856E-03	0.51849E-03	0.13733E-07
94	0.47885E-03	0.51880E-03	0.13741E-07
95	0.47834E-03	0.51825E-03	0.13726E-07
96	0.47697E-03	0.51676E-03	0.13687E-07
97	0.47470E-03	0.51430E-03	0.13622E-07
98	0.47147E-03	0.51080E-03	0.13529E-07
99	0.46722E-03	0.50620E-03	0.13407E-07
100	0.46190E-03	0.50043E-03	0.13254E-07

POLYGON I

Time: 140.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.31684E-06	0.34328E-06	0.90920E-11
2	0.68025E-06	0.73700E-06	0.19520E-10
3	0.10908E-05	0.11818E-05	0.31302E-10
4	0.15493E-05	0.16785E-05	0.44457E-10
5	0.20563E-05	0.22278E-05	0.59005E-10
6	0.26126E-05	0.28306E-05	0.74970E-10
7	0.32192E-05	0.34877E-05	0.92376E-10
8	0.38768E-05	0.42002E-05	0.11125E-09
9	0.45865E-05	0.49691E-05	0.13161E-09
10	0.53491E-05	0.57953E-05	0.15349E-09
11	0.61657E-05	0.66801E-05	0.17693E-09
12	0.70373E-05	0.76244E-05	0.20194E-09
13	0.79650E-05	0.86295E-05	0.22856E-09
14	0.89500E-05	0.96966E-05	0.25682E-09
15	0.99932E-05	0.10827E-04	0.28676E-09
16	0.11096E-04	0.12022E-04	0.31840E-09
17	0.12259E-04	0.13282E-04	0.35178E-09
18	0.13484E-04	0.14609E-04	0.38693E-09
19	0.14772E-04	0.16004E-04	0.42389E-09
20	0.16124E-04	0.17469E-04	0.46269E-09
21	0.17542E-04	0.19005E-04	0.50336E-09
22	0.19025E-04	0.20613E-04	0.54594E-09
23	0.20577E-04	0.22293E-04	0.59046E-09
24	0.22197E-04	0.24049E-04	0.63695E-09
25	0.23887E-04	0.25880E-04	0.68545E-09
26	0.25648E-04	0.27788E-04	0.73598E-09
27	0.27481E-04	0.29774E-04	0.78859E-09
28	0.29387E-04	0.31839E-04	0.84328E-09
29	0.31368E-04	0.33985E-04	0.90011E-09
30	0.33423E-04	0.36211E-04	0.95909E-09
31	0.35554E-04	0.38520E-04	0.10202E-08
32	0.37762E-04	0.40913E-04	0.10836E-08
33	0.40048E-04	0.43389E-04	0.11492E-08
34	0.42412E-04	0.45950E-04	0.12170E-08
35	0.44855E-04	0.48597E-04	0.12871E-08
36	0.47378E-04	0.51330E-04	0.13595E-08
37	0.49980E-04	0.54149E-04	0.14342E-08
38	0.52663E-04	0.57056E-04	0.15112E-08
39	0.55426E-04	0.60050E-04	0.15905E-08
40	0.58270E-04	0.63131E-04	0.16721E-08
41	0.61195E-04	0.66300E-04	0.17560E-08
42	0.64201E-04	0.69557E-04	0.18423E-08
43	0.67287E-04	0.72901E-04	0.19308E-08
44	0.70454E-04	0.76331E-04	0.20217E-08
45	0.73700E-04	0.79848E-04	0.21148E-08
46	0.77025E-04	0.83451E-04	0.22103E-08
47	0.80428E-04	0.87138E-04	0.23079E-08
48	0.83908E-04	0.90908E-04	0.24078E-08
49	0.87464E-04	0.94761E-04	0.25098E-08
50	0.91095E-04	0.98694E-04	0.26140E-08
51	0.94798E-04	0.10271E-03	0.27203E-08
52	0.98572E-04	0.10680E-03	0.28286E-08
53	0.10241E-03	0.11096E-03	0.29388E-08
54	0.10632E-03	0.11519E-03	0.30510E-08
55	0.11030E-03	0.11950E-03	0.31650E-08
56	0.11433E-03	0.12387E-03	0.32808E-08

57	0.11842E-03	0.12830E-03	0.33982E-08
58	0.12257E-03	0.13280E-03	0.35172E-08
59	0.12677E-03	0.13734E-03	0.36376E-08
60	0.13101E-03	0.14194E-03	0.37594E-08
61	0.13530E-03	0.14658E-03	0.38824E-08
62	0.13962E-03	0.15127E-03	0.40064E-08
63	0.14397E-03	0.15599E-03	0.41314E-08
64	0.14836E-03	0.16073E-03	0.42571E-08
65	0.15276E-03	0.16550E-03	0.43835E-08
66	0.15718E-03	0.17029E-03	0.45102E-08
67	0.16160E-03	0.17508E-03	0.46372E-08
68	0.16603E-03	0.17988E-03	0.47642E-08
69	0.17045E-03	0.18467E-03	0.48910E-08
70	0.17485E-03	0.18944E-03	0.50174E-08
71	0.17923E-03	0.19418E-03	0.51431E-08
72	0.18358E-03	0.19890E-03	0.52679E-08
73	0.18789E-03	0.20356E-03	0.53915E-08
74	0.19214E-03	0.20817E-03	0.55136E-08
75	0.19633E-03	0.21271E-03	0.56338E-08
76	0.20045E-03	0.21717E-03	0.57520E-08
77	0.20448E-03	0.22154E-03	0.58677E-08
78	0.20842E-03	0.22580E-03	0.59806E-08
79	0.21224E-03	0.22995E-03	0.60903E-08
80	0.21594E-03	0.23395E-03	0.61965E-08
81	0.21950E-03	0.23781E-03	0.62986E-08
82	0.22291E-03	0.24150E-03	0.63964E-08
83	0.22614E-03	0.24501E-03	0.64893E-08
84	0.22920E-03	0.24832E-03	0.65769E-08
85	0.23205E-03	0.25141E-03	0.66587E-08
86	0.23468E-03	0.25426E-03	0.67342E-08
87	0.23707E-03	0.25685E-03	0.68029E-08
88	0.23921E-03	0.25916E-03	0.68642E-08
89	0.24107E-03	0.26118E-03	0.69175E-08
90	0.24263E-03	0.26287E-03	0.69624E-08
91	0.24387E-03	0.26422E-03	0.69980E-08
92	0.24477E-03	0.26519E-03	0.70239E-08
93	0.24531E-03	0.26578E-03	0.70393E-08
94	0.24546E-03	0.26594E-03	0.70436E-08
95	0.24520E-03	0.26565E-03	0.70360E-08
96	0.24450E-03	0.26489E-03	0.70159E-08
97	0.24333E-03	0.26363E-03	0.69825E-08
98	0.24167E-03	0.26183E-03	0.69349E-08
99	0.23950E-03	0.25948E-03	0.68724E-08
100	0.23677E-03	0.25652E-03	0.67942E-08

POLYGON I

Time:	150.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16241E-06	0.17596E-06	0.46605E-11
2	0.34870E-06	0.37779E-06	0.10006E-10
3	0.55916E-06	0.60581E-06	0.16045E-10
4	0.79415E-06	0.86040E-06	0.22789E-10
5	0.10540E-05	0.11420E-05	0.30246E-10
6	0.13392E-05	0.14510E-05	0.38430E-10
7	0.16502E-05	0.17878E-05	0.47352E-10
8	0.19873E-05	0.21530E-05	0.57025E-10
9	0.23510E-05	0.25472E-05	0.67463E-10
10	0.27419E-05	0.29707E-05	0.78681E-10
11	0.31605E-05	0.34242E-05	0.90693E-10
12	0.36073E-05	0.39083E-05	0.10351E-09
13	0.40829E-05	0.44235E-05	0.11716E-09
14	0.45877E-05	0.49705E-05	0.13165E-09
15	0.51225E-05	0.55498E-05	0.14699E-09
16	0.56877E-05	0.61622E-05	0.16321E-09
17	0.62840E-05	0.68083E-05	0.18032E-09
18	0.69120E-05	0.74886E-05	0.19834E-09
19	0.75722E-05	0.82039E-05	0.21729E-09
20	0.82653E-05	0.89548E-05	0.23718E-09
21	0.89918E-05	0.97419E-05	0.25802E-09
22	0.97524E-05	0.10566E-04	0.27985E-09
23	0.10548E-04	0.11428E-04	0.30267E-09
24	0.11378E-04	0.12327E-04	0.32650E-09
25	0.12245E-04	0.13266E-04	0.35136E-09
26	0.13147E-04	0.14244E-04	0.37726E-09
27	0.14087E-04	0.15262E-04	0.40423E-09
28	0.15064E-04	0.16321E-04	0.43227E-09
29	0.16079E-04	0.17420E-04	0.46140E-09
30	0.17133E-04	0.18562E-04	0.49163E-09
31	0.18225E-04	0.19746E-04	0.52298E-09
32	0.19357E-04	0.20972E-04	0.55546E-09
33	0.20529E-04	0.22241E-04	0.58908E-09
34	0.21740E-04	0.23554E-04	0.62385E-09
35	0.22993E-04	0.24911E-04	0.65978E-09
36	0.24286E-04	0.26312E-04	0.69689E-09
37	0.25620E-04	0.27757E-04	0.73517E-09
38	0.26995E-04	0.29247E-04	0.77463E-09
39	0.28411E-04	0.30782E-04	0.81528E-09
40	0.29869E-04	0.32361E-04	0.85711E-09
41	0.31369E-04	0.33986E-04	0.90014E-09
42	0.32909E-04	0.35655E-04	0.94435E-09

43	0.34491E-04	0.37369E-04	0.98975E-09
44	0.36115E-04	0.39127E-04	0.10363E-08
45	0.37779E-04	0.40930E-04	0.10841E-08
46	0.39483E-04	0.42777E-04	0.11330E-08
47	0.41227E-04	0.44667E-04	0.11830E-08
48	0.43011E-04	0.46599E-04	0.12342E-08
49	0.44834E-04	0.48574E-04	0.12865E-08
50	0.46695E-04	0.50591E-04	0.13399E-08
51	0.48593E-04	0.52647E-04	0.13944E-08
52	0.50528E-04	0.54743E-04	0.14499E-08
53	0.52498E-04	0.56877E-04	0.15064E-08
54	0.54502E-04	0.59048E-04	0.15639E-08
55	0.56538E-04	0.61255E-04	0.16224E-08
56	0.58606E-04	0.63495E-04	0.16817E-08
57	0.60704E-04	0.65768E-04	0.17419E-08
58	0.62829E-04	0.68071E-04	0.18029E-08
59	0.64981E-04	0.70402E-04	0.18646E-08
60	0.67156E-04	0.72758E-04	0.19271E-08
61	0.69353E-04	0.75138E-04	0.19901E-08
62	0.71569E-04	0.77539E-04	0.20537E-08
63	0.73801E-04	0.79958E-04	0.21178E-08
64	0.76047E-04	0.82391E-04	0.21822E-08
65	0.78304E-04	0.84837E-04	0.22470E-08
66	0.80569E-04	0.87290E-04	0.23119E-08
67	0.82837E-04	0.89748E-04	0.23770E-08
68	0.85106E-04	0.92206E-04	0.24421E-08
69	0.87371E-04	0.94660E-04	0.25071E-08
70	0.89629E-04	0.97106E-04	0.25719E-08
71	0.91874E-04	0.99539E-04	0.26364E-08
72	0.94103E-04	0.10195E-03	0.27003E-08
73	0.96311E-04	0.10435E-03	0.27637E-08
74	0.98491E-04	0.10671E-03	0.28262E-08
75	0.10064E-03	0.10904E-03	0.28879E-08
76	0.10275E-03	0.11132E-03	0.29485E-08
77	0.10482E-03	0.11356E-03	0.30078E-08
78	0.10683E-03	0.11575E-03	0.30657E-08
79	0.10879E-03	0.11787E-03	0.31219E-08
80	0.11069E-03	0.11992E-03	0.31763E-08
81	0.11252E-03	0.12190E-03	0.32287E-08
82	0.11426E-03	0.12379E-03	0.32788E-08
83	0.11592E-03	0.12559E-03	0.33264E-08
84	0.11749E-03	0.12729E-03	0.33713E-08
85	0.11895E-03	0.12887E-03	0.34133E-08
86	0.12030E-03	0.13033E-03	0.34520E-08
87	0.12152E-03	0.13166E-03	0.34872E-08
88	0.12262E-03	0.13285E-03	0.35186E-08
89	0.12357E-03	0.13388E-03	0.35459E-08
90	0.12437E-03	0.13475E-03	0.35689E-08
91	0.12501E-03	0.13544E-03	0.35872E-08
92	0.12547E-03	0.13594E-03	0.36004E-08
93	0.12575E-03	0.13624E-03	0.36083E-08
94	0.12582E-03	0.13632E-03	0.36105E-08
95	0.12569E-03	0.13617E-03	0.36067E-08
96	0.12533E-03	0.13578E-03	0.35964E-08
97	0.12473E-03	0.13514E-03	0.35792E-08
98	0.12388E-03	0.13422E-03	0.35548E-08
99	0.12277E-03	0.13301E-03	0.35228E-08
100	0.12137E-03	0.13149E-03	0.34827E-08

POLYGON I

Time:	160.000		
Cell	Cgas(g/cu.ft)	Clq(g/cu.ft)	Csol(g/g)
1	0.83253E-07	0.90199E-07	0.23890E-11
2	0.17874E-06	0.19365E-06	0.51291E-11
3	0.28663E-06	0.31054E-06	0.82249E-11
4	0.40708E-06	0.44104E-06	0.11681E-10
5	0.54030E-06	0.58538E-06	0.15504E-10
6	0.68649E-06	0.74376E-06	0.19699E-10
7	0.84587E-06	0.91643E-06	0.24273E-10
8	0.10187E-05	0.11036E-05	0.29231E-10
9	0.12051E-05	0.13057E-05	0.34582E-10
10	0.14055E-05	0.15228E-05	0.40332E-10
11	0.16201E-05	0.17552E-05	0.46489E-10
12	0.18491E-05	0.20034E-05	0.53061E-10
13	0.20929E-05	0.22675E-05	0.60056E-10
14	0.23517E-05	0.25479E-05	0.67482E-10
15	0.26258E-05	0.28448E-05	0.75348E-10
16	0.29155E-05	0.31588E-05	0.83662E-10
17	0.32212E-05	0.34899E-05	0.92433E-10
18	0.35431E-05	0.38387E-05	0.10167E-09
19	0.38815E-05	0.42053E-05	0.11138E-09
20	0.42368E-05	0.45902E-05	0.12158E-09
21	0.46092E-05	0.49937E-05	0.13226E-09
22	0.49991E-05	0.54161E-05	0.14345E-09
23	0.54067E-05	0.58578E-05	0.15515E-09
24	0.58325E-05	0.63190E-05	0.16736E-09
25	0.62765E-05	0.68001E-05	0.18011E-09
26	0.67393E-05	0.73015E-05	0.19339E-09
27	0.72209E-05	0.78233E-05	0.20721E-09
28	0.77218E-05	0.83660E-05	0.22158E-09

29	0.82421E-05	0.89297E-05	0.23651E-09
30	0.87822E-05	0.95148E-05	0.25201E-09
31	0.93422E-05	0.10122E-04	0.26808E-09
32	0.99224E-05	0.10750E-04	0.28473E-09
33	0.10523E-04	0.11401E-04	0.30196E-09
34	0.11144E-04	0.12074E-04	0.31979E-09
35	0.11786E-04	0.12769E-04	0.33821E-09
36	0.12449E-04	0.13487E-04	0.35722E-09
37	0.13133E-04	0.14228E-04	0.37685E-09
38	0.13838E-04	0.14992E-04	0.39707E-09
39	0.14564E-04	0.15779E-04	0.41791E-09
40	0.15311E-04	0.16588E-04	0.43936E-09
41	0.16080E-04	0.17421E-04	0.46141E-09
42	0.16869E-04	0.18277E-04	0.48407E-09
43	0.17680E-04	0.19155E-04	0.50734E-09
44	0.18512E-04	0.20057E-04	0.53122E-09
45	0.19365E-04	0.20981E-04	0.55569E-09
46	0.20239E-04	0.21927E-04	0.58076E-09
47	0.21133E-04	0.22896E-04	0.60642E-09
48	0.22048E-04	0.23887E-04	0.63266E-09
49	0.22982E-04	0.24899E-04	0.65948E-09
50	0.23936E-04	0.25933E-04	0.68685E-09
51	0.24909E-04	0.26987E-04	0.71477E-09
52	0.25901E-04	0.28061E-04	0.74323E-09
53	0.26910E-04	0.29155E-04	0.77220E-09
54	0.27938E-04	0.30268E-04	0.80168E-09
55	0.28982E-04	0.31399E-04	0.83164E-09
56	0.30042E-04	0.32548E-04	0.86205E-09
57	0.31117E-04	0.33713E-04	0.89291E-09
58	0.32206E-04	0.34893E-04	0.92417E-09
59	0.33309E-04	0.36088E-04	0.95582E-09
60	0.34424E-04	0.37296E-04	0.98781E-09
61	0.35550E-04	0.38516E-04	0.10201E-08
62	0.36686E-04	0.39747E-04	0.10527E-08
63	0.37830E-04	0.40986E-04	0.10856E-08
64	0.38982E-04	0.42234E-04	0.11186E-08
65	0.40139E-04	0.43487E-04	0.11518E-08
66	0.41299E-04	0.44745E-04	0.11851E-08
67	0.42462E-04	0.46005E-04	0.12185E-08
68	0.43625E-04	0.47265E-04	0.12518E-08
69	0.44786E-04	0.48523E-04	0.12852E-08
70	0.45944E-04	0.49776E-04	0.13184E-08
71	0.47095E-04	0.51024E-04	0.13514E-08
72	0.48237E-04	0.52261E-04	0.13842E-08
73	0.49369E-04	0.53487E-04	0.14167E-08
74	0.50487E-04	0.54698E-04	0.14487E-08
75	0.51588E-04	0.55892E-04	0.14803E-08
76	0.52670E-04	0.57064E-04	0.15114E-08
77	0.53729E-04	0.58212E-04	0.15418E-08
78	0.54763E-04	0.59332E-04	0.15715E-08
79	0.55768E-04	0.60420E-04	0.16003E-08
80	0.56740E-04	0.61473E-04	0.16282E-08
81	0.57675E-04	0.62487E-04	0.16550E-08
82	0.58571E-04	0.63457E-04	0.16807E-08
83	0.59421E-04	0.64378E-04	0.17051E-08
84	0.60224E-04	0.65248E-04	0.17281E-08
85	0.60973E-04	0.66059E-04	0.17496E-08
86	0.61664E-04	0.66808E-04	0.17695E-08
87	0.62293E-04	0.67489E-04	0.17875E-08
88	0.62854E-04	0.68098E-04	0.18036E-08
89	0.63343E-04	0.68627E-04	0.18176E-08
90	0.63753E-04	0.69071E-04	0.18294E-08
91	0.64079E-04	0.69425E-04	0.18388E-08
92	0.64316E-04	0.69682E-04	0.18456E-08
93	0.64457E-04	0.69835E-04	0.18496E-08
94	0.64497E-04	0.69877E-04	0.18508E-08
95	0.64428E-04	0.69802E-04	0.18488E-08
96	0.64243E-04	0.69603E-04	0.18435E-08
97	0.63937E-04	0.69271E-04	0.18347E-08
98	0.63501E-04	0.68799E-04	0.18222E-08
99	0.62929E-04	0.68179E-04	0.18058E-08
100	0.62213E-04	0.67403E-04	0.17852E-08

POLYGON I

Time:	170.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.42676E-07	0.46236E-07	0.12246E-11
2	0.91623E-07	0.99267E-07	0.26292E-11
3	0.14692E-06	0.15918E-06	0.42161E-11
4	0.20867E-06	0.22608E-06	0.59879E-11
5	0.27696E-06	0.30006E-06	0.79474E-11
6	0.35189E-06	0.38125E-06	0.10098E-10
7	0.43359E-06	0.46976E-06	0.12442E-10
8	0.52217E-06	0.56573E-06	0.14984E-10
9	0.61775E-06	0.66928E-06	0.17727E-10
10	0.72047E-06	0.78057E-06	0.20674E-10
11	0.83046E-06	0.89974E-06	0.23830E-10
12	0.94786E-06	0.10269E-05	0.27199E-10
13	0.10728E-05	0.11623E-05	0.30785E-10
14	0.12055E-05	0.13060E-05	0.34591E-10

15	0.13460E-05	0.14583E-05	0.38623E-10
16	0.14945E-05	0.16192E-05	0.42885E-10
17	0.16512E-05	0.17889E-05	0.47381E-10
18	0.18162E-05	0.19677E-05	0.52116E-10
19	0.19897E-05	0.21556E-05	0.57094E-10
20	0.21718E-05	0.23529E-05	0.62320E-10
21	0.23627E-05	0.25598E-05	0.67798E-10
22	0.25625E-05	0.27763E-05	0.73533E-10
23	0.27715E-05	0.30027E-05	0.79529E-10
24	0.29897E-05	0.32391E-05	0.85791E-10
25	0.32173E-05	0.34857E-05	0.92323E-10
26	0.34545E-05	0.37427E-05	0.99129E-10
27	0.37014E-05	0.40102E-05	0.10621E-09
28	0.39582E-05	0.42884E-05	0.11358E-09
29	0.42249E-05	0.45774E-05	0.12124E-09
30	0.45017E-05	0.48773E-05	0.12918E-09
31	0.47888E-05	0.51883E-05	0.13742E-09
32	0.50862E-05	0.55105E-05	0.14595E-09
33	0.53941E-05	0.58441E-05	0.15479E-09
34	0.57125E-05	0.61890E-05	0.16392E-09
35	0.60415E-05	0.65455E-05	0.17336E-09
36	0.63813E-05	0.69136E-05	0.18311E-09
37	0.67318E-05	0.72934E-05	0.19317E-09
38	0.70931E-05	0.76849E-05	0.20354E-09
39	0.74653E-05	0.80881E-05	0.21422E-09
40	0.78484E-05	0.85032E-05	0.22521E-09
41	0.82424E-05	0.89300E-05	0.23652E-09
42	0.86472E-05	0.93686E-05	0.24814E-09
43	0.90629E-05	0.98190E-05	0.26006E-09
44	0.94894E-05	0.10281E-04	0.27230E-09
45	0.99266E-05	0.10755E-04	0.28485E-09
46	0.10374E-04	0.11240E-04	0.29770E-09
47	0.10833E-04	0.11737E-04	0.31085E-09
48	0.11302E-04	0.12244E-04	0.32430E-09
49	0.11781E-04	0.12763E-04	0.33805E-09
50	0.12270E-04	0.13293E-04	0.35208E-09
51	0.12768E-04	0.13833E-04	0.36639E-09
52	0.13277E-04	0.14384E-04	0.38098E-09
53	0.13794E-04	0.14945E-04	0.39583E-09
54	0.14321E-04	0.15515E-04	0.41094E-09
55	0.14856E-04	0.16095E-04	0.42630E-09
56	0.15399E-04	0.16684E-04	0.44189E-09
57	0.15950E-04	0.17281E-04	0.45770E-09
58	0.16509E-04	0.17886E-04	0.47373E-09
59	0.17074E-04	0.18499E-04	0.48995E-09
60	0.17646E-04	0.19118E-04	0.50635E-09
61	0.18223E-04	0.19743E-04	0.52292E-09
62	0.18805E-04	0.20374E-04	0.53962E-09
63	0.19392E-04	0.21010E-04	0.55646E-09
64	0.19982E-04	0.21649E-04	0.57339E-09
65	0.20575E-04	0.22292E-04	0.59041E-09
66	0.21170E-04	0.22936E-04	0.60748E-09
67	0.21766E-04	0.23582E-04	0.62459E-09
68	0.22362E-04	0.24228E-04	0.64169E-09
69	0.22957E-04	0.24873E-04	0.65877E-09
70	0.23551E-04	0.25515E-04	0.67580E-09
71	0.24141E-04	0.26155E-04	0.69273E-09
72	0.24726E-04	0.26789E-04	0.70953E-09
73	0.25306E-04	0.27418E-04	0.72618E-09
74	0.25879E-04	0.28038E-04	0.74262E-09
75	0.26444E-04	0.28650E-04	0.75882E-09
76	0.26999E-04	0.29251E-04	0.77474E-09
77	0.27542E-04	0.29839E-04	0.79032E-09
78	0.28072E-04	0.30413E-04	0.80553E-09
79	0.28587E-04	0.30971E-04	0.82030E-09
80	0.29085E-04	0.31511E-04	0.83460E-09
81	0.29564E-04	0.32031E-04	0.84836E-09
82	0.30023E-04	0.32528E-04	0.86153E-09
83	0.30459E-04	0.33000E-04	0.87404E-09
84	0.30871E-04	0.33446E-04	0.88584E-09
85	0.31255E-04	0.33862E-04	0.89686E-09
86	0.31609E-04	0.34246E-04	0.90703E-09
87	0.31931E-04	0.34595E-04	0.91628E-09
88	0.32219E-04	0.34907E-04	0.92454E-09
89	0.32469E-04	0.35178E-04	0.93172E-09
90	0.32680E-04	0.35406E-04	0.93776E-09
91	0.32847E-04	0.35587E-04	0.94256E-09
92	0.32968E-04	0.35719E-04	0.94604E-09
93	0.33041E-04	0.35797E-04	0.94812E-09
94	0.33061E-04	0.35819E-04	0.94870E-09
95	0.33026E-04	0.35781E-04	0.94768E-09
96	0.32931E-04	0.35678E-04	0.94497E-09
97	0.32774E-04	0.35508E-04	0.94047E-09
98	0.32551E-04	0.35266E-04	0.93406E-09
99	0.32258E-04	0.34949E-04	0.92564E-09
100	0.31890E-04	0.34551E-04	0.91511E-09

POLYGON I

Time: 180.000
Cell Cgas(g/cu.ft)

Cliq(g/cu.ft)

Csol(g/g)

TUT 004 2138

1	0.21876E-07	0.23700E-07	0.62773E-12
2	0.46966E-07	0.50884E-07	0.13477E-11
3	0.75314E-07	0.81596E-07	0.21612E-11
4	0.10696E-06	0.11589E-06	0.30694E-11
5	0.14197E-06	0.15381E-06	0.40738E-11
6	0.18038E-06	0.19543E-06	0.51761E-11
7	0.22226E-06	0.24080E-06	0.63778E-11
8	0.26766E-06	0.28999E-06	0.76807E-11
9	0.31666E-06	0.34308E-06	0.90866E-11
10	0.36931E-06	0.40012E-06	0.10598E-10
11	0.42569E-06	0.46120E-06	0.12215E-10
12	0.48587E-06	0.52640E-06	0.13942E-10
13	0.54992E-06	0.59580E-06	0.15780E-10
14	0.61792E-06	0.66947E-06	0.17732E-10
15	0.68995E-06	0.74751E-06	0.19798E-10
16	0.76608E-06	0.82999E-06	0.21983E-10
17	0.84639E-06	0.91700E-06	0.24288E-10
18	0.93097E-06	0.10086E-05	0.26715E-10
19	0.10199E-05	0.11050E-05	0.29266E-10
20	0.11132E-05	0.12061E-05	0.31945E-10
21	0.12111E-05	0.13121E-05	0.34753E-10
22	0.13135E-05	0.14231E-05	0.37693E-10
23	0.14207E-05	0.15392E-05	0.40767E-10
24	0.15325E-05	0.16604E-05	0.43976E-10
25	0.16492E-05	0.17868E-05	0.47325E-10
26	0.17708E-05	0.19185E-05	0.50814E-10
27	0.18974E-05	0.20556E-05	0.54445E-10
28	0.20290E-05	0.21982E-05	0.58222E-10
29	0.21657E-05	0.23464E-05	0.62145E-10
30	0.23076E-05	0.25001E-05	0.66217E-10
31	0.24547E-05	0.26595E-05	0.70440E-10
32	0.26072E-05	0.28247E-05	0.74814E-10
33	0.27650E-05	0.29957E-05	0.79343E-10
34	0.29282E-05	0.31725E-05	0.84026E-10
35	0.30969E-05	0.33552E-05	0.88866E-10
36	0.32710E-05	0.35439E-05	0.93864E-10
37	0.34507E-05	0.37386E-05	0.99020E-10
38	0.36359E-05	0.39393E-05	0.10433E-09
39	0.38267E-05	0.41460E-05	0.10981E-09
40	0.40231E-05	0.43587E-05	0.11544E-09
41	0.42250E-05	0.45775E-05	0.12124E-09
42	0.44326E-05	0.48023E-05	0.12719E-09
43	0.46456E-05	0.50332E-05	0.13331E-09
44	0.48643E-05	0.52701E-05	0.13958E-09
45	0.50884E-05	0.55129E-05	0.14601E-09
46	0.53179E-05	0.57616E-05	0.15260E-09
47	0.55529E-05	0.60161E-05	0.15934E-09
48	0.57932E-05	0.62765E-05	0.16624E-09
49	0.60387E-05	0.65425E-05	0.17328E-09
50	0.62893E-05	0.68140E-05	0.18048E-09
51	0.65450E-05	0.70910E-05	0.18781E-09
52	0.68056E-05	0.73733E-05	0.19529E-09
53	0.70709E-05	0.76608E-05	0.20290E-09
54	0.73408E-05	0.79532E-05	0.21065E-09
55	0.76151E-05	0.82504E-05	0.21852E-09
56	0.78937E-05	0.85522E-05	0.22651E-09
57	0.81762E-05	0.88583E-05	0.23462E-09
58	0.84625E-05	0.91684E-05	0.24283E-09
59	0.87522E-05	0.94824E-05	0.25115E-09
60	0.90452E-05	0.97998E-05	0.25956E-09
61	0.93411E-05	0.10120E-04	0.26805E-09
62	0.96396E-05	0.10444E-04	0.27661E-09
63	0.99403E-05	0.10770E-04	0.28524E-09
64	0.10243E-04	0.11097E-04	0.29392E-09
65	0.10547E-04	0.11427E-04	0.30264E-09
66	0.10852E-04	0.11757E-04	0.31140E-09
67	0.11157E-04	0.12088E-04	0.32016E-09
68	0.11463E-04	0.12419E-04	0.32893E-09
69	0.11768E-04	0.12750E-04	0.33769E-09
70	0.12072E-04	0.13079E-04	0.34641E-09
71	0.12375E-04	0.13407E-04	0.35509E-09
72	0.12675E-04	0.13732E-04	0.36371E-09
73	0.12972E-04	0.14054E-04	0.37224E-09
74	0.13266E-04	0.14372E-04	0.38067E-09
75	0.13555E-04	0.14686E-04	0.38897E-09
76	0.13839E-04	0.14994E-04	0.39713E-09
77	0.14118E-04	0.15296E-04	0.40512E-09
78	0.14389E-04	0.15590E-04	0.41291E-09
79	0.14653E-04	0.15876E-04	0.42049E-09
80	0.14909E-04	0.16153E-04	0.42782E-09
81	0.15155E-04	0.16419E-04	0.43487E-09
82	0.15390E-04	0.16674E-04	0.44162E-09
83	0.15613E-04	0.16916E-04	0.44803E-09
84	0.15824E-04	0.17144E-04	0.45408E-09
85	0.16021E-04	0.17358E-04	0.45973E-09
86	0.16203E-04	0.17554E-04	0.46494E-09
87	0.16368E-04	0.17733E-04	0.46968E-09
88	0.16515E-04	0.17893E-04	0.47392E-09
89	0.16644E-04	0.18032E-04	0.47760E-09
90	0.16752E-04	0.18149E-04	0.48069E-09

91	0.16837E-04	0.18242E-04	0.48316E-09
92	0.16900E-04	0.18309E-04	0.48494E-09
93	0.16937E-04	0.18350E-04	0.48601E-09
94	0.16947E-04	0.18361E-04	0.48630E-09
95	0.16929E-04	0.18341E-04	0.48578E-09
96	0.16880E-04	0.18289E-04	0.48439E-09
97	0.16800E-04	0.18201E-04	0.48208E-09
98	0.16686E-04	0.18078E-04	0.47880E-09
99	0.16535E-04	0.17915E-04	0.47449E-09
100	0.16347E-04	0.17711E-04	0.46908E-09

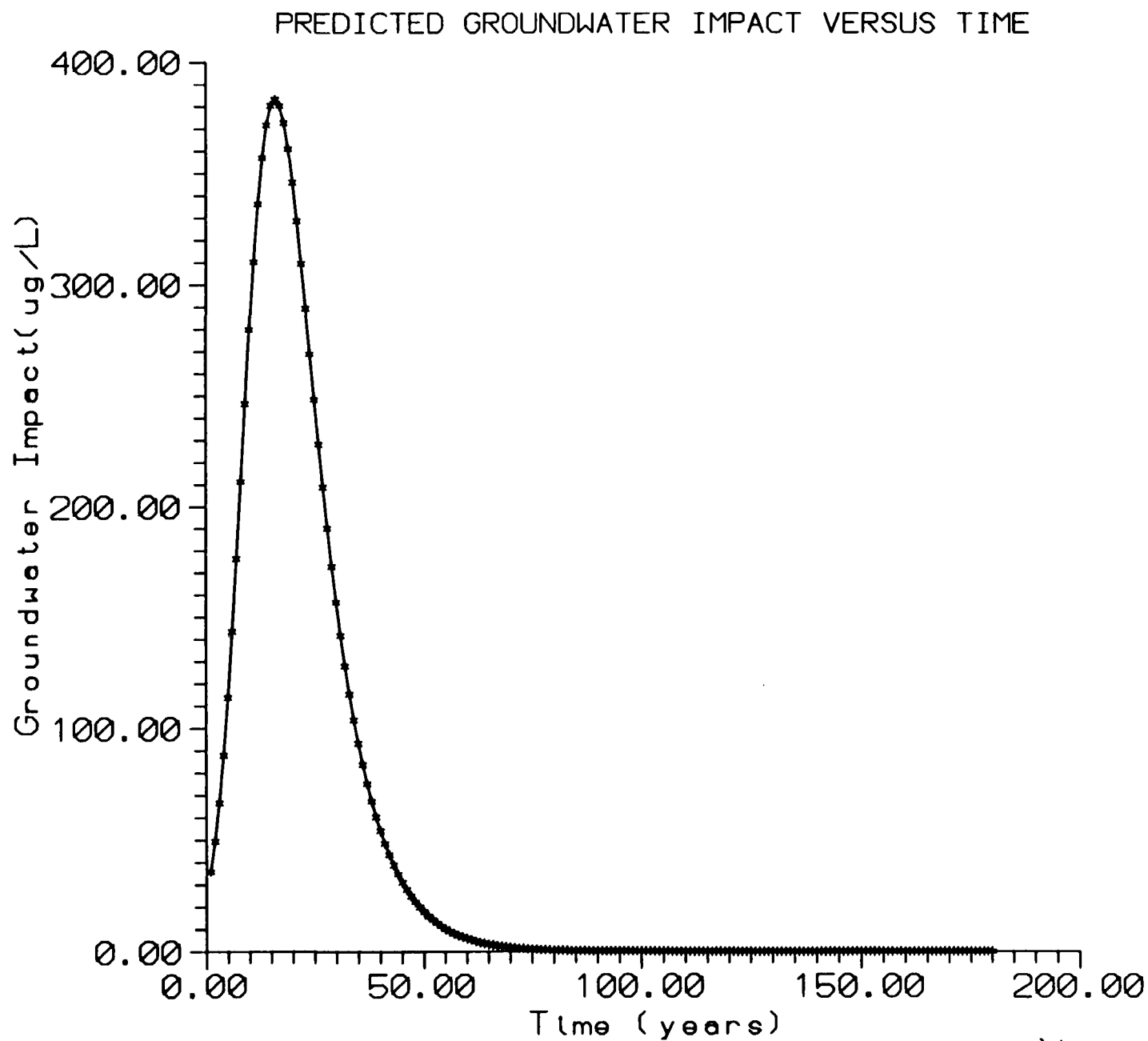
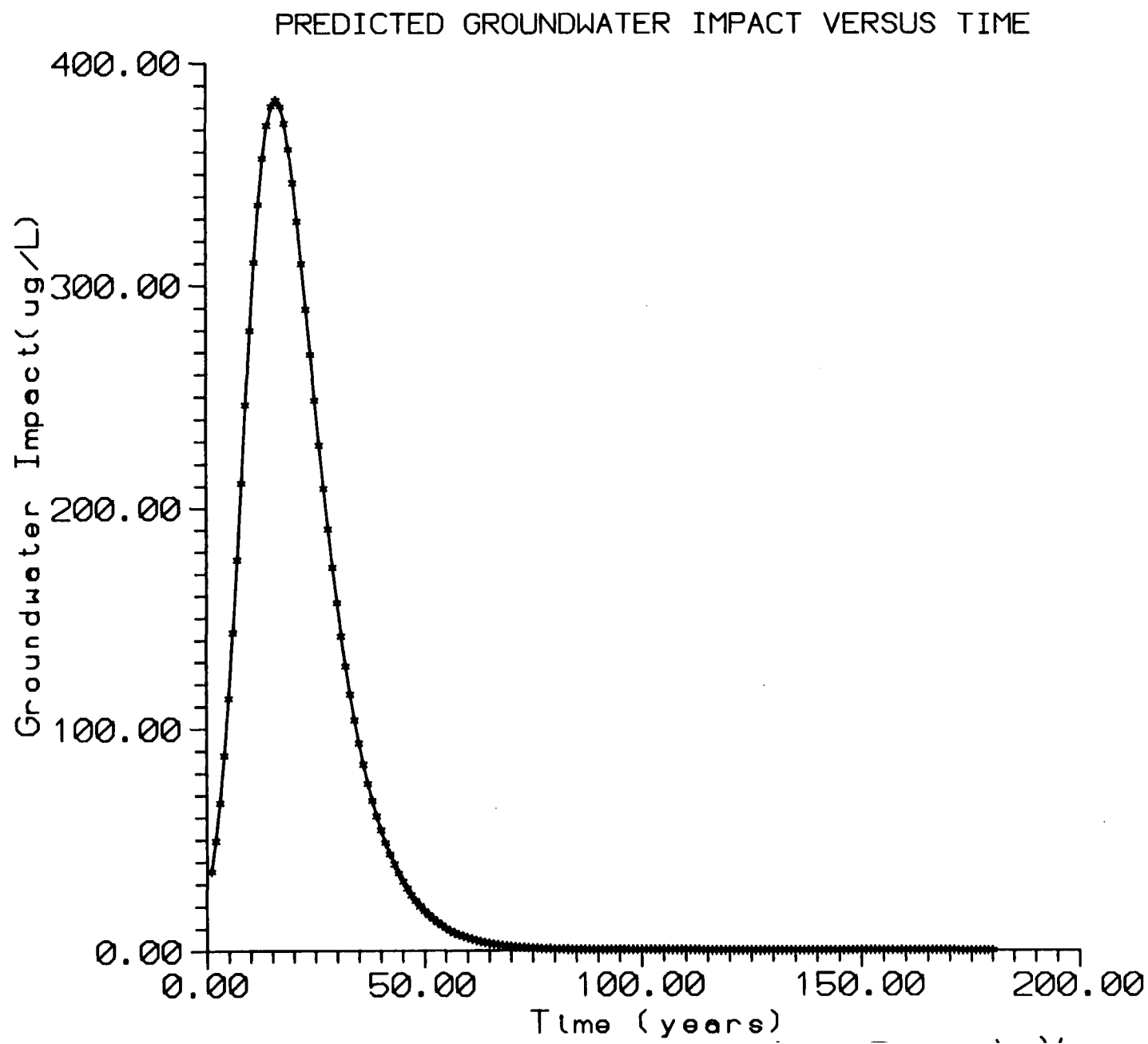


Figure B-4; Predicted Groundwater Impact Versus Time
(for a 100-year period, constant soil PCE concentrations)



VLEACH
version 2.0, 1993.

Developed by :

Varadhan Ravi and Jeffrey A. Johnson (Dynamac)
Center for Subsurface Modeling Support
Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

LNEMRI SIMULATION 2

1 polygons.
Timestep = 1.00 years. Simulation length = 180.00 years.
Printout every 10.00 years. Vertical profile stored every 10.00 years.
Koc = 375.00 ml/g, 0.13243E-01cu.ft./g
Kh = 0.92300 (dimensionless).
Aqueous solubility = 150.00 mg/l, 4.2476 g/cu.ft
Free air diffusion coefficient = .66000 sq. m/day, 2593.1 sq.ft./yr

Polygon 1

POLYGON 1

Polygon area = 1.0000 sq. ft.
100 cells, each cell 0.200 ft. thick.

Soil Properties:

Bulk density = 1.3500 g/ml, 38228. g/cu.ft.
Porosity = 0.3000 Volumetric water content = 0.2000
Organic carbon content = 0.00100000
Recharge Rate = 0.46000001 ft/yr
Conc. in recharge water = 0.00000 mg/l, 0.00000 g/cu.ft
Atmospheric concentration = 0.00000 mg/l, 0.00000 g/cu.ft
Water table has a fixed concentration of 0.00000 mg/l, 0.00000 g/cu.ft.
with respect to gas diffusion.

VLEACH
version 2.0, 1993.

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Center for Subsurface Modeling Support
Robert S. Kerr Environmental Research Laboratory
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LNENRI SIMULATION 2

Polygon 1
At time = 0.00, total mass in vadose zone = 9.2429 g/sq.ft.
Mass in gas phase = 1.0683 g/sq.ft.
Mass in liquid phase = 2.3149 g/sq.ft.
Mass sorbed = 5.8596 g/sq.ft.

Polygon 1
At time = 10.00, total mass in vadose zone = 6.8469 g/sq.ft.
Mass in gas phase = 0.79139 g/sq.ft.
Mass in liquid phase = 1.7148 g/sq.ft.
Mass sorbed = 4.3406 g/sq.ft.

Since last printout at time = 0.00
Change in Total Mass = -2.3961 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.42667 g/sq.ft.
Diffusion in from atmosphere = -1.1783 g/sq.ft.
Diffusion in from water table = -0.79107 g/sq.ft.
Total inflow at boundaries = -2.3960 g/sq.ft.
Mass discrepancy = -0.20504E-04g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -2.3961 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.42667 g/sq.ft.
Diffusion in from atmosphere = -1.1783 g/sq.ft.
Diffusion in from water table = -0.79107 g/sq.ft.
Total inflow at boundaries = -2.3960 g/sq.ft.
Mass discrepancy = -0.20504E-04g/sq.ft.

Polygon 1
At time = 20.00, total mass in vadose zone = 3.4191 g/sq.ft.
Mass in gas phase = 0.39519 g/sq.ft.
Mass in liquid phase = 0.85632 g/sq.ft.
Mass sorbed = 2.1676 g/sq.ft.

Since last printout at time = 10.00
Change in Total Mass = -3.4278 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -1.6777 g/sq.ft.
Diffusion in from atmosphere = -0.32293 g/sq.ft.
Diffusion in from water table = -1.4272 g/sq.ft.
Total inflow at boundaries = -3.4278 g/sq.ft.
Mass discrepancy = -0.97752E-05g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -5.8238 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -2.1043 g/sq.ft.
Diffusion in from atmosphere = -1.5012 g/sq.ft.
Diffusion in from water table = -2.2183 g/sq.ft.
Total inflow at boundaries = -5.8238 g/sq.ft.
Mass discrepancy = -0.30518E-04g/sq.ft.

Polygon 1
At time = 30.00, total mass in vadose zone = 1.2439 g/sq.ft.
Mass in gas phase = 0.14378 g/sq.ft.
Mass in liquid phase = 0.31154 g/sq.ft.
Mass sorbed = 0.78858 g/sq.ft.

Since last printout at time = 20.00
Change in Total Mass = -2.1752 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -1.2415 g/sq.ft.
Diffusion in from atmosphere = -0.10341 g/sq.ft.
Diffusion in from water table = -0.83027 g/sq.ft.
Total inflow at boundaries = -2.1752 g/sq.ft.
Mass discrepancy = -0.33379E-05g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -7.9990 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -3.3458 g/sq.ft.
 Diffusion in from atmosphere = -1.6046 g/sq.ft.
 Diffusion in from water table = -3.0485 g/sq.ft.
 Total inflow at boundaries = -7.9990 g/sq.ft.
 Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
 At time = 40.00, total mass in vadose zone = 0.41366 g/sq.ft.
 Mass in gas phase = 0.47813E-01g/sq.ft.
 Mass in liquid phase = 0.10360 g/sq.ft.
 Mass sorbed = 0.26224 g/sq.ft.

Since last printout at time = 30.00
 Change in Total Mass = -0.83024 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.48850 g/sq.ft.
 Diffusion in from atmosphere = -0.33822E-01g/sq.ft.
 Diffusion in from water table = -0.30792 g/sq.ft.
 Total inflow at boundaries = -0.83024 g/sq.ft.
 Mass discrepancy = -0.18477E-05g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -8.8293 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -3.8343 g/sq.ft.
 Diffusion in from atmosphere = -1.6385 g/sq.ft.
 Diffusion in from water table = -3.3565 g/sq.ft.
 Total inflow at boundaries = -8.8292 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1
 At time = 50.00, total mass in vadose zone = 0.13567 g/sq.ft.
 Mass in gas phase = 0.15682E-01g/sq.ft.
 Mass in liquid phase = 0.33980E-01g/sq.ft.
 Mass sorbed = 0.86013E-01g/sq.ft.

Since last printout at time = 40.00
 Change in Total Mass = -0.27798 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.16432 g/sq.ft.
 Diffusion in from atmosphere = -0.11077E-01g/sq.ft.
 Diffusion in from water table = -0.10259 g/sq.ft.
 Total inflow at boundaries = -0.27798 g/sq.ft.
 Mass discrepancy = -0.44703E-06g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.1072 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -3.9986 g/sq.ft.
 Diffusion in from atmosphere = -1.6495 g/sq.ft.
 Diffusion in from water table = -3.4590 g/sq.ft.
 Total inflow at boundaries = -9.1072 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1
 At time = 60.00, total mass in vadose zone = 0.44437E-01g/sq.ft.
 Mass in gas phase = 0.51363E-02g/sq.ft.
 Mass in liquid phase = 0.11129E-01g/sq.ft.
 Mass sorbed = 0.28171E-01g/sq.ft.

Since last printout at time = 50.00
 Change in Total Mass = -0.91238E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.53957E-01g/sq.ft.
 Diffusion in from atmosphere = -0.36277E-02g/sq.ft.
 Diffusion in from water table = -0.33653E-01g/sq.ft.
 Total inflow at boundaries = -0.91237E-01g/sq.ft.
 Mass discrepancy = -0.20117E-06g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.1985 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0526 g/sq.ft.
 Diffusion in from atmosphere = -1.6532 g/sq.ft.
 Diffusion in from water table = -3.4927 g/sq.ft.
 Total inflow at boundaries = -9.1984 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1
 At time = 70.00, total mass in vadose zone = 0.14553E-01g/sq.ft.
 Mass in gas phase = 0.16821E-02g/sq.ft.
 Mass in liquid phase = 0.36449E-02g/sq.ft.
 Mass sorbed = 0.92261E-02g/sq.ft.

Since last printout at time = 60.00
 Change in Total Mass = -0.29884E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.17674E-01g/sq.ft.
 Diffusion in from atmosphere = -0.11881E-02g/sq.ft.
 Diffusion in from water table = -0.11022E-01g/sq.ft.
 Total inflow at boundaries = -0.29884E-01g/sq.ft.
 Mass discrepancy = -0.57742E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2284 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0702 g/sq.ft.
 Diffusion in from atmosphere = -1.6544 g/sq.ft.
 Diffusion in from water table = -3.5037 g/sq.ft.
 Total inflow at boundaries = -9.2283 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1
 At time = 80.00, total mass in vadose zone = 0.47661E-02g/sq.ft.
 Mass in gas phase = 0.55088E-03g/sq.ft.
 Mass in liquid phase = 0.11937E-02g/sq.ft.
 Mass sorbed = 0.30215E-02g/sq.ft.

Since last printout at time = 70.00
 Change in Total Mass = -0.97870E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.57881E-02g/sq.ft.
 Diffusion in from atmosphere = -0.38909E-03g/sq.ft.
 Diffusion in from water table = -0.36097E-02g/sq.ft.
 Total inflow at boundaries = -0.97870E-02g/sq.ft.
 Mass discrepancy = -0.16764E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2381 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0760 g/sq.ft.
 Diffusion in from atmosphere = -1.6547 g/sq.ft.
 Diffusion in from water table = -3.5073 g/sq.ft.
 Total inflow at boundaries = -9.2381 g/sq.ft.
 Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1
 At time = 90.00, total mass in vadose zone = 0.15609E-02g/sq.ft.
 Mass in gas phase = 0.18041E-03g/sq.ft.
 Mass in liquid phase = 0.39093E-03g/sq.ft.
 Mass sorbed = 0.98954E-03g/sq.ft.

Since last printout at time = 80.00
 Change in Total Mass = -0.32052E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.18956E-02g/sq.ft.
 Diffusion in from atmosphere = -0.12743E-03g/sq.ft.
 Diffusion in from water table = -0.11822E-02g/sq.ft.
 Total inflow at boundaries = -0.32052E-02g/sq.ft.
 Mass discrepancy = -0.67521E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2413 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0779 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5085 g/sq.ft.
 Total inflow at boundaries = -9.2413 g/sq.ft.
 Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1
 At time = 100.00, total mass in vadose zone = 0.51118E-03g/sq.ft.
 Mass in gas phase = 0.59085E-04g/sq.ft.
 Mass in liquid phase = 0.12803E-03g/sq.ft.
 Mass sorbed = 0.32407E-03g/sq.ft.

Since last printout at time = 90.00
 Change in Total Mass = -0.10497E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.62080E-03g/sq.ft.
 Diffusion in from atmosphere = -0.41731E-04g/sq.ft.
 Diffusion in from water table = -0.38716E-03g/sq.ft.
 Total inflow at boundaries = -0.10497E-02g/sq.ft.
 Mass discrepancy = -0.18626E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2424 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0786 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5089 g/sq.ft.

Total inflow at boundaries = -9.2424 g/sq.ft.
Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1
At time = 110.00, total mass in vadose zone = 0.16741E-03g/sq.ft.
Mass in gas phase = 0.19350E-04g/sq.ft.
Mass in liquid phase = 0.41929E-04g/sq.ft.
Mass sorbed = 0.10613E-03g/sq.ft.

Since last printout at time = 100.00
Change in Total Mass = -0.34377E-03g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.20331E-03g/sq.ft.
Diffusion in from atmosphere = -0.13667E-04g/sq.ft.
Diffusion in from water table = -0.12679E-03g/sq.ft.
Total inflow at boundaries = -0.34377E-03g/sq.ft.
Mass discrepancy = -0.58208E-09g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -9.2427 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0788 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5090 g/sq.ft.
Total inflow at boundaries = -9.2427 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
At time = 120.00, total mass in vadose zone = 0.54827E-04g/sq.ft.
Mass in gas phase = 0.63371E-05g/sq.ft.
Mass in liquid phase = 0.13732E-04g/sq.ft.
Mass sorbed = 0.34758E-04g/sq.ft.

Since last printout at time = 110.00
Change in Total Mass = -0.11258E-03g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.66584E-04g/sq.ft.
Diffusion in from atmosphere = -0.44759E-05g/sq.ft.
Diffusion in from water table = -0.41524E-04g/sq.ft.
Total inflow at boundaries = -0.11258E-03g/sq.ft.
Mass discrepancy = -0.21828E-09g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0788 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2428 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
At time = 130.00, total mass in vadose zone = 0.17956E-04g/sq.ft.
Mass in gas phase = 0.20754E-05g/sq.ft.
Mass in liquid phase = 0.44970E-05g/sq.ft.
Mass sorbed = 0.11383E-04g/sq.ft.

Since last printout at time = 120.00
Change in Total Mass = -0.36871E-04g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.21806E-04g/sq.ft.
Diffusion in from atmosphere = -0.14658E-05g/sq.ft.
Diffusion in from water table = -0.13599E-04g/sq.ft.
Total inflow at boundaries = -0.36871E-04g/sq.ft.
Mass discrepancy = -0.61846E-10g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0788 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.33379E-04g/sq.ft.

Polygon 1
At time = 140.00, total mass in vadose zone = 0.58804E-05g/sq.ft.
Mass in gas phase = 0.67968E-06g/sq.ft.
Mass in liquid phase = 0.14728E-05g/sq.ft.
Mass sorbed = 0.37279E-05g/sq.ft.

Since last printout at time = 130.00
Change in Total Mass = -0.12075E-04g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.71414E-05g/sq.ft.
Diffusion in from atmosphere = -0.48006E-06g/sq.ft.

Diffusion in from water table = -0.44537E-05g/sq.ft.
Total inflow at boundaries = -0.12075E-04g/sq.ft.
Mass discrepancy = -0.22737E-10g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1

At time = 150.00, total mass in vadose zone = 0.19258E-05g/sq.ft.
Mass in gas phase = 0.22259E-06g/sq.ft.
Mass in liquid phase = 0.48233E-06g/sq.ft.
Mass sorbed = 0.12209E-05g/sq.ft.

Since last printout at time = 140.00

Change in Total Mass = -0.39546E-05g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.23388E-05g/sq.ft.
Diffusion in from atmosphere = -0.15722E-06g/sq.ft.
Diffusion in from water table = -0.14586E-05g/sq.ft.
Total inflow at boundaries = -0.39546E-05g/sq.ft.
Mass discrepancy = -0.81855E-11g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1

At time = 160.00, total mass in vadose zone = 0.63070E-06g/sq.ft.
Mass in gas phase = 0.72899E-07g/sq.ft.
Mass in liquid phase = 0.15796E-06g/sq.ft.
Mass sorbed = 0.39984E-06g/sq.ft.

Since last printout at time = 150.00

Change in Total Mass = -0.12951E-05g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.76595E-06g/sq.ft.
Diffusion in from atmosphere = -0.51488E-07g/sq.ft.
Diffusion in from water table = -0.47768E-06g/sq.ft.
Total inflow at boundaries = -0.12951E-05g/sq.ft.
Mass discrepancy = -0.23874E-11g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1

At time = 170.00, total mass in vadose zone = 0.20655E-06g/sq.ft.
Mass in gas phase = 0.23874E-07g/sq.ft.
Mass in liquid phase = 0.51732E-07g/sq.ft.
Mass sorbed = 0.13095E-06g/sq.ft.

Since last printout at time = 160.00

Change in Total Mass = -0.42415E-06g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.25085E-06g/sq.ft.
Diffusion in from atmosphere = -0.16862E-07g/sq.ft.
Diffusion in from water table = -0.15644E-06g/sq.ft.
Total inflow at boundaries = -0.42414E-06g/sq.ft.
Mass discrepancy = -0.76739E-12g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 180.00, total mass in vadose zone = 0.67645E-07g/sq.ft.
 Mass in gas phase = 0.78187E-08g/sq.ft.
 Mass in liquid phase = 0.16942E-07g/sq.ft.
 Mass sorbed = 0.42884E-07g/sq.ft.

Since last printout at time = 170.00
 Change in Total Mass = -0.13891E-06g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.82151E-07g/sq.ft.
 Diffusion in from atmosphere = -0.55223E-08g/sq.ft.
 Diffusion in from water table = -0.51233E-07g/sq.ft.
 Total inflow at boundaries = -0.13891E-06g/sq.ft.
 Mass discrepancy = -0.25580E-12g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

GROUNDWATER IMPACT OF POLYGON 1

Time	Mass per area (g/sq.ft.)	Total Mass (g)
10.00	1.2177	1.2177
20.00	3.1049	3.1049
30.00	2.0718	2.0718
40.00	0.79641	0.79641
50.00	0.26691	0.26691
60.00	0.87610E-01	0.87610E-01
70.00	0.28696E-01	0.28696E-01
80.00	0.93979E-02	0.93979E-02
90.00	0.30778E-02	0.30778E-02
100.00	0.10080E-02	0.10080E-02
110.00	0.33010E-03	0.33010E-03
120.00	0.10811E-03	0.10811E-03
130.00	0.35405E-04	0.35405E-04
140.00	0.11595E-04	0.11595E-04
150.00	0.37974E-05	0.37974E-05
160.00	0.12436E-05	0.12436E-05
170.00	0.40728E-06	0.40728E-06
180.00	0.13338E-06	0.13338E-06

***** TOTAL GROUNDWATER IMPACT

Time (yr)	Mass (g)	Cumulative Mass (g)
10.00	1.2177	1.2177
20.00	3.1049	4.3226
30.00	2.0718	6.3943
40.00	0.79641	7.1908
50.00	0.26691	7.4577
60.00	0.87610E-01	7.5453
70.00	0.28696E-01	7.5740
80.00	0.93979E-02	7.5834
90.00	0.30778E-02	7.5864
100.00	0.10080E-02	7.5874
110.00	0.33010E-03	7.5878
120.00	0.10811E-03	7.5879
130.00	0.35405E-04	7.5879
140.00	0.11595E-04	7.5879
150.00	0.37974E-05	7.5879
160.00	0.12436E-05	7.5879
170.00	0.40728E-06	7.5879
180.00	0.13338E-06	7.5879

VLEACH
version 2.0, 1993.

Developed by :

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POLYGON 1

Time:	0.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.23859	0.25850	0.34233E-05
2	0.23859	0.25850	0.34233E-05
3	0.23859	0.25850	0.34233E-05
4	0.23859	0.25850	0.34233E-05
5	0.23859	0.25850	0.34233E-05
6	0.23859	0.25850	0.34233E-05
7	0.23859	0.25850	0.34233E-05
8	0.23859	0.25850	0.34233E-05
9	0.23859	0.25850	0.34233E-05
10	0.23859	0.25850	0.34233E-05
11	0.23859	0.25850	0.34233E-05
12	0.23859	0.25850	0.34233E-05
13	0.23859	0.25850	0.34233E-05
14	0.23859	0.25850	0.34233E-05
15	0.23859	0.25850	0.34233E-05
16	0.23859	0.25850	0.34233E-05
17	0.23859	0.25850	0.34233E-05
18	0.23859	0.25850	0.34233E-05
19	0.23859	0.25850	0.34233E-05
20	0.23859	0.25850	0.34233E-05
21	0.23859	0.25850	0.34233E-05
22	0.23859	0.25850	0.34233E-05
23	0.23859	0.25850	0.34233E-05
24	0.23859	0.25850	0.34233E-05
25	0.23859	0.25850	0.34233E-05
26	2.6069	2.8243	0.37402E-04
27	2.6069	2.8243	0.37402E-04
28	2.6069	2.8243	0.37402E-04
29	2.6069	2.8243	0.37402E-04
30	2.6069	2.8243	0.37402E-04
31	2.6069	2.8243	0.37402E-04
32	2.6069	2.8243	0.37402E-04
33	2.6069	2.8243	0.37402E-04
34	2.6069	2.8243	0.37402E-04
35	2.6069	2.8243	0.37402E-04
36	2.6069	2.8243	0.37402E-04
37	2.6069	2.8243	0.37402E-04
38	2.6069	2.8243	0.37402E-04
39	2.6069	2.8243	0.37402E-04
40	2.6069	2.8243	0.37402E-04
41	2.6069	2.8243	0.37402E-04
42	2.6069	2.8243	0.37402E-04
43	2.6069	2.8243	0.37402E-04
44	0.10162E-01	0.11010E-01	0.14581E-06
45	0.10162E-01	0.11010E-01	0.14581E-06
46	0.10162E-01	0.11010E-01	0.14581E-06
47	0.10162E-01	0.11010E-01	0.14581E-06
48	0.10162E-01	0.11010E-01	0.14581E-06
49	0.10162E-01	0.11010E-01	0.14581E-06
50	0.10162E-01	0.11010E-01	0.14581E-06
51	0.10162E-01	0.11010E-01	0.14581E-06
52	0.10162E-01	0.11010E-01	0.14581E-06
53	0.10162E-01	0.11010E-01	0.14581E-06
54	0.10162E-01	0.11010E-01	0.14581E-06
55	0.10162E-01	0.11010E-01	0.14581E-06
56	0.10162E-01	0.11010E-01	0.14581E-06
57	0.10162E-01	0.11010E-01	0.14581E-06
58	0.10162E-01	0.11010E-01	0.14581E-06
59	0.10162E-01	0.11010E-01	0.14581E-06
60	0.10162E-01	0.11010E-01	0.14581E-06
61	0.10162E-01	0.11010E-01	0.14581E-06
62	0.10162E-01	0.11010E-01	0.14581E-06
63	0.10162E-01	0.11010E-01	0.14581E-06
64	0.10162E-01	0.11010E-01	0.14581E-06
65	0.10162E-01	0.11010E-01	0.14581E-06
66	0.10162E-01	0.11010E-01	0.14581E-06
67	0.10162E-01	0.11010E-01	0.14581E-06
68	0.10162E-01	0.11010E-01	0.14581E-06
69	0.10162E-01	0.11010E-01	0.14581E-06
70	0.10162E-01	0.11010E-01	0.14581E-06
71	0.10162E-01	0.11010E-01	0.14581E-06
72	0.10162E-01	0.11010E-01	0.14581E-06

73	0.10162E-01	0.11010E-01	0.14581E-06
74	0.10162E-01	0.11010E-01	0.14581E-06
75	0.10162E-01	0.11010E-01	0.14581E-06
76	0.10162E-01	0.11010E-01	0.14581E-06
77	0.10162E-01	0.11010E-01	0.14581E-06
78	0.10162E-01	0.11010E-01	0.14581E-06
79	0.10162E-01	0.11010E-01	0.14581E-06
80	0.10162E-01	0.11010E-01	0.14581E-06
81	0.10162E-01	0.11010E-01	0.14581E-06
82	0.10162E-01	0.11010E-01	0.14581E-06
83	0.10162E-01	0.11010E-01	0.14581E-06
84	0.10162E-01	0.11010E-01	0.14581E-06
85	0.10162E-01	0.11010E-01	0.14581E-06
86	0.10162E-01	0.11010E-01	0.14581E-06
87	0.10162E-01	0.11010E-01	0.14581E-06
88	0.10162E-01	0.11010E-01	0.14581E-06
89	0.10162E-01	0.11010E-01	0.14581E-06
90	0.10162E-01	0.11010E-01	0.14581E-06
91	0.10162E-01	0.11010E-01	0.14581E-06
92	0.10162E-01	0.11010E-01	0.14581E-06
93	0.10162E-01	0.11010E-01	0.14581E-06
94	0.10162E-01	0.11010E-01	0.14581E-06
95	0.10162E-01	0.11010E-01	0.14581E-06
96	0.00000	0.00000	0.00000
97	0.00000	0.00000	0.00000
98	0.00000	0.00000	0.00000
99	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000

POLYGON I

Time:	10.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.22132E-02	0.23978E-02	0.31754E-07
2	0.47829E-02	0.51819E-02	0.68623E-07
3	0.77382E-02	0.83837E-02	0.11103E-06
4	0.11090E-01	0.12016E-01	0.15912E-06
5	0.14849E-01	0.16088E-01	0.21305E-06
6	0.19021E-01	0.20608E-01	0.27291E-06
7	0.23613E-01	0.25583E-01	0.33879E-06
8	0.28627E-01	0.31015E-01	0.41074E-06
9	0.34065E-01	0.36907E-01	0.48876E-06
10	0.39927E-01	0.43258E-01	0.57286E-06
11	0.46208E-01	0.50063E-01	0.66299E-06
12	0.52906E-01	0.57320E-01	0.75908E-06
13	0.60013E-01	0.65020E-01	0.86106E-06
14	0.67523E-01	0.73156E-01	0.96880E-06
15	0.75426E-01	0.81719E-01	0.10822E-05
16	0.83713E-01	0.90697E-01	0.12011E-05
17	0.92373E-01	0.10008	0.13253E-05
18	0.10139	0.10985	0.14548E-05
19	0.11077	0.12001	0.15892E-05
20	0.12048	0.13053	0.17286E-05
21	0.13051	0.14140	0.18726E-05
22	0.14087	0.15262	0.20211E-05
23	0.15153	0.16417	0.21740E-05
24	0.16248	0.17603	0.23312E-05
25	0.17371	0.18820	0.24923E-05
26	0.18617	0.20171	0.26712E-05
27	0.19926	0.21588	0.28589E-05
28	0.21322	0.23100	0.30592E-05
29	0.22811	0.24714	0.32728E-05
30	0.24399	0.26434	0.35006E-05
31	0.26090	0.28266	0.37433E-05
32	0.27886	0.30212	0.40009E-05
33	0.29787	0.32272	0.42737E-05
34	0.31792	0.34444	0.45615E-05
35	0.33898	0.36726	0.48637E-05
36	0.36101	0.39112	0.51796E-05
37	0.38393	0.41596	0.55085E-05
38	0.40767	0.44168	0.58491E-05
39	0.43214	0.46819	0.62002E-05
40	0.45724	0.49539	0.65604E-05
41	0.48286	0.52314	0.69279E-05
42	0.50887	0.55132	0.73011E-05
43	0.53515	0.57979	0.76782E-05
44	0.56052	0.60728	0.80422E-05
45	0.58550	0.63435	0.84007E-05
46	0.60969	0.66055	0.87476E-05
47	0.63285	0.68564	0.90799E-05
48	0.65478	0.70940	0.93946E-05
49	0.67530	0.73164	0.96890E-05
50	0.69425	0.75217	0.99610E-05
51	0.71150	0.77085	0.10208E-04
52	0.72692	0.78756	0.10430E-04
53	0.74043	0.80220	0.10623E-04
54	0.75196	0.81469	0.10789E-04
55	0.76148	0.82500	0.10925E-04
56	0.76895	0.83310	0.11033E-04
57	0.77439	0.83900	0.11111E-04
58	0.77782	0.84271	0.11160E-04

59	0.77927	0.84428	0.11181E-04
60	0.77879	0.84376	0.11174E-04
61	0.77645	0.84122	0.11140E-04
62	0.77233	0.83676	0.11081E-04
63	0.76652	0.83047	0.10998E-04
64	0.75911	0.82244	0.10891E-04
65	0.75020	0.81279	0.10764E-04
66	0.73990	0.80163	0.10616E-04
67	0.72832	0.78908	0.10450E-04
68	0.71557	0.77526	0.10267E-04
69	0.70175	0.76029	0.10068E-04
70	0.68697	0.74428	0.98565E-05
71	0.67135	0.72736	0.96324E-05
72	0.65499	0.70963	0.93976E-05
73	0.63798	0.69120	0.91535E-05
74	0.62042	0.67218	0.89016E-05
75	0.60241	0.65267	0.86432E-05
76	0.58403	0.63275	0.83795E-05
77	0.56536	0.61253	0.81117E-05
78	0.54648	0.59207	0.78408E-05
79	0.52746	0.57146	0.75679E-05
80	0.50836	0.55077	0.72938E-05
81	0.48924	0.53005	0.70195E-05
82	0.47015	0.50937	0.67456E-05
83	0.45114	0.48878	0.64728E-05
84	0.43225	0.46831	0.62019E-05
85	0.41352	0.44802	0.59331E-05
86	0.39499	0.42794	0.56671E-05
87	0.37666	0.40808	0.54042E-05
88	0.35858	0.38849	0.51447E-05
89	0.34075	0.36917	0.48889E-05
90	0.32319	0.35015	0.46370E-05
91	0.30591	0.33143	0.43891E-05
92	0.28892	0.31302	0.41454E-05
93	0.27222	0.29493	0.39058E-05
94	0.25581	0.27715	0.36703E-05
95	0.23969	0.25969	0.34390E-05
96	0.22385	0.24252	0.32117E-05
97	0.20828	0.22566	0.29884E-05
98	0.19298	0.20908	0.27688E-05
99	0.17793	0.19277	0.25529E-05
100	0.16312	0.17672	0.23403E-05

POLYGON 1

Time: 20.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.64630E-03	0.70022E-03	0.92729E-08
2	0.13882E-02	0.15040E-02	0.19918E-07
3	0.22271E-02	0.24129E-02	0.31954E-07
4	0.31647E-02	0.34287E-02	0.45406E-07
5	0.42026E-02	0.45532E-02	0.60298E-07
6	0.53427E-02	0.57884E-02	0.76656E-07
7	0.65871E-02	0.71366E-02	0.94509E-07
8	0.79378E-02	0.86000E-02	0.11389E-06
9	0.93971E-02	0.10181E-01	0.13483E-06
10	0.10967E-01	0.11882E-01	0.15736E-06
11	0.12651E-01	0.13707E-01	0.18151E-06
12	0.14451E-01	0.15656E-01	0.20734E-06
13	0.16369E-01	0.17735E-01	0.23486E-06
14	0.18408E-01	0.19944E-01	0.26412E-06
15	0.20572E-01	0.22288E-01	0.29516E-06
16	0.22861E-01	0.24769E-01	0.32801E-06
17	0.25280E-01	0.27389E-01	0.36272E-06
18	0.27831E-01	0.30153E-01	0.39932E-06
19	0.30517E-01	0.33062E-01	0.43784E-06
20	0.33339E-01	0.36120E-01	0.47834E-06
21	0.36301E-01	0.39329E-01	0.52083E-06
22	0.39404E-01	0.42692E-01	0.56536E-06
23	0.42652E-01	0.46210E-01	0.61196E-06
24	0.46046E-01	0.49887E-01	0.66065E-06
25	0.49588E-01	0.53724E-01	0.71147E-06
26	0.53279E-01	0.57724E-01	0.76444E-06
27	0.57123E-01	0.61889E-01	0.81959E-06
28	0.61121E-01	0.66219E-01	0.87694E-06
29	0.65274E-01	0.70719E-01	0.93653E-06
30	0.69584E-01	0.75389E-01	0.99837E-06
31	0.74053E-01	0.80231E-01	0.10625E-05
32	0.78684E-01	0.85248E-01	0.11289E-05
33	0.83477E-01	0.90441E-01	0.11977E-05
34	0.88434E-01	0.95812E-01	0.12688E-05
35	0.93558E-01	0.10136	0.13423E-05
36	0.98849E-01	0.10710	0.14183E-05
37	0.10431	0.11301	0.14966E-05
38	0.10994	0.11911	0.15774E-05
39	0.11574	0.12540	0.16606E-05
40	0.12172	0.13187	0.17464E-05
41	0.12787	0.13853	0.18346E-05
42	0.13419	0.14538	0.19253E-05
43	0.14068	0.15242	0.20185E-05
44	0.14735	0.15964	0.21141E-05

45	0.15418	0.16704	0.22122E-05
46	0.16118	0.17463	0.23126E-05
47	0.16835	0.18239	0.24154E-05
48	0.17567	0.19032	0.25204E-05
49	0.18313	0.19841	0.26276E-05
50	0.19074	0.20666	0.27368E-05
51	0.19849	0.21505	0.28478E-05
52	0.20635	0.22357	0.29607E-05
53	0.21432	0.23220	0.30750E-05
54	0.22239	0.24094	0.31907E-05
55	0.23053	0.24976	0.33076E-05
56	0.23873	0.25865	0.34252E-05
57	0.24697	0.26758	0.35435E-05
58	0.25523	0.27653	0.36620E-05
59	0.26349	0.28547	0.37805E-05
60	0.27172	0.29439	0.38986E-05
61	0.27990	0.30325	0.40159E-05
62	0.28800	0.31203	0.41321E-05
63	0.29599	0.32069	0.42468E-05
64	0.30386	0.32921	0.43596E-05
65	0.31156	0.33755	0.44701E-05
66	0.31907	0.34568	0.45779E-05
67	0.32635	0.35358	0.46824E-05
68	0.33339	0.36121	0.47834E-05
69	0.34015	0.36853	0.48804E-05
70	0.34660	0.37552	0.49729E-05
71	0.35271	0.38214	0.50606E-05
72	0.35846	0.38836	0.51431E-05
73	0.36381	0.39416	0.52198E-05
74	0.36874	0.39950	0.52906E-05
75	0.37322	0.40436	0.53549E-05
76	0.37723	0.40870	0.54124E-05
77	0.38075	0.41251	0.54629E-05
78	0.38375	0.41576	0.55059E-05
79	0.38620	0.41842	0.55411E-05
80	0.38810	0.42048	0.55684E-05
81	0.38942	0.42191	0.55873E-05
82	0.39015	0.42270	0.55978E-05
83	0.39027	0.42283	0.55994E-05
84	0.38976	0.42228	0.55922E-05
85	0.38862	0.42104	0.55758E-05
86	0.38683	0.41911	0.55502E-05
87	0.38439	0.41646	0.55151E-05
88	0.38129	0.41310	0.54706E-05
89	0.37751	0.40901	0.54164E-05
90	0.37306	0.40418	0.53526E-05
91	0.36793	0.39863	0.52790E-05
92	0.36212	0.39233	0.51956E-05
93	0.35562	0.38529	0.51024E-05
94	0.34844	0.37751	0.49993E-05
95	0.34057	0.36898	0.48864E-05
96	0.33202	0.35971	0.47637E-05
97	0.32278	0.34970	0.46311E-05
98	0.31285	0.33895	0.44887E-05
99	0.30225	0.32746	0.43365E-05
100	0.29096	0.31523	0.41746E-05

POLYGON I

Time: 30.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.21032E-03	0.22787E-03	0.30176E-08
2	0.45156E-03	0.48923E-03	0.64789E-08
3	0.72413E-03	0.78454E-03	0.10390E-07
4	0.10285E-02	0.11143E-02	0.14756E-07
5	0.13651E-02	0.14790E-02	0.19586E-07
6	0.17345E-02	0.18792E-02	0.24886E-07
7	0.21373E-02	0.23156E-02	0.30665E-07
8	0.25740E-02	0.27887E-02	0.36930E-07
9	0.30452E-02	0.32993E-02	0.43692E-07
10	0.35517E-02	0.38480E-02	0.50959E-07
11	0.40941E-02	0.44357E-02	0.58741E-07
12	0.46731E-02	0.50630E-02	0.67049E-07
13	0.52895E-02	0.57307E-02	0.75891E-07
14	0.59438E-02	0.64397E-02	0.85280E-07
15	0.66370E-02	0.71907E-02	0.95226E-07
16	0.73698E-02	0.79847E-02	0.10574E-06
17	0.81430E-02	0.88223E-02	0.11683E-06
18	0.89573E-02	0.97046E-02	0.12852E-06
19	0.98136E-02	0.10632E-01	0.14080E-06
20	0.10713E-01	0.11606E-01	0.15370E-06
21	0.11655E-01	0.12628E-01	0.16723E-06
22	0.12642E-01	0.13697E-01	0.18139E-06
23	0.13674E-01	0.14815E-01	0.19620E-06
24	0.14752E-01	0.15983E-01	0.21166E-06
25	0.15877E-01	0.17202E-01	0.22780E-06
26	0.17049E-01	0.18472E-01	0.24462E-06
27	0.18270E-01	0.19794E-01	0.26213E-06
28	0.19539E-01	0.21169E-01	0.28034E-06
29	0.20858E-01	0.22598E-01	0.29926E-06
30	0.22227E-01	0.24081E-01	0.31891E-06

31	0.23647E-01	0.25620E-01	0.33928E-06
32	0.25118E-01	0.27214E-01	0.36039E-06
33	0.26642E-01	0.28864E-01	0.38225E-06
34	0.28217E-01	0.30571E-01	0.40485E-06
35	0.29846E-01	0.32336E-01	0.42822E-06
36	0.31528E-01	0.34158E-01	0.45235E-06
37	0.33263E-01	0.36038E-01	0.47725E-06
38	0.35052E-01	0.37976E-01	0.50292E-06
39	0.36895E-01	0.39973E-01	0.52936E-06
40	0.38792E-01	0.42028E-01	0.55657E-06
41	0.40743E-01	0.44142E-01	0.58456E-06
42	0.42748E-01	0.46314E-01	0.61333E-06
43	0.44806E-01	0.48544E-01	0.64286E-06
44	0.46918E-01	0.50832E-01	0.67317E-06
45	0.49083E-01	0.53178E-01	0.70423E-06
46	0.51301E-01	0.55580E-01	0.73604E-06
47	0.53570E-01	0.58039E-01	0.76861E-06
48	0.55890E-01	0.60553E-01	0.80190E-06
49	0.58261E-01	0.63122E-01	0.83591E-06
50	0.60681E-01	0.65743E-01	0.87063E-06
51	0.63149E-01	0.68417E-01	0.90604E-06
52	0.65663E-01	0.71141E-01	0.94212E-06
53	0.68223E-01	0.73914E-01	0.97884E-06
54	0.70826E-01	0.76734E-01	0.10162E-05
55	0.73470E-01	0.79599E-01	0.10541E-05
56	0.76154E-01	0.82507E-01	0.10926E-05
57	0.78874E-01	0.85454E-01	0.11317E-05
58	0.81629E-01	0.88439E-01	0.11712E-05
59	0.84415E-01	0.91457E-01	0.12112E-05
60	0.87230E-01	0.94507E-01	0.12515E-05
61	0.90069E-01	0.97583E-01	0.12923E-05
62	0.92930E-01	0.10068	0.13333E-05
63	0.95808E-01	0.10380	0.13746E-05
64	0.98700E-01	0.10693	0.14161E-05
65	0.10160	0.11008	0.14577E-05
66	0.10450	0.11322	0.14994E-05
67	0.10740	0.11636	0.15410E-05
68	0.11030	0.11950	0.15825E-05
69	0.11318	0.12262	0.16238E-05
70	0.11604	0.12572	0.16649E-05
71	0.11887	0.12879	0.17055E-05
72	0.12167	0.13182	0.17457E-05
73	0.12443	0.13481	0.17853E-05
74	0.12714	0.13775	0.18241E-05
75	0.12979	0.14062	0.18622E-05
76	0.13237	0.14342	0.18992E-05
77	0.13488	0.14613	0.19352E-05
78	0.13730	0.14876	0.19700E-05
79	0.13963	0.15128	0.20033E-05
80	0.14185	0.15368	0.20352E-05
81	0.14395	0.15596	0.20654E-05
82	0.14593	0.15810	0.20937E-05
83	0.14776	0.16009	0.21200E-05
84	0.14944	0.16191	0.21442E-05
85	0.15096	0.16356	0.21660E-05
86	0.15231	0.16501	0.21852E-05
87	0.15346	0.16626	0.22018E-05
88	0.15441	0.16729	0.22154E-05
89	0.15514	0.16809	0.22260E-05
90	0.15565	0.16864	0.22332E-05
91	0.15591	0.16892	0.22370E-05
92	0.15592	0.16892	0.22370E-05
93	0.15565	0.16863	0.22332E-05
94	0.15510	0.16803	0.22253E-05
95	0.15424	0.16711	0.22130E-05
96	0.15307	0.16584	0.21962E-05
97	0.15157	0.16422	0.21747E-05
98	0.14973	0.16222	0.21482E-05
99	0.14752	0.15983	0.21166E-05
100	0.14494	0.15703	0.20796E-05

POLYGON I

Time:	40.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.68866E-04	0.74611E-04	0.98807E-09
2	0.14785E-03	0.16019E-03	0.21214E-08
3	0.23709E-03	0.25687E-03	0.34017E-08
4	0.33673E-03	0.36482E-03	0.48313E-08
5	0.44693E-03	0.48421E-03	0.64124E-08
6	0.56785E-03	0.61523E-03	0.81474E-08
7	0.69969E-03	0.75806E-03	0.10039E-07
8	0.84263E-03	0.91292E-03	0.12090E-07
9	0.99687E-03	0.10800E-02	0.14303E-07
10	0.11626E-02	0.12596E-02	0.16681E-07
11	0.13401E-02	0.14519E-02	0.19228E-07
12	0.15296E-02	0.16572E-02	0.21946E-07
13	0.17312E-02	0.18756E-02	0.24839E-07
14	0.19453E-02	0.21076E-02	0.27910E-07
15	0.21720E-02	0.23532E-02	0.31164E-07
16	0.24117E-02	0.26129E-02	0.34603E-07

17	0.26646E-02	0.28868E-02	0.38230E-07
18	0.29308E-02	0.31753E-02	0.42051E-07
19	0.32108E-02	0.34786E-02	0.46067E-07
20	0.35047E-02	0.37971E-02	0.50284E-07
21	0.38128E-02	0.41308E-02	0.54704E-07
22	0.41353E-02	0.44803E-02	0.59332E-07
23	0.44725E-02	0.48457E-02	0.64171E-07
24	0.48247E-02	0.52272E-02	0.69224E-07
25	0.51921E-02	0.56252E-02	0.74495E-07
26	0.55749E-02	0.60400E-02	0.79987E-07
27	0.59734E-02	0.64717E-02	0.85705E-07
28	0.63878E-02	0.69207E-02	0.91650E-07
29	0.68183E-02	0.73871E-02	0.97827E-07
30	0.72651E-02	0.78712E-02	0.10424E-06
31	0.77284E-02	0.83732E-02	0.11089E-06
32	0.82085E-02	0.88933E-02	0.11777E-06
33	0.87054E-02	0.94316E-02	0.12490E-06
34	0.92194E-02	0.99885E-02	0.13228E-06
35	0.97505E-02	0.10564E-01	0.13990E-06
36	0.10299E-01	0.11158E-01	0.14777E-06
37	0.10865E-01	0.11771E-01	0.15588E-06
38	0.11448E-01	0.12403E-01	0.16425E-06
39	0.12049E-01	0.13054E-01	0.17288E-06
40	0.12667E-01	0.13724E-01	0.18175E-06
41	0.13303E-01	0.14413E-01	0.19087E-06
42	0.13957E-01	0.15121E-01	0.20025E-06
43	0.14628E-01	0.15849E-01	0.20988E-06
44	0.15317E-01	0.16595E-01	0.21976E-06
45	0.16023E-01	0.17359E-01	0.22989E-06
46	0.16746E-01	0.18143E-01	0.24026E-06
47	0.17486E-01	0.18945E-01	0.25088E-06
48	0.18243E-01	0.19765E-01	0.26174E-06
49	0.19016E-01	0.20603E-01	0.27284E-06
50	0.19806E-01	0.21458E-01	0.28417E-06
51	0.20611E-01	0.22331E-01	0.29572E-06
52	0.21432E-01	0.23220E-01	0.30750E-06
53	0.22268E-01	0.24125E-01	0.31949E-06
54	0.23118E-01	0.25047E-01	0.33169E-06
55	0.23982E-01	0.25983E-01	0.34409E-06
56	0.24859E-01	0.26933E-01	0.35668E-06
57	0.25749E-01	0.27897E-01	0.36944E-06
58	0.26651E-01	0.28874E-01	0.38238E-06
59	0.27564E-01	0.29863E-01	0.39547E-06
60	0.28486E-01	0.30863E-01	0.40871E-06
61	0.29418E-01	0.31872E-01	0.42208E-06
62	0.30358E-01	0.32891E-01	0.43557E-06
63	0.31305E-01	0.33916E-01	0.44915E-06
64	0.32257E-01	0.34948E-01	0.46282E-06
65	0.33214E-01	0.35985E-01	0.47655E-06
66	0.34174E-01	0.37025E-01	0.49032E-06
67	0.35135E-01	0.38066E-01	0.50411E-06
68	0.36097E-01	0.39108E-01	0.51791E-06
69	0.37056E-01	0.40148E-01	0.53167E-06
70	0.38013E-01	0.41184E-01	0.54539E-06
71	0.38963E-01	0.42214E-01	0.55903E-06
72	0.39907E-01	0.43236E-01	0.57257E-06
73	0.40841E-01	0.44248E-01	0.58597E-06
74	0.41763E-01	0.45247E-01	0.59920E-06
75	0.42671E-01	0.46230E-01	0.61223E-06
76	0.43562E-01	0.47196E-01	0.62501E-06
77	0.44434E-01	0.48141E-01	0.63753E-06
78	0.45284E-01	0.49062E-01	0.64973E-06
79	0.46110E-01	0.49957E-01	0.66157E-06
80	0.46908E-01	0.50821E-01	0.67301E-06
81	0.47674E-01	0.51651E-01	0.68401E-06
82	0.48406E-01	0.52445E-01	0.69452E-06
83	0.49101E-01	0.53197E-01	0.70448E-06
84	0.49754E-01	0.53905E-01	0.71386E-06
85	0.50362E-01	0.54563E-01	0.72258E-06
86	0.50921E-01	0.55169E-01	0.73060E-06
87	0.51427E-01	0.55717E-01	0.73785E-06
88	0.51875E-01	0.56203E-01	0.74429E-06
89	0.52262E-01	0.56621E-01	0.74983E-06
90	0.52582E-01	0.56968E-01	0.75443E-06
91	0.52831E-01	0.57238E-01	0.75800E-06
92	0.53004E-01	0.57425E-01	0.76048E-06
93	0.53095E-01	0.57525E-01	0.76180E-06
94	0.53101E-01	0.57531E-01	0.76187E-06
95	0.53014E-01	0.57437E-01	0.76064E-06
96	0.52831E-01	0.57238E-01	0.75800E-06
97	0.52544E-01	0.56927E-01	0.75388E-06
98	0.52147E-01	0.56498E-01	0.74820E-06
99	0.51636E-01	0.55944E-01	0.74086E-06
100	0.51003E-01	0.55258E-01	0.73178E-06

POLYGON I

Time:	50.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.22554E-04	0.24436E-04	0.32360E-09
2	0.48423E-04	0.52463E-04	0.69476E-09

3	0.77650E-04	0.84128E-04	0.11141E-08
4	0.11028E-03	0.11948E-03	0.15823E-08
5	0.14637E-03	0.15858E-03	0.21001E-08
6	0.18598E-03	0.20149E-03	0.26683E-08
7	0.22915E-03	0.24827E-03	0.32878E-08
8	0.27597E-03	0.29899E-03	0.39595E-08
9	0.32648E-03	0.35372E-03	0.46843E-08
10	0.38077E-03	0.41253E-03	0.54631E-08
11	0.43890E-03	0.47551E-03	0.62972E-08
12	0.50094E-03	0.54273E-03	0.71874E-08
13	0.56698E-03	0.61428E-03	0.81349E-08
14	0.63709E-03	0.69024E-03	0.91408E-08
15	0.71135E-03	0.77069E-03	0.10206E-07
16	0.78984E-03	0.85573E-03	0.11332E-07
17	0.87265E-03	0.94545E-03	0.12520E-07
18	0.95985E-03	0.10399E-02	0.13772E-07
19	0.10515E-02	0.11393E-02	0.15087E-07
20	0.11478E-02	0.12435E-02	0.16468E-07
21	0.12487E-02	0.13528E-02	0.17916E-07
22	0.13543E-02	0.14673E-02	0.19431E-07
23	0.14647E-02	0.15869E-02	0.21016E-07
24	0.15801E-02	0.17119E-02	0.22670E-07
25	0.17004E-02	0.18422E-02	0.24396E-07
26	0.18257E-02	0.19780E-02	0.26195E-07
27	0.19562E-02	0.21194E-02	0.28067E-07
28	0.20919E-02	0.22664E-02	0.30014E-07
29	0.22329E-02	0.24191E-02	0.32036E-07
30	0.23792E-02	0.25777E-02	0.34136E-07
31	0.25309E-02	0.27420E-02	0.36312E-07
32	0.26881E-02	0.29123E-02	0.38568E-07
33	0.28508E-02	0.30886E-02	0.40902E-07
34	0.30190E-02	0.32709E-02	0.43316E-07
35	0.31929E-02	0.34593E-02	0.45811E-07
36	0.33725E-02	0.36539E-02	0.48388E-07
37	0.35578E-02	0.38546E-02	0.51046E-07
38	0.37487E-02	0.40615E-02	0.53786E-07
39	0.39454E-02	0.42746E-02	0.56608E-07
40	0.41479E-02	0.44939E-02	0.59513E-07
41	0.43561E-02	0.47195E-02	0.62500E-07
42	0.45701E-02	0.49513E-02	0.65570E-07
43	0.47898E-02	0.51894E-02	0.68722E-07
44	0.50152E-02	0.54336E-02	0.71957E-07
45	0.52463E-02	0.56839E-02	0.75272E-07
46	0.54830E-02	0.59404E-02	0.78668E-07
47	0.57252E-02	0.62028E-02	0.82144E-07
48	0.59730E-02	0.64712E-02	0.85698E-07
49	0.62261E-02	0.67455E-02	0.89330E-07
50	0.64845E-02	0.70255E-02	0.93038E-07
51	0.67482E-02	0.73111E-02	0.96821E-07
52	0.70168E-02	0.76022E-02	0.10068E-06
53	0.72904E-02	0.78986E-02	0.10460E-06
54	0.75687E-02	0.82001E-02	0.10859E-06
55	0.78516E-02	0.85066E-02	0.11265E-06
56	0.81387E-02	0.88177E-02	0.11677E-06
57	0.84301E-02	0.91333E-02	0.12095E-06
58	0.87252E-02	0.94531E-02	0.12519E-06
59	0.90240E-02	0.97768E-02	0.12947E-06
60	0.93261E-02	0.10104E-01	0.13381E-06
61	0.96312E-02	0.10435E-01	0.13819E-06
62	0.99390E-02	0.10768E-01	0.14260E-06
63	0.10249E-01	0.11104E-01	0.14705E-06
64	0.10561E-01	0.11442E-01	0.15153E-06
65	0.10874E-01	0.11782E-01	0.15602E-06
66	0.11189E-01	0.12122E-01	0.16053E-06
67	0.11504E-01	0.12464E-01	0.16505E-06
68	0.11819E-01	0.12805E-01	0.16958E-06
69	0.12134E-01	0.13146E-01	0.17409E-06
70	0.12447E-01	0.13486E-01	0.17859E-06
71	0.12759E-01	0.13823E-01	0.18306E-06
72	0.13069E-01	0.14159E-01	0.18750E-06
73	0.13375E-01	0.14491E-01	0.19190E-06
74	0.13678E-01	0.14819E-01	0.19625E-06
75	0.13976E-01	0.15142E-01	0.20053E-06
76	0.14269E-01	0.15460E-01	0.20473E-06
77	0.14556E-01	0.15771E-01	0.20885E-06
78	0.14836E-01	0.16074E-01	0.21287E-06
79	0.15108E-01	0.16369E-01	0.21677E-06
80	0.15372E-01	0.16654E-01	0.22055E-06
81	0.15625E-01	0.16928E-01	0.22418E-06
82	0.15867E-01	0.17191E-01	0.22766E-06
83	0.16098E-01	0.17441E-01	0.23096E-06
84	0.16315E-01	0.17676E-01	0.23408E-06
85	0.16517E-01	0.17895E-01	0.23699E-06
86	0.16704E-01	0.18098E-01	0.23967E-06
87	0.16875E-01	0.18282E-01	0.24211E-06
88	0.17026E-01	0.18447E-01	0.24429E-06
89	0.17158E-01	0.18590E-01	0.24618E-06
90	0.17269E-01	0.18709E-01	0.24777E-06
91	0.17357E-01	0.18805E-01	0.24903E-06
92	0.17420E-01	0.18874E-01	0.24994E-06

93	0.17458E-01	0.18914E-01	0.25048E-06
94	0.17468E-01	0.18925E-01	0.25062E-06
95	0.17448E-01	0.18904E-01	0.25034E-06
96	0.17397E-01	0.18849E-01	0.24961E-06
97	0.17313E-01	0.18758E-01	0.24841E-06
98	0.17194E-01	0.18629E-01	0.24670E-06
99	0.17038E-01	0.18459E-01	0.24446E-06
100	0.16843E-01	0.18248E-01	0.24165E-06

POLYGON I

Time: 60.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.73865E-05	0.80027E-05	0.10598E-09
2	0.15859E-04	0.17182E-04	0.22753E-09
3	0.25430E-04	0.27552E-04	0.36487E-09
4	0.36118E-04	0.39131E-04	0.51820E-09
5	0.47937E-04	0.51936E-04	0.68779E-09
6	0.60907E-04	0.65988E-04	0.87388E-09
7	0.75048E-04	0.81309E-04	0.10768E-08
8	0.90379E-04	0.97919E-04	0.12967E-08
9	0.10692E-03	0.11584E-03	0.15341E-08
10	0.12470E-03	0.13510E-03	0.17892E-08
11	0.14374E-03	0.15573E-03	0.20623E-08
12	0.16406E-03	0.17774E-03	0.23539E-08
13	0.18569E-03	0.20118E-03	0.26642E-08
14	0.20865E-03	0.22605E-03	0.29936E-08
15	0.23297E-03	0.25240E-03	0.33425E-08
16	0.25867E-03	0.28025E-03	0.37114E-08
17	0.28579E-03	0.30963E-03	0.41005E-08
18	0.31435E-03	0.34058E-03	0.45102E-08
19	0.34438E-03	0.37311E-03	0.49410E-08
20	0.37590E-03	0.40726E-03	0.53933E-08
21	0.40894E-03	0.44306E-03	0.58674E-08
22	0.44353E-03	0.48053E-03	0.63637E-08
23	0.47970E-03	0.51972E-03	0.68826E-08
24	0.51747E-03	0.56064E-03	0.74245E-08
25	0.55687E-03	0.60333E-03	0.79898E-08
26	0.59793E-03	0.64781E-03	0.85789E-08
27	0.64066E-03	0.69411E-03	0.91920E-08
28	0.68510E-03	0.74225E-03	0.98296E-08
29	0.73126E-03	0.79227E-03	0.10492E-07
30	0.77918E-03	0.84418E-03	0.11179E-07
31	0.82887E-03	0.89801E-03	0.11892E-07
32	0.88034E-03	0.95378E-03	0.12631E-07
33	0.93363E-03	0.10115E-02	0.13395E-07
34	0.98874E-03	0.10712E-02	0.14186E-07
35	0.10457E-02	0.11329E-02	0.15003E-07
36	0.11045E-02	0.11966E-02	0.15847E-07
37	0.11652E-02	0.12624E-02	0.16717E-07
38	0.12277E-02	0.13301E-02	0.17615E-07
39	0.12921E-02	0.13999E-02	0.18539E-07
40	0.13584E-02	0.14718E-02	0.19490E-07
41	0.14266E-02	0.15456E-02	0.20469E-07
42	0.14967E-02	0.16216E-02	0.21474E-07
43	0.15686E-02	0.16995E-02	0.22506E-07
44	0.16425E-02	0.17795E-02	0.23566E-07
45	0.17181E-02	0.18615E-02	0.24651E-07
46	0.17957E-02	0.19455E-02	0.25763E-07
47	0.18750E-02	0.20314E-02	0.26902E-07
48	0.19561E-02	0.21193E-02	0.28066E-07
49	0.20390E-02	0.22091E-02	0.29255E-07
50	0.21237E-02	0.23008E-02	0.30470E-07
51	0.22100E-02	0.23944E-02	0.31708E-07
52	0.22980E-02	0.24897E-02	0.32971E-07
53	0.23876E-02	0.25867E-02	0.34256E-07
54	0.24787E-02	0.26855E-02	0.35564E-07
55	0.25713E-02	0.27858E-02	0.36893E-07
56	0.26654E-02	0.28877E-02	0.38242E-07
57	0.27608E-02	0.29911E-02	0.39611E-07
58	0.28574E-02	0.30958E-02	0.40998E-07
59	0.29553E-02	0.32018E-02	0.42401E-07
60	0.30542E-02	0.33090E-02	0.43821E-07
61	0.31541E-02	0.34172E-02	0.45254E-07
62	0.32549E-02	0.35264E-02	0.46700E-07
63	0.33564E-02	0.36364E-02	0.48157E-07
64	0.34586E-02	0.37471E-02	0.49623E-07
65	0.35612E-02	0.38583E-02	0.51095E-07
66	0.36642E-02	0.39699E-02	0.52573E-07
67	0.37674E-02	0.40817E-02	0.54053E-07
68	0.38706E-02	0.41935E-02	0.55534E-07
69	0.39736E-02	0.43051E-02	0.57012E-07
70	0.40763E-02	0.44163E-02	0.58485E-07
71	0.41784E-02	0.45270E-02	0.59950E-07
72	0.42798E-02	0.46368E-02	0.61405E-07
73	0.43802E-02	0.47456E-02	0.62845E-07
74	0.44793E-02	0.48530E-02	0.64268E-07
75	0.45771E-02	0.49589E-02	0.65670E-07
76	0.46731E-02	0.50629E-02	0.67048E-07
77	0.47671E-02	0.51648E-02	0.68396E-07
78	0.48588E-02	0.52641E-02	0.69712E-07

79	0.49479E-02	0.53607E-02	0.70991E-07
80	0.50342E-02	0.54541E-02	0.72229E-07
81	0.51172E-02	0.55441E-02	0.73420E-07
82	0.51966E-02	0.56301E-02	0.74559E-07
83	0.52721E-02	0.57119E-02	0.75642E-07
84	0.53433E-02	0.57890E-02	0.76663E-07
85	0.54097E-02	0.58610E-02	0.77617E-07
86	0.54711E-02	0.59275E-02	0.78497E-07
87	0.55268E-02	0.59879E-02	0.79298E-07
88	0.55766E-02	0.60419E-02	0.80012E-07
89	0.56200E-02	0.60888E-02	0.80634E-07
90	0.56564E-02	0.61283E-02	0.81156E-07
91	0.56853E-02	0.61596E-02	0.81572E-07
92	0.57064E-02	0.61824E-02	0.81873E-07
93	0.57189E-02	0.61960E-02	0.82053E-07
94	0.57223E-02	0.61997E-02	0.82103E-07
95	0.57162E-02	0.61931E-02	0.82014E-07
96	0.56998E-02	0.61753E-02	0.81779E-07
97	0.56726E-02	0.61459E-02	0.81389E-07
98	0.56340E-02	0.61040E-02	0.80835E-07
99	0.55832E-02	0.60490E-02	0.80106E-07
100	0.55196E-02	0.59801E-02	0.79194E-07

POLYGON I

Time:

70.000

Cell

Cgas(g/cu.ft)

Clig(g/cu.ft)

Csol(g/g)

1	0.24191E-05	0.26209E-05	0.34708E-10
2	0.51936E-05	0.56269E-05	0.74517E-10
3	0.83284E-05	0.90232E-05	0.11949E-09
4	0.11828E-04	0.12815E-04	0.16971E-09
5	0.15699E-04	0.17009E-04	0.22525E-09
6	0.19947E-04	0.21611E-04	0.28619E-09
7	0.24578E-04	0.26628E-04	0.35264E-09
8	0.29599E-04	0.32068E-04	0.42468E-09
9	0.35017E-04	0.37938E-04	0.50241E-09
10	0.40839E-04	0.44246E-04	0.58595E-09
11	0.47074E-04	0.51001E-04	0.67540E-09
12	0.53729E-04	0.58211E-04	0.77088E-09
13	0.60812E-04	0.65885E-04	0.87251E-09
14	0.68331E-04	0.74032E-04	0.98040E-09
15	0.76296E-04	0.82661E-04	0.10947E-08
16	0.84715E-04	0.91782E-04	0.12155E-08
17	0.93596E-04	0.10140E-03	0.13429E-08
18	0.10295E-03	0.11154E-03	0.14771E-08
19	0.11278E-03	0.12219E-03	0.16182E-08
20	0.12311E-03	0.13338E-03	0.17663E-08
21	0.13393E-03	0.14510E-03	0.19215E-08
22	0.14526E-03	0.15737E-03	0.20841E-08
23	0.15710E-03	0.17021E-03	0.22540E-08
24	0.16947E-03	0.18361E-03	0.24315E-08
25	0.18237E-03	0.19759E-03	0.26166E-08
26	0.19582E-03	0.21216E-03	0.28096E-08
27	0.20981E-03	0.22732E-03	0.30104E-08
28	0.22437E-03	0.24309E-03	0.32192E-08
29	0.23949E-03	0.25947E-03	0.34361E-08
30	0.25518E-03	0.27647E-03	0.36612E-08
31	0.27145E-03	0.29410E-03	0.38947E-08
32	0.28831E-03	0.31236E-03	0.41366E-08
33	0.30576E-03	0.33127E-03	0.43870E-08
34	0.32381E-03	0.35082E-03	0.46459E-08
35	0.34246E-03	0.37103E-03	0.49135E-08
36	0.36172E-03	0.39190E-03	0.51898E-08
37	0.38159E-03	0.41342E-03	0.54749E-08
38	0.40207E-03	0.43561E-03	0.57688E-08
39	0.42317E-03	0.45847E-03	0.60715E-08
40	0.44488E-03	0.48200E-03	0.63831E-08
41	0.46722E-03	0.50619E-03	0.67035E-08
42	0.49016E-03	0.53106E-03	0.70327E-08
43	0.51373E-03	0.55659E-03	0.73708E-08
44	0.53790E-03	0.58278E-03	0.77177E-08
45	0.56269E-03	0.60963E-03	0.80733E-08
46	0.58807E-03	0.63713E-03	0.84375E-08
47	0.61405E-03	0.66528E-03	0.88103E-08
48	0.64063E-03	0.69407E-03	0.91915E-08
49	0.66777E-03	0.72348E-03	0.95810E-08
50	0.69549E-03	0.75351E-03	0.99787E-08
51	0.72377E-03	0.78414E-03	0.10384E-07
52	0.75258E-03	0.81536E-03	0.10798E-07
53	0.78192E-03	0.84715E-03	0.11219E-07
54	0.81177E-03	0.87949E-03	0.11647E-07
55	0.84210E-03	0.91235E-03	0.12082E-07
56	0.87290E-03	0.94572E-03	0.12524E-07
57	0.90414E-03	0.97957E-03	0.12972E-07
58	0.93580E-03	0.10139E-02	0.13427E-07
59	0.96784E-03	0.10486E-02	0.13886E-07
60	0.10002E-02	0.10837E-02	0.14351E-07
61	0.10330E-02	0.11191E-02	0.14821E-07
62	0.10660E-02	0.11549E-02	0.15294E-07
63	0.10992E-02	0.11909E-02	0.15771E-07
64	0.11327E-02	0.12272E-02	0.16251E-07

65	0.11663E-02	0.12636E-02	0.16734E-07
66	0.12000E-02	0.13001E-02	0.17217E-07
67	0.12338E-02	0.13367E-02	0.17702E-07
68	0.12676E-02	0.13733E-02	0.18187E-07
69	0.13013E-02	0.14099E-02	0.18671E-07
70	0.13350E-02	0.14463E-02	0.19154E-07
71	0.13684E-02	0.14826E-02	0.19634E-07
72	0.14016E-02	0.15185E-02	0.20110E-07
73	0.14345E-02	0.15542E-02	0.20582E-07
74	0.14670E-02	0.15893E-02	0.21048E-07
75	0.14990E-02	0.16240E-02	0.21507E-07
76	0.15304E-02	0.16581E-02	0.21958E-07
77	0.15612E-02	0.16914E-02	0.22400E-07
78	0.15912E-02	0.17240E-02	0.22830E-07
79	0.16204E-02	0.17556E-02	0.23249E-07
80	0.16487E-02	0.17862E-02	0.23655E-07
81	0.16758E-02	0.18157E-02	0.24045E-07
82	0.17019E-02	0.18438E-02	0.24418E-07
83	0.17266E-02	0.18706E-02	0.24772E-07
84	0.17499E-02	0.18959E-02	0.25107E-07
85	0.17717E-02	0.19195E-02	0.25419E-07
86	0.17917E-02	0.19412E-02	0.25707E-07
87	0.18100E-02	0.19610E-02	0.25970E-07
88	0.18263E-02	0.19787E-02	0.26204E-07
89	0.18405E-02	0.19941E-02	0.26407E-07
90	0.18524E-02	0.20070E-02	0.26578E-07
91	0.18619E-02	0.20173E-02	0.26714E-07
92	0.18688E-02	0.20247E-02	0.26813E-07
93	0.18729E-02	0.20292E-02	0.26872E-07
94	0.18741E-02	0.20304E-02	0.26888E-07
95	0.18720E-02	0.20282E-02	0.26860E-07
96	0.18667E-02	0.20224E-02	0.26783E-07
97	0.18578E-02	0.20128E-02	0.26655E-07
98	0.18451E-02	0.19991E-02	0.26474E-07
99	0.18285E-02	0.19811E-02	0.26235E-07
100	0.18077E-02	0.19585E-02	0.25936E-07

POLYGON 1

Time:	80.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.79223E-06	0.85833E-06	0.11367E-10
2	0.17009E-05	0.18428E-05	0.24404E-10
3	0.27275E-05	0.29551E-05	0.39134E-10
4	0.38738E-05	0.41969E-05	0.55580E-10
5	0.51415E-05	0.55704E-05	0.73768E-10
6	0.65326E-05	0.70776E-05	0.93728E-10
7	0.80492E-05	0.87207E-05	0.11549E-09
8	0.96936E-05	0.10502E-04	0.13908E-09
9	0.11468E-04	0.12425E-04	0.16454E-09
10	0.13375E-04	0.14491E-04	0.19190E-09
11	0.15417E-04	0.16703E-04	0.22119E-09
12	0.17596E-04	0.19064E-04	0.25246E-09
13	0.19916E-04	0.21577E-04	0.28574E-09
14	0.22378E-04	0.24245E-04	0.32108E-09
15	0.24987E-04	0.27071E-04	0.35850E-09
16	0.27744E-04	0.30058E-04	0.39806E-09
17	0.30653E-04	0.33210E-04	0.43979E-09
18	0.33716E-04	0.36528E-04	0.48374E-09
19	0.36936E-04	0.40017E-04	0.52995E-09
20	0.40317E-04	0.43680E-04	0.57845E-09
21	0.43861E-04	0.47520E-04	0.62930E-09
22	0.47571E-04	0.51539E-04	0.68253E-09
23	0.51450E-04	0.55742E-04	0.73819E-09
24	0.55501E-04	0.60131E-04	0.79631E-09
25	0.59727E-04	0.64710E-04	0.85694E-09
26	0.64130E-04	0.69480E-04	0.92012E-09
27	0.68714E-04	0.74446E-04	0.98588E-09
28	0.73480E-04	0.79610E-04	0.10543E-08
29	0.78432E-04	0.84975E-04	0.11253E-08
30	0.83571E-04	0.90542E-04	0.11990E-08
31	0.88900E-04	0.96316E-04	0.12755E-08
32	0.94421E-04	0.10230E-03	0.13547E-08
33	0.10014E-03	0.10849E-03	0.14367E-08
34	0.10605E-03	0.11489E-03	0.15215E-08
35	0.11216E-03	0.12151E-03	0.16092E-08
36	0.11846E-03	0.12834E-03	0.16997E-08
37	0.12497E-03	0.13539E-03	0.17930E-08
38	0.13168E-03	0.14266E-03	0.18893E-08
39	0.13859E-03	0.15015E-03	0.19884E-08
40	0.14570E-03	0.15785E-03	0.20904E-08
41	0.15301E-03	0.16578E-03	0.21954E-08
42	0.16053E-03	0.17392E-03	0.23032E-08
43	0.16824E-03	0.18228E-03	0.24139E-08
44	0.17616E-03	0.19086E-03	0.25275E-08
45	0.18428E-03	0.19965E-03	0.26440E-08
46	0.19259E-03	0.20866E-03	0.27633E-08
47	0.20110E-03	0.21788E-03	0.28853E-08
48	0.20980E-03	0.22731E-03	0.30102E-08
49	0.21869E-03	0.23694E-03	0.31378E-08
50	0.22777E-03	0.24677E-03	0.32680E-08

51	0.23703E-03	0.25681E-03	0.34009E-08
52	0.24647E-03	0.26703E-03	0.35362E-08
53	0.25608E-03	0.27744E-03	0.36741E-08
54	0.26585E-03	0.28803E-03	0.38144E-08
55	0.27579E-03	0.29879E-03	0.39569E-08
56	0.28587E-03	0.30972E-03	0.41016E-08
57	0.29610E-03	0.32081E-03	0.42484E-08
58	0.30647E-03	0.33204E-03	0.43972E-08
59	0.31697E-03	0.34341E-03	0.45477E-08
60	0.32758E-03	0.35490E-03	0.47000E-08
61	0.33829E-03	0.36651E-03	0.48537E-08
62	0.34910E-03	0.37822E-03	0.50088E-08
63	0.35999E-03	0.39002E-03	0.51650E-08
64	0.37095E-03	0.40189E-03	0.53223E-08
65	0.38196E-03	0.41382E-03	0.54802E-08
66	0.39300E-03	0.42579E-03	0.56387E-08
67	0.40407E-03	0.43778E-03	0.57974E-08
68	0.41513E-03	0.44977E-03	0.59562E-08
69	0.42618E-03	0.46174E-03	0.61148E-08
70	0.43720E-03	0.47367E-03	0.62728E-08
71	0.44815E-03	0.48554E-03	0.64299E-08
72	0.45902E-03	0.49732E-03	0.65859E-08
73	0.46979E-03	0.50898E-03	0.67404E-08
74	0.48043E-03	0.52051E-03	0.68930E-08
75	0.49091E-03	0.53186E-03	0.70434E-08
76	0.50120E-03	0.54302E-03	0.71911E-08
77	0.51129E-03	0.55394E-03	0.73358E-08
78	0.52112E-03	0.56460E-03	0.74769E-08
79	0.53068E-03	0.57495E-03	0.76141E-08
80	0.53993E-03	0.58497E-03	0.77468E-08
81	0.54883E-03	0.59462E-03	0.78745E-08
82	0.55735E-03	0.60385E-03	0.79967E-08
83	0.56545E-03	0.61262E-03	0.81129E-08
84	0.57308E-03	0.62089E-03	0.82224E-08
85	0.58021E-03	0.62861E-03	0.83247E-08
86	0.58679E-03	0.63574E-03	0.84191E-08
87	0.59277E-03	0.64222E-03	0.85049E-08
88	0.59811E-03	0.64801E-03	0.85816E-08
89	0.60276E-03	0.65305E-03	0.86483E-08
90	0.60667E-03	0.65728E-03	0.87043E-08
91	0.60977E-03	0.66064E-03	0.87489E-08
92	0.61203E-03	0.66309E-03	0.87812E-08
93	0.61337E-03	0.66454E-03	0.88005E-08
94	0.61375E-03	0.66495E-03	0.88059E-08
95	0.61309E-03	0.66423E-03	0.87964E-08
96	0.61133E-03	0.66233E-03	0.87712E-08
97	0.60842E-03	0.65918E-03	0.87294E-08
98	0.60428E-03	0.65469E-03	0.86700E-08
99	0.59883E-03	0.64879E-03	0.85919E-08
100	0.59202E-03	0.64141E-03	0.84941E-08

POLYGON I

Time:	90.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.25945E-06	0.28110E-06	0.37226E-11
2	0.55704E-06	0.60351E-06	0.79922E-11
3	0.89325E-06	0.96777E-06	0.12816E-10
4	0.12686E-05	0.13745E-05	0.18202E-10
5	0.16838E-05	0.18243E-05	0.24159E-10
6	0.21394E-05	0.23179E-05	0.30696E-10
7	0.26361E-05	0.28560E-05	0.37822E-10
8	0.31746E-05	0.34395E-05	0.45548E-10
9	0.37557E-05	0.40690E-05	0.53886E-10
10	0.43802E-05	0.47456E-05	0.62846E-10
11	0.50489E-05	0.54701E-05	0.72440E-10
12	0.57627E-05	0.62434E-05	0.82681E-10
13	0.65223E-05	0.70665E-05	0.93581E-10
14	0.73289E-05	0.79403E-05	0.10515E-09
15	0.81831E-05	0.88658E-05	0.11741E-09
16	0.90861E-05	0.98441E-05	0.13036E-09
17	0.10039E-04	0.10876E-04	0.14403E-09
18	0.11042E-04	0.11963E-04	0.15842E-09
19	0.12096E-04	0.13106E-04	0.17356E-09
20	0.13204E-04	0.14305E-04	0.18944E-09
21	0.14364E-04	0.15563E-04	0.20609E-09
22	0.15579E-04	0.16879E-04	0.22353E-09
23	0.16850E-04	0.18255E-04	0.24176E-09
24	0.18176E-04	0.19693E-04	0.26079E-09
25	0.19560E-04	0.21192E-04	0.28065E-09
26	0.21002E-04	0.22755E-04	0.30134E-09
27	0.22504E-04	0.24381E-04	0.32287E-09
28	0.24064E-04	0.26072E-04	0.34527E-09
29	0.25686E-04	0.27829E-04	0.36854E-09
30	0.27369E-04	0.29652E-04	0.39268E-09
31	0.29114E-04	0.31543E-04	0.41772E-09
32	0.30923E-04	0.33502E-04	0.44367E-09
33	0.32794E-04	0.35530E-04	0.47052E-09
34	0.34730E-04	0.37627E-04	0.49830E-09
35	0.36730E-04	0.39795E-04	0.52700E-09
36	0.38796E-04	0.42033E-04	0.55663E-09

37	0.40927E-04	0.44341E-04	0.58721E-09
38	0.43124E-04	0.46721E-04	0.61873E-09
39	0.45387E-04	0.49173E-04	0.65120E-09
40	0.47716E-04	0.51696E-04	0.68461E-09
41	0.50111E-04	0.54291E-04	0.71898E-09
42	0.52572E-04	0.56958E-04	0.75429E-09
43	0.55100E-04	0.59696E-04	0.79055E-09
44	0.57693E-04	0.62505E-04	0.82775E-09
45	0.60351E-04	0.65385E-04	0.86589E-09
46	0.63073E-04	0.68335E-04	0.90496E-09
47	0.65860E-04	0.71354E-04	0.94494E-09
48	0.68710E-04	0.74442E-04	0.98583E-09
49	0.71622E-04	0.77597E-04	0.10276E-08
50	0.74595E-04	0.80818E-04	0.10703E-08
51	0.77627E-04	0.84103E-04	0.11138E-08
52	0.80718E-04	0.87451E-04	0.11581E-08
53	0.83864E-04	0.90861E-04	0.12033E-08
54	0.87066E-04	0.94329E-04	0.12492E-08
55	0.90319E-04	0.97854E-04	0.12959E-08
56	0.93623E-04	0.10143E-03	0.13433E-08
57	0.96973E-04	0.10506E-03	0.13913E-08
58	0.10037E-03	0.10874E-03	0.14401E-08
59	0.10381E-03	0.11247E-03	0.14894E-08
60	0.10728E-03	0.11623E-03	0.15392E-08
61	0.11079E-03	0.12003E-03	0.15896E-08
62	0.11433E-03	0.12387E-03	0.16404E-08
63	0.11790E-03	0.12773E-03	0.16915E-08
64	0.12148E-03	0.13162E-03	0.17430E-08
65	0.12509E-03	0.13553E-03	0.17948E-08
66	0.12871E-03	0.13944E-03	0.18467E-08
67	0.13233E-03	0.14337E-03	0.18986E-08
68	0.13596E-03	0.14730E-03	0.19506E-08
69	0.13957E-03	0.15122E-03	0.20026E-08
70	0.14318E-03	0.15513E-03	0.20543E-08
71	0.14677E-03	0.15901E-03	0.21058E-08
72	0.15033E-03	0.16287E-03	0.21569E-08
73	0.15385E-03	0.16669E-03	0.22075E-08
74	0.15734E-03	0.17046E-03	0.22574E-08
75	0.16077E-03	0.17418E-03	0.23067E-08
76	0.16414E-03	0.17784E-03	0.23551E-08
77	0.16744E-03	0.18141E-03	0.24024E-08
78	0.17067E-03	0.18490E-03	0.24487E-08
79	0.17380E-03	0.18830E-03	0.24936E-08
80	0.17683E-03	0.19158E-03	0.25370E-08
81	0.17974E-03	0.19474E-03	0.25789E-08
82	0.18253E-03	0.19776E-03	0.26189E-08
83	0.18518E-03	0.20063E-03	0.26569E-08
84	0.18768E-03	0.20334E-03	0.26928E-08
85	0.19002E-03	0.20587E-03	0.27263E-08
86	0.19217E-03	0.20820E-03	0.27572E-08
87	0.19413E-03	0.21033E-03	0.27853E-08
88	0.19588E-03	0.21222E-03	0.28104E-08
89	0.19740E-03	0.21387E-03	0.28323E-08
90	0.19868E-03	0.21526E-03	0.28506E-08
91	0.19970E-03	0.21636E-03	0.28652E-08
92	0.20044E-03	0.21716E-03	0.28758E-08
93	0.20088E-03	0.21764E-03	0.28821E-08
94	0.20100E-03	0.21777E-03	0.28839E-08
95	0.20078E-03	0.21753E-03	0.28808E-08
96	0.20021E-03	0.21691E-03	0.28726E-08
97	0.19926E-03	0.21588E-03	0.28589E-08
98	0.19790E-03	0.21441E-03	0.28394E-08
99	0.19612E-03	0.21248E-03	0.28138E-08
100	0.19388E-03	0.21006E-03	0.27818E-08

POLYGON I

Time:	100.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.84971E-07	0.92059E-07	0.12191E-11
2	0.18243E-06	0.19765E-06	0.26174E-11
3	0.29254E-06	0.31694E-06	0.41973E-11
4	0.41548E-06	0.45014E-06	0.59612E-11
5	0.55145E-06	0.59745E-06	0.79120E-11
6	0.70065E-06	0.75910E-06	0.10053E-10
7	0.86331E-06	0.93533E-06	0.12387E-10
8	0.10397E-05	0.11264E-05	0.14917E-10
9	0.12300E-05	0.13326E-05	0.17647E-10
10	0.14345E-05	0.15542E-05	0.20582E-10
11	0.16535E-05	0.17914E-05	0.23724E-10
12	0.18873E-05	0.20447E-05	0.27078E-10
13	0.21360E-05	0.23142E-05	0.30647E-10
14	0.24002E-05	0.26004E-05	0.34437E-10
15	0.26799E-05	0.29035E-05	0.38451E-10
16	0.29757E-05	0.32239E-05	0.42694E-10
17	0.32876E-05	0.35619E-05	0.47170E-10
18	0.36161E-05	0.39178E-05	0.51883E-10
19	0.39616E-05	0.42920E-05	0.56839E-10
20	0.43242E-05	0.46849E-05	0.62042E-10
21	0.47043E-05	0.50967E-05	0.67495E-10
22	0.51022E-05	0.55278E-05	0.73205E-10

23	0.55182E-05	0.59786E-05	0.79174E-10
24	0.59527E-05	0.64493E-05	0.85408E-10
25	0.64060E-05	0.69404E-05	0.91911E-10
26	0.68783E-05	0.74521E-05	0.98687E-10
27	0.73699E-05	0.79847E-05	0.10574E-09
28	0.78811E-05	0.85385E-05	0.11308E-09
29	0.84121E-05	0.91139E-05	0.12069E-09
30	0.89633E-05	0.97111E-05	0.12860E-09
31	0.95349E-05	0.10330E-04	0.13680E-09
32	0.10127E-04	0.10972E-04	0.14530E-09
33	0.10740E-04	0.11636E-04	0.15409E-09
34	0.11374E-04	0.12323E-04	0.16319E-09
35	0.12029E-04	0.13033E-04	0.17259E-09
36	0.12706E-04	0.13766E-04	0.18230E-09
37	0.13404E-04	0.14522E-04	0.19231E-09
38	0.14123E-04	0.15301E-04	0.20263E-09
39	0.14864E-04	0.16104E-04	0.21326E-09
40	0.15627E-04	0.16930E-04	0.22421E-09
41	0.16411E-04	0.17780E-04	0.23546E-09
42	0.17217E-04	0.18654E-04	0.24703E-09
43	0.18045E-04	0.19550E-04	0.25890E-09
44	0.18894E-04	0.20470E-04	0.27109E-09
45	0.19765E-04	0.21413E-04	0.28358E-09
46	0.20656E-04	0.22380E-04	0.29637E-09
47	0.21569E-04	0.23368E-04	0.30947E-09
48	0.22502E-04	0.24380E-04	0.32286E-09
49	0.23456E-04	0.25413E-04	0.33654E-09
50	0.24430E-04	0.26468E-04	0.35051E-09
51	0.25423E-04	0.27543E-04	0.36476E-09
52	0.26435E-04	0.28640E-04	0.37928E-09
53	0.27465E-04	0.29757E-04	0.39406E-09
54	0.28514E-04	0.30892E-04	0.40911E-09
55	0.29579E-04	0.32047E-04	0.42439E-09
56	0.30661E-04	0.33219E-04	0.43992E-09
57	0.31759E-04	0.34408E-04	0.45566E-09
58	0.32870E-04	0.35613E-04	0.47162E-09
59	0.33996E-04	0.36832E-04	0.48776E-09
60	0.35134E-04	0.38065E-04	0.50409E-09
61	0.36283E-04	0.39310E-04	0.52058E-09
62	0.37443E-04	0.40566E-04	0.53722E-09
63	0.38611E-04	0.41832E-04	0.55397E-09
64	0.39786E-04	0.43105E-04	0.57083E-09
65	0.40967E-04	0.44384E-04	0.58778E-09
66	0.42151E-04	0.45668E-04	0.60477E-09
67	0.43338E-04	0.46953E-04	0.62180E-09
68	0.44525E-04	0.48239E-04	0.63883E-09
69	0.45710E-04	0.49523E-04	0.65583E-09
70	0.46891E-04	0.50803E-04	0.67278E-09
71	0.48066E-04	0.52076E-04	0.68964E-09
72	0.49232E-04	0.53339E-04	0.70637E-09
73	0.50387E-04	0.54590E-04	0.72294E-09
74	0.51528E-04	0.55827E-04	0.73931E-09
75	0.52652E-04	0.57044E-04	0.75544E-09
76	0.53756E-04	0.58241E-04	0.77128E-09
77	0.54838E-04	0.59412E-04	0.78679E-09
78	0.55893E-04	0.60555E-04	0.80193E-09
79	0.56918E-04	0.61666E-04	0.81664E-09
80	0.57910E-04	0.62741E-04	0.83088E-09
81	0.58865E-04	0.63776E-04	0.84458E-09
82	0.59779E-04	0.64765E-04	0.85768E-09
83	0.60647E-04	0.65706E-04	0.87014E-09
84	0.61466E-04	0.66593E-04	0.88189E-09
85	0.62230E-04	0.67422E-04	0.89286E-09
86	0.62936E-04	0.68186E-04	0.90298E-09
87	0.63578E-04	0.68881E-04	0.91219E-09
88	0.64150E-04	0.69502E-04	0.92041E-09
89	0.64649E-04	0.70042E-04	0.92756E-09
90	0.65068E-04	0.70496E-04	0.93357E-09
91	0.65401E-04	0.70857E-04	0.93835E-09
92	0.65643E-04	0.71119E-04	0.94182E-09
93	0.65787E-04	0.71275E-04	0.94389E-09
94	0.65827E-04	0.71318E-04	0.94447E-09
95	0.65756E-04	0.71242E-04	0.94345E-09
96	0.65568E-04	0.71038E-04	0.94075E-09
97	0.65256E-04	0.70700E-04	0.93627E-09
98	0.64811E-04	0.70218E-04	0.92989E-09
99	0.64227E-04	0.69585E-04	0.92151E-09
100	0.63496E-04	0.68793E-04	0.91103E-09

POLYGON I

Time: 110.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.27828E-07	0.30149E-07	0.39926E-12
2	0.59745E-07	0.64729E-07	0.85720E-12
3	0.95805E-07	0.10380E-06	0.13746E-11
4	0.13607E-06	0.14742E-06	0.19523E-11
5	0.18060E-06	0.19566E-06	0.25911E-11
6	0.22946E-06	0.24860E-06	0.32922E-11
7	0.28273E-06	0.30632E-06	0.40566E-11
8	0.34049E-06	0.36890E-06	0.48853E-11

9	0.40282E-06	0.43642E-06	0.57795E-11
10	0.46980E-06	0.50899E-06	0.67405E-11
11	0.54152E-06	0.58669E-06	0.77695E-11
12	0.61807E-06	0.66963E-06	0.88679E-11
13	0.69955E-06	0.75791E-06	0.10037E-10
14	0.78605E-06	0.85163E-06	0.11278E-10
15	0.87767E-06	0.95089E-06	0.12593E-10
16	0.97452E-06	0.10558E-05	0.13982E-10
17	0.10767E-05	0.11665E-05	0.15448E-10
18	0.11843E-05	0.12831E-05	0.16992E-10
19	0.12974E-05	0.14056E-05	0.18615E-10
20	0.14161E-05	0.15343E-05	0.20318E-10
21	0.15406E-05	0.16692E-05	0.22105E-10
22	0.16710E-05	0.18103E-05	0.23974E-10
23	0.18072E-05	0.19580E-05	0.25929E-10
24	0.19495E-05	0.21121E-05	0.27971E-10
25	0.20979E-05	0.22730E-05	0.30101E-10
26	0.22526E-05	0.24405E-05	0.32320E-10
27	0.24136E-05	0.26150E-05	0.34630E-10
28	0.25810E-05	0.27963E-05	0.37032E-10
29	0.27549E-05	0.29848E-05	0.39527E-10
30	0.29355E-05	0.31803E-05	0.42117E-10
31	0.31226E-05	0.33832E-05	0.44803E-10
32	0.33166E-05	0.35933E-05	0.47585E-10
33	0.35173E-05	0.38108E-05	0.50466E-10
34	0.37249E-05	0.40357E-05	0.53444E-10
35	0.39395E-05	0.42682E-05	0.56523E-10
36	0.41610E-05	0.45082E-05	0.59701E-10
37	0.43896E-05	0.47558E-05	0.62981E-10
38	0.46252E-05	0.50111E-05	0.66361E-10
39	0.48679E-05	0.52740E-05	0.69844E-10
40	0.51177E-05	0.55447E-05	0.73428E-10
41	0.53746E-05	0.58230E-05	0.77114E-10
42	0.56386E-05	0.61090E-05	0.80901E-10
43	0.59097E-05	0.64027E-05	0.84790E-10
44	0.61878E-05	0.67040E-05	0.88780E-10
45	0.64729E-05	0.70129E-05	0.92871E-10
46	0.67649E-05	0.73292E-05	0.97061E-10
47	0.70638E-05	0.76531E-05	0.10135E-09
48	0.73694E-05	0.79842E-05	0.10573E-09
49	0.76817E-05	0.83226E-05	0.11022E-09
50	0.80006E-05	0.86680E-05	0.11479E-09
51	0.83258E-05	0.90204E-05	0.11946E-09
52	0.86573E-05	0.93795E-05	0.12421E-09
53	0.89948E-05	0.97452E-05	0.12906E-09
54	0.93382E-05	0.10117E-04	0.13398E-09
55	0.96871E-05	0.10495E-04	0.13899E-09
56	0.10041E-04	0.10879E-04	0.14407E-09
57	0.10401E-04	0.11268E-04	0.14923E-09
58	0.10765E-04	0.11663E-04	0.15445E-09
59	0.11134E-04	0.12062E-04	0.15974E-09
60	0.11506E-04	0.12466E-04	0.16509E-09
61	0.11883E-04	0.12874E-04	0.17049E-09
62	0.12262E-04	0.13285E-04	0.17594E-09
63	0.12645E-04	0.13700E-04	0.18142E-09
64	0.13030E-04	0.14117E-04	0.18695E-09
65	0.13416E-04	0.14536E-04	0.19249E-09
66	0.13804E-04	0.14956E-04	0.19806E-09
67	0.14193E-04	0.15377E-04	0.20364E-09
68	0.14582E-04	0.15798E-04	0.20922E-09
69	0.14970E-04	0.16219E-04	0.21478E-09
70	0.15357E-04	0.16638E-04	0.22033E-09
71	0.15741E-04	0.17055E-04	0.22585E-09
72	0.16123E-04	0.17468E-04	0.23133E-09
73	0.16502E-04	0.17878E-04	0.23676E-09
74	0.16875E-04	0.18283E-04	0.24212E-09
75	0.17243E-04	0.18682E-04	0.24740E-09
76	0.17605E-04	0.19074E-04	0.25259E-09
77	0.17959E-04	0.19457E-04	0.25767E-09
78	0.18305E-04	0.19832E-04	0.26263E-09
79	0.18640E-04	0.20196E-04	0.26745E-09
80	0.18965E-04	0.20548E-04	0.27211E-09
81	0.19278E-04	0.20886E-04	0.27660E-09
82	0.19577E-04	0.21211E-04	0.28089E-09
83	0.19862E-04	0.21519E-04	0.28497E-09
84	0.20130E-04	0.21809E-04	0.28882E-09
85	0.20380E-04	0.22080E-04	0.29241E-09
86	0.20611E-04	0.22331E-04	0.29572E-09
87	0.20821E-04	0.22558E-04	0.29874E-09
88	0.21009E-04	0.22762E-04	0.30143E-09
89	0.21172E-04	0.22939E-04	0.30377E-09
90	0.21310E-04	0.23087E-04	0.30574E-09
91	0.21419E-04	0.23205E-04	0.30731E-09
92	0.21498E-04	0.23291E-04	0.30844E-09
93	0.21545E-04	0.23342E-04	0.30912E-09
94	0.21558E-04	0.23357E-04	0.30931E-09
95	0.21535E-04	0.23332E-04	0.30898E-09
96	0.21473E-04	0.23265E-04	0.30809E-09
97	0.21371E-04	0.23154E-04	0.30663E-09
98	0.21225E-04	0.22996E-04	0.30454E-09

99	0.21034E-04	0.22789E-04	0.30179E-09
100	0.20795E-04	0.22530E-04	0.29836E-09

POLYGM I

Time:	120.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.91135E-08	0.98737E-08	0.13076E-12
2	0.19566E-07	0.21199E-07	0.28073E-12
3	0.31376E-07	0.33994E-07	0.45017E-12
4	0.44562E-07	0.48279E-07	0.63936E-12
5	0.59145E-07	0.64079E-07	0.84859E-12
6	0.75148E-07	0.81417E-07	0.10782E-11
7	0.92594E-07	0.10032E-06	0.13285E-11
8	0.11151E-06	0.12081E-06	0.15999E-11
9	0.13192E-06	0.14293E-06	0.18928E-11
10	0.15386E-06	0.16669E-06	0.22075E-11
11	0.17735E-06	0.19214E-06	0.25445E-11
12	0.20242E-06	0.21930E-06	0.29042E-11
13	0.22910E-06	0.24821E-06	0.32871E-11
14	0.25743E-06	0.27891E-06	0.36935E-11
15	0.28744E-06	0.31142E-06	0.41240E-11
16	0.31915E-06	0.34578E-06	0.45791E-11
17	0.35261E-06	0.38203E-06	0.50592E-11
18	0.38785E-06	0.42020E-06	0.55647E-11
19	0.42489E-06	0.46034E-06	0.60963E-11
20	0.46378E-06	0.50247E-06	0.66542E-11
21	0.50455E-06	0.54664E-06	0.72392E-11
22	0.54723E-06	0.59288E-06	0.78515E-11
23	0.59186E-06	0.64123E-06	0.84918E-11
24	0.63846E-06	0.69172E-06	0.91604E-11
25	0.68707E-06	0.74439E-06	0.98579E-11
26	0.73772E-06	0.79927E-06	0.10585E-10
27	0.79045E-06	0.85639E-06	0.11341E-10
28	0.84528E-06	0.91579E-06	0.12128E-10
29	0.90224E-06	0.97751E-06	0.12945E-10
30	0.96136E-06	0.10416E-05	0.13793E-10
31	0.10227E-05	0.11080E-05	0.14673E-10
32	0.10862E-05	0.11768E-05	0.15584E-10
33	0.11519E-05	0.12480E-05	0.16527E-10
34	0.12199E-05	0.13217E-05	0.17503E-10
35	0.12902E-05	0.13978E-05	0.18511E-10
36	0.13627E-05	0.14764E-05	0.19552E-10
37	0.14376E-05	0.15575E-05	0.20626E-10
38	0.15148E-05	0.16411E-05	0.21733E-10
39	0.15942E-05	0.17272E-05	0.22874E-10
40	0.16760E-05	0.18159E-05	0.24047E-10
41	0.17602E-05	0.19070E-05	0.25254E-10
42	0.18466E-05	0.20007E-05	0.26495E-10
43	0.19354E-05	0.20969E-05	0.27769E-10
44	0.20265E-05	0.21955E-05	0.29075E-10
45	0.21198E-05	0.22967E-05	0.30415E-10
46	0.22155E-05	0.24003E-05	0.31787E-10
47	0.23134E-05	0.25064E-05	0.33192E-10
48	0.24135E-05	0.26148E-05	0.34628E-10
49	0.25158E-05	0.27256E-05	0.36095E-10
50	0.26202E-05	0.28388E-05	0.37593E-10
51	0.27267E-05	0.29542E-05	0.39122E-10
52	0.28352E-05	0.30718E-05	0.40679E-10
53	0.29458E-05	0.31915E-05	0.42265E-10
54	0.30582E-05	0.33134E-05	0.43878E-10
55	0.31725E-05	0.34372E-05	0.45518E-10
56	0.32885E-05	0.35629E-05	0.47183E-10
57	0.34062E-05	0.36904E-05	0.48872E-10
58	0.35255E-05	0.38196E-05	0.50583E-10
59	0.36462E-05	0.39504E-05	0.52315E-10
60	0.37683E-05	0.40826E-05	0.54066E-10
61	0.38915E-05	0.42162E-05	0.55835E-10
62	0.40159E-05	0.43509E-05	0.57619E-10
63	0.41412E-05	0.44866E-05	0.59416E-10
64	0.42672E-05	0.46232E-05	0.61225E-10
65	0.43938E-05	0.47604E-05	0.63042E-10
66	0.45209E-05	0.48981E-05	0.64865E-10
67	0.46482E-05	0.50360E-05	0.66691E-10
68	0.47755E-05	0.51739E-05	0.68517E-10
69	0.49026E-05	0.53116E-05	0.70341E-10
70	0.50293E-05	0.54488E-05	0.72159E-10
71	0.51553E-05	0.55854E-05	0.73967E-10
72	0.52804E-05	0.57209E-05	0.75761E-10
73	0.54042E-05	0.58551E-05	0.77538E-10
74	0.55266E-05	0.59876E-05	0.79294E-10
75	0.56472E-05	0.61183E-05	0.81024E-10
76	0.57656E-05	0.62466E-05	0.82723E-10
77	0.58816E-05	0.63722E-05	0.84387E-10
78	0.59947E-05	0.64948E-05	0.86011E-10
79	0.61047E-05	0.66140E-05	0.87589E-10
80	0.62111E-05	0.67293E-05	0.89115E-10
81	0.63135E-05	0.68402E-05	0.90584E-10
82	0.64115E-05	0.69464E-05	0.91990E-10
83	0.65046E-05	0.70473E-05	0.93327E-10
84	0.65925E-05	0.71424E-05	0.94587E-10

85	0.66745E-05	0.72313E-05	0.95763E-10
86	0.67501E-05	0.73133E-05	0.96849E-10
87	0.68190E-05	0.73878E-05	0.97837E-10
88	0.68804E-05	0.74544E-05	0.98718E-10
89	0.69339E-05	0.75123E-05	0.99485E-10
90	0.69788E-05	0.75610E-05	0.10013E-09
91	0.70145E-05	0.75997E-05	0.10064E-09
92	0.70405E-05	0.76278E-05	0.10101E-09
93	0.70559E-05	0.76446E-05	0.10124E-09
94	0.70602E-05	0.76492E-05	0.10130E-09
95	0.70527E-05	0.76410E-05	0.10119E-09
96	0.70325E-05	0.76192E-05	0.10090E-09
97	0.69990E-05	0.75828E-05	0.10042E-09
98	0.69513E-05	0.75312E-05	0.99735E-10
99	0.68887E-05	0.74633E-05	0.98836E-10
100	0.68103E-05	0.73784E-05	0.97712E-10

POLYGON I

Time: 130.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.29846E-08	0.32336E-08	0.42823E-13
2	0.64079E-08	0.69425E-08	0.91939E-13
3	0.10276E-07	0.11133E-07	0.14743E-12
4	0.14594E-07	0.15811E-07	0.20939E-12
5	0.19370E-07	0.20986E-07	0.27791E-12
6	0.24611E-07	0.26664E-07	0.35311E-12
7	0.30324E-07	0.32854E-07	0.43508E-12
8	0.36519E-07	0.39566E-07	0.52397E-12
9	0.43204E-07	0.46808E-07	0.61988E-12
10	0.50388E-07	0.54591E-07	0.72295E-12
11	0.58080E-07	0.62925E-07	0.83331E-12
12	0.66291E-07	0.71821E-07	0.95112E-12
13	0.75030E-07	0.81289E-07	0.10765E-11
14	0.84307E-07	0.91341E-07	0.12096E-11
15	0.94134E-07	0.10199E-06	0.13506E-11
16	0.10452E-06	0.11324E-06	0.14996E-11
17	0.11548E-06	0.12511E-06	0.16569E-11
18	0.12702E-06	0.13762E-06	0.18224E-11
19	0.13915E-06	0.15076E-06	0.19965E-11
20	0.15189E-06	0.16456E-06	0.21792E-11
21	0.16524E-06	0.17902E-06	0.23708E-11
22	0.17922E-06	0.19417E-06	0.25713E-11
23	0.19383E-06	0.21000E-06	0.27810E-11
24	0.20909E-06	0.22654E-06	0.30000E-11
25	0.22501E-06	0.24378E-06	0.32284E-11
26	0.24160E-06	0.26176E-06	0.34664E-11
27	0.25887E-06	0.28047E-06	0.37142E-11
28	0.27683E-06	0.29992E-06	0.39718E-11
29	0.29548E-06	0.32013E-06	0.42395E-11
30	0.31484E-06	0.34111E-06	0.45172E-11
31	0.33492E-06	0.36286E-06	0.48053E-11
32	0.35572E-06	0.38539E-06	0.51037E-11
33	0.37725E-06	0.40872E-06	0.54127E-11
34	0.39952E-06	0.43285E-06	0.57322E-11
35	0.42253E-06	0.45778E-06	0.60623E-11
36	0.44629E-06	0.48352E-06	0.64032E-11
37	0.47080E-06	0.51008E-06	0.67550E-11
38	0.49608E-06	0.53746E-06	0.71176E-11
39	0.52211E-06	0.56566E-06	0.74910E-11
40	0.54890E-06	0.59469E-06	0.78754E-11
41	0.57645E-06	0.62454E-06	0.82708E-11
42	0.60477E-06	0.65522E-06	0.86770E-11
43	0.63384E-06	0.68672E-06	0.90941E-11
44	0.66367E-06	0.71903E-06	0.95221E-11
45	0.69424E-06	0.75216E-06	0.99608E-11
46	0.72556E-06	0.78609E-06	0.10410E-10
47	0.75762E-06	0.82082E-06	0.10870E-10
48	0.79040E-06	0.85634E-06	0.11340E-10
49	0.82390E-06	0.89263E-06	0.11821E-10
50	0.85810E-06	0.92969E-06	0.12312E-10
51	0.89298E-06	0.96748E-06	0.12812E-10
52	0.92853E-06	0.10060E-05	0.13322E-10
53	0.96473E-06	0.10452E-05	0.13842E-10
54	0.10016E-05	0.10851E-05	0.14370E-10
55	0.10390E-05	0.11257E-05	0.14907E-10
56	0.10770E-05	0.11668E-05	0.15452E-10
57	0.11155E-05	0.12086E-05	0.16005E-10
58	0.11546E-05	0.12509E-05	0.16566E-10
59	0.11941E-05	0.12937E-05	0.17133E-10
60	0.12341E-05	0.13371E-05	0.17707E-10
61	0.12745E-05	0.13808E-05	0.18286E-10
62	0.13152E-05	0.14249E-05	0.18870E-10
63	0.13562E-05	0.14694E-05	0.19459E-10
64	0.13975E-05	0.15141E-05	0.20051E-10
65	0.14390E-05	0.15590E-05	0.20646E-10
66	0.14806E-05	0.16041E-05	0.21243E-10
67	0.15223E-05	0.16493E-05	0.21841E-10
68	0.15640E-05	0.16944E-05	0.22439E-10
69	0.16056E-05	0.17395E-05	0.23037E-10
70	0.16471E-05	0.17845E-05	0.23632E-10

71	0.16883E-05	0.18292E-05	0.24224E-10
72	0.17293E-05	0.18736E-05	0.24812E-10
73	0.17699E-05	0.19175E-05	0.25394E-10
74	0.18099E-05	0.19609E-05	0.25969E-10
75	0.18494E-05	0.20037E-05	0.26535E-10
76	0.18882E-05	0.20457E-05	0.27092E-10
77	0.19262E-05	0.20869E-05	0.27637E-10
78	0.19633E-05	0.21270E-05	0.28168E-10
79	0.19993E-05	0.21661E-05	0.28685E-10
80	0.20341E-05	0.22038E-05	0.29185E-10
81	0.20677E-05	0.22401E-05	0.29666E-10
82	0.20998E-05	0.22749E-05	0.30127E-10
83	0.21303E-05	0.23080E-05	0.30564E-10
84	0.21590E-05	0.23391E-05	0.30977E-10
85	0.21859E-05	0.23682E-05	0.31362E-10
86	0.22106E-05	0.23951E-05	0.31718E-10
87	0.22332E-05	0.24195E-05	0.32041E-10
88	0.22533E-05	0.24413E-05	0.32330E-10
89	0.22708E-05	0.24603E-05	0.32581E-10
90	0.22855E-05	0.24762E-05	0.32792E-10
91	0.22972E-05	0.24889E-05	0.32960E-10
92	0.23057E-05	0.24981E-05	0.33082E-10
93	0.23108E-05	0.25036E-05	0.33155E-10
94	0.23122E-05	0.25051E-05	0.33175E-10
95	0.23097E-05	0.25024E-05	0.33139E-10
96	0.23031E-05	0.24953E-05	0.33044E-10
97	0.22921E-05	0.24834E-05	0.32887E-10
98	0.22765E-05	0.24664E-05	0.32663E-10
99	0.22560E-05	0.24442E-05	0.32369E-10
100	0.22303E-05	0.24164E-05	0.32000E-10

POLYGON I

Time: 140.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.97746E-09	0.10590E-08	0.14024E-13
2	0.20986E-08	0.22736E-08	0.30110E-13
3	0.33652E-08	0.36460E-08	0.48283E-13
4	0.47795E-08	0.51782E-08	0.68574E-13
5	0.63435E-08	0.68728E-08	0.91015E-13
6	0.80599E-08	0.87323E-08	0.11564E-12
7	0.99311E-08	0.10760E-07	0.14249E-12
8	0.11960E-07	0.12958E-07	0.17160E-12
9	0.14149E-07	0.15330E-07	0.20301E-12
10	0.16502E-07	0.17878E-07	0.23676E-12
11	0.19021E-07	0.20608E-07	0.27291E-12
12	0.21710E-07	0.23521E-07	0.31149E-12
13	0.24572E-07	0.26622E-07	0.35255E-12
14	0.27610E-07	0.29914E-07	0.39615E-12
15	0.30829E-07	0.33401E-07	0.44232E-12
16	0.34230E-07	0.37086E-07	0.49113E-12
17	0.37819E-07	0.40974E-07	0.54262E-12
18	0.41598E-07	0.45069E-07	0.59684E-12
19	0.45572E-07	0.49374E-07	0.65385E-12
20	0.49743E-07	0.53893E-07	0.71370E-12
21	0.54115E-07	0.58630E-07	0.77643E-12
22	0.58693E-07	0.63589E-07	0.84211E-12
23	0.63479E-07	0.68775E-07	0.91078E-12
24	0.68477E-07	0.74190E-07	0.98249E-12
25	0.73691E-07	0.79839E-07	0.10573E-11
26	0.79124E-07	0.85725E-07	0.11352E-11
27	0.84779E-07	0.91852E-07	0.12164E-11
28	0.90660E-07	0.98223E-07	0.13008E-11
29	0.96769E-07	0.10484E-06	0.13884E-11
30	0.10311E-06	0.11171E-06	0.14794E-11
31	0.10968E-06	0.11883E-06	0.15737E-11
32	0.11650E-06	0.12622E-06	0.16715E-11
33	0.12355E-06	0.13385E-06	0.17726E-11
34	0.13084E-06	0.14176E-06	0.18773E-11
35	0.13838E-06	0.14992E-06	0.19854E-11
36	0.14616E-06	0.15835E-06	0.20970E-11
37	0.15419E-06	0.16705E-06	0.22122E-11
38	0.16246E-06	0.17602E-06	0.23310E-11
39	0.17099E-06	0.18525E-06	0.24533E-11
40	0.17976E-06	0.19476E-06	0.25792E-11
41	0.18879E-06	0.20454E-06	0.27087E-11
42	0.19806E-06	0.21458E-06	0.28417E-11
43	0.20758E-06	0.22490E-06	0.29783E-11
44	0.21735E-06	0.23548E-06	0.31185E-11
45	0.22736E-06	0.24633E-06	0.32621E-11
46	0.23762E-06	0.25744E-06	0.34093E-11
47	0.24812E-06	0.26882E-06	0.35599E-11
48	0.25886E-06	0.28045E-06	0.37140E-11
49	0.26983E-06	0.29234E-06	0.38714E-11
50	0.28103E-06	0.30447E-06	0.40321E-11
51	0.29245E-06	0.31685E-06	0.41960E-11
52	0.30409E-06	0.32946E-06	0.43630E-11
53	0.31595E-06	0.34231E-06	0.45331E-11
54	0.32801E-06	0.35537E-06	0.47062E-11
55	0.34027E-06	0.36865E-06	0.48820E-11
56	0.35271E-06	0.38213E-06	0.50606E-11

57	0.36533E-06	0.39581E-06	0.52417E-11
58	0.37813E-06	0.40967E-06	0.54252E-11
59	0.39107E-06	0.42370E-06	0.56110E-11
60	0.40416E-06	0.43788E-06	0.57988E-11
61	0.41739E-06	0.45221E-06	0.59885E-11
62	0.43072E-06	0.46665E-06	0.61799E-11
63	0.44416E-06	0.48121E-06	0.63726E-11
64	0.45768E-06	0.49586E-06	0.65666E-11
65	0.47126E-06	0.51057E-06	0.67615E-11
66	0.48489E-06	0.52534E-06	0.69570E-11
67	0.49854E-06	0.54013E-06	0.71529E-11
68	0.51219E-06	0.55492E-06	0.73488E-11
69	0.52583E-06	0.56969E-06	0.75444E-11
70	0.53941E-06	0.58441E-06	0.77393E-11
71	0.55293E-06	0.59905E-06	0.79332E-11
72	0.56634E-06	0.61359E-06	0.81257E-11
73	0.57963E-06	0.62798E-06	0.83163E-11
74	0.59275E-06	0.64220E-06	0.85046E-11
75	0.60568E-06	0.65621E-06	0.86901E-11
76	0.61839E-06	0.66997E-06	0.88724E-11
77	0.63082E-06	0.68345E-06	0.90509E-11
78	0.64296E-06	0.69660E-06	0.92250E-11
79	0.65476E-06	0.70938E-06	0.93943E-11
80	0.66617E-06	0.72174E-06	0.95580E-11
81	0.67715E-06	0.73364E-06	0.97156E-11
82	0.68766E-06	0.74503E-06	0.98664E-11
83	0.69765E-06	0.75585E-06	0.10010E-10
84	0.70707E-06	0.76606E-06	0.10145E-10
85	0.71586E-06	0.7758E-06	0.10271E-10
86	0.72398E-06	0.78438E-06	0.10387E-10
87	0.73136E-06	0.79238E-06	0.10493E-10
88	0.73795E-06	0.79952E-06	0.10588E-10
89	0.74369E-06	0.80573E-06	0.10670E-10
90	0.74851E-06	0.81095E-06	0.10739E-10
91	0.75234E-06	0.81510E-06	0.10794E-10
92	0.75512E-06	0.81812E-06	0.10834E-10
93	0.75678E-06	0.81991E-06	0.10858E-10
94	0.75724E-06	0.82041E-06	0.10865E-10
95	0.75643E-06	0.81953E-06	0.10853E-10
96	0.75426E-06	0.81719E-06	0.10822E-10
97	0.75067E-06	0.81329E-06	0.10770E-10
98	0.74556E-06	0.80775E-06	0.10697E-10
99	0.73884E-06	0.80048E-06	0.10601E-10
100	0.73043E-06	0.79137E-06	0.10480E-10

POLYGON I

Time: 150.000

Cell	Cgas(g/cu.ft)	Clq(g/cu.ft)	Csol(g/g)
1	0.32011E-09	0.34682E-09	0.45929E-14
2	0.68728E-09	0.74461E-09	0.98608E-14
3	0.11021E-08	0.11940E-08	0.15813E-13
4	0.15653E-08	0.16958E-08	0.22458E-13
5	0.20775E-08	0.22508E-08	0.29807E-13
6	0.26396E-08	0.28598E-08	0.37872E-13
7	0.32524E-08	0.35237E-08	0.46665E-13
8	0.39168E-08	0.42436E-08	0.56198E-13
9	0.46338E-08	0.50204E-08	0.66485E-13
10	0.54043E-08	0.58551E-08	0.77539E-13
11	0.62293E-08	0.67490E-08	0.89377E-13
12	0.71100E-08	0.77031E-08	0.10201E-12
13	0.80473E-08	0.87186E-08	0.11546E-12
14	0.90423E-08	0.97967E-08	0.12974E-12
15	0.10096E-07	0.10939E-07	0.14486E-12
16	0.11210E-07	0.12146E-07	0.16084E-12
17	0.12386E-07	0.13419E-07	0.17771E-12
18	0.13623E-07	0.14760E-07	0.19546E-12
19	0.14925E-07	0.16170E-07	0.21413E-12
20	0.16291E-07	0.17650E-07	0.23373E-12
21	0.17723E-07	0.19201E-07	0.25428E-12
22	0.19222E-07	0.20825E-07	0.27579E-12
23	0.20789E-07	0.22524E-07	0.29828E-12
24	0.22426E-07	0.24297E-07	0.32176E-12
25	0.24134E-07	0.26147E-07	0.34626E-12
26	0.25913E-07	0.28075E-07	0.37179E-12
27	0.27765E-07	0.30081E-07	0.39836E-12
28	0.29691E-07	0.32168E-07	0.42599E-12
29	0.31692E-07	0.34335E-07	0.45470E-12
30	0.33768E-07	0.36585E-07	0.48449E-12
31	0.35921E-07	0.38918E-07	0.51539E-12
32	0.38152E-07	0.41335E-07	0.54740E-12
33	0.40462E-07	0.43837E-07	0.58053E-12
34	0.42850E-07	0.46425E-07	0.61480E-12
35	0.45318E-07	0.49099E-07	0.65021E-12
36	0.47867E-07	0.51860E-07	0.68678E-12
37	0.50496E-07	0.54708E-07	0.72450E-12
38	0.53206E-07	0.57645E-07	0.76339E-12
39	0.55998E-07	0.60670E-07	0.80345E-12
40	0.58872E-07	0.63783E-07	0.84468E-12
41	0.61827E-07	0.66985E-07	0.88708E-12
42	0.64864E-07	0.70275E-07	0.93065E-12

43	0.67982E-07	0.73653E-07	0.97538E-12
44	0.71181E-07	0.77119E-07	0.10213E-11
45	0.74461E-07	0.80672E-07	0.10683E-11
46	0.77820E-07	0.84312E-07	0.11165E-11
47	0.81258E-07	0.88037E-07	0.11659E-11
48	0.84774E-07	0.91846E-07	0.12163E-11
49	0.88367E-07	0.95739E-07	0.12679E-11
50	0.92035E-07	0.99713E-07	0.13205E-11
51	0.95776E-07	0.10377E-06	0.13742E-11
52	0.99589E-07	0.10790E-06	0.14289E-11
53	0.10347E-06	0.11210E-06	0.14846E-11
54	0.10742E-06	0.11638E-06	0.15413E-11
55	0.11144E-06	0.12073E-06	0.15988E-11
56	0.11551E-06	0.12515E-06	0.16573E-11
57	0.11965E-06	0.12963E-06	0.17166E-11
58	0.12384E-06	0.13417E-06	0.17767E-11
59	0.12808E-06	0.13876E-06	0.18376E-11
60	0.13236E-06	0.14340E-06	0.18991E-11
61	0.13669E-06	0.14810E-06	0.19612E-11
62	0.14106E-06	0.15283E-06	0.20239E-11
63	0.14546E-06	0.15760E-06	0.20870E-11
64	0.14989E-06	0.16239E-06	0.21505E-11
65	0.15434E-06	0.16721E-06	0.22144E-11
66	0.15880E-06	0.17205E-06	0.22784E-11
67	0.16327E-06	0.17689E-06	0.23425E-11
68	0.16774E-06	0.18174E-06	0.24067E-11
69	0.17221E-06	0.18657E-06	0.24708E-11
70	0.17666E-06	0.19139E-06	0.25346E-11
71	0.18108E-06	0.19619E-06	0.25981E-11
72	0.18548E-06	0.20095E-06	0.26611E-11
73	0.18983E-06	0.20566E-06	0.27236E-11
74	0.19412E-06	0.21032E-06	0.27852E-11
75	0.19836E-06	0.21491E-06	0.28460E-11
76	0.20252E-06	0.21941E-06	0.29057E-11
77	0.20659E-06	0.22383E-06	0.29641E-11
78	0.21057E-06	0.22813E-06	0.30212E-11
79	0.21443E-06	0.23232E-06	0.30766E-11
80	0.21817E-06	0.23637E-06	0.31302E-11
81	0.22177E-06	0.24027E-06	0.31818E-11
82	0.22521E-06	0.24400E-06	0.32312E-11
83	0.22848E-06	0.24754E-06	0.32781E-11
84	0.23156E-06	0.25088E-06	0.33224E-11
85	0.23444E-06	0.25400E-06	0.33637E-11
86	0.23710E-06	0.25688E-06	0.34019E-11
87	0.23952E-06	0.25950E-06	0.34366E-11
88	0.24168E-06	0.26184E-06	0.34675E-11
89	0.24356E-06	0.26387E-06	0.34945E-11
90	0.24513E-06	0.26558E-06	0.35171E-11
91	0.24639E-06	0.26694E-06	0.35351E-11
92	0.24730E-06	0.26793E-06	0.35482E-11
93	0.24784E-06	0.26852E-06	0.35560E-11
94	0.24799E-06	0.26868E-06	0.35581E-11
95	0.24773E-06	0.26839E-06	0.35543E-11
96	0.24702E-06	0.26763E-06	0.35442E-11
97	0.24584E-06	0.26635E-06	0.35273E-11
98	0.24417E-06	0.26454E-06	0.35032E-11
99	0.24197E-06	0.26215E-06	0.34717E-11
100	0.23921E-06	0.25917E-06	0.34322E-11

POLYGON I

Time:	160.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.10484E-09	0.11358E-09	0.15042E-14
2	0.22508E-09	0.24386E-09	0.32294E-14
3	0.36093E-09	0.39104E-09	0.51786E-14
4	0.51262E-09	0.55538E-09	0.73549E-14
5	0.68037E-09	0.73713E-09	0.97618E-14
6	0.86446E-09	0.93658E-09	0.12403E-13
7	0.10652E-08	0.11540E-08	0.15283E-13
8	0.12828E-08	0.13898E-08	0.18405E-13
9	0.15176E-08	0.16442E-08	0.21773E-13
10	0.17699E-08	0.19175E-08	0.25394E-13
11	0.20401E-08	0.22103E-08	0.29271E-13
12	0.23285E-08	0.25227E-08	0.33409E-13
13	0.26355E-08	0.28553E-08	0.37813E-13
14	0.29613E-08	0.32084E-08	0.42488E-13
15	0.33065E-08	0.35824E-08	0.47441E-13
16	0.36714E-08	0.39776E-08	0.52676E-13
17	0.40563E-08	0.43947E-08	0.58198E-13
18	0.44616E-08	0.48338E-08	0.64014E-13
19	0.48878E-08	0.52955E-08	0.70128E-13
20	0.53351E-08	0.57802E-08	0.76547E-13
21	0.58041E-08	0.62883E-08	0.83276E-13
22	0.62951E-08	0.68202E-08	0.90320E-13
23	0.68084E-08	0.73764E-08	0.97685E-13
24	0.73445E-08	0.79572E-08	0.10538E-12
25	0.79037E-08	0.85631E-08	0.11340E-12
26	0.84864E-08	0.91944E-08	0.12176E-12
27	0.90929E-08	0.98515E-08	0.13046E-12
28	0.97236E-08	0.10535E-07	0.13951E-12

29	0.10379E-07	0.11245E-07	0.14891E-12
30	0.11059E-07	0.11982E-07	0.15867E-12
31	0.11764E-07	0.12746E-07	0.16879E-12
32	0.12495E-07	0.13537E-07	0.17927E-12
33	0.13251E-07	0.14356E-07	0.19012E-12
34	0.14033E-07	0.15204E-07	0.20134E-12
35	0.14842E-07	0.16080E-07	0.21294E-12
36	0.15676E-07	0.16984E-07	0.22492E-12
37	0.16537E-07	0.17917E-07	0.23727E-12
38	0.17425E-07	0.18879E-07	0.25001E-12
39	0.18339E-07	0.19869E-07	0.26313E-12
40	0.19280E-07	0.20889E-07	0.27663E-12
41	0.20248E-07	0.21937E-07	0.29051E-12
42	0.21243E-07	0.23015E-07	0.30478E-12
43	0.22264E-07	0.24121E-07	0.31944E-12
44	0.23312E-07	0.25256E-07	0.33447E-12
45	0.24386E-07	0.26420E-07	0.34988E-12
46	0.25486E-07	0.27612E-07	0.36566E-12
47	0.26612E-07	0.28832E-07	0.38182E-12
48	0.27763E-07	0.30079E-07	0.39834E-12
49	0.28940E-07	0.31354E-07	0.41522E-12
50	0.30141E-07	0.32656E-07	0.43246E-12
51	0.31366E-07	0.33983E-07	0.45004E-12
52	0.32615E-07	0.35336E-07	0.46795E-12
53	0.33887E-07	0.36714E-07	0.48620E-12
54	0.35180E-07	0.38115E-07	0.50476E-12
55	0.36495E-07	0.39539E-07	0.52362E-12
56	0.37830E-07	0.40986E-07	0.54277E-12
57	0.39184E-07	0.42453E-07	0.56220E-12
58	0.40556E-07	0.43939E-07	0.58188E-12
59	0.41944E-07	0.45443E-07	0.60180E-12
60	0.43348E-07	0.46965E-07	0.62195E-12
61	0.44766E-07	0.48501E-07	0.64230E-12
62	0.46197E-07	0.50051E-07	0.66282E-12
63	0.47638E-07	0.51612E-07	0.68349E-12
64	0.49088E-07	0.53183E-07	0.70430E-12
65	0.50545E-07	0.54761E-07	0.72520E-12
66	0.52006E-07	0.56345E-07	0.74617E-12
67	0.53470E-07	0.57931E-07	0.76718E-12
68	0.54935E-07	0.59518E-07	0.78819E-12
69	0.56397E-07	0.61102E-07	0.80917E-12
70	0.57854E-07	0.62681E-07	0.83008E-12
71	0.59304E-07	0.64251E-07	0.85087E-12
72	0.60743E-07	0.65810E-07	0.87152E-12
73	0.62168E-07	0.67354E-07	0.89196E-12
74	0.63575E-07	0.68879E-07	0.91216E-12
75	0.64962E-07	0.70381E-07	0.93206E-12
76	0.66325E-07	0.71858E-07	0.95160E-12
77	0.67659E-07	0.73303E-07	0.97075E-12
78	0.68960E-07	0.74713E-07	0.98942E-12
79	0.70226E-07	0.76084E-07	0.10076E-11
80	0.71449E-07	0.77410E-07	0.10251E-11
81	0.72627E-07	0.78686E-07	0.10420E-11
82	0.73755E-07	0.79908E-07	0.10582E-11
83	0.74826E-07	0.81068E-07	0.10736E-11
84	0.75836E-07	0.82163E-07	0.10881E-11
85	0.76780E-07	0.83185E-07	0.11016E-11
86	0.77650E-07	0.84128E-07	0.11141E-11
87	0.78442E-07	0.84986E-07	0.11255E-11
88	0.79149E-07	0.85752E-07	0.11356E-11
89	0.79764E-07	0.86418E-07	0.11444E-11
90	0.80281E-07	0.86978E-07	0.11518E-11
91	0.80692E-07	0.87423E-07	0.11577E-11
92	0.80990E-07	0.87747E-07	0.11620E-11
93	0.81168E-07	0.87939E-07	0.11646E-11
94	0.81217E-07	0.87993E-07	0.11653E-11
95	0.81130E-07	0.87898E-07	0.11640E-11
96	0.80898E-07	0.87647E-07	0.11607E-11
97	0.80512E-07	0.87229E-07	0.11552E-11
98	0.79964E-07	0.86635E-07	0.11473E-11
99	0.79244E-07	0.85855E-07	0.11370E-11
100	0.78342E-07	0.84877E-07	0.11240E-11

POLYGON I

Time: 170.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.34334E-10	0.37198E-10	0.49261E-15
2	0.73713E-10	0.79863E-10	0.10576E-14
3	0.11820E-09	0.12807E-09	0.16960E-14
4	0.16788E-09	0.18189E-09	0.24087E-14
5	0.22282E-09	0.24141E-09	0.31970E-14
6	0.28311E-09	0.30673E-09	0.40620E-14
7	0.34884E-09	0.37794E-09	0.50050E-14
8	0.42010E-09	0.45514E-09	0.60274E-14
9	0.49700E-09	0.53846E-09	0.71308E-14
10	0.57963E-09	0.62799E-09	0.83164E-14
11	0.66812E-09	0.72386E-09	0.95860E-14
12	0.76257E-09	0.82619E-09	0.10941E-13
13	0.86310E-09	0.93511E-09	0.12384E-13
14	0.96983E-09	0.10507E-08	0.13915E-13

15	0.10829E-08	0.11732E-08	0.15537E-13
16	0.12024E-08	0.13027E-08	0.17251E-13
17	0.13284E-08	0.14392E-08	0.19060E-13
18	0.14612E-08	0.15831E-08	0.20964E-13
19	0.16007E-08	0.17343E-08	0.22967E-13
20	0.17472E-08	0.18930E-08	0.25069E-13
21	0.19008E-08	0.20594E-08	0.27273E-13
22	0.20616E-08	0.22336E-08	0.29580E-13
23	0.22297E-08	0.24157E-08	0.31992E-13
24	0.24053E-08	0.26060E-08	0.34511E-13
25	0.25884E-08	0.28044E-08	0.37138E-13
26	0.27793E-08	0.30111E-08	0.39876E-13
27	0.29779E-08	0.32263E-08	0.42726E-13
28	0.31845E-08	0.34501E-08	0.45690E-13
29	0.33991E-08	0.36826E-08	0.48769E-13
30	0.36218E-08	0.39239E-08	0.51964E-13
31	0.38527E-08	0.41741E-08	0.55278E-13
32	0.40920E-08	0.44334E-08	0.58711E-13
33	0.43397E-08	0.47017E-08	0.62264E-13
34	0.45958E-08	0.49792E-08	0.65940E-13
35	0.48606E-08	0.52661E-08	0.69738E-13
36	0.51339E-08	0.55622E-08	0.73660E-13
37	0.54159E-08	0.58677E-08	0.77706E-13
38	0.57066E-08	0.61827E-08	0.81877E-13
39	0.60061E-08	0.65071E-08	0.86173E-13
40	0.63143E-08	0.68410E-08	0.90595E-13
41	0.66312E-08	0.71844E-08	0.95143E-13
42	0.69569E-08	0.75373E-08	0.99816E-13
43	0.72914E-08	0.78996E-08	0.10461E-12
44	0.76345E-08	0.82714E-08	0.10954E-12
45	0.79862E-08	0.86525E-08	0.11458E-12
46	0.83465E-08	0.90428E-08	0.11975E-12
47	0.87153E-08	0.94424E-08	0.12504E-12
48	0.90924E-08	0.98509E-08	0.13046E-12
49	0.94777E-08	0.10268E-07	0.13598E-12
50	0.98711E-08	0.10695E-07	0.14163E-12
51	0.10272E-07	0.11129E-07	0.14739E-12
52	0.10681E-07	0.11572E-07	0.15325E-12
53	0.11098E-07	0.12024E-07	0.15923E-12
54	0.11521E-07	0.12483E-07	0.16531E-12
55	0.11952E-07	0.12949E-07	0.17148E-12
56	0.12389E-07	0.13423E-07	0.17776E-12
57	0.12833E-07	0.13903E-07	0.18412E-12
58	0.13282E-07	0.14390E-07	0.19056E-12
59	0.13737E-07	0.14883E-07	0.19709E-12
60	0.14196E-07	0.15381E-07	0.20369E-12
61	0.14661E-07	0.15884E-07	0.21035E-12
62	0.15129E-07	0.16391E-07	0.21707E-12
63	0.15601E-07	0.16903E-07	0.22384E-12
64	0.16076E-07	0.17417E-07	0.23066E-12
65	0.16553E-07	0.17934E-07	0.23750E-12
66	0.17032E-07	0.18453E-07	0.24437E-12
67	0.17511E-07	0.18972E-07	0.25125E-12
68	0.17991E-07	0.19492E-07	0.25813E-12
69	0.18470E-07	0.20011E-07	0.26500E-12
70	0.18947E-07	0.20528E-07	0.27185E-12
71	0.19422E-07	0.21042E-07	0.27866E-12
72	0.19893E-07	0.21553E-07	0.28542E-12
73	0.20360E-07	0.22058E-07	0.29211E-12
74	0.20821E-07	0.22558E-07	0.29873E-12
75	0.21275E-07	0.23050E-07	0.30525E-12
76	0.21721E-07	0.23533E-07	0.31165E-12
77	0.22158E-07	0.24007E-07	0.31792E-12
78	0.22584E-07	0.24468E-07	0.32403E-12
79	0.22999E-07	0.24917E-07	0.32998E-12
80	0.23399E-07	0.25352E-07	0.33573E-12
81	0.23785E-07	0.25770E-07	0.34126E-12
82	0.24154E-07	0.26170E-07	0.34656E-12
83	0.24505E-07	0.26550E-07	0.35160E-12
84	0.24836E-07	0.26908E-07	0.35634E-12
85	0.25145E-07	0.27243E-07	0.36077E-12
86	0.25430E-07	0.27552E-07	0.36487E-12
87	0.25690E-07	0.27833E-07	0.36859E-12
88	0.25921E-07	0.28083E-07	0.37191E-12
89	0.26122E-07	0.28302E-07	0.37480E-12
90	0.26292E-07	0.28485E-07	0.37723E-12
91	0.26426E-07	0.28631E-07	0.37916E-12
92	0.26524E-07	0.28737E-07	0.38056E-12
93	0.26582E-07	0.28800E-07	0.38139E-12
94	0.26598E-07	0.28817E-07	0.38163E-12
95	0.26570E-07	0.28786E-07	0.38122E-12
96	0.26494E-07	0.28704E-07	0.38013E-12
97	0.26368E-07	0.28567E-07	0.37831E-12
98	0.26188E-07	0.28373E-07	0.37574E-12
99	0.25952E-07	0.28117E-07	0.37235E-12
100	0.25657E-07	0.27797E-07	0.36812E-12

POLYGON I

Time: 180.000

Cell Cgas(g/cu.ft)

Clig(g/cu.ft)

Csol(g/g)

TUT 004 2170

1	0.11244E-10	0.12182E-10	0.16133E-15
2	0.24141E-10	0.26155E-10	0.34637E-15
3	0.38712E-10	0.41941E-10	0.55542E-15
4	0.54980E-10	0.59567E-10	0.78884E-15
5	0.72973E-10	0.79061E-10	0.10670E-14
6	0.92717E-10	0.10045E-09	0.13303E-14
7	0.11424E-09	0.12377E-09	0.16391E-14
8	0.13758E-09	0.14906E-09	0.19740E-14
9	0.16276E-09	0.17634E-09	0.23353E-14
10	0.18983E-09	0.20567E-09	0.27236E-14
11	0.21881E-09	0.23706E-09	0.31394E-14
12	0.24974E-09	0.27058E-09	0.35832E-14
13	0.28266E-09	0.30624E-09	0.40556E-14
14	0.31762E-09	0.34411E-09	0.45571E-14
15	0.35464E-09	0.38422E-09	0.50883E-14
16	0.39377E-09	0.42662E-09	0.56497E-14
17	0.43505E-09	0.47135E-09	0.62420E-14
18	0.47853E-09	0.51845E-09	0.68658E-14
19	0.52423E-09	0.56797E-09	0.75216E-14
20	0.57222E-09	0.61995E-09	0.82100E-14
21	0.62252E-09	0.67445E-09	0.89317E-14
22	0.67517E-09	0.73150E-09	0.96872E-14
23	0.73023E-09	0.79115E-09	0.10477E-13
24	0.78773E-09	0.85344E-09	0.11302E-13
25	0.84771E-09	0.91843E-09	0.12163E-13
26	0.91020E-09	0.98614E-09	0.13059E-13
27	0.97526E-09	0.10566E-08	0.13993E-13
28	0.10429E-08	0.11299E-08	0.14963E-13
29	0.11132E-08	0.12060E-08	0.15972E-13
30	0.11861E-08	0.12851E-08	0.17018E-13
31	0.12618E-08	0.13670E-08	0.18103E-13
32	0.13401E-08	0.14519E-08	0.19228E-13
33	0.14212E-08	0.15398E-08	0.20391E-13
34	0.15051E-08	0.16307E-08	0.21595E-13
35	0.15918E-08	0.17246E-08	0.22839E-13
36	0.16813E-08	0.18216E-08	0.24123E-13
37	0.17737E-08	0.19217E-08	0.25448E-13
38	0.18689E-08	0.20248E-08	0.26814E-13
39	0.19670E-08	0.21311E-08	0.28221E-13
40	0.20679E-08	0.22404E-08	0.29670E-13
41	0.21717E-08	0.23529E-08	0.31159E-13
42	0.22784E-08	0.24684E-08	0.32689E-13
43	0.23879E-08	0.25871E-08	0.34261E-13
44	0.25003E-08	0.27089E-08	0.35873E-13
45	0.26155E-08	0.28337E-08	0.37526E-13
46	0.27335E-08	0.29615E-08	0.39219E-13
47	0.28542E-08	0.30923E-08	0.40952E-13
48	0.29777E-08	0.32262E-08	0.42724E-13
49	0.31039E-08	0.33629E-08	0.44534E-13
50	0.32328E-08	0.35025E-08	0.46383E-13
51	0.33642E-08	0.36448E-08	0.48268E-13
52	0.34981E-08	0.37900E-08	0.50190E-13
53	0.36345E-08	0.39377E-08	0.52147E-13
54	0.37732E-08	0.40880E-08	0.54137E-13
55	0.39142E-08	0.42408E-08	0.56160E-13
56	0.40574E-08	0.43959E-08	0.58214E-13
57	0.42026E-08	0.45532E-08	0.60298E-13
58	0.43498E-08	0.47126E-08	0.62409E-13
59	0.44987E-08	0.48740E-08	0.64546E-13
60	0.46493E-08	0.50372E-08	0.66707E-13
61	0.48014E-08	0.52019E-08	0.68889E-13
62	0.49548E-08	0.53682E-08	0.71090E-13
63	0.51094E-08	0.55356E-08	0.73308E-13
64	0.52649E-08	0.57041E-08	0.75539E-13
65	0.54211E-08	0.58734E-08	0.77781E-13
66	0.55779E-08	0.60432E-08	0.80030E-13
67	0.57349E-08	0.62134E-08	0.82283E-13
68	0.58920E-08	0.63835E-08	0.84537E-13
69	0.60488E-08	0.65535E-08	0.86787E-13
70	0.62051E-08	0.67228E-08	0.89029E-13
71	0.63606E-08	0.68912E-08	0.91260E-13
72	0.65149E-08	0.70584E-08	0.93474E-13
73	0.66677E-08	0.72240E-08	0.95667E-13
74	0.68187E-08	0.73876E-08	0.97833E-13
75	0.69675E-08	0.75487E-08	0.99967E-13
76	0.71136E-08	0.77070E-08	0.10206E-12
77	0.72567E-08	0.78621E-08	0.10412E-12
78	0.73963E-08	0.80133E-08	0.10612E-12
79	0.75320E-08	0.81603E-08	0.10807E-12
80	0.76633E-08	0.83026E-08	0.10995E-12
81	0.77896E-08	0.84395E-08	0.11176E-12
82	0.79105E-08	0.85704E-08	0.11350E-12
83	0.80254E-08	0.86949E-08	0.11515E-12
84	0.81338E-08	0.88123E-08	0.11670E-12
85	0.82349E-08	0.89219E-08	0.11815E-12
86	0.83283E-08	0.90231E-08	0.11949E-12
87	0.84132E-08	0.91151E-08	0.12071E-12
88	0.84891E-08	0.91972E-08	0.12180E-12
89	0.85550E-08	0.92687E-08	0.12275E-12
90	0.86105E-08	0.93288E-08	0.12354E-12

91	0.86546E-08	0.93765E-08	0.12417E-12
92	0.86865E-08	0.94112E-08	0.12463E-12
93	0.87056E-08	0.94319E-08	0.12491E-12
94	0.87109E-08	0.94376E-08	0.12498E-12
95	0.87016E-08	0.94275E-08	0.12485E-12
96	0.86767E-08	0.94005E-08	0.12449E-12
97	0.86353E-08	0.93557E-08	0.12390E-12
98	0.85765E-08	0.92920E-08	0.12305E-12
99	0.84992E-08	0.92083E-08	0.12194E-12
100	0.84025E-08	0.91035E-08	0.12056E-12

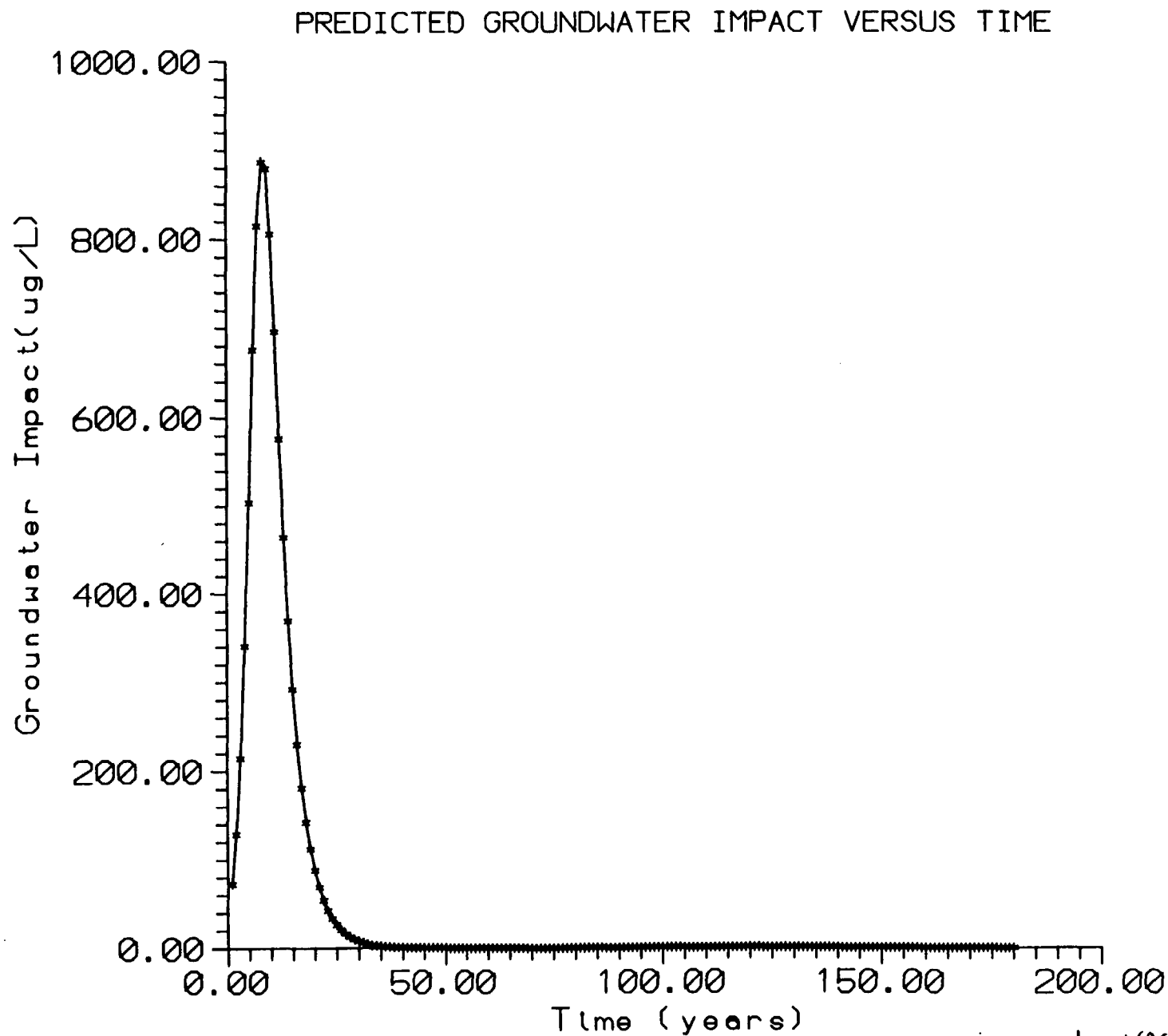


Figure B-5: Predicted Groundwater impact versus Time

for 00020
field

VLEACH
version 2.0, 1993.

Developed by :

Varadhan Ravi and Jeffrey A. Johnson (Dynamac)
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Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

LHENRI SIMULATION 3

1 polygons.
Timestep = 1.00 years. Simulation length = 180.00 years.
Printout every 10.00 years. Vertical profile stored every 10.00 years.
Koc = 375.00 ml/g, 0.13243E-01cu.ft./g
Kh = 0.92300 (dimensionless).
Aqueous solubility = 150.00 mg/l, 4.2476 g/cu.ft
Free air diffusion coefficient = .66000 sq. m/day, 2593.1 sq.ft./yr

Polygon 1

POLYGON 1

Polygon area = 1.0000 sq. ft.
100 cells, each cell 0.200 ft. thick.

Soil Properties:

Bulk density = 1.3500 g/ml, 38228. g/cu.ft.
Porosity = 0.3000 Volumetric water content = 0.2000
Organic carbon content = 0.00020000

Recharge Rate = 0.46000001 ft/yr

Conc. in recharge water = 0.00000 mg/l, 0.00000 g/cu.ft
Atmospheric concentration = 0.00000 mg/l, 0.00000 g/cu.ft
Water table has a fixed concentration of 0.00000 mg/l, 0.00000 g/cu.ft.
with respect to gas diffusion.

VLEACH
version 2.0, 1993.

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LHENRI SIMULATION 3

WARNING!!! At time = 0.00, aqueous solubility was exceeded in 18 cells.

Polygon 1

At time = 0.00, total mass in vadose zone = 9.2429 g/sq.ft.

Mass in gas phase = 2.1678 g/sq.ft.

Mass in liquid phase = 4.6972 g/sq.ft.

Mass sorbed = 2.3779 g/sq.ft.

WARNING!!! At time = 1.00, aqueous solubility was exceeded in 7 cells.

Polygon 1

At time = 10.00, total mass in vadose zone = 3.1236 g/sq.ft.

Mass in gas phase = 0.73258 g/sq.ft.

Mass in liquid phase = 1.5874 g/sq.ft.

Mass sorbed = 0.80362 g/sq.ft.

Since last printout at time = 0.00

Change in Total Mass = -6.1193 g/sq.ft.

Advection in from atmosphere = 0.00000 g/sq.ft.

Advection in from water table = -2.2453 g/sq.ft.

Diffusion in from atmosphere = -1.5266 g/sq.ft.

Diffusion in from water table = -2.3474 g/sq.ft.

Total inflow at boundaries = -6.1193 g/sq.ft.

Mass discrepancy = -0.29564E-04g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -6.1193 g/sq.ft.

Advection in from atmosphere = 0.00000 g/sq.ft.

Advection in from water table = -2.2453 g/sq.ft.

Diffusion in from atmosphere = -1.5266 g/sq.ft.

Diffusion in from water table = -2.3474 g/sq.ft.

Total inflow at boundaries = -6.1193 g/sq.ft.

Mass discrepancy = -0.29564E-04g/sq.ft.

Polygon 1

At time = 20.00, total mass in vadose zone = 0.28937 g/sq.ft.

Mass in gas phase = 0.67866E-01g/sq.ft.

Mass in liquid phase = 0.14706 g/sq.ft.

Mass sorbed = 0.74447E-01g/sq.ft.

Since last printout at time = 10.00

Change in Total Mass = -2.8342 g/sq.ft.

Advection in from atmosphere = 0.00000 g/sq.ft.

Advection in from water table = -1.6625 g/sq.ft.

Diffusion in from atmosphere = -0.11682 g/sq.ft.

Diffusion in from water table = -1.0549 g/sq.ft.

Total inflow at boundaries = -2.8342 g/sq.ft.

Mass discrepancy = -0.42915E-05g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -8.9535 g/sq.ft.

Advection in from atmosphere = 0.00000 g/sq.ft.

Advection in from water table = -3.9077 g/sq.ft.

Diffusion in from atmosphere = -1.6434 g/sq.ft.

Diffusion in from water table = -3.4024 g/sq.ft.

Total inflow at boundaries = -8.9535 g/sq.ft.

Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1

At time = 30.00, total mass in vadose zone = 0.25936E-01g/sq.ft.

Mass in gas phase = 0.60827E-02g/sq.ft.

Mass in liquid phase = 0.13180E-01g/sq.ft.

Mass sorbed = 0.66726E-02g/sq.ft.

Since last printout at time = 20.00

Change in Total Mass = -0.26343 g/sq.ft.

Advection in from atmosphere = 0.00000 g/sq.ft.

Advection in from water table = -0.15580 g/sq.ft.

Diffusion in from atmosphere = -0.10472E-01g/sq.ft.

Diffusion in from water table = -0.97161E-01g/sq.ft.

Total inflow at boundaries = -0.26343 g/sq.ft.

Mass discrepancy = -0.41723E-06g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2170 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0635 g/sq.ft.
 Diffusion in from atmosphere = -1.6539 g/sq.ft.
 Diffusion in from water table = -3.4995 g/sq.ft.
 Total inflow at boundaries = -9.2169 g/sq.ft.
 Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
 At time = 40.00, total mass in vadose zone = 0.23247E-02g/sq.ft.
 Mass in gas phase = 0.54521E-03g/sq.ft.
 Mass in liquid phase = 0.11814E-02g/sq.ft.
 Mass sorbed = 0.59808E-03g/sq.ft.

Since last printout at time = 30.00
 Change in Total Mass = -0.23611E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.13964E-01g/sq.ft.
 Diffusion in from atmosphere = -0.93867E-03g/sq.ft.
 Diffusion in from water table = -0.87084E-02g/sq.ft.
 Total inflow at boundaries = -0.23611E-01g/sq.ft.
 Mass discrepancy = -0.39116E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2406 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0775 g/sq.ft.
 Diffusion in from atmosphere = -1.6548 g/sq.ft.
 Diffusion in from water table = -3.5082 g/sq.ft.
 Total inflow at boundaries = -9.2406 g/sq.ft.
 Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
 At time = 50.00, total mass in vadose zone = 0.20837E-03g/sq.ft.
 Mass in gas phase = 0.48869E-04g/sq.ft.
 Mass in liquid phase = 0.10589E-03g/sq.ft.
 Mass sorbed = 0.53607E-04g/sq.ft.

Since last printout at time = 40.00
 Change in Total Mass = -0.21163E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.12516E-02g/sq.ft.
 Diffusion in from atmosphere = -0.84136E-04g/sq.ft.
 Diffusion in from water table = -0.78056E-03g/sq.ft.
 Total inflow at boundaries = -0.21163E-02g/sq.ft.
 Mass discrepancy = -0.34925E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2427 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0787 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5090 g/sq.ft.
 Total inflow at boundaries = -9.2427 g/sq.ft.
 Mass discrepancy = -0.35286E-04g/sq.ft.

Polygon 1
 At time = 60.00, total mass in vadose zone = 0.18676E-04g/sq.ft.
 Mass in gas phase = 0.43802E-05g/sq.ft.
 Mass in liquid phase = 0.94913E-05g/sq.ft.
 Mass sorbed = 0.48050E-05g/sq.ft.

Since last printout at time = 50.00
 Change in Total Mass = -0.18969E-03g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.11219E-03g/sq.ft.
 Diffusion in from atmosphere = -0.75413E-05g/sq.ft.
 Diffusion in from water table = -0.69964E-04g/sq.ft.
 Total inflow at boundaries = -0.18969E-03g/sq.ft.
 Mass discrepancy = -0.29104E-09g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0788 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1
 At time = 70.00, total mass in vadose zone = 0.16740E-05g/sq.ft.
 Mass in gas phase = 0.39261E-06g/sq.ft.
 Mass in liquid phase = 0.85073E-06g/sq.ft.

Mass sorbed = 0.43068E-06g/sq.ft.

Since last printout at time = 60.00

Change in Total Mass = -0.17002E-04g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.10055E-04g/sq.ft.
Diffusion in from atmosphere = -0.67595E-06g/sq.ft.
Diffusion in from water table = -0.62710E-05g/sq.ft.
Total inflow at boundaries = -0.17002E-04g/sq.ft.
Mass discrepancy = -0.29104E-10g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.34332E-04g/sq.ft.

Polygon 1

At time = 80.00, total mass in vadose zone = 0.15005E-06g/sq.ft.
Mass in gas phase = 0.35191E-07g/sq.ft.
Mass in liquid phase = 0.76253E-07g/sq.ft.
Mass sorbed = 0.38603E-07g/sq.ft.

Since last printout at time = 70.00

Change in Total Mass = -0.15240E-05g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.90130E-06g/sq.ft.
Diffusion in from atmosphere = -0.60587E-07g/sq.ft.
Diffusion in from water table = -0.56209E-06g/sq.ft.
Total inflow at boundaries = -0.15240E-05g/sq.ft.
Mass discrepancy = -0.25011E-11g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 90.00, total mass in vadose zone = 0.13449E-07g/sq.ft.
Mass in gas phase = 0.31542E-08g/sq.ft.
Mass in liquid phase = 0.68347E-08g/sq.ft.
Mass sorbed = 0.34601E-08g/sq.ft.

Since last printout at time = 80.00

Change in Total Mass = -0.13660E-06g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.80786E-07g/sq.ft.
Diffusion in from atmosphere = -0.54306E-08g/sq.ft.
Diffusion in from water table = -0.50381E-07g/sq.ft.
Total inflow at boundaries = -0.13660E-06g/sq.ft.
Mass discrepancy = -0.25580E-12g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.
Diffusion in from atmosphere = -1.6549 g/sq.ft.
Diffusion in from water table = -3.5091 g/sq.ft.
Total inflow at boundaries = -9.2429 g/sq.ft.
Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 100.00, total mass in vadose zone = 0.12055E-08g/sq.ft.
Mass in gas phase = 0.28272E-09g/sq.ft.
Mass in liquid phase = 0.61262E-09g/sq.ft.
Mass sorbed = 0.31014E-09g/sq.ft.

Since last printout at time = 90.00

Change in Total Mass = -0.12244E-07g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.72410E-08g/sq.ft.
Diffusion in from atmosphere = -0.48675E-09g/sq.ft.
Diffusion in from water table = -0.45158E-08g/sq.ft.
Total inflow at boundaries = -0.12244E-07g/sq.ft.
Mass discrepancy = -0.19540E-13g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -4.0789 g/sq.ft.

Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 110.00, total mass in vadose zone = 0.10805E-09g/sq.ft.
 Mass in gas phase = 0.25341E-10g/sq.ft.
 Mass in liquid phase = 0.54910E-10g/sq.ft.
 Mass sorbed = 0.27798E-10g/sq.ft.

Since last printout at time = 100.00

Change in Total Mass = -0.10974E-08g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.64903E-09g/sq.ft.
 Diffusion in from atmosphere = -0.43629E-10g/sq.ft.
 Diffusion in from water table = -0.40476E-09g/sq.ft.
 Total inflow at boundaries = -0.10974E-08g/sq.ft.
 Mass discrepancy = -0.15543E-14g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 120.00, total mass in vadose zone = 0.96848E-11g/sq.ft.
 Mass in gas phase = 0.22714E-11g/sq.ft.
 Mass in liquid phase = 0.49217E-11g/sq.ft.
 Mass sorbed = 0.24916E-11g/sq.ft.

Since last printout at time = 110.00

Change in Total Mass = -0.98365E-10g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.58174E-10g/sq.ft.
 Diffusion in from atmosphere = -0.39106E-11g/sq.ft.
 Diffusion in from water table = -0.36280E-10g/sq.ft.
 Total inflow at boundaries = -0.98365E-10g/sq.ft.
 Mass discrepancy = -0.15266E-15g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 130.00, total mass in vadose zone = 0.86807E-12g/sq.ft.
 Mass in gas phase = 0.20359E-12g/sq.ft.
 Mass in liquid phase = 0.44115E-12g/sq.ft.
 Mass sorbed = 0.22333E-12g/sq.ft.

Since last printout at time = 120.00

Change in Total Mass = -0.88167E-11g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.52143E-11g/sq.ft.
 Diffusion in from atmosphere = -0.35052E-12g/sq.ft.
 Diffusion in from water table = -0.32519E-11g/sq.ft.
 Total inflow at boundaries = -0.88167E-11g/sq.ft.
 Mass discrepancy = -0.14745E-16g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 140.00, total mass in vadose zone = 0.77807E-13g/sq.ft.
 Mass in gas phase = 0.18248E-13g/sq.ft.
 Mass in liquid phase = 0.39541E-13g/sq.ft.
 Mass sorbed = 0.20018E-13g/sq.ft.

Since last printout at time = 130.00

Change in Total Mass = -0.79026E-12g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.

Advection in from water table = -0.46737E-12g/sq.ft.
 Diffusion in from atmosphere = -0.31418E-13g/sq.ft.
 Diffusion in from water table = -0.29147E-12g/sq.ft.
 Total inflow at boundaries = -0.79026E-12g/sq.ft.
 Mass discrepancy = -0.13553E-17g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 150.00, total mass in vadose zone = 0.69741E-14g/sq.ft.
 Mass in gas phase = 0.16356E-14g/sq.ft.
 Mass in liquid phase = 0.35442E-14g/sq.ft.
 Mass sorbed = 0.17942E-14g/sq.ft.

Since last printout at time = 140.00

Change in Total Mass = -0.70833E-13g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.41892E-13g/sq.ft.
 Diffusion in from atmosphere = -0.28160E-14g/sq.ft.
 Diffusion in from water table = -0.26125E-13g/sq.ft.
 Total inflow at boundaries = -0.70833E-13g/sq.ft.
 Mass discrepancy = -0.13553E-18g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 160.00, total mass in vadose zone = 0.62510E-15g/sq.ft.
 Mass in gas phase = 0.14661E-15g/sq.ft.
 Mass in liquid phase = 0.31767E-15g/sq.ft.
 Mass sorbed = 0.16082E-15g/sq.ft.

Since last printout at time = 150.00

Change in Total Mass = -0.63490E-14g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.37549E-14g/sq.ft.
 Diffusion in from atmosphere = -0.25241E-15g/sq.ft.
 Diffusion in from water table = -0.23417E-14g/sq.ft.
 Total inflow at boundaries = -0.63490E-14g/sq.ft.
 Mass discrepancy = -0.10164E-19g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1

At time = 170.00, total mass in vadose zone = 0.56030E-16g/sq.ft.
 Mass in gas phase = 0.13141E-16g/sq.ft.
 Mass in liquid phase = 0.28474E-16g/sq.ft.
 Mass sorbed = 0.14415E-16g/sq.ft.

Since last printout at time = 160.00

Change in Total Mass = -0.56907E-15g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.33656E-15g/sq.ft.
 Diffusion in from atmosphere = -0.22624E-16g/sq.ft.
 Diffusion in from water table = -0.20989E-15g/sq.ft.
 Total inflow at boundaries = -0.56907E-15g/sq.ft.
 Mass discrepancy = -0.95291E-21g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

Polygon 1
 At time = 180.00, total mass in vadose zone = 0.50221E-17g/sq.ft.
 Mass in gas phase = 0.11778E-17g/sq.ft.
 Mass in liquid phase = 0.25522E-17g/sq.ft.
 Mass sorbed = 0.12920E-17g/sq.ft.

Since last printout at time = 170.00
 Change in Total Mass = -0.51008E-16g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.30167E-16g/sq.ft.
 Diffusion in from atmosphere = -0.20278E-17g/sq.ft.
 Diffusion in from water table = -0.18813E-16g/sq.ft.
 Total inflow at boundaries = -0.51007E-16g/sq.ft.
 Mass discrepancy = -0.95953E-22g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -9.2429 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -4.0789 g/sq.ft.
 Diffusion in from atmosphere = -1.6549 g/sq.ft.
 Diffusion in from water table = -3.5091 g/sq.ft.
 Total inflow at boundaries = -9.2429 g/sq.ft.
 Mass discrepancy = -0.36240E-04g/sq.ft.

GROUNDWATER IMPACT OF POLYGON 1

Time	Mass per area (g/sq.ft.)	Total Mass (g)
10.00	4.5927	4.5927
20.00	2.7174	2.7174
30.00	0.25296	0.25296
40.00	0.22672E-01	0.22672E-01
50.00	0.20322E-02	0.20322E-02
60.00	0.18215E-03	0.18215E-03
70.00	0.16326E-04	0.16326E-04
80.00	0.14634E-05	0.14634E-05
90.00	0.13117E-06	0.13117E-06
100.00	0.11757E-07	0.11757E-07
110.00	0.10538E-08	0.10538E-08
120.00	0.94454E-10	0.94454E-10
130.00	0.84662E-11	0.84662E-11
140.00	0.75884E-12	0.75884E-12
150.00	0.68017E-13	0.68017E-13
160.00	0.60966E-14	0.60966E-14
170.00	0.54645E-15	0.54645E-15
180.00	0.48980E-16	0.48980E-16

TOTAL GROUNDWATER IMPACT

Time (yr)	Mass (g)	Cumulative Mass (g)
10.00	4.5927	4.5927
20.00	2.7174	7.3101
30.00	0.25296	7.5630
40.00	0.22672E-01	7.5857
50.00	0.20322E-02	7.5877
60.00	0.18215E-03	7.5879
70.00	0.16326E-04	7.5879
80.00	0.14634E-05	7.5879
90.00	0.13117E-06	7.5879
100.00	0.11757E-07	7.5879
110.00	0.10538E-08	7.5879
120.00	0.94454E-10	7.5879
130.00	0.84662E-11	7.5879
140.00	0.75884E-12	7.5879
150.00	0.68017E-13	7.5879
160.00	0.60966E-14	7.5879
170.00	0.54645E-15	7.5879
180.00	0.48980E-16	7.5879

VLEACH
version 2.0, 1993.

Developed by :

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POLYGON I

Time:	0.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.48413	0.52452	0.13892E-05
2	0.48413	0.52452	0.13892E-05
3	0.48413	0.52452	0.13892E-05
4	0.48413	0.52452	0.13892E-05
5	0.48413	0.52452	0.13892E-05
6	0.48413	0.52452	0.13892E-05
7	0.48413	0.52452	0.13892E-05
8	0.48413	0.52452	0.13892E-05
9	0.48413	0.52452	0.13892E-05
10	0.48413	0.52452	0.13892E-05
11	0.48413	0.52452	0.13892E-05
12	0.48413	0.52452	0.13892E-05
13	0.48413	0.52452	0.13892E-05
14	0.48413	0.52452	0.13892E-05
15	0.48413	0.52452	0.13892E-05
16	0.48413	0.52452	0.13892E-05
17	0.48413	0.52452	0.13892E-05
18	0.48413	0.52452	0.13892E-05
19	0.48413	0.52452	0.13892E-05
20	0.48413	0.52452	0.13892E-05
21	0.48413	0.52452	0.13892E-05
22	0.48413	0.52452	0.13892E-05
23	0.48413	0.52452	0.13892E-05
24	0.48413	0.52452	0.13892E-05
25	0.48413	0.52452	0.13892E-05
26	5.2896	5.7308	0.15179E-04
27	5.2896	5.7308	0.15179E-04
28	5.2896	5.7308	0.15179E-04
29	5.2896	5.7308	0.15179E-04
30	5.2896	5.7308	0.15179E-04
31	5.2896	5.7308	0.15179E-04
32	5.2896	5.7308	0.15179E-04
33	5.2896	5.7308	0.15179E-04
34	5.2896	5.7308	0.15179E-04
35	5.2896	5.7308	0.15179E-04
36	5.2896	5.7308	0.15179E-04
37	5.2896	5.7308	0.15179E-04
38	5.2896	5.7308	0.15179E-04
39	5.2896	5.7308	0.15179E-04
40	5.2896	5.7308	0.15179E-04
41	5.2896	5.7308	0.15179E-04
42	5.2896	5.7308	0.15179E-04
43	5.2896	5.7308	0.15179E-04
44	0.20620E-01	0.22341E-01	0.59171E-07
45	0.20620E-01	0.22341E-01	0.59171E-07
46	0.20620E-01	0.22341E-01	0.59171E-07
47	0.20620E-01	0.22341E-01	0.59171E-07
48	0.20620E-01	0.22341E-01	0.59171E-07
49	0.20620E-01	0.22341E-01	0.59171E-07
50	0.20620E-01	0.22341E-01	0.59171E-07
51	0.20620E-01	0.22341E-01	0.59171E-07
52	0.20620E-01	0.22341E-01	0.59171E-07
53	0.20620E-01	0.22341E-01	0.59171E-07
54	0.20620E-01	0.22341E-01	0.59171E-07
55	0.20620E-01	0.22341E-01	0.59171E-07
56	0.20620E-01	0.22341E-01	0.59171E-07
57	0.20620E-01	0.22341E-01	0.59171E-07
58	0.20620E-01	0.22341E-01	0.59171E-07
59	0.20620E-01	0.22341E-01	0.59171E-07
60	0.20620E-01	0.22341E-01	0.59171E-07
61	0.20620E-01	0.22341E-01	0.59171E-07
62	0.20620E-01	0.22341E-01	0.59171E-07
63	0.20620E-01	0.22341E-01	0.59171E-07
64	0.20620E-01	0.22341E-01	0.59171E-07
65	0.20620E-01	0.22341E-01	0.59171E-07
66	0.20620E-01	0.22341E-01	0.59171E-07
67	0.20620E-01	0.22341E-01	0.59171E-07
68	0.20620E-01	0.22341E-01	0.59171E-07
69	0.20620E-01	0.22341E-01	0.59171E-07
70	0.20620E-01	0.22341E-01	0.59171E-07
71	0.20620E-01	0.22341E-01	0.59171E-07
72	0.20620E-01	0.22341E-01	0.59171E-07

73	0.20620E-01	0.22341E-01	0.59171E-07
74	0.20620E-01	0.22341E-01	0.59171E-07
75	0.20620E-01	0.22341E-01	0.59171E-07
76	0.20620E-01	0.22341E-01	0.59171E-07
77	0.20620E-01	0.22341E-01	0.59171E-07
78	0.20620E-01	0.22341E-01	0.59171E-07
79	0.20620E-01	0.22341E-01	0.59171E-07
80	0.20620E-01	0.22341E-01	0.59171E-07
81	0.20620E-01	0.22341E-01	0.59171E-07
82	0.20620E-01	0.22341E-01	0.59171E-07
83	0.20620E-01	0.22341E-01	0.59171E-07
84	0.20620E-01	0.22341E-01	0.59171E-07
85	0.20620E-01	0.22341E-01	0.59171E-07
86	0.20620E-01	0.22341E-01	0.59171E-07
87	0.20620E-01	0.22341E-01	0.59171E-07
88	0.20620E-01	0.22341E-01	0.59171E-07
89	0.20620E-01	0.22341E-01	0.59171E-07
90	0.20620E-01	0.22341E-01	0.59171E-07
91	0.20620E-01	0.22341E-01	0.59171E-07
92	0.20620E-01	0.22341E-01	0.59171E-07
93	0.20620E-01	0.22341E-01	0.59171E-07
94	0.20620E-01	0.22341E-01	0.59171E-07
95	0.20620E-01	0.22341E-01	0.59171E-07
96	0.00000	0.00000	0.00000
97	0.00000	0.00000	0.00000
98	0.00000	0.00000	0.00000
99	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000

POLYGON 1

Time:	10.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.10886E-02	0.11794E-02	0.31236E-08
2	0.23371E-02	0.25321E-02	0.67065E-08
3	0.37478E-02	0.40605E-02	0.10755E-07
4	0.53230E-02	0.57671E-02	0.15275E-07
5	0.70652E-02	0.76546E-02	0.20274E-07
6	0.89771E-02	0.97260E-02	0.25760E-07
7	0.11062E-01	0.11984E-01	0.31742E-07
8	0.13322E-01	0.14433E-01	0.38228E-07
9	0.15761E-01	0.17076E-01	0.45227E-07
10	0.18383E-01	0.19916E-01	0.52750E-07
11	0.21190E-01	0.22958E-01	0.60806E-07
12	0.24187E-01	0.26205E-01	0.69406E-07
13	0.27378E-01	0.29661E-01	0.78561E-07
14	0.30765E-01	0.33332E-01	0.88281E-07
15	0.34354E-01	0.37220E-01	0.98579E-07
16	0.38147E-01	0.41330E-01	0.10947E-06
17	0.42150E-01	0.45667E-01	0.12095E-06
18	0.46367E-01	0.50235E-01	0.13305E-06
19	0.50801E-01	0.55039E-01	0.14577E-06
20	0.55456E-01	0.60083E-01	0.15913E-06
21	0.60338E-01	0.65372E-01	0.17314E-06
22	0.65450E-01	0.70910E-01	0.18781E-06
23	0.70796E-01	0.76702E-01	0.20315E-06
24	0.76381E-01	0.82753E-01	0.21918E-06
25	0.82207E-01	0.89065E-01	0.23590E-06
26	0.88280E-01	0.95645E-01	0.25332E-06
27	0.94603E-01	0.10249	0.27147E-06
28	0.10118	0.10962	0.29034E-06
29	0.10801	0.11702	0.30995E-06
30	0.11511	0.12471	0.33031E-06
31	0.12247	0.13269	0.35143E-06
32	0.13010	0.14095	0.37333E-06
33	0.13800	0.14951	0.39600E-06
34	0.14618	0.15837	0.41947E-06
35	0.15464	0.16754	0.44373E-06
36	0.16337	0.17700	0.46881E-06
37	0.17240	0.18678	0.49470E-06
38	0.18170	0.19686	0.52140E-06
39	0.19130	0.20726	0.54894E-06
40	0.20118	0.21797	0.57730E-06
41	0.21135	0.22899	0.60649E-06
42	0.22181	0.24032	0.63651E-06
43	0.23256	0.25196	0.66735E-06
44	0.24360	0.26392	0.69901E-06
45	0.25491	0.27618	0.73147E-06
46	0.26650	0.28873	0.76474E-06
47	0.27836	0.30159	0.79878E-06
48	0.29049	0.31472	0.83357E-06
49	0.30287	0.32814	0.86910E-06
50	0.31550	0.34182	0.90533E-06
51	0.32836	0.35575	0.94223E-06
52	0.34144	0.36992	0.97976E-06
53	0.35472	0.38432	0.10179E-05
54	0.36821	0.39893	0.10566E-05
55	0.38188	0.41373	0.10958E-05
56	0.39572	0.42873	0.11355E-05
57	0.40971	0.44389	0.11757E-05
58	0.42386	0.45922	0.12163E-05

59	0.43813	0.47469	0.12572E-05
60	0.45254	0.49029	0.12986E-05
61	0.46705	0.50601	0.13402E-05
62	0.48165	0.52183	0.13821E-05
63	0.49634	0.53775	0.14243E-05
64	0.51111	0.55374	0.14666E-05
65	0.52592	0.56980	0.15092E-05
66	0.54077	0.58589	0.15518E-05
67	0.55564	0.60199	0.15944E-05
68	0.57050	0.61810	0.16371E-05
69	0.58533	0.63416	0.16796E-05
70	0.60009	0.65015	0.17220E-05
71	0.61475	0.66603	0.17640E-05
72	0.62926	0.68176	0.18057E-05
73	0.64358	0.69727	0.18468E-05
74	0.65765	0.71252	0.18872E-05
75	0.67141	0.72743	0.19266E-05
76	0.68480	0.74193	0.19651E-05
77	0.69773	0.75594	0.20022E-05
78	0.71014	0.76938	0.20378E-05
79	0.72193	0.78215	0.20716E-05
80	0.73301	0.79416	0.21034E-05
81	0.74330	0.80531	0.21329E-05
82	0.75270	0.81549	0.21599E-05
83	0.76111	0.82460	0.21840E-05
84	0.76843	0.83254	0.22050E-05
85	0.77457	0.83919	0.22227E-05
86	0.77943	0.84446	0.22366E-05
87	0.78292	0.84824	0.22466E-05
88	0.78495	0.85044	0.22525E-05
89	0.78544	0.85097	0.22539E-05
90	0.78430	0.84973	0.22506E-05
91	0.78147	0.84666	0.22425E-05
92	0.77687	0.84168	0.22293E-05
93	0.77044	0.83472	0.22108E-05
94	0.76214	0.82572	0.21870E-05
95	0.75191	0.81464	0.21576E-05
96	0.73972	0.80143	0.21227E-05
97	0.72553	0.78606	0.20819E-05
98	0.70933	0.76851	0.20355E-05
99	0.69109	0.74874	0.19831E-05
100	0.67080	0.72676	0.19249E-05

POLYGON I

Time:	20.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.97595E-04	0.10574E-03	0.28005E-09
2	0.20953E-03	0.22701E-03	0.60126E-09
3	0.33600E-03	0.36403E-03	0.96417E-09
4	0.47721E-03	0.51702E-03	0.13694E-08
5	0.63337E-03	0.68621E-03	0.18175E-08
6	0.80474E-03	0.87188E-03	0.23092E-08
7	0.99157E-03	0.10743E-02	0.28454E-08
8	0.11941E-02	0.12938E-02	0.34266E-08
9	0.14127E-02	0.15306E-02	0.40539E-08
10	0.16476E-02	0.17851E-02	0.47279E-08
11	0.18992E-02	0.20576E-02	0.54497E-08
12	0.21676E-02	0.23485E-02	0.62201E-08
13	0.24534E-02	0.26581E-02	0.70401E-08
14	0.27568E-02	0.29867E-02	0.79106E-08
15	0.30781E-02	0.33349E-02	0.88327E-08
16	0.34177E-02	0.37029E-02	0.98073E-08
17	0.37760E-02	0.40911E-02	0.10836E-07
18	0.41534E-02	0.44999E-02	0.11918E-07
19	0.45501E-02	0.49297E-02	0.13057E-07
20	0.49666E-02	0.53809E-02	0.14252E-07
21	0.54031E-02	0.58539E-02	0.15505E-07
22	0.58602E-02	0.63491E-02	0.16816E-07
23	0.63381E-02	0.68668E-02	0.18187E-07
24	0.68371E-02	0.74075E-02	0.19619E-07
25	0.73577E-02	0.79715E-02	0.21113E-07
26	0.79001E-02	0.85592E-02	0.22670E-07
27	0.84647E-02	0.91709E-02	0.24290E-07
28	0.90519E-02	0.98070E-02	0.25975E-07
29	0.96618E-02	0.10468E-01	0.27725E-07
30	0.10295E-01	0.11154E-01	0.29542E-07
31	0.10951E-01	0.11865E-01	0.31425E-07
32	0.11632E-01	0.12602E-01	0.33377E-07
33	0.12336E-01	0.13365E-01	0.35397E-07
34	0.13064E-01	0.14154E-01	0.37487E-07
35	0.13816E-01	0.14969E-01	0.39646E-07
36	0.14593E-01	0.15811E-01	0.41876E-07
37	0.15395E-01	0.16679E-01	0.44176E-07
38	0.16221E-01	0.17574E-01	0.46547E-07
39	0.17072E-01	0.18496E-01	0.48989E-07
40	0.17948E-01	0.19446E-01	0.51503E-07
41	0.18849E-01	0.20422E-01	0.54089E-07
42	0.19775E-01	0.21425E-01	0.56745E-07
43	0.20726E-01	0.22455E-01	0.59473E-07
44	0.21701E-01	0.23511E-01	0.62272E-07

45	0.22701E-01	0.24595E-01	0.65141E-07
46	0.23725E-01	0.25704E-01	0.68080E-07
47	0.24773E-01	0.26840E-01	0.71088E-07
48	0.25845E-01	0.28001E-01	0.74164E-07
49	0.26940E-01	0.29188E-01	0.77307E-07
50	0.28059E-01	0.30399E-01	0.80516E-07
51	0.29199E-01	0.31635E-01	0.83789E-07
52	0.30362E-01	0.32895E-01	0.87125E-07
53	0.31546E-01	0.34177E-01	0.90521E-07
54	0.32750E-01	0.35482E-01	0.93977E-07
55	0.33974E-01	0.36808E-01	0.97488E-07
56	0.35216E-01	0.38154E-01	0.10105E-06
57	0.36477E-01	0.39520E-01	0.10467E-06
58	0.37754E-01	0.40903E-01	0.10834E-06
59	0.39047E-01	0.42304E-01	0.11205E-06
60	0.40354E-01	0.43720E-01	0.11580E-06
61	0.41674E-01	0.45150E-01	0.11958E-06
62	0.43005E-01	0.46593E-01	0.12341E-06
63	0.44347E-01	0.48046E-01	0.12726E-06
64	0.45697E-01	0.49509E-01	0.13113E-06
65	0.47053E-01	0.50978E-01	0.13502E-06
66	0.48414E-01	0.52453E-01	0.13893E-06
67	0.49777E-01	0.53929E-01	0.14284E-06
68	0.51140E-01	0.55407E-01	0.14675E-06
69	0.52502E-01	0.56881E-01	0.15066E-06
70	0.53858E-01	0.58351E-01	0.15455E-06
71	0.55208E-01	0.59813E-01	0.15842E-06
72	0.56547E-01	0.61265E-01	0.16227E-06
73	0.57874E-01	0.62702E-01	0.16607E-06
74	0.59185E-01	0.64122E-01	0.16983E-06
75	0.60476E-01	0.65521E-01	0.17354E-06
76	0.61744E-01	0.66895E-01	0.17718E-06
77	0.62987E-01	0.68241E-01	0.18074E-06
78	0.64199E-01	0.69555E-01	0.18422E-06
79	0.65377E-01	0.70831E-01	0.18760E-06
80	0.66517E-01	0.72066E-01	0.19087E-06
81	0.67614E-01	0.73254E-01	0.19402E-06
82	0.68663E-01	0.74392E-01	0.19703E-06
83	0.69661E-01	0.75473E-01	0.19990E-06
84	0.70602E-01	0.76492E-01	0.20260E-06
85	0.71481E-01	0.77444E-01	0.20512E-06
86	0.72291E-01	0.78322E-01	0.20744E-06
87	0.73029E-01	0.79122E-01	0.20956E-06
88	0.73688E-01	0.79835E-01	0.21145E-06
89	0.74261E-01	0.80456E-01	0.21309E-06
90	0.74742E-01	0.80978E-01	0.21448E-06
91	0.75126E-01	0.81393E-01	0.21558E-06
92	0.75404E-01	0.81694E-01	0.21637E-06
93	0.75570E-01	0.81874E-01	0.21685E-06
94	0.75616E-01	0.81924E-01	0.21698E-06
95	0.75535E-01	0.81837E-01	0.21675E-06
96	0.75320E-01	0.81603E-01	0.21613E-06
97	0.74961E-01	0.81214E-01	0.21510E-06
98	0.74450E-01	0.80661E-01	0.21364E-06
99	0.73780E-01	0.79935E-01	0.21171E-06
100	0.72940E-01	0.79025E-01	0.20930E-06

POLYGON 1

Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.87477E-05	0.94774E-05	0.25102E-10
2	0.18781E-04	0.20348E-04	0.53893E-10
3	0.30117E-04	0.32629E-04	0.86421E-10
4	0.42773E-04	0.46342E-04	0.12274E-09
5	0.56771E-04	0.61507E-04	0.16291E-09
6	0.72131E-04	0.78149E-04	0.20698E-09
7	0.88878E-04	0.96292E-04	0.25504E-09
8	0.10703E-03	0.11596E-03	0.30714E-09
9	0.12663E-03	0.13719E-03	0.36336E-09
10	0.14768E-03	0.16000E-03	0.42378E-09
11	0.17023E-03	0.18443E-03	0.48847E-09
12	0.19429E-03	0.21050E-03	0.55753E-09
13	0.21990E-03	0.23825E-03	0.63103E-09
14	0.24710E-03	0.26771E-03	0.70906E-09
15	0.27590E-03	0.29892E-03	0.79170E-09
16	0.30634E-03	0.33190E-03	0.87906E-09
17	0.33846E-03	0.36669E-03	0.97122E-09
18	0.37228E-03	0.40334E-03	0.10683E-08
19	0.40784E-03	0.44186E-03	0.11703E-08
20	0.44517E-03	0.48231E-03	0.12774E-08
21	0.48430E-03	0.52470E-03	0.13897E-08
22	0.52527E-03	0.56909E-03	0.15073E-08
23	0.56810E-03	0.61549E-03	0.16302E-08
24	0.61283E-03	0.66396E-03	0.17585E-08
25	0.65949E-03	0.71451E-03	0.18924E-08
26	0.70811E-03	0.76719E-03	0.20320E-08
27	0.75872E-03	0.82202E-03	0.21772E-08
28	0.81135E-03	0.87904E-03	0.23282E-08
29	0.86602E-03	0.93827E-03	0.24851E-08
30	0.92277E-03	0.99975E-03	0.26479E-08

31	0.98161E-03	0.10635E-02	0.28168E-08
32	0.10426E-02	0.11296E-02	0.29917E-08
33	0.11057E-02	0.11979E-02	0.31728E-08
34	0.11709E-02	0.12686E-02	0.33601E-08
35	0.12384E-02	0.13417E-02	0.35536E-08
36	0.13080E-02	0.14172E-02	0.37535E-08
37	0.13799E-02	0.14950E-02	0.39596E-08
38	0.14540E-02	0.15752E-02	0.41722E-08
39	0.15302E-02	0.16579E-02	0.43911E-08
40	0.16088E-02	0.17430E-02	0.46164E-08
41	0.16895E-02	0.18305E-02	0.48482E-08
42	0.17725E-02	0.19204E-02	0.50863E-08
43	0.18577E-02	0.20127E-02	0.53308E-08
44	0.19451E-02	0.21074E-02	0.55817E-08
45	0.20348E-02	0.22045E-02	0.58388E-08
46	0.21266E-02	0.23040E-02	0.61023E-08
47	0.22205E-02	0.24058E-02	0.63719E-08
48	0.23166E-02	0.25099E-02	0.66476E-08
49	0.24148E-02	0.26162E-02	0.69293E-08
50	0.25150E-02	0.27248E-02	0.72169E-08
51	0.26172E-02	0.28356E-02	0.75103E-08
52	0.27214E-02	0.29485E-02	0.78093E-08
53	0.28275E-02	0.30634E-02	0.81137E-08
54	0.29355E-02	0.31804E-02	0.84235E-08
55	0.30452E-02	0.32992E-02	0.87382E-08
56	0.31565E-02	0.34199E-02	0.90578E-08
57	0.32695E-02	0.35423E-02	0.93820E-08
58	0.33840E-02	0.36663E-02	0.97105E-08
59	0.34999E-02	0.37918E-02	0.10043E-07
60	0.36170E-02	0.39188E-02	0.10379E-07
61	0.37354E-02	0.40470E-02	0.10719E-07
62	0.38547E-02	0.41763E-02	0.11061E-07
63	0.39749E-02	0.43066E-02	0.11406E-07
64	0.40959E-02	0.44376E-02	0.11753E-07
65	0.42175E-02	0.45693E-02	0.12102E-07
66	0.43394E-02	0.47015E-02	0.12452E-07
67	0.44616E-02	0.48338E-02	0.12803E-07
68	0.45838E-02	0.49662E-02	0.13153E-07
69	0.47058E-02	0.50984E-02	0.13504E-07
70	0.48274E-02	0.52301E-02	0.13852E-07
71	0.49484E-02	0.53612E-02	0.14200E-07
72	0.50684E-02	0.54913E-02	0.14544E-07
73	0.51873E-02	0.56201E-02	0.14885E-07
74	0.53048E-02	0.57473E-02	0.15222E-07
75	0.54205E-02	0.58727E-02	0.15554E-07
76	0.55342E-02	0.59959E-02	0.15881E-07
77	0.56455E-02	0.61165E-02	0.16200E-07
78	0.57541E-02	0.62342E-02	0.16512E-07
79	0.58597E-02	0.63485E-02	0.16815E-07
80	0.59618E-02	0.64592E-02	0.17108E-07
81	0.60601E-02	0.65657E-02	0.17390E-07
82	0.61542E-02	0.66676E-02	0.17660E-07
83	0.62436E-02	0.67644E-02	0.17916E-07
84	0.63279E-02	0.68557E-02	0.18158E-07
85	0.64066E-02	0.69410E-02	0.18384E-07
86	0.64792E-02	0.70197E-02	0.18592E-07
87	0.65453E-02	0.70913E-02	0.18782E-07
88	0.66043E-02	0.71552E-02	0.18951E-07
89	0.66556E-02	0.72108E-02	0.19098E-07
90	0.66987E-02	0.72575E-02	0.19222E-07
91	0.67330E-02	0.72947E-02	0.19321E-07
92	0.67579E-02	0.73217E-02	0.19392E-07
93	0.67727E-02	0.73377E-02	0.19435E-07
94	0.67769E-02	0.73422E-02	0.19446E-07
95	0.67696E-02	0.73343E-02	0.19426E-07
96	0.67502E-02	0.73134E-02	0.19370E-07
97	0.67180E-02	0.72785E-02	0.19278E-07
98	0.66723E-02	0.72289E-02	0.19146E-07
99	0.66122E-02	0.71638E-02	0.18974E-07
100	0.65369E-02	0.70823E-02	0.18758E-07

POLYGON I

Time:	40.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.78408E-06	0.84949E-06	0.22499E-11
2	0.16834E-05	0.18238E-05	0.48305E-11
3	0.26994E-05	0.29246E-05	0.77461E-11
4	0.38339E-05	0.41537E-05	0.11001E-10
5	0.50885E-05	0.55130E-05	0.14602E-10
6	0.64653E-05	0.70047E-05	0.18553E-10
7	0.79663E-05	0.86309E-05	0.22860E-10
8	0.95937E-05	0.10394E-04	0.27530E-10
9	0.11350E-04	0.12297E-04	0.32569E-10
10	0.13237E-04	0.14341E-04	0.37984E-10
11	0.15258E-04	0.16531E-04	0.43783E-10
12	0.17415E-04	0.18868E-04	0.49973E-10
13	0.19711E-04	0.21355E-04	0.56560E-10
14	0.22148E-04	0.23996E-04	0.63554E-10
15	0.24730E-04	0.26793E-04	0.70962E-10
16	0.27458E-04	0.29749E-04	0.78793E-10

17	0.30337E-04	0.32868E-04	0.87053E-10
18	0.33368E-04	0.36152E-04	0.95752E-10
19	0.36556E-04	0.39605E-04	0.10490E-09
20	0.39902E-04	0.43230E-04	0.11450E-09
21	0.43409E-04	0.47030E-04	0.12456E-09
22	0.47081E-04	0.51009E-04	0.13510E-09
23	0.50920E-04	0.55168E-04	0.14612E-09
24	0.54930E-04	0.59512E-04	0.15762E-09
25	0.59112E-04	0.64043E-04	0.16962E-09
26	0.63470E-04	0.68765E-04	0.18213E-09
27	0.68006E-04	0.73680E-04	0.19515E-09
28	0.72723E-04	0.78790E-04	0.20868E-09
29	0.77624E-04	0.84100E-04	0.22274E-09
30	0.82710E-04	0.89610E-04	0.23734E-09
31	0.87984E-04	0.95324E-04	0.25247E-09
32	0.93449E-04	0.10124E-03	0.26815E-09
33	0.99105E-04	0.10737E-03	0.28439E-09
34	0.10495E-03	0.11371E-03	0.30117E-09
35	0.11100E-03	0.12026E-03	0.31852E-09
36	0.11724E-03	0.12702E-03	0.33643E-09
37	0.12368E-03	0.13400E-03	0.35491E-09
38	0.13032E-03	0.14119E-03	0.37396E-09
39	0.13716E-03	0.14860E-03	0.39359E-09
40	0.14420E-03	0.15623E-03	0.41378E-09
41	0.15144E-03	0.16407E-03	0.43455E-09
42	0.15887E-03	0.17213E-03	0.45590E-09
43	0.16651E-03	0.18040E-03	0.47781E-09
44	0.17435E-03	0.18889E-03	0.50030E-09
45	0.18238E-03	0.19760E-03	0.52335E-09
46	0.19061E-03	0.20651E-03	0.54696E-09
47	0.19903E-03	0.21563E-03	0.57113E-09
48	0.20764E-03	0.22496E-03	0.59584E-09
49	0.21644E-03	0.23450E-03	0.62109E-09
50	0.22543E-03	0.24423E-03	0.64687E-09
51	0.23459E-03	0.25416E-03	0.67317E-09
52	0.24393E-03	0.26428E-03	0.69997E-09
53	0.25344E-03	0.27458E-03	0.72726E-09
54	0.26311E-03	0.28506E-03	0.75502E-09
55	0.27295E-03	0.29572E-03	0.78323E-09
56	0.28293E-03	0.30653E-03	0.81188E-09
57	0.29306E-03	0.31750E-03	0.84094E-09
58	0.30332E-03	0.32862E-03	0.87038E-09
59	0.31370E-03	0.33987E-03	0.90018E-09
60	0.32420E-03	0.35125E-03	0.93032E-09
61	0.33481E-03	0.36274E-03	0.96075E-09
62	0.34551E-03	0.37433E-03	0.99145E-09
63	0.35628E-03	0.38601E-03	0.10224E-08
64	0.36713E-03	0.39776E-03	0.10535E-08
65	0.37802E-03	0.40956E-03	0.10848E-08
66	0.38896E-03	0.42140E-03	0.11161E-08
67	0.39991E-03	0.43327E-03	0.11475E-08
68	0.41086E-03	0.44513E-03	0.11790E-08
69	0.42180E-03	0.45698E-03	0.12104E-08
70	0.43269E-03	0.46879E-03	0.12416E-08
71	0.44354E-03	0.48054E-03	0.12727E-08
72	0.45430E-03	0.49219E-03	0.13036E-08
73	0.46495E-03	0.50374E-03	0.13342E-08
74	0.47548E-03	0.51515E-03	0.13644E-08
75	0.48585E-03	0.52638E-03	0.13942E-08
76	0.49604E-03	0.53742E-03	0.14234E-08
77	0.50602E-03	0.54823E-03	0.14520E-08
78	0.51576E-03	0.55878E-03	0.14800E-08
79	0.52522E-03	0.56903E-03	0.15071E-08
80	0.53437E-03	0.57895E-03	0.15334E-08
81	0.54318E-03	0.58850E-03	0.15587E-08
82	0.55161E-03	0.59763E-03	0.15829E-08
83	0.55963E-03	0.60631E-03	0.16059E-08
84	0.56718E-03	0.61450E-03	0.16276E-08
85	0.57424E-03	0.62214E-03	0.16478E-08
86	0.58075E-03	0.62920E-03	0.16665E-08
87	0.58667E-03	0.63561E-03	0.16835E-08
88	0.59196E-03	0.64134E-03	0.16986E-08
89	0.59656E-03	0.64632E-03	0.17118E-08
90	0.60042E-03	0.65051E-03	0.17229E-08
91	0.60350E-03	0.65384E-03	0.17318E-08
92	0.60573E-03	0.65626E-03	0.17382E-08
93	0.60706E-03	0.65770E-03	0.17420E-08
94	0.60743E-03	0.65810E-03	0.17430E-08
95	0.60678E-03	0.65739E-03	0.17412E-08
96	0.60504E-03	0.65551E-03	0.17362E-08
97	0.60215E-03	0.65239E-03	0.17279E-08
98	0.59805E-03	0.64795E-03	0.17161E-08
99	0.59267E-03	0.64211E-03	0.17007E-08
100	0.58592E-03	0.63480E-03	0.16813E-08

POLYGON 1

Time:	50.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.70279E-07	0.76142E-07	0.20167E-12
2	0.15089E-06	0.16347E-06	0.43297E-12

3	0.24196E-06	0.26214E-06	0.69431E-12
4	0.34364E-06	0.37231E-06	0.98609E-12
5	0.45610E-06	0.49415E-06	0.13088E-11
6	0.57950E-06	0.62785E-06	0.16629E-11
7	0.71404E-06	0.77361E-06	0.20490E-11
8	0.85991E-06	0.93165E-06	0.24676E-11
9	0.10173E-05	0.11022E-05	0.29192E-11
10	0.11865E-05	0.12855E-05	0.34046E-11
11	0.13676E-05	0.14817E-05	0.39244E-11
12	0.15609E-05	0.16912E-05	0.44792E-11
13	0.17667E-05	0.19141E-05	0.50697E-11
14	0.19852E-05	0.21508E-05	0.56965E-11
15	0.22166E-05	0.24015E-05	0.63605E-11
16	0.24612E-05	0.26665E-05	0.70624E-11
17	0.27192E-05	0.29460E-05	0.78028E-11
18	0.29909E-05	0.32404E-05	0.85825E-11
19	0.32766E-05	0.35499E-05	0.94023E-11
20	0.35765E-05	0.38749E-05	0.10263E-10
21	0.38909E-05	0.42155E-05	0.11165E-10
22	0.42200E-05	0.45720E-05	0.12109E-10
23	0.45641E-05	0.49449E-05	0.13097E-10
24	0.49235E-05	0.53342E-05	0.14128E-10
25	0.52984E-05	0.57404E-05	0.15204E-10
26	0.56890E-05	0.61636E-05	0.16325E-10
27	0.60956E-05	0.66041E-05	0.17491E-10
28	0.65184E-05	0.70622E-05	0.18705E-10
29	0.69576E-05	0.75381E-05	0.19965E-10
30	0.74135E-05	0.80320E-05	0.21273E-10
31	0.78863E-05	0.85442E-05	0.22630E-10
32	0.83760E-05	0.90748E-05	0.24035E-10
33	0.88830E-05	0.96241E-05	0.25490E-10
34	0.94074E-05	0.10192E-04	0.26995E-10
35	0.99492E-05	0.10779E-04	0.28550E-10
36	0.10509E-04	0.11385E-04	0.30155E-10
37	0.11086E-04	0.12011E-04	0.31812E-10
38	0.11681E-04	0.12656E-04	0.33519E-10
39	0.12294E-04	0.13320E-04	0.35278E-10
40	0.12925E-04	0.14003E-04	0.37088E-10
41	0.13574E-04	0.14706E-04	0.38950E-10
42	0.14240E-04	0.15428E-04	0.40863E-10
43	0.14925E-04	0.16170E-04	0.42828E-10
44	0.15627E-04	0.16931E-04	0.44843E-10
45	0.16347E-04	0.17711E-04	0.46909E-10
46	0.17085E-04	0.18510E-04	0.49025E-10
47	0.17840E-04	0.19328E-04	0.51191E-10
48	0.18612E-04	0.20164E-04	0.53407E-10
49	0.19400E-04	0.21019E-04	0.55670E-10
50	0.20206E-04	0.21891E-04	0.57981E-10
51	0.21027E-04	0.22781E-04	0.60338E-10
52	0.21864E-04	0.23688E-04	0.62740E-10
53	0.22716E-04	0.24612E-04	0.65186E-10
54	0.23584E-04	0.25551E-04	0.67674E-10
55	0.24465E-04	0.26506E-04	0.70203E-10
56	0.25360E-04	0.27475E-04	0.72771E-10
57	0.26267E-04	0.28459E-04	0.75375E-10
58	0.27187E-04	0.29455E-04	0.78014E-10
59	0.28118E-04	0.30464E-04	0.80686E-10
60	0.29059E-04	0.31483E-04	0.83387E-10
61	0.30010E-04	0.32513E-04	0.86114E-10
62	0.30969E-04	0.33552E-04	0.88866E-10
63	0.31935E-04	0.34599E-04	0.91638E-10
64	0.32907E-04	0.35652E-04	0.94427E-10
65	0.33883E-04	0.36710E-04	0.97229E-10
66	0.34863E-04	0.37771E-04	0.10004E-09
67	0.35845E-04	0.38835E-04	0.10286E-09
68	0.36826E-04	0.39899E-04	0.10567E-09
69	0.37807E-04	0.40961E-04	0.10849E-09
70	0.38783E-04	0.42019E-04	0.11129E-09
71	0.39755E-04	0.43072E-04	0.11408E-09
72	0.40720E-04	0.44117E-04	0.11685E-09
73	0.41675E-04	0.45152E-04	0.11959E-09
74	0.42618E-04	0.46174E-04	0.12230E-09
75	0.43548E-04	0.47181E-04	0.12496E-09
76	0.44462E-04	0.48171E-04	0.12758E-09
77	0.45356E-04	0.49140E-04	0.13015E-09
78	0.46229E-04	0.50085E-04	0.13265E-09
79	0.47077E-04	0.51004E-04	0.13509E-09
80	0.47897E-04	0.51893E-04	0.13744E-09
81	0.48687E-04	0.52748E-04	0.13971E-09
82	0.49443E-04	0.53567E-04	0.14188E-09
83	0.50161E-04	0.54345E-04	0.14394E-09
84	0.50838E-04	0.55079E-04	0.14588E-09
85	0.51470E-04	0.55764E-04	0.14770E-09
86	0.52054E-04	0.56396E-04	0.14937E-09
87	0.52585E-04	0.56972E-04	0.15089E-09
88	0.53058E-04	0.57485E-04	0.15225E-09
89	0.53471E-04	0.57932E-04	0.15344E-09
90	0.53817E-04	0.58307E-04	0.15443E-09
91	0.54093E-04	0.58606E-04	0.15522E-09
92	0.54293E-04	0.58822E-04	0.15580E-09

93	0.54412E-04	0.58951E-04	0.15614E-09
94	0.54445E-04	0.58987E-04	0.15623E-09
95	0.54387E-04	0.58924E-04	0.15607E-09
96	0.54231E-04	0.58755E-04	0.15562E-09
97	0.53973E-04	0.58475E-04	0.15488E-09
98	0.53605E-04	0.58077E-04	0.15382E-09
99	0.53122E-04	0.57554E-04	0.15244E-09
100	0.52518E-04	0.56899E-04	0.15070E-09

POLYGON I

Time:	60.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.62993E-08	0.68248E-08	0.18076E-13
2	0.13524E-07	0.14653E-07	0.38809E-13
3	0.21687E-07	0.23496E-07	0.62232E-13
4	0.30801E-07	0.33371E-07	0.88386E-13
5	0.40881E-07	0.44292E-07	0.11731E-12
6	0.51942E-07	0.56276E-07	0.14905E-12
7	0.64001E-07	0.69341E-07	0.18365E-12
8	0.77076E-07	0.83506E-07	0.22117E-12
9	0.91185E-07	0.98792E-07	0.26166E-12
10	0.10635E-06	0.11522E-06	0.30517E-12
11	0.12258E-06	0.13281E-06	0.35175E-12
12	0.13991E-06	0.15158E-06	0.40148E-12
13	0.15836E-06	0.17157E-06	0.45441E-12
14	0.17794E-06	0.19278E-06	0.51060E-12
15	0.19868E-06	0.21525E-06	0.57011E-12
16	0.22060E-06	0.23900E-06	0.63302E-12
17	0.24373E-06	0.26406E-06	0.69938E-12
18	0.26808E-06	0.29045E-06	0.76927E-12
19	0.29369E-06	0.31819E-06	0.84275E-12
20	0.32057E-06	0.34731E-06	0.91989E-12
21	0.34875E-06	0.37784E-06	0.10007E-11
22	0.37825E-06	0.40980E-06	0.10854E-11
23	0.40909E-06	0.44322E-06	0.11739E-11
24	0.44130E-06	0.47812E-06	0.12663E-11
25	0.47491E-06	0.51452E-06	0.13628E-11
26	0.50992E-06	0.55246E-06	0.14632E-11
27	0.54636E-06	0.59194E-06	0.15678E-11
28	0.58426E-06	0.63300E-06	0.16766E-11
29	0.62363E-06	0.67566E-06	0.17895E-11
30	0.66449E-06	0.71993E-06	0.19068E-11
31	0.70687E-06	0.76584E-06	0.20284E-11
32	0.75077E-06	0.81340E-06	0.21544E-11
33	0.79621E-06	0.86263E-06	0.22848E-11
34	0.84321E-06	0.91355E-06	0.24196E-11
35	0.89178E-06	0.96617E-06	0.25590E-11
36	0.94193E-06	0.10205E-05	0.27029E-11
37	0.99366E-06	0.10766E-05	0.28514E-11
38	0.10470E-05	0.11343E-05	0.30044E-11
39	0.11019E-05	0.11939E-05	0.31621E-11
40	0.11585E-05	0.12551E-05	0.33243E-11
41	0.12166E-05	0.13181E-05	0.34912E-11
42	0.12764E-05	0.13829E-05	0.36627E-11
43	0.13378E-05	0.14494E-05	0.38388E-11
44	0.14007E-05	0.15176E-05	0.40194E-11
45	0.14652E-05	0.15875E-05	0.42046E-11
46	0.15314E-05	0.16591E-05	0.43943E-11
47	0.15990E-05	0.17324E-05	0.45884E-11
48	0.16682E-05	0.18074E-05	0.47870E-11
49	0.17389E-05	0.18840E-05	0.49898E-11
50	0.18111E-05	0.19622E-05	0.51970E-11
51	0.18847E-05	0.20419E-05	0.54082E-11
52	0.19597E-05	0.21232E-05	0.56235E-11
53	0.20361E-05	0.22060E-05	0.58428E-11
54	0.21139E-05	0.22902E-05	0.60658E-11
55	0.21928E-05	0.23758E-05	0.62925E-11
56	0.22731E-05	0.24627E-05	0.65226E-11
57	0.23544E-05	0.25508E-05	0.67561E-11
58	0.24368E-05	0.26401E-05	0.69926E-11
59	0.25203E-05	0.27305E-05	0.72321E-11
60	0.26047E-05	0.28219E-05	0.74741E-11
61	0.26899E-05	0.29143E-05	0.77186E-11
62	0.27758E-05	0.30074E-05	0.79653E-11
63	0.28624E-05	0.31012E-05	0.82137E-11
64	0.29495E-05	0.31956E-05	0.84637E-11
65	0.30370E-05	0.32904E-05	0.87149E-11
66	0.31249E-05	0.33856E-05	0.89669E-11
67	0.32128E-05	0.34809E-05	0.92194E-11
68	0.33008E-05	0.35762E-05	0.94719E-11
69	0.33887E-05	0.36714E-05	0.97240E-11
70	0.34763E-05	0.37663E-05	0.99753E-11
71	0.35634E-05	0.38606E-05	0.10225E-10
72	0.36498E-05	0.39543E-05	0.10473E-10
73	0.37354E-05	0.40470E-05	0.10719E-10
74	0.38200E-05	0.41387E-05	0.10962E-10
75	0.39033E-05	0.42290E-05	0.11201E-10
76	0.39852E-05	0.43177E-05	0.11436E-10
77	0.40654E-05	0.44045E-05	0.11666E-10
78	0.41436E-05	0.44893E-05	0.11890E-10

79	0.42196E-05	0.45716E-05	0.12108E-10
80	0.42931E-05	0.46513E-05	0.12319E-10
81	0.43639E-05	0.47280E-05	0.12522E-10
82	0.44317E-05	0.48014E-05	0.12717E-10
83	0.44960E-05	0.48711E-05	0.12902E-10
84	0.45567E-05	0.49369E-05	0.13076E-10
85	0.46134E-05	0.49983E-05	0.13238E-10
86	0.46657E-05	0.50550E-05	0.13388E-10
87	0.47133E-05	0.51065E-05	0.13525E-10
88	0.47558E-05	0.51525E-05	0.13647E-10
89	0.47927E-05	0.51926E-05	0.13753E-10
90	0.48238E-05	0.52262E-05	0.13842E-10
91	0.48485E-05	0.52530E-05	0.13913E-10
92	0.48664E-05	0.52724E-05	0.13964E-10
93	0.48771E-05	0.52840E-05	0.13995E-10
94	0.48801E-05	0.52872E-05	0.14004E-10
95	0.48748E-05	0.52815E-05	0.13989E-10
96	0.48609E-05	0.52664E-05	0.13949E-10
97	0.48377E-05	0.52413E-05	0.13882E-10
98	0.48048E-05	0.52056E-05	0.13787E-10
99	0.47615E-05	0.51587E-05	0.13663E-10
100	0.47073E-05	0.51000E-05	0.13508E-10

POLYGON I

Time:	70.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.56462E-09	0.61172E-09	0.16202E-14
2	0.12122E-08	0.13133E-08	0.34785E-14
3	0.19439E-08	0.21060E-08	0.55781E-14
4	0.27608E-08	0.29911E-08	0.79222E-14
5	0.36643E-08	0.39700E-08	0.10515E-13
6	0.46557E-08	0.50441E-08	0.13360E-13
7	0.57366E-08	0.62152E-08	0.16461E-13
8	0.69085E-08	0.74849E-08	0.19824E-13
9	0.81731E-08	0.88550E-08	0.23453E-13
10	0.95321E-08	0.10327E-07	0.27353E-13
11	0.10987E-07	0.11904E-07	0.31529E-13
12	0.12541E-07	0.13587E-07	0.35986E-13
13	0.14194E-07	0.15378E-07	0.40730E-13
14	0.15949E-07	0.17279E-07	0.45766E-13
15	0.17808E-07	0.19294E-07	0.51101E-13
16	0.19773E-07	0.21422E-07	0.56739E-13
17	0.21846E-07	0.23668E-07	0.62688E-13
18	0.24029E-07	0.26033E-07	0.68952E-13
19	0.26324E-07	0.28520E-07	0.75538E-13
20	0.28733E-07	0.31131E-07	0.82452E-13
21	0.31259E-07	0.33867E-07	0.89700E-13
22	0.33903E-07	0.36732E-07	0.97287E-13
23	0.36668E-07	0.39727E-07	0.10522E-12
24	0.39555E-07	0.42855E-07	0.11351E-12
25	0.42567E-07	0.46118E-07	0.12215E-12
26	0.45705E-07	0.49518E-07	0.13115E-12
27	0.48972E-07	0.53057E-07	0.14053E-12
28	0.52369E-07	0.56737E-07	0.15027E-12
29	0.55898E-07	0.60561E-07	0.16040E-12
30	0.59560E-07	0.64529E-07	0.17091E-12
31	0.63358E-07	0.68644E-07	0.18181E-12
32	0.67293E-07	0.72907E-07	0.19310E-12
33	0.71366E-07	0.77320E-07	0.20479E-12
34	0.75579E-07	0.81884E-07	0.21688E-12
35	0.79932E-07	0.86600E-07	0.22937E-12
36	0.84427E-07	0.91470E-07	0.24227E-12
37	0.89065E-07	0.96495E-07	0.25557E-12
38	0.93845E-07	0.10167E-06	0.26929E-12
39	0.98770E-07	0.10701E-06	0.28342E-12
40	0.10384E-06	0.11250E-06	0.29797E-12
41	0.10905E-06	0.11815E-06	0.31293E-12
42	0.11441E-06	0.12395E-06	0.32830E-12
43	0.11991E-06	0.12991E-06	0.34408E-12
44	0.12555E-06	0.13602E-06	0.36027E-12
45	0.13133E-06	0.14229E-06	0.37687E-12
46	0.13726E-06	0.14871E-06	0.39387E-12
47	0.14332E-06	0.15528E-06	0.41127E-12
48	0.14953E-06	0.16200E-06	0.42907E-12
49	0.15586E-06	0.16886E-06	0.44725E-12
50	0.16233E-06	0.17587E-06	0.46582E-12
51	0.16893E-06	0.18302E-06	0.48475E-12
52	0.17566E-06	0.19031E-06	0.50405E-12
53	0.18250E-06	0.19773E-06	0.52370E-12
54	0.18947E-06	0.20528E-06	0.54369E-12
55	0.19655E-06	0.21295E-06	0.56401E-12
56	0.20374E-06	0.22074E-06	0.58464E-12
57	0.21103E-06	0.22864E-06	0.60556E-12
58	0.21842E-06	0.23664E-06	0.62677E-12
59	0.22590E-06	0.24474E-06	0.64823E-12
60	0.23346E-06	0.25294E-06	0.66993E-12
61	0.24110E-06	0.26121E-06	0.69184E-12
62	0.24880E-06	0.26956E-06	0.71395E-12
63	0.25656E-06	0.27797E-06	0.73622E-12
64	0.26437E-06	0.28643E-06	0.75863E-12

65	0.27222E-06	0.29493E-06	0.78114E-12
66	0.28009E-06	0.30346E-06	0.80373E-12
67	0.28798E-06	0.31200E-06	0.82636E-12
68	0.29586E-06	0.32054E-06	0.84899E-12
69	0.30374E-06	0.32908E-06	0.87159E-12
70	0.31159E-06	0.33758E-06	0.89411E-12
71	0.31939E-06	0.34604E-06	0.91651E-12
72	0.32714E-06	0.35443E-06	0.93875E-12
73	0.33482E-06	0.36275E-06	0.96077E-12
74	0.34240E-06	0.37096E-06	0.98252E-12
75	0.34987E-06	0.37905E-06	0.10040E-11
76	0.35720E-06	0.38700E-06	0.10250E-11
77	0.36439E-06	0.39479E-06	0.10456E-11
78	0.37140E-06	0.40238E-06	0.10657E-11
79	0.37821E-06	0.40977E-06	0.10853E-11
80	0.38481E-06	0.41691E-06	0.11042E-11
81	0.39115E-06	0.42378E-06	0.11224E-11
82	0.39722E-06	0.43036E-06	0.11398E-11
83	0.40299E-06	0.43661E-06	0.11564E-11
84	0.40843E-06	0.44250E-06	0.11720E-11
85	0.41351E-06	0.44801E-06	0.11866E-11
86	0.41820E-06	0.45309E-06	0.12000E-11
87	0.42247E-06	0.45771E-06	0.12123E-11
88	0.42627E-06	0.46183E-06	0.12232E-11
89	0.42958E-06	0.46542E-06	0.12327E-11
90	0.43237E-06	0.46844E-06	0.12407E-11
91	0.43458E-06	0.47084E-06	0.12471E-11
92	0.43619E-06	0.47258E-06	0.12517E-11
93	0.43715E-06	0.47361E-06	0.12544E-11
94	0.43741E-06	0.47390E-06	0.12552E-11
95	0.43694E-06	0.47339E-06	0.12538E-11
96	0.43569E-06	0.47204E-06	0.12502E-11
97	0.43362E-06	0.46979E-06	0.12443E-11
98	0.43066E-06	0.46659E-06	0.12358E-11
99	0.42678E-06	0.46239E-06	0.12247E-11
100	0.42193E-06	0.45712E-06	0.12107E-11

POLYGON 1

Time: 80.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.50608E-10	0.54830E-10	0.14522E-15
2	0.10865E-09	0.11772E-09	0.31179E-15
3	0.17424E-09	0.18877E-09	0.49997E-15
4	0.24746E-09	0.26810E-09	0.71009E-15
5	0.32844E-09	0.35584E-09	0.94247E-15
6	0.41730E-09	0.45212E-09	0.11975E-14
7	0.51419E-09	0.55708E-09	0.14755E-14
8	0.61923E-09	0.67089E-09	0.17769E-14
9	0.73258E-09	0.79369E-09	0.21022E-14
10	0.85439E-09	0.92566E-09	0.24517E-14
11	0.98482E-09	0.10670E-08	0.28260E-14
12	0.11240E-08	0.12178E-08	0.32255E-14
13	0.12722E-08	0.13784E-08	0.36507E-14
14	0.14295E-08	0.15488E-08	0.41021E-14
15	0.15962E-08	0.17293E-08	0.45803E-14
16	0.17723E-08	0.19201E-08	0.50857E-14
17	0.19581E-08	0.21215E-08	0.56188E-14
18	0.21538E-08	0.23334E-08	0.61803E-14
19	0.23595E-08	0.25563E-08	0.67707E-14
20	0.25755E-08	0.27903E-08	0.73904E-14
21	0.28018E-08	0.30356E-08	0.80400E-14
22	0.30388E-08	0.32924E-08	0.87201E-14
23	0.32867E-08	0.35608E-08	0.94312E-14
24	0.35454E-08	0.38412E-08	0.10174E-13
25	0.38154E-08	0.41337E-08	0.10948E-13
26	0.40967E-08	0.44384E-08	0.11756E-13
27	0.43895E-08	0.47557E-08	0.12596E-13
28	0.46939E-08	0.50855E-08	0.13469E-13
29	0.50102E-08	0.54282E-08	0.14377E-13
30	0.53385E-08	0.57839E-08	0.15319E-13
31	0.56790E-08	0.61527E-08	0.16296E-13
32	0.60316E-08	0.65348E-08	0.17308E-13
33	0.63967E-08	0.69304E-08	0.18356E-13
34	0.67743E-08	0.73395E-08	0.19439E-13
35	0.71645E-08	0.77622E-08	0.20559E-13
36	0.75674E-08	0.81987E-08	0.21715E-13
37	0.79831E-08	0.86491E-08	0.22908E-13
38	0.84116E-08	0.91133E-08	0.24137E-13
39	0.88530E-08	0.95915E-08	0.25404E-13
40	0.93073E-08	0.10084E-07	0.26708E-13
41	0.97745E-08	0.10590E-07	0.28048E-13
42	0.10255E-07	0.11110E-07	0.29426E-13
43	0.10748E-07	0.11644E-07	0.30840E-13
44	0.11253E-07	0.12192E-07	0.32292E-13
45	0.11772E-07	0.12754E-07	0.33780E-13
46	0.12303E-07	0.13329E-07	0.35304E-13
47	0.12846E-07	0.13918E-07	0.36863E-13
48	0.13402E-07	0.14520E-07	0.38458E-13
49	0.13970E-07	0.15136E-07	0.40088E-13
50	0.14550E-07	0.15764E-07	0.41752E-13

51	0.15142E-07	0.16405E-07	0.43450E-13
52	0.15744E-07	0.17058E-07	0.45179E-13
53	0.16358E-07	0.17723E-07	0.46941E-13
54	0.16983E-07	0.18399E-07	0.48733E-13
55	0.17617E-07	0.19087E-07	0.50554E-13
56	0.18262E-07	0.19785E-07	0.52403E-13
57	0.18915E-07	0.20493E-07	0.54278E-13
58	0.19578E-07	0.21211E-07	0.56179E-13
59	0.20248E-07	0.21937E-07	0.58102E-13
60	0.20926E-07	0.22671E-07	0.60047E-13
61	0.21610E-07	0.23413E-07	0.62012E-13
62	0.22301E-07	0.24161E-07	0.63993E-13
63	0.22996E-07	0.24915E-07	0.65989E-13
64	0.23696E-07	0.25673E-07	0.67998E-13
65	0.24400E-07	0.26435E-07	0.70016E-13
66	0.25105E-07	0.27200E-07	0.72040E-13
67	0.25812E-07	0.27965E-07	0.74069E-13
68	0.26519E-07	0.28731E-07	0.76097E-13
69	0.27225E-07	0.29496E-07	0.78123E-13
70	0.27928E-07	0.30258E-07	0.80141E-13
71	0.28628E-07	0.31016E-07	0.82149E-13
72	0.29323E-07	0.31769E-07	0.84142E-13
73	0.30010E-07	0.32514E-07	0.86116E-13
74	0.30690E-07	0.33250E-07	0.88066E-13
75	0.31359E-07	0.33976E-07	0.89987E-13
76	0.32017E-07	0.34688E-07	0.91874E-13
77	0.32661E-07	0.35386E-07	0.93722E-13
78	0.33290E-07	0.36067E-07	0.95526E-13
79	0.33900E-07	0.36728E-07	0.97278E-13
80	0.34491E-07	0.37368E-07	0.98974E-13
81	0.35060E-07	0.37985E-07	0.10061E-12
82	0.35604E-07	0.38574E-07	0.10217E-12
83	0.36121E-07	0.39134E-07	0.10365E-12
84	0.36609E-07	0.39663E-07	0.10505E-12
85	0.37064E-07	0.40156E-07	0.10636E-12
86	0.37484E-07	0.40611E-07	0.10756E-12
87	0.37867E-07	0.41026E-07	0.10866E-12
88	0.38208E-07	0.41395E-07	0.10964E-12
89	0.38505E-07	0.41717E-07	0.11049E-12
90	0.38754E-07	0.41987E-07	0.11121E-12
91	0.38953E-07	0.42202E-07	0.11178E-12
92	0.39097E-07	0.42358E-07	0.11219E-12
93	0.39183E-07	0.42451E-07	0.11244E-12
94	0.39206E-07	0.42477E-07	0.11250E-12
95	0.39164E-07	0.42432E-07	0.11238E-12
96	0.39052E-07	0.42310E-07	0.11206E-12
97	0.38866E-07	0.42108E-07	0.11153E-12
98	0.38601E-07	0.41822E-07	0.11077E-12
99	0.38254E-07	0.41445E-07	0.10977E-12
100	0.37818E-07	0.40973E-07	0.10852E-12

POLYGON I

Time: 90.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.45361E-11	0.49146E-11	0.13017E-16
2	0.97390E-11	0.10551E-10	0.27946E-16
3	0.15617E-10	0.16920E-10	0.44814E-16
4	0.22180E-10	0.24031E-10	0.63647E-16
5	0.29439E-10	0.31895E-10	0.84476E-16
6	0.37404E-10	0.40524E-10	0.10733E-15
7	0.46088E-10	0.49933E-10	0.13225E-15
8	0.55503E-10	0.60133E-10	0.15927E-15
9	0.65663E-10	0.71141E-10	0.18842E-15
10	0.76581E-10	0.82970E-10	0.21975E-15
11	0.88272E-10	0.95636E-10	0.25330E-15
12	0.10075E-09	0.10916E-09	0.28911E-15
13	0.11403E-09	0.12355E-09	0.32722E-15
14	0.12813E-09	0.13882E-09	0.36768E-15
15	0.14307E-09	0.15500E-09	0.41054E-15
16	0.15886E-09	0.17211E-09	0.45584E-15
17	0.17551E-09	0.19015E-09	0.50363E-15
18	0.19305E-09	0.20915E-09	0.55396E-15
19	0.21149E-09	0.22913E-09	0.60687E-15
20	0.23084E-09	0.25010E-09	0.66242E-15
21	0.25114E-09	0.27209E-09	0.72065E-15
22	0.27238E-09	0.29510E-09	0.78160E-15
23	0.29459E-09	0.31917E-09	0.84534E-15
24	0.31779E-09	0.34430E-09	0.91190E-15
25	0.34198E-09	0.37051E-09	0.98133E-15
26	0.36720E-09	0.39783E-09	0.10537E-14
27	0.39344E-09	0.42626E-09	0.11290E-14
28	0.42073E-09	0.45583E-09	0.12073E-14
29	0.44908E-09	0.48654E-09	0.12887E-14
30	0.47851E-09	0.51842E-09	0.13731E-14
31	0.50902E-09	0.55148E-09	0.14607E-14
32	0.54063E-09	0.58573E-09	0.15514E-14
33	0.57336E-09	0.62119E-09	0.16453E-14
34	0.60720E-09	0.65785E-09	0.17424E-14
35	0.64217E-09	0.69575E-09	0.18427E-14
36	0.67829E-09	0.73487E-09	0.19464E-14

37	0.71555E-09	0.77524E-09	0.20533E-14
38	0.75395E-09	0.81685E-09	0.21635E-14
39	0.79352E-09	0.85971E-09	0.22770E-14
40	0.83424E-09	0.90383E-09	0.23939E-14
41	0.87611E-09	0.94920E-09	0.25140E-14
42	0.91914E-09	0.99582E-09	0.26375E-14
43	0.96333E-09	0.10437E-08	0.27643E-14
44	0.10087E-08	0.10928E-08	0.28944E-14
45	0.10551E-08	0.11432E-08	0.30278E-14
46	0.11027E-08	0.11947E-08	0.31643E-14
47	0.11515E-08	0.12475E-08	0.33042E-14
48	0.12013E-08	0.13015E-08	0.34471E-14
49	0.12522E-08	0.13567E-08	0.35932E-14
50	0.13042E-08	0.14130E-08	0.37424E-14
51	0.13572E-08	0.14704E-08	0.38945E-14
52	0.14112E-08	0.15289E-08	0.40495E-14
53	0.14662E-08	0.15886E-08	0.42074E-14
54	0.15222E-08	0.16492E-08	0.43680E-14
55	0.15791E-08	0.17108E-08	0.45313E-14
56	0.16368E-08	0.17734E-08	0.46970E-14
57	0.16954E-08	0.18369E-08	0.48651E-14
58	0.17548E-08	0.19012E-08	0.50354E-14
59	0.18149E-08	0.19663E-08	0.52079E-14
60	0.18756E-08	0.20321E-08	0.53822E-14
61	0.19370E-08	0.20986E-08	0.55583E-14
62	0.19989E-08	0.21656E-08	0.57358E-14
63	0.20612E-08	0.22332E-08	0.59148E-14
64	0.21240E-08	0.23012E-08	0.60948E-14
65	0.21870E-08	0.23694E-08	0.62757E-14
66	0.22502E-08	0.24380E-08	0.64572E-14
67	0.23136E-08	0.25066E-08	0.66390E-14
68	0.23770E-08	0.25753E-08	0.68208E-14
69	0.24402E-08	0.26438E-08	0.70023E-14
70	0.25033E-08	0.27121E-08	0.71833E-14
71	0.25660E-08	0.27801E-08	0.73632E-14
72	0.26283E-08	0.28475E-08	0.75419E-14
73	0.26899E-08	0.29143E-08	0.77188E-14
74	0.27508E-08	0.29803E-08	0.78936E-14
75	0.28108E-08	0.30453E-08	0.80658E-14
76	0.28698E-08	0.31092E-08	0.82349E-14
77	0.29275E-08	0.31717E-08	0.84006E-14
78	0.29838E-08	0.32327E-08	0.85622E-14
79	0.30386E-08	0.32921E-08	0.87193E-14
80	0.30915E-08	0.33494E-08	0.88712E-14
81	0.31425E-08	0.34047E-08	0.90175E-14
82	0.31913E-08	0.34575E-08	0.91575E-14
83	0.32376E-08	0.35077E-08	0.92905E-14
84	0.32813E-08	0.35551E-08	0.94159E-14
85	0.33222E-08	0.35993E-08	0.95330E-14
86	0.33598E-08	0.36401E-08	0.96411E-14
87	0.33941E-08	0.36772E-08	0.97395E-14
88	0.34247E-08	0.37104E-08	0.98272E-14
89	0.34513E-08	0.37392E-08	0.99036E-14
90	0.34736E-08	0.37634E-08	0.99677E-14
91	0.34914E-08	0.37827E-08	0.10019E-13
92	0.35043E-08	0.37967E-08	0.10056E-13
93	0.35120E-08	0.38050E-08	0.10078E-13
94	0.35142E-08	0.38073E-08	0.10084E-13
95	0.35104E-08	0.38032E-08	0.10073E-13
96	0.35004E-08	0.37924E-08	0.10044E-13
97	0.34837E-08	0.37743E-08	0.99965E-14
98	0.34599E-08	0.37486E-08	0.99284E-14
99	0.34288E-08	0.37148E-08	0.98390E-14
100	0.33897E-08	0.36725E-08	0.97270E-14

POLYGON I

Time:	100.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.40659E-12	0.44051E-12	0.11667E-17
2	0.87293E-12	0.94575E-12	0.25049E-17
3	0.13998E-11	0.15166E-11	0.40168E-17
4	0.19881E-11	0.21539E-11	0.57049E-17
5	0.26387E-11	0.28588E-11	0.75718E-17
6	0.33526E-11	0.36323E-11	0.96205E-17
7	0.41310E-11	0.44756E-11	0.11854E-16
8	0.49749E-11	0.53899E-11	0.14276E-16
9	0.58855E-11	0.63765E-11	0.16889E-16
10	0.68641E-11	0.74368E-11	0.19697E-16
11	0.79120E-11	0.85721E-11	0.22704E-16
12	0.90305E-11	0.97839E-11	0.25914E-16
13	0.10221E-10	0.11074E-10	0.29330E-16
14	0.11485E-10	0.12443E-10	0.32956E-16
15	0.12824E-10	0.13893E-10	0.36798E-16
16	0.14239E-10	0.15426E-10	0.40858E-16
17	0.15731E-10	0.17044E-10	0.45142E-16
18	0.17303E-10	0.18747E-10	0.49653E-16
19	0.18956E-10	0.20538E-10	0.54395E-16
20	0.20691E-10	0.22417E-10	0.59374E-16
21	0.22510E-10	0.24388E-10	0.64593E-16
22	0.24414E-10	0.26451E-10	0.70057E-16

23	0.26405E-10	0.28608E-10	0.75770E-16
24	0.28484E-10	0.30860E-10	0.81736E-16
25	0.30653E-10	0.33210E-10	0.87959E-16
26	0.32913E-10	0.35658E-10	0.94444E-16
27	0.35265E-10	0.38207E-10	0.10119E-15
28	0.37711E-10	0.40857E-10	0.10821E-15
29	0.40252E-10	0.43610E-10	0.11551E-15
30	0.42890E-10	0.46468E-10	0.12307E-15
31	0.45625E-10	0.49431E-10	0.13092E-15
32	0.48458E-10	0.52501E-10	0.13905E-15
33	0.51391E-10	0.55679E-10	0.14747E-15
34	0.54425E-10	0.58965E-10	0.15617E-15
35	0.57560E-10	0.62362E-10	0.16517E-15
36	0.60797E-10	0.65868E-10	0.17446E-15
37	0.64136E-10	0.69487E-10	0.18404E-15
38	0.67579E-10	0.73216E-10	0.19392E-15
39	0.71125E-10	0.77058E-10	0.20410E-15
40	0.74775E-10	0.81013E-10	0.21457E-15
41	0.78528E-10	0.85079E-10	0.22534E-15
42	0.82385E-10	0.89258E-10	0.23641E-15
43	0.86346E-10	0.93549E-10	0.24777E-15
44	0.90409E-10	0.97951E-10	0.25943E-15
45	0.94574E-10	0.10246E-09	0.27138E-15
46	0.98841E-10	0.10709E-09	0.28363E-15
47	0.10321E-09	0.11182E-09	0.29616E-15
48	0.10767E-09	0.11666E-09	0.30898E-15
49	0.11224E-09	0.12160E-09	0.32207E-15
50	0.11690E-09	0.12665E-09	0.33544E-15
51	0.12165E-09	0.13180E-09	0.34907E-15
52	0.12649E-09	0.13704E-09	0.36297E-15
53	0.13142E-09	0.14239E-09	0.37712E-15
54	0.13644E-09	0.14782E-09	0.39152E-15
55	0.14154E-09	0.15335E-09	0.40615E-15
56	0.14671E-09	0.15895E-09	0.42100E-15
57	0.15197E-09	0.16464E-09	0.43607E-15
58	0.15729E-09	0.17041E-09	0.45134E-15
59	0.16267E-09	0.17624E-09	0.46679E-15
60	0.16812E-09	0.18214E-09	0.48242E-15
61	0.17362E-09	0.18810E-09	0.49820E-15
62	0.17916E-09	0.19411E-09	0.51412E-15
63	0.18475E-09	0.20017E-09	0.53016E-15
64	0.19038E-09	0.20626E-09	0.54629E-15
65	0.19603E-09	0.21238E-09	0.56250E-15
66	0.20169E-09	0.21852E-09	0.57877E-15
67	0.20737E-09	0.22467E-09	0.59507E-15
68	0.21305E-09	0.23083E-09	0.61136E-15
69	0.21872E-09	0.23697E-09	0.62764E-15
70	0.22438E-09	0.24309E-09	0.64385E-15
71	0.23000E-09	0.24918E-09	0.65999E-15
72	0.23558E-09	0.25523E-09	0.67600E-15
73	0.24110E-09	0.26122E-09	0.69186E-15
74	0.24656E-09	0.26713E-09	0.70752E-15
75	0.25194E-09	0.27296E-09	0.72296E-15
76	0.25723E-09	0.27868E-09	0.73812E-15
77	0.26240E-09	0.28429E-09	0.75297E-15
78	0.26745E-09	0.28976E-09	0.76745E-15
79	0.27235E-09	0.29508E-09	0.78153E-15
80	0.27710E-09	0.30022E-09	0.79515E-15
81	0.28167E-09	0.30517E-09	0.80826E-15
82	0.28604E-09	0.30990E-09	0.82081E-15
83	0.29020E-09	0.31441E-09	0.83273E-15
84	0.29411E-09	0.31865E-09	0.84397E-15
85	0.29777E-09	0.32261E-09	0.85447E-15
86	0.30115E-09	0.32627E-09	0.86416E-15
87	0.30422E-09	0.32960E-09	0.87297E-15
88	0.30696E-09	0.33257E-09	0.88084E-15
89	0.30935E-09	0.33515E-09	0.88768E-15
90	0.31135E-09	0.33733E-09	0.89343E-15
91	0.31295E-09	0.33905E-09	0.89801E-15
92	0.31410E-09	0.34031E-09	0.90133E-15
93	0.31479E-09	0.34105E-09	0.90331E-15
94	0.31498E-09	0.34126E-09	0.90386E-15
95	0.31465E-09	0.34089E-09	0.90289E-15
96	0.31375E-09	0.33992E-09	0.90031E-15
97	0.31225E-09	0.33830E-09	0.89601E-15
98	0.31012E-09	0.33599E-09	0.88991E-15
99	0.30733E-09	0.33297E-09	0.88189E-15
100	0.30383E-09	0.32918E-09	0.87186E-15

POLYGON 1

Time:

Cell

110.000

Cgas(g/cu.ft)

Cliq(g/cu.ft)

Csol(g/g)

1	0.36443E-13	0.39484E-13	0.10458E-18
2	0.78243E-13	0.84770E-13	0.22452E-18
3	0.12547E-12	0.13594E-12	0.36004E-18
4	0.17820E-12	0.19306E-12	0.51134E-18
5	0.23651E-12	0.25624E-12	0.67868E-18
6	0.30050E-12	0.32557E-12	0.86231E-18
7	0.37027E-12	0.40116E-12	0.10625E-17
8	0.44591E-12	0.48311E-12	0.12796E-17

9	0.52753E-12	0.57154E-12	0.15138E-17
10	0.61525E-12	0.66658E-12	0.17655E-17
11	0.70918E-12	0.76834E-12	0.20350E-17
12	0.80943E-12	0.87696E-12	0.23227E-17
13	0.91614E-12	0.99257E-12	0.26289E-17
14	0.10294E-11	0.11153E-11	0.29540E-17
15	0.11494E-11	0.12453E-11	0.32983E-17
16	0.12762E-11	0.13827E-11	0.36622E-17
17	0.14100E-11	0.15277E-11	0.40462E-17
18	0.15509E-11	0.16803E-11	0.44505E-17
19	0.16991E-11	0.18408E-11	0.48756E-17
20	0.18546E-11	0.20093E-11	0.53219E-17
21	0.20176E-11	0.21859E-11	0.57897E-17
22	0.21883E-11	0.23709E-11	0.62794E-17
23	0.23667E-11	0.25642E-11	0.67915E-17
24	0.25531E-11	0.27661E-11	0.73262E-17
25	0.27475E-11	0.29767E-11	0.78840E-17
26	0.29500E-11	0.31961E-11	0.84653E-17
27	0.31609E-11	0.34246E-11	0.90703E-17
28	0.33801E-11	0.36621E-11	0.96994E-17
29	0.36079E-11	0.39089E-11	0.10353E-16
30	0.38443E-11	0.41650E-11	0.11031E-16
31	0.40895E-11	0.44306E-11	0.11735E-16
32	0.43434E-11	0.47058E-11	0.12464E-16
33	0.46063E-11	0.49906E-11	0.13218E-16
34	0.48782E-11	0.52852E-11	0.13998E-16
35	0.51592E-11	0.55896E-11	0.14805E-16
36	0.54494E-11	0.59040E-11	0.15637E-16
37	0.57487E-11	0.62283E-11	0.16496E-16
38	0.60573E-11	0.65626E-11	0.17382E-16
39	0.63751E-11	0.69069E-11	0.18294E-16
40	0.67022E-11	0.72614E-11	0.19232E-16
41	0.70387E-11	0.76259E-11	0.20198E-16
42	0.73844E-11	0.80004E-11	0.21190E-16
43	0.77394E-11	0.83850E-11	0.22208E-16
44	0.81036E-11	0.87796E-11	0.23254E-16
45	0.84769E-11	0.91841E-11	0.24325E-16
46	0.88594E-11	0.95985E-11	0.25422E-16
47	0.92508E-11	0.10023E-10	0.26546E-16
48	0.96511E-11	0.10456E-10	0.27694E-16
49	0.10060E-10	0.10899E-10	0.28868E-16
50	0.10478E-10	0.11352E-10	0.30066E-16
51	0.10904E-10	0.11813E-10	0.31288E-16
52	0.11338E-10	0.12284E-10	0.32534E-16
53	0.11780E-10	0.12762E-10	0.33802E-16
54	0.12229E-10	0.13250E-10	0.35093E-16
55	0.12686E-10	0.13745E-10	0.36404E-16
56	0.13150E-10	0.14247E-10	0.37736E-16
57	0.13621E-10	0.14757E-10	0.39086E-16
58	0.14098E-10	0.15274E-10	0.40455E-16
59	0.14581E-10	0.15797E-10	0.41840E-16
60	0.15069E-10	0.16326E-10	0.43240E-16
61	0.15562E-10	0.16860E-10	0.44655E-16
62	0.16059E-10	0.17399E-10	0.46082E-16
63	0.16560E-10	0.17941E-10	0.47519E-16
64	0.17064E-10	0.18487E-10	0.48966E-16
65	0.17570E-10	0.19036E-10	0.50419E-16
66	0.18078E-10	0.19587E-10	0.51877E-16
67	0.18587E-10	0.20138E-10	0.53337E-16
68	0.19096E-10	0.20690E-10	0.54798E-16
69	0.19605E-10	0.21240E-10	0.56257E-16
70	0.20111E-10	0.21789E-10	0.57710E-16
71	0.20615E-10	0.22335E-10	0.59156E-16
72	0.21115E-10	0.22877E-10	0.60591E-16
73	0.21611E-10	0.23414E-10	0.62013E-16
74	0.22100E-10	0.23944E-10	0.63417E-16
75	0.22582E-10	0.24466E-10	0.64800E-16
76	0.23056E-10	0.24979E-10	0.66159E-16
77	0.23520E-10	0.25482E-10	0.67490E-16
78	0.23972E-10	0.25972E-10	0.68789E-16
79	0.24412E-10	0.26448E-10	0.70051E-16
80	0.24837E-10	0.26909E-10	0.71272E-16
81	0.25247E-10	0.27353E-10	0.72447E-16
82	0.25639E-10	0.27778E-10	0.73571E-16
83	0.26011E-10	0.28181E-10	0.74640E-16
84	0.26362E-10	0.28561E-10	0.75647E-16
85	0.26690E-10	0.28917E-10	0.76588E-16
86	0.26993E-10	0.29245E-10	0.77457E-16
87	0.27268E-10	0.29543E-10	0.78247E-16
88	0.27514E-10	0.29809E-10	0.78952E-16
89	0.27728E-10	0.30041E-10	0.79565E-16
90	0.27907E-10	0.30235E-10	0.80081E-16
91	0.28050E-10	0.30390E-10	0.80491E-16
92	0.28154E-10	0.30502E-10	0.80788E-16
93	0.28216E-10	0.30569E-10	0.80966E-16
94	0.28233E-10	0.30588E-10	0.81015E-16
95	0.28203E-10	0.30555E-10	0.80928E-16
96	0.28122E-10	0.30468E-10	0.80697E-16
97	0.27988E-10	0.30323E-10	0.80312E-16
98	0.27797E-10	0.30116E-10	0.79765E-16

99	0.27547E-10	0.29845E-10	0.79046E-16
100	0.27233E-10	0.29505E-10	0.78147E-16

POLYGON I

Time:

Cell

	120.000		
	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.32665E-14	0.35390E-14	0.93734E-20
2	0.70131E-14	0.75981E-14	0.20124E-19
3	0.11246E-13	0.12184E-13	0.32271E-19
4	0.15972E-13	0.17305E-13	0.45833E-19
5	0.21199E-13	0.22968E-13	0.60832E-19
6	0.26935E-13	0.29182E-13	0.77291E-19
7	0.33188E-13	0.35957E-13	0.95235E-19
8	0.39968E-13	0.43302E-13	0.11469E-18
9	0.47284E-13	0.51229E-13	0.13568E-18
10	0.55146E-13	0.59747E-13	0.15825E-18
11	0.63565E-13	0.68868E-13	0.18240E-18
12	0.72551E-13	0.78604E-13	0.20819E-18
13	0.82116E-13	0.88966E-13	0.23563E-18
14	0.92270E-13	0.99967E-13	0.26477E-18
15	0.10302E-12	0.11162E-12	0.29563E-18
16	0.11439E-12	0.12394E-12	0.32825E-18
17	0.12639E-12	0.13693E-12	0.36267E-18
18	0.13902E-12	0.15061E-12	0.39891E-18
19	0.15229E-12	0.16500E-12	0.43701E-18
20	0.16623E-12	0.18010E-12	0.47701E-18
21	0.18085E-12	0.19593E-12	0.51894E-18
22	0.19614E-12	0.21251E-12	0.56284E-18
23	0.21214E-12	0.22983E-12	0.60874E-18
24	0.22884E-12	0.24793E-12	0.65667E-18
25	0.24626E-12	0.26681E-12	0.70667E-18
26	0.26442E-12	0.28648E-12	0.75876E-18
27	0.28332E-12	0.30695E-12	0.81299E-18
28	0.30297E-12	0.32825E-12	0.86939E-18
29	0.32339E-12	0.35036E-12	0.92797E-18
30	0.34458E-12	0.37332E-12	0.98877E-18
31	0.36655E-12	0.39713E-12	0.10518E-17
32	0.38931E-12	0.42179E-12	0.11171E-17
33	0.41288E-12	0.44732E-12	0.11848E-17
34	0.43725E-12	0.47373E-12	0.12547E-17
35	0.46243E-12	0.50101E-12	0.13270E-17
36	0.48844E-12	0.52919E-12	0.14016E-17
37	0.51527E-12	0.55825E-12	0.14786E-17
38	0.54293E-12	0.58822E-12	0.15580E-17
39	0.57142E-12	0.61909E-12	0.16397E-17
40	0.60074E-12	0.65085E-12	0.17238E-17
41	0.63089E-12	0.68353E-12	0.18104E-17
42	0.66188E-12	0.71710E-12	0.18993E-17
43	0.69370E-12	0.75157E-12	0.19906E-17
44	0.72634E-12	0.78694E-12	0.20843E-17
45	0.75981E-12	0.82320E-12	0.21803E-17
46	0.79409E-12	0.86033E-12	0.22787E-17
47	0.82917E-12	0.89835E-12	0.23793E-17
48	0.86505E-12	0.93722E-12	0.24823E-17
49	0.90171E-12	0.97694E-12	0.25875E-17
50	0.93914E-12	0.10175E-11	0.26949E-17
51	0.97732E-12	0.10589E-11	0.28045E-17
52	0.10162E-11	0.11010E-11	0.29161E-17
53	0.10558E-11	0.11439E-11	0.30298E-17
54	0.10961E-11	0.11876E-11	0.31454E-17
55	0.11371E-11	0.12320E-11	0.32630E-17
56	0.11787E-11	0.12770E-11	0.33823E-17
57	0.12209E-11	0.13227E-11	0.35034E-17
58	0.12636E-11	0.13691E-11	0.36261E-17
59	0.13069E-11	0.14159E-11	0.37502E-17
60	0.13507E-11	0.14633E-11	0.38758E-17
61	0.13948E-11	0.15112E-11	0.40025E-17
62	0.14394E-11	0.15595E-11	0.41304E-17
63	0.14843E-11	0.16081E-11	0.42593E-17
64	0.15295E-11	0.16571E-11	0.43889E-17
65	0.15749E-11	0.17063E-11	0.45192E-17
66	0.16204E-11	0.17556E-11	0.46498E-17
67	0.16660E-11	0.18050E-11	0.47808E-17
68	0.17117E-11	0.18545E-11	0.49117E-17
69	0.17572E-11	0.19038E-11	0.50424E-17
70	0.18026E-11	0.19530E-11	0.51727E-17
71	0.18478E-11	0.20019E-11	0.53023E-17
72	0.18926E-11	0.20505E-11	0.54310E-17
73	0.19370E-11	0.20986E-11	0.55584E-17
74	0.19809E-11	0.21461E-11	0.56842E-17
75	0.20241E-11	0.21930E-11	0.58082E-17
76	0.20665E-11	0.22389E-11	0.59300E-17
77	0.21081E-11	0.22840E-11	0.60493E-17
78	0.21487E-11	0.23279E-11	0.61657E-17
79	0.21881E-11	0.23706E-11	0.62788E-17
80	0.22262E-11	0.24119E-11	0.63882E-17
81	0.22629E-11	0.24517E-11	0.64936E-17
82	0.22981E-11	0.24898E-11	0.65944E-17
83	0.23314E-11	0.25259E-11	0.66902E-17
84	0.23629E-11	0.25600E-11	0.67805E-17

85	0.23923E-11	0.25919E-11	0.68648E-17
86	0.24194E-11	0.26213E-11	0.69427E-17
87	0.24441E-11	0.26480E-11	0.70135E-17
88	0.24661E-11	0.26719E-11	0.70766E-17
89	0.24853E-11	0.26926E-11	0.71316E-17
90	0.25014E-11	0.27101E-11	0.71778E-17
91	0.25142E-11	0.27239E-11	0.72146E-17
92	0.25235E-11	0.27340E-11	0.72413E-17
93	0.25290E-11	0.27400E-11	0.72572E-17
94	0.25306E-11	0.27417E-11	0.72616E-17
95	0.25279E-11	0.27387E-11	0.72538E-17
96	0.25206E-11	0.27309E-11	0.72331E-17
97	0.25086E-11	0.27179E-11	0.71986E-17
98	0.24915E-11	0.26994E-11	0.71495E-17
99	0.24691E-11	0.26751E-11	0.70851E-17
100	0.24410E-11	0.26446E-11	0.70045E-17

POLYGON I

Time:	130.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.29279E-15	0.31721E-15	0.84016E-21
2	0.62860E-15	0.68104E-15	0.18038E-20
3	0.10080E-14	0.10921E-14	0.28925E-20
4	0.14316E-14	0.15511E-14	0.41081E-20
5	0.19001E-14	0.20586E-14	0.54525E-20
6	0.24142E-14	0.26157E-14	0.69278E-20
7	0.29747E-14	0.32229E-14	0.85362E-20
8	0.35824E-14	0.38813E-14	0.10280E-19
9	0.42382E-14	0.45918E-14	0.12162E-19
10	0.49429E-14	0.53553E-14	0.14184E-19
11	0.56975E-14	0.61728E-14	0.16349E-19
12	0.65030E-14	0.70455E-14	0.18661E-19
13	0.73602E-14	0.79743E-14	0.21121E-19
14	0.82704E-14	0.89603E-14	0.23732E-19
15	0.92344E-14	0.10005E-13	0.26498E-19
16	0.10253E-13	0.11109E-13	0.29422E-19
17	0.11328E-13	0.12273E-13	0.32507E-19
18	0.12460E-13	0.13500E-13	0.35755E-19
19	0.13650E-13	0.14789E-13	0.39171E-19
20	0.14900E-13	0.16143E-13	0.42756E-19
21	0.16210E-13	0.17562E-13	0.46514E-19
22	0.17581E-13	0.19047E-13	0.50449E-19
23	0.19014E-13	0.20601E-13	0.54563E-19
24	0.20512E-13	0.22223E-13	0.58859E-19
25	0.22073E-13	0.23915E-13	0.63340E-19
26	0.23701E-13	0.25678E-13	0.68010E-19
27	0.25395E-13	0.27513E-13	0.72871E-19
28	0.27156E-13	0.29421E-13	0.77925E-19
29	0.28986E-13	0.31404E-13	0.83176E-19
30	0.30885E-13	0.33462E-13	0.88626E-19
31	0.32855E-13	0.35596E-13	0.94278E-19
32	0.34895E-13	0.37806E-13	0.10013E-18
33	0.37007E-13	0.40095E-13	0.10619E-18
34	0.39192E-13	0.42461E-13	0.11246E-18
35	0.41449E-13	0.44907E-13	0.11894E-18
36	0.43780E-13	0.47432E-13	0.12563E-18
37	0.46185E-13	0.50038E-13	0.13253E-18
38	0.48664E-13	0.52724E-13	0.13964E-18
39	0.51218E-13	0.55490E-13	0.14697E-18
40	0.53846E-13	0.58338E-13	0.15451E-18
41	0.56549E-13	0.61266E-13	0.16227E-18
42	0.59326E-13	0.64275E-13	0.17024E-18
43	0.62178E-13	0.67365E-13	0.17842E-18
44	0.65104E-13	0.70535E-13	0.18682E-18
45	0.68104E-13	0.73785E-13	0.19543E-18
46	0.71176E-13	0.77114E-13	0.20424E-18
47	0.74321E-13	0.80521E-13	0.21327E-18
48	0.77537E-13	0.84005E-13	0.22250E-18
49	0.80823E-13	0.87565E-13	0.23192E-18
50	0.84178E-13	0.91200E-13	0.24155E-18
51	0.87600E-13	0.94907E-13	0.25137E-18
52	0.91087E-13	0.98686E-13	0.26138E-18
53	0.94638E-13	0.10253E-12	0.27157E-18
54	0.98251E-13	0.10645E-12	0.28193E-18
55	0.10192E-12	0.11042E-12	0.29247E-18
56	0.10565E-12	0.11446E-12	0.30317E-18
57	0.10943E-12	0.11856E-12	0.31402E-18
58	0.11326E-12	0.12271E-12	0.32501E-18
59	0.11714E-12	0.12691E-12	0.33614E-18
60	0.12106E-12	0.13116E-12	0.34739E-18
61	0.12502E-12	0.13545E-12	0.35876E-18
62	0.12902E-12	0.13978E-12	0.37022E-18
63	0.13304E-12	0.14414E-12	0.38177E-18
64	0.13709E-12	0.14853E-12	0.39339E-18
65	0.14116E-12	0.15294E-12	0.40506E-18
66	0.14524E-12	0.15736E-12	0.41678E-18
67	0.14933E-12	0.16179E-12	0.42851E-18
68	0.15342E-12	0.16622E-12	0.44025E-18
69	0.15750E-12	0.17064E-12	0.45197E-18
70	0.16157E-12	0.17505E-12	0.46364E-18

71	0.16562E-12	0.17944E-12	0.47526E-18
72	0.16964E-12	0.18379E-12	0.48679E-18
73	0.17362E-12	0.18810E-12	0.49821E-18
74	0.17755E-12	0.19236E-12	0.50949E-18
75	0.18142E-12	0.19656E-12	0.52061E-18
76	0.18523E-12	0.20068E-12	0.53152E-18
77	0.18896E-12	0.20472E-12	0.54222E-18
78	0.19259E-12	0.20866E-12	0.55265E-18
79	0.19612E-12	0.21249E-12	0.56279E-18
80	0.19954E-12	0.21619E-12	0.57259E-18
81	0.20283E-12	0.21975E-12	0.58204E-18
82	0.20598E-12	0.22316E-12	0.59107E-18
83	0.20897E-12	0.22641E-12	0.59966E-18
84	0.21179E-12	0.22946E-12	0.60775E-18
85	0.21443E-12	0.23232E-12	0.61531E-18
86	0.21686E-12	0.23495E-12	0.62229E-18
87	0.21907E-12	0.23735E-12	0.62863E-18
88	0.22105E-12	0.23949E-12	0.63430E-18
89	0.22276E-12	0.24135E-12	0.63923E-18
90	0.22421E-12	0.24291E-12	0.64337E-18
91	0.22535E-12	0.24415E-12	0.64666E-18
92	0.22619E-12	0.24506E-12	0.64905E-18
93	0.22668E-12	0.24559E-12	0.65048E-18
94	0.22682E-12	0.24574E-12	0.65088E-18
95	0.22658E-12	0.24548E-12	0.65018E-18
96	0.22593E-12	0.24478E-12	0.64832E-18
97	0.22485E-12	0.24361E-12	0.64523E-18
98	0.22332E-12	0.24195E-12	0.64083E-18
99	0.22131E-12	0.23977E-12	0.63506E-18
100	0.21879E-12	0.23704E-12	0.62783E-18

POLYGON I

Time:	140.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26243E-16	0.28432E-16	0.75306E-22
2	0.56343E-16	0.61044E-16	0.16168E-21
3	0.90350E-16	0.97888E-16	0.25926E-21
4	0.12832E-15	0.13903E-15	0.36822E-21
5	0.17031E-15	0.18452E-15	0.48872E-21
6	0.21640E-15	0.23445E-15	0.62095E-21
7	0.26663E-15	0.28888E-15	0.76512E-21
8	0.32110E-15	0.34789E-15	0.92142E-21
9	0.37988E-15	0.41157E-15	0.10901E-20
10	0.44305E-15	0.48001E-15	0.12713E-20
11	0.51068E-15	0.55329E-15	0.14654E-20
12	0.58288E-15	0.63150E-15	0.16726E-20
13	0.65972E-15	0.71475E-15	0.18931E-20
14	0.74129E-15	0.80314E-15	0.21272E-20
15	0.82770E-15	0.89675E-15	0.23751E-20
16	0.91903E-15	0.99570E-15	0.26372E-20
17	0.10154E-14	0.11001E-14	0.29137E-20
18	0.11168E-14	0.12100E-14	0.32048E-20
19	0.12235E-14	0.13256E-14	0.35110E-20
20	0.13355E-14	0.14469E-14	0.38323E-20
21	0.14529E-14	0.15741E-14	0.41692E-20
22	0.15758E-14	0.17073E-14	0.45218E-20
23	0.17043E-14	0.18465E-14	0.48906E-20
24	0.18385E-14	0.19919E-14	0.52757E-20
25	0.19785E-14	0.21435E-14	0.56773E-20
26	0.21243E-14	0.23016E-14	0.60959E-20
27	0.22762E-14	0.24661E-14	0.65316E-20
28	0.24341E-14	0.26371E-14	0.69846E-20
29	0.25981E-14	0.28148E-14	0.74553E-20
30	0.27683E-14	0.29993E-14	0.79438E-20
31	0.29448E-14	0.31905E-14	0.84504E-20
32	0.31277E-14	0.33887E-14	0.89752E-20
33	0.33171E-14	0.35938E-14	0.95184E-20
34	0.35129E-14	0.38059E-14	0.10080E-19
35	0.37152E-14	0.40251E-14	0.10661E-19
36	0.39241E-14	0.42515E-14	0.11260E-19
37	0.41397E-14	0.44850E-14	0.11879E-19
38	0.43619E-14	0.47258E-14	0.12517E-19
39	0.45908E-14	0.49737E-14	0.13173E-19
40	0.48263E-14	0.52290E-14	0.13849E-19
41	0.50686E-14	0.54914E-14	0.14545E-19
42	0.53176E-14	0.57612E-14	0.15259E-19
43	0.55732E-14	0.60381E-14	0.15992E-19
44	0.58354E-14	0.63223E-14	0.16745E-19
45	0.61043E-14	0.66135E-14	0.17517E-19
46	0.63797E-14	0.69119E-14	0.18307E-19
47	0.66616E-14	0.72173E-14	0.19116E-19
48	0.69498E-14	0.75296E-14	0.19943E-19
49	0.72444E-14	0.78487E-14	0.20788E-19
50	0.75451E-14	0.81745E-14	0.21651E-19
51	0.78518E-14	0.85068E-14	0.22531E-19
52	0.81644E-14	0.88455E-14	0.23428E-19
53	0.84827E-14	0.91903E-14	0.24341E-19
54	0.88065E-14	0.95411E-14	0.25270E-19
55	0.91355E-14	0.98977E-14	0.26215E-19
56	0.94697E-14	0.10260E-13	0.27174E-19

57	0.98086E-14	0.10627E-13	0.28146E-19
58	0.10152E-13	0.10999E-13	0.29132E-19
59	0.10500E-13	0.11376E-13	0.30129E-19
60	0.10851E-13	0.11756E-13	0.31138E-19
61	0.11206E-13	0.12141E-13	0.32156E-19
62	0.11564E-13	0.12529E-13	0.33184E-19
63	0.11925E-13	0.12920E-13	0.34219E-19
64	0.12288E-13	0.13313E-13	0.35260E-19
65	0.12653E-13	0.13708E-13	0.36307E-19
66	0.13018E-13	0.14104E-13	0.37357E-19
67	0.13385E-13	0.14502E-13	0.38409E-19
68	0.13752E-13	0.14899E-13	0.39461E-19
69	0.14118E-13	0.15295E-13	0.40511E-19
70	0.14482E-13	0.15690E-13	0.41558E-19
71	0.14845E-13	0.16084E-13	0.42599E-19
72	0.15205E-13	0.16474E-13	0.43632E-19
73	0.15562E-13	0.16860E-13	0.44656E-19
74	0.15914E-13	0.17242E-13	0.45667E-19
75	0.16262E-13	0.17618E-13	0.46663E-19
76	0.16603E-13	0.17988E-13	0.47642E-19
77	0.16937E-13	0.18349E-13	0.48600E-19
78	0.17262E-13	0.18703E-13	0.49535E-19
79	0.17579E-13	0.19046E-13	0.50444E-19
80	0.17885E-13	0.19378E-13	0.51323E-19
81	0.18180E-13	0.19697E-13	0.52169E-19
82	0.18463E-13	0.20003E-13	0.52979E-19
83	0.18731E-13	0.20293E-13	0.53749E-19
84	0.18984E-13	0.20567E-13	0.54474E-19
85	0.19220E-13	0.20823E-13	0.55152E-19
86	0.19438E-13	0.21059E-13	0.55777E-19
87	0.19636E-13	0.21274E-13	0.56346E-19
88	0.19813E-13	0.21466E-13	0.56854E-19
89	0.19967E-13	0.21633E-13	0.57296E-19
90	0.20096E-13	0.21773E-13	0.57667E-19
91	0.20199E-13	0.21884E-13	0.57962E-19
92	0.20274E-13	0.21965E-13	0.58176E-19
93	0.20318E-13	0.22013E-13	0.58304E-19
94	0.20331E-13	0.22027E-13	0.58340E-19
95	0.20309E-13	0.22003E-13	0.58277E-19
96	0.20251E-13	0.21940E-13	0.58110E-19
97	0.20154E-13	0.21836E-13	0.57833E-19
98	0.20017E-13	0.21687E-13	0.57439E-19
99	0.19837E-13	0.21491E-13	0.56922E-19
100	0.19611E-13	0.21247E-13	0.56274E-19

POLYGON I

Time: 150.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.23522E-17	0.25485E-17	0.67498E-23
2	0.50502E-17	0.54715E-17	0.14492E-22
3	0.80983E-17	0.87739E-17	0.23238E-22
4	0.11502E-16	0.12461E-16	0.33005E-22
5	0.15266E-16	0.16539E-16	0.43805E-22
6	0.19396E-16	0.21014E-16	0.55658E-22
7	0.23899E-16	0.25893E-16	0.68579E-22
8	0.28781E-16	0.31182E-16	0.82589E-22
9	0.34050E-16	0.36890E-16	0.97707E-22
10	0.39711E-16	0.43024E-16	0.11395E-21
11	0.45774E-16	0.49592E-16	0.13135E-21
12	0.52245E-16	0.56603E-16	0.14992E-21
13	0.59132E-16	0.64065E-16	0.16968E-21
14	0.66444E-16	0.71987E-16	0.19066E-21
15	0.74189E-16	0.80378E-16	0.21289E-21
16	0.82375E-16	0.89247E-16	0.23638E-21
17	0.91011E-16	0.98604E-16	0.26116E-21
18	0.10011E-15	0.10846E-15	0.28726E-21
19	0.10967E-15	0.11882E-15	0.31470E-21
20	0.11971E-15	0.12969E-15	0.34350E-21
21	0.13023E-15	0.14109E-15	0.37369E-21
22	0.14124E-15	0.15303E-15	0.40530E-21
23	0.15276E-15	0.16551E-15	0.43836E-21
24	0.16479E-15	0.17854E-15	0.47287E-21
25	0.17734E-15	0.19213E-15	0.50887E-21
26	0.19041E-15	0.20630E-15	0.54639E-21
27	0.20402E-15	0.22104E-15	0.58544E-21
28	0.21817E-15	0.23637E-15	0.62605E-21
29	0.23287E-15	0.25230E-15	0.66824E-21
30	0.24813E-15	0.26883E-15	0.71202E-21
31	0.26395E-15	0.28597E-15	0.75743E-21
32	0.28035E-15	0.30373E-15	0.80447E-21
33	0.29732E-15	0.32212E-15	0.85316E-21
34	0.31487E-15	0.34113E-15	0.90352E-21
35	0.33300E-15	0.36078E-15	0.95556E-21
36	0.35173E-15	0.38107E-15	0.10093E-20
37	0.37105E-15	0.40200E-15	0.10647E-20
38	0.39097E-15	0.42358E-15	0.11219E-20
39	0.41148E-15	0.44581E-15	0.11808E-20
40	0.43260E-15	0.46869E-15	0.12414E-20
41	0.45431E-15	0.49221E-15	0.13037E-20
42	0.47663E-15	0.51639E-15	0.13677E-20

43	0.49954E-15	0.54121E-15	0.14334E-20
44	0.52305E-15	0.56668E-15	0.15009E-20
45	0.54714E-15	0.59279E-15	0.15701E-20
46	0.57183E-15	0.61953E-15	0.16409E-20
47	0.59709E-15	0.64691E-15	0.17134E-20
48	0.62293E-15	0.67490E-15	0.17875E-20
49	0.64933E-15	0.70350E-15	0.18633E-20
50	0.67628E-15	0.73270E-15	0.19406E-20
51	0.70377E-15	0.76249E-15	0.20195E-20
52	0.73179E-15	0.79284E-15	0.20999E-20
53	0.76032E-15	0.82375E-15	0.21818E-20
54	0.78935E-15	0.85520E-15	0.22651E-20
55	0.81884E-15	0.88715E-15	0.23497E-20
56	0.84879E-15	0.91960E-15	0.24356E-20
57	0.87917E-15	0.95251E-15	0.25228E-20
58	0.90995E-15	0.98586E-15	0.26111E-20
59	0.94111E-15	0.10196E-14	0.27006E-20
60	0.97261E-15	0.10538E-14	0.27910E-20
61	0.10044E-14	0.10882E-14	0.28823E-20
62	0.10365E-14	0.11230E-14	0.29743E-20
63	0.10689E-14	0.11580E-14	0.30671E-20
64	0.11014E-14	0.11933E-14	0.31605E-20
65	0.11341E-14	0.12287E-14	0.32543E-20
66	0.11669E-14	0.12642E-14	0.33484E-20
67	0.11997E-14	0.12998E-14	0.34427E-20
68	0.12326E-14	0.13354E-14	0.35369E-20
69	0.12654E-14	0.13710E-14	0.36311E-20
70	0.12981E-14	0.14064E-14	0.37249E-20
71	0.13306E-14	0.14416E-14	0.38182E-20
72	0.13629E-14	0.14766E-14	0.39109E-20
73	0.13949E-14	0.15112E-14	0.40026E-20
74	0.14264E-14	0.15454E-14	0.40932E-20
75	0.14576E-14	0.15792E-14	0.41825E-20
76	0.14881E-14	0.16123E-14	0.42703E-20
77	0.15181E-14	0.16447E-14	0.43562E-20
78	0.15473E-14	0.16764E-14	0.44400E-20
79	0.15757E-14	0.17071E-14	0.45214E-20
80	0.16031E-14	0.17369E-14	0.46002E-20
81	0.16296E-14	0.17655E-14	0.46761E-20
82	0.16548E-14	0.17929E-14	0.47487E-20
83	0.16789E-14	0.18189E-14	0.48176E-20
84	0.17016E-14	0.18435E-14	0.48827E-20
85	0.17227E-14	0.18664E-14	0.49434E-20
86	0.17422E-14	0.18876E-14	0.49995E-20
87	0.17600E-14	0.19068E-14	0.50504E-20
88	0.17759E-14	0.19240E-14	0.50959E-20
89	0.17897E-14	0.19390E-14	0.51355E-20
90	0.18013E-14	0.19515E-14	0.51688E-20
91	0.18105E-14	0.19615E-14	0.51953E-20
92	0.18172E-14	0.19688E-14	0.52145E-20
93	0.18212E-14	0.19731E-14	0.52259E-20
94	0.18223E-14	0.19743E-14	0.52291E-20
95	0.18203E-14	0.19722E-14	0.52235E-20
96	0.18151E-14	0.19666E-14	0.52086E-20
97	0.18065E-14	0.19572E-14	0.51837E-20
98	0.17942E-14	0.19438E-14	0.51484E-20
99	0.17780E-14	0.19263E-14	0.51021E-20
100	0.17578E-14	0.19044E-14	0.50440E-20

POLYGON I

Time:	160.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.21084E-18	0.22843E-18	0.60501E-24
2	0.45266E-18	0.49042E-18	0.12989E-23
3	0.72587E-18	0.78643E-18	0.20829E-23
4	0.10309E-17	0.11169E-17	0.29583E-23
5	0.13683E-17	0.14824E-17	0.39264E-23
6	0.17385E-17	0.18836E-17	0.49887E-23
7	0.21421E-17	0.23208E-17	0.61469E-23
8	0.25797E-17	0.27950E-17	0.74027E-23
9	0.30520E-17	0.33066E-17	0.87577E-23
10	0.35594E-17	0.38564E-17	0.10214E-22
11	0.41028E-17	0.44451E-17	0.11773E-22
12	0.46828E-17	0.50735E-17	0.13438E-22
13	0.53002E-17	0.57423E-17	0.15209E-22
14	0.59556E-17	0.64524E-17	0.17090E-22
15	0.66497E-17	0.72045E-17	0.19082E-22
16	0.73835E-17	0.79994E-17	0.21187E-22
17	0.81576E-17	0.88381E-17	0.23408E-22
18	0.89727E-17	0.97213E-17	0.25748E-22
19	0.98298E-17	0.10650E-16	0.28207E-22
20	0.10730E-16	0.11625E-16	0.30789E-22
21	0.11673E-16	0.12646E-16	0.33495E-22
22	0.12660E-16	0.13716E-16	0.36328E-22
23	0.13692E-16	0.14835E-16	0.39291E-22
24	0.14771E-16	0.16003E-16	0.42385E-22
25	0.15895E-16	0.17221E-16	0.45612E-22
26	0.17067E-16	0.18491E-16	0.48974E-22
27	0.18287E-16	0.19812E-16	0.52475E-22
28	0.19555E-16	0.21187E-16	0.56115E-22

29	0.20873E-16	0.22614E-16	0.59896E-22
30	0.22241E-16	0.24096E-16	0.63820E-22
31	0.23659E-16	0.25633E-16	0.67890E-22
32	0.25128E-16	0.27224E-16	0.72106E-22
33	0.26649E-16	0.28872E-16	0.76471E-22
34	0.28222E-16	0.30577E-16	0.80985E-22
35	0.29848E-16	0.32338E-16	0.85650E-22
36	0.31526E-16	0.34156E-16	0.90466E-22
37	0.33258E-16	0.36033E-16	0.95435E-22
38	0.35043E-16	0.37967E-16	0.10056E-21
39	0.36882E-16	0.39959E-16	0.10583E-21
40	0.38775E-16	0.42009E-16	0.11127E-21
41	0.40721E-16	0.44118E-16	0.11685E-21
42	0.42721E-16	0.46285E-16	0.12259E-21
43	0.44775E-16	0.48510E-16	0.12848E-21
44	0.46882E-16	0.50793E-16	0.13453E-21
45	0.49042E-16	0.53133E-16	0.14073E-21
46	0.51255E-16	0.55530E-16	0.14708E-21
47	0.53519E-16	0.57984E-16	0.15358E-21
48	0.55835E-16	0.60493E-16	0.16022E-21
49	0.58201E-16	0.63056E-16	0.16701E-21
50	0.60617E-16	0.65674E-16	0.17394E-21
51	0.63081E-16	0.68344E-16	0.18101E-21
52	0.65592E-16	0.71064E-16	0.18822E-21
53	0.68150E-16	0.73835E-16	0.19556E-21
54	0.70751E-16	0.76653E-16	0.20302E-21
55	0.73395E-16	0.79518E-16	0.21061E-21
56	0.76079E-16	0.82426E-16	0.21831E-21
57	0.78802E-16	0.85376E-16	0.22613E-21
58	0.81561E-16	0.88366E-16	0.23404E-21
59	0.84354E-16	0.91391E-16	0.24206E-21
60	0.87178E-16	0.94451E-16	0.25016E-21
61	0.90030E-16	0.97540E-16	0.25834E-21
62	0.92906E-16	0.10066E-15	0.26660E-21
63	0.95804E-16	0.10380E-15	0.27491E-21
64	0.98720E-16	0.10696E-15	0.28328E-21
65	0.10165E-15	0.11013E-15	0.29169E-21
66	0.10459E-15	0.11331E-15	0.30012E-21
67	0.10753E-15	0.11651E-15	0.30857E-21
68	0.11048E-15	0.11970E-15	0.31703E-21
69	0.11342E-15	0.12288E-15	0.32546E-21
70	0.11635E-15	0.12606E-15	0.33387E-21
71	0.11927E-15	0.12922E-15	0.34224E-21
72	0.12216E-15	0.13235E-15	0.35054E-21
73	0.12503E-15	0.13546E-15	0.35876E-21
74	0.12786E-15	0.13852E-15	0.36689E-21
75	0.13065E-15	0.14154E-15	0.37489E-21
76	0.13339E-15	0.14451E-15	0.38275E-21
77	0.13607E-15	0.14742E-15	0.39045E-21
78	0.13869E-15	0.15026E-15	0.39797E-21
79	0.14123E-15	0.15301E-15	0.40527E-21
80	0.14369E-15	0.15568E-15	0.41233E-21
81	0.14606E-15	0.15825E-15	0.41913E-21
82	0.14833E-15	0.16070E-15	0.42563E-21
83	0.15048E-15	0.16304E-15	0.43182E-21
84	0.15251E-15	0.16524E-15	0.43765E-21
85	0.15441E-15	0.16729E-15	0.44309E-21
86	0.15616E-15	0.16919E-15	0.44811E-21
87	0.15775E-15	0.17092E-15	0.45268E-21
88	0.15918E-15	0.17246E-15	0.45676E-21
89	0.16041E-15	0.17380E-15	0.46031E-21
90	0.16145E-15	0.17492E-15	0.46329E-21
91	0.16228E-15	0.17582E-15	0.46567E-21
92	0.16288E-15	0.17647E-15	0.46739E-21
93	0.16324E-15	0.17685E-15	0.46841E-21
94	0.16334E-15	0.17696E-15	0.46870E-21
95	0.16316E-15	0.17677E-15	0.46820E-21
96	0.16269E-15	0.17627E-15	0.46686E-21
97	0.16192E-15	0.17543E-15	0.46463E-21
98	0.16082E-15	0.17423E-15	0.46147E-21
99	0.15937E-15	0.17266E-15	0.45731E-21
100	0.15755E-15	0.17070E-15	0.45211E-21

POLYGON 1

Time:	170.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.18898E-19	0.20474E-19	0.54228E-25
2	0.40573E-19	0.43958E-19	0.11643E-24
3	0.65062E-19	0.70490E-19	0.18670E-24
4	0.92404E-19	0.10011E-18	0.26516E-24
5	0.12264E-18	0.13288E-18	0.35193E-24
6	0.15583E-18	0.16883E-18	0.44715E-24
7	0.19201E-18	0.20802E-18	0.55097E-24
8	0.23123E-18	0.25052E-18	0.66352E-24
9	0.27356E-18	0.29638E-18	0.78498E-24
10	0.31904E-18	0.34566E-18	0.91550E-24
11	0.36775E-18	0.39843E-18	0.10553E-23
12	0.41973E-18	0.45475E-18	0.12044E-23
13	0.47507E-18	0.51470E-18	0.13632E-23
14	0.53381E-18	0.57834E-18	0.15318E-23

15	0.59603E-18	0.64576E-18	0.17103E-23
16	0.66180E-18	0.71701E-18	0.18991E-23
17	0.73118E-18	0.79218E-18	0.20982E-23
18	0.80425E-18	0.87134E-18	0.23078E-23
19	0.88107E-18	0.95457E-18	0.25283E-23
20	0.96171E-18	0.10419E-17	0.27597E-23
21	0.10463E-17	0.11335E-17	0.30023E-23
22	0.11348E-17	0.12294E-17	0.32562E-23
23	0.12273E-17	0.13297E-17	0.35217E-23
24	0.13239E-17	0.14344E-17	0.37990E-23
25	0.14247E-17	0.15436E-17	0.40883E-23
26	0.15298E-17	0.16574E-17	0.43897E-23
27	0.16391E-17	0.17758E-17	0.47034E-23
28	0.17528E-17	0.18990E-17	0.50297E-23
29	0.18709E-17	0.20270E-17	0.53686E-23
30	0.19935E-17	0.21598E-17	0.57204E-23
31	0.21206E-17	0.22975E-17	0.60852E-23
32	0.22523E-17	0.24402E-17	0.64631E-23
33	0.23886E-17	0.25879E-17	0.68543E-23
34	0.25296E-17	0.27407E-17	0.72589E-23
35	0.26753E-17	0.28985E-17	0.76770E-23
36	0.28258E-17	0.30615E-17	0.81087E-23
37	0.29810E-17	0.32297E-17	0.85541E-23
38	0.31410E-17	0.34031E-17	0.90133E-23
39	0.33058E-17	0.35816E-17	0.94862E-23
40	0.34755E-17	0.37654E-17	0.99730E-23
41	0.36499E-17	0.39544E-17	0.10474E-22
42	0.38292E-17	0.41487E-17	0.10988E-22
43	0.40133E-17	0.43481E-17	0.11516E-22
44	0.42021E-17	0.45527E-17	0.12058E-22
45	0.43958E-17	0.47625E-17	0.12614E-22
46	0.45941E-17	0.49773E-17	0.13183E-22
47	0.47970E-17	0.51972E-17	0.13765E-22
48	0.50046E-17	0.54221E-17	0.14361E-22
49	0.52167E-17	0.56519E-17	0.14970E-22
50	0.54332E-17	0.58865E-17	0.15591E-22
51	0.56541E-17	0.61258E-17	0.16225E-22
52	0.58792E-17	0.63697E-17	0.16871E-22
53	0.61084E-17	0.66180E-17	0.17528E-22
54	0.63416E-17	0.68706E-17	0.18197E-22
55	0.65786E-17	0.71274E-17	0.18877E-22
56	0.68192E-17	0.73881E-17	0.19568E-22
57	0.70633E-17	0.76525E-17	0.20268E-22
58	0.73106E-17	0.79204E-17	0.20978E-22
59	0.75609E-17	0.81916E-17	0.21696E-22
60	0.78140E-17	0.84659E-17	0.22423E-22
61	0.80696E-17	0.87428E-17	0.23156E-22
62	0.83274E-17	0.90221E-17	0.23896E-22
63	0.85872E-17	0.93036E-17	0.24641E-22
64	0.88486E-17	0.95867E-17	0.25391E-22
65	0.91112E-17	0.98712E-17	0.26145E-22
66	0.93746E-17	0.10157E-16	0.26901E-22
67	0.96386E-17	0.10443E-16	0.27658E-22
68	0.99026E-17	0.10729E-16	0.28416E-22
69	0.10166E-16	0.11014E-16	0.29172E-22
70	0.10429E-16	0.11299E-16	0.29926E-22
71	0.10690E-16	0.11582E-16	0.30676E-22
72	0.10949E-16	0.11863E-16	0.31420E-22
73	0.11206E-16	0.12141E-16	0.32157E-22
74	0.11460E-16	0.12416E-16	0.32885E-22
75	0.11710E-16	0.12687E-16	0.33602E-22
76	0.11956E-16	0.12953E-16	0.34307E-22
77	0.12196E-16	0.13214E-16	0.34997E-22
78	0.12431E-16	0.13468E-16	0.35671E-22
79	0.12659E-16	0.13715E-16	0.36325E-22
80	0.12879E-16	0.13954E-16	0.36958E-22
81	0.13092E-16	0.14184E-16	0.37568E-22
82	0.13295E-16	0.14404E-16	0.38151E-22
83	0.13488E-16	0.14613E-16	0.38705E-22
84	0.13670E-16	0.14811E-16	0.39227E-22
85	0.13840E-16	0.14995E-16	0.39715E-22
86	0.13997E-16	0.15165E-16	0.40166E-22
87	0.14140E-16	0.15320E-16	0.40575E-22
88	0.14267E-16	0.15458E-16	0.40941E-22
89	0.14378E-16	0.15578E-16	0.41259E-22
90	0.14471E-16	0.15679E-16	0.41526E-22
91	0.14546E-16	0.15759E-16	0.41739E-22
92	0.14599E-16	0.15817E-16	0.41893E-22
93	0.14631E-16	0.15852E-16	0.41985E-22
94	0.14640E-16	0.15862E-16	0.42011E-22
95	0.14625E-16	0.15845E-16	0.41966E-22
96	0.14583E-16	0.15799E-16	0.41846E-22
97	0.14513E-16	0.15724E-16	0.41646E-22
98	0.14414E-16	0.15617E-16	0.41362E-22
99	0.14284E-16	0.15476E-16	0.40990E-22
100	0.14122E-16	0.15300E-16	0.40523E-22

POLYGON I

Time: 180.000

Cell Cgas(g/cu.ft)

Cliq(g/cu.ft)

Csol(g/g)

TUT 004 2201

1	0.16939E-20	0.18352E-20	0.48606E-26
2	0.36367E-20	0.39401E-20	0.10436E-25
3	0.58317E-20	0.63182E-20	0.16734E-25
4	0.82824E-20	0.89734E-20	0.23767E-25
5	0.10993E-19	0.11910E-19	0.31545E-25
6	0.13967E-19	0.15132E-19	0.40080E-25
7	0.17210E-19	0.18646E-19	0.49385E-25
8	0.20726E-19	0.22455E-19	0.59473E-25
9	0.24519E-19	0.26565E-19	0.70360E-25
10	0.28596E-19	0.30982E-19	0.82059E-25
11	0.32962E-19	0.35712E-19	0.94586E-25
12	0.37622E-19	0.40760E-19	0.10796E-24
13	0.42581E-19	0.46134E-19	0.12219E-24
14	0.47847E-19	0.51838E-19	0.13730E-24
15	0.53424E-19	0.57881E-19	0.15330E-24
16	0.59319E-19	0.64268E-19	0.17022E-24
17	0.65538E-19	0.71005E-19	0.18806E-24
18	0.72087E-19	0.78101E-19	0.20686E-24
19	0.78972E-19	0.85561E-19	0.22661E-24
20	0.86201E-19	0.93392E-19	0.24736E-24
21	0.93778E-19	0.10160E-18	0.26910E-24
22	0.10171E-18	0.11020E-18	0.29186E-24
23	0.11000E-18	0.11918E-18	0.31566E-24
24	0.11867E-18	0.12857E-18	0.34052E-24
25	0.12770E-18	0.13835E-18	0.36644E-24
26	0.13712E-18	0.14855E-18	0.39346E-24
27	0.14692E-18	0.15917E-18	0.42158E-24
28	0.15711E-18	0.17021E-18	0.45082E-24
29	0.16769E-18	0.18168E-18	0.48120E-24
30	0.17868E-18	0.19359E-18	0.51273E-24
31	0.19008E-18	0.20593E-18	0.54543E-24
32	0.20188E-18	0.21872E-18	0.57930E-24
33	0.21410E-18	0.23196E-18	0.61437E-24
34	0.22674E-18	0.24565E-18	0.65063E-24
35	0.23980E-18	0.25980E-18	0.68811E-24
36	0.25328E-18	0.27441E-18	0.72680E-24
37	0.26720E-18	0.28949E-18	0.76673E-24
38	0.28154E-18	0.30502E-18	0.80788E-24
39	0.29631E-18	0.32103E-18	0.85028E-24
40	0.31152E-18	0.33750E-18	0.89391E-24
41	0.32715E-18	0.35445E-18	0.93878E-24
42	0.34322E-18	0.37185E-18	0.98489E-24
43	0.35972E-18	0.38973E-18	0.10322E-23
44	0.37665E-18	0.40807E-18	0.10808E-23
45	0.39400E-18	0.42687E-18	0.11306E-23
46	0.41178E-18	0.44613E-18	0.11816E-23
47	0.42997E-18	0.46584E-18	0.12338E-23
48	0.44858E-18	0.48600E-18	0.12872E-23
49	0.46759E-18	0.50660E-18	0.13418E-23
50	0.48700E-18	0.52762E-18	0.13975E-23
51	0.50679E-18	0.54907E-18	0.14543E-23
52	0.52697E-18	0.57093E-18	0.15122E-23
53	0.54751E-18	0.59319E-18	0.15711E-23
54	0.56841E-18	0.61583E-18	0.16311E-23
55	0.58965E-18	0.63885E-18	0.16920E-23
56	0.61122E-18	0.66221E-18	0.17539E-23
57	0.63310E-18	0.68591E-18	0.18167E-23
58	0.65526E-18	0.70993E-18	0.18803E-23
59	0.67770E-18	0.73424E-18	0.19447E-23
60	0.70039E-18	0.75882E-18	0.20098E-23
61	0.72330E-18	0.78364E-18	0.20755E-23
62	0.74641E-18	0.80868E-18	0.21419E-23
63	0.76969E-18	0.83390E-18	0.22087E-23
64	0.79312E-18	0.85928E-18	0.22759E-23
65	0.81666E-18	0.88478E-18	0.23434E-23
66	0.84027E-18	0.91037E-18	0.24112E-23
67	0.86393E-18	0.93600E-18	0.24791E-23
68	0.88759E-18	0.96164E-18	0.25470E-23
69	0.91122E-18	0.98723E-18	0.26148E-23
70	0.93476E-18	0.10127E-17	0.26823E-23
71	0.95818E-18	0.10381E-17	0.27495E-23
72	0.98143E-18	0.10633E-17	0.28162E-23
73	0.10045E-17	0.10882E-17	0.28823E-23
74	0.10272E-17	0.11129E-17	0.29476E-23
75	0.10496E-17	0.11372E-17	0.30119E-23
76	0.10716E-17	0.11610E-17	0.30750E-23
77	0.10932E-17	0.11844E-17	0.31369E-23
78	0.11142E-17	0.12072E-17	0.31973E-23
79	0.11346E-17	0.12293E-17	0.32559E-23
80	0.11544E-17	0.12507E-17	0.33127E-23
81	0.11735E-17	0.12713E-17	0.33673E-23
82	0.11917E-17	0.12911E-17	0.34195E-23
83	0.12090E-17	0.13098E-17	0.34692E-23
84	0.12253E-17	0.13275E-17	0.35160E-23
85	0.12405E-17	0.13440E-17	0.35598E-23
86	0.12546E-17	0.13593E-17	0.36001E-23
87	0.12674E-17	0.13731E-17	0.36369E-23
88	0.12788E-17	0.13855E-17	0.36696E-23
89	0.12888E-17	0.13963E-17	0.36981E-23
90	0.12971E-17	0.14053E-17	0.37221E-23

91	0.13038E-17	0.14125E-17	0.37412E-23
92	0.13086E-17	0.14177E-17	0.37550E-23
93	0.13114E-17	0.14208E-17	0.37632E-23
94	0.13122E-17	0.14217E-17	0.37655E-23
95	0.13108E-17	0.14202E-17	0.37615E-23
96	0.13071E-17	0.14161E-17	0.37507E-23
97	0.13009E-17	0.14094E-17	0.37329E-23
98	0.12920E-17	0.13998E-17	0.37074E-23
99	0.12804E-17	0.13872E-17	0.36740E-23
100	0.12658E-17	0.13714E-17	0.36322E-23

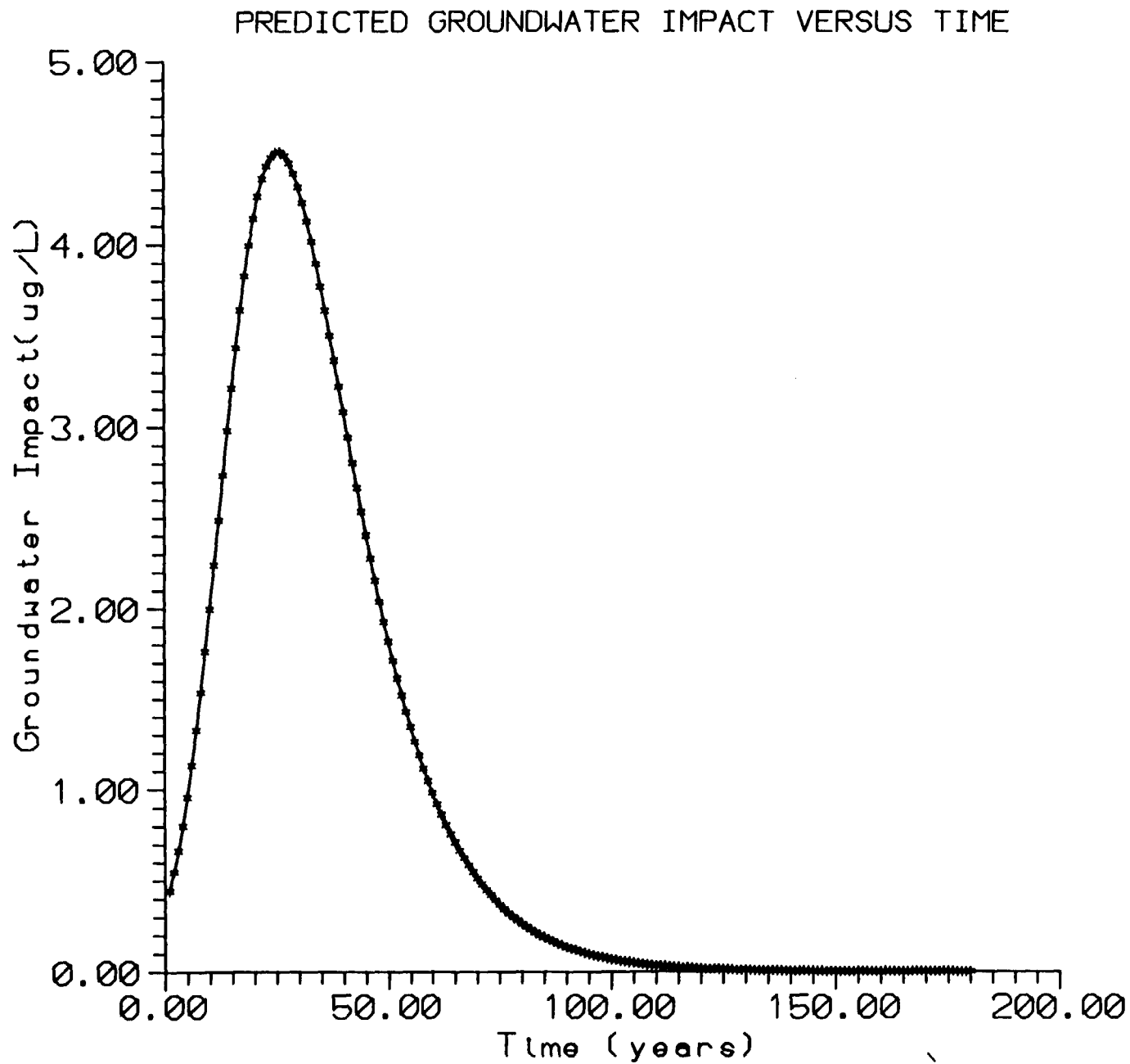


Figure B-6: Predicted Groundwater impact vs Time
(for 0.002 and soil cleanup PCE cone).

VLEACH
version 2.0, 1993.

Developed by :

Varadhan Ravi and Jeffrey A. Johnson (Dynamac)
Center for Subsurface Modeling Support
Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

LHENRI SIMULATION 4

1 polygons.

Timestep = 1.00 years. Simulation length = 180.00 years.

Printout every 10.00 years. Vertical profile stored every 10.00 years.

Koc = 375.00 ml/g, 0.13243E-01cu.ft./g

Kh = 0.92300 (dimensionless).

Aqueous solubility = 150.00 mg/l, 4.2476 g/cu.ft

Free air diffusion coefficient = .66000 sq. m/day, 2593.1 sq.ft./yr

Polygon 1

POLYGON 1

Polygon area = 1.0000 sq. ft.

100 cells, each cell 0.200 ft. thick.

Soil Properties:

Bulk density = 1.3500 g/ml, 38228. g/cu.ft.

Porosity = 0.3000 Volumetric water content = 0.2000

Organic carbon content = 0.00200000

Recharge Rate = 0.46000001 ft/yr

Conc. in recharge water = 0.00000 mg/l, 0.00000 g/cu.ft

Atmospheric concentration = 0.00000 mg/l, 0.00000 g/cu.ft

Water table has a fixed concentration of 0.00000 mg/l, 0.00000 g/cu.ft.
with respect to gas diffusion.

VLEACH
version 2.0, 1993.

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Ada, OK 74820

LHENRI SIMULATION 4

Polygon 1
At time = 0.00, total mass in vadose zone = 0.18502 g/sq.ft.
Mass in gas phase = 0.13088E-01g/sq.ft.
Mass in liquid phase = 0.28359E-01g/sq.ft.
Mass sorbed = 0.14357 g/sq.ft.

Polygon 1
At time = 10.00, total mass in vadose zone = 0.15764 g/sq.ft.
Mass in gas phase = 0.11152E-01g/sq.ft.
Mass in liquid phase = 0.24164E-01g/sq.ft.
Mass sorbed = 0.12233 g/sq.ft.

Since last printout at time = 0.00
Change in Total Mass = -0.27373E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.25154E-02g/sq.ft.
Diffusion in from atmosphere = -0.17731E-01g/sq.ft.
Diffusion in from water table = -0.71275E-02g/sq.ft.
Total inflow at boundaries = -0.27373E-01g/sq.ft.
Mass discrepancy = 0.17509E-06g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.27373E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.25154E-02g/sq.ft.
Diffusion in from atmosphere = -0.17731E-01g/sq.ft.
Diffusion in from water table = -0.71275E-02g/sq.ft.
Total inflow at boundaries = -0.27373E-01g/sq.ft.
Mass discrepancy = 0.17509E-06g/sq.ft.

Polygon 1
At time = 20.00, total mass in vadose zone = 0.12168 g/sq.ft.
Mass in gas phase = 0.86075E-02g/sq.ft.
Mass in liquid phase = 0.18651E-01g/sq.ft.
Mass sorbed = 0.94421E-01g/sq.ft.

Since last printout at time = 10.00
Change in Total Mass = -0.35963E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.12864E-01g/sq.ft.
Diffusion in from atmosphere = -0.77554E-02g/sq.ft.
Diffusion in from water table = -0.15344E-01g/sq.ft.
Total inflow at boundaries = -0.35963E-01g/sq.ft.
Mass discrepancy = -0.12293E-06g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.63337E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.15379E-01g/sq.ft.
Diffusion in from atmosphere = -0.25486E-01g/sq.ft.
Diffusion in from water table = -0.22472E-01g/sq.ft.
Total inflow at boundaries = -0.63337E-01g/sq.ft.
Mass discrepancy = 0.52154E-07g/sq.ft.

Polygon 1
At time = 30.00, total mass in vadose zone = 0.79832E-01g/sq.ft.
Mass in gas phase = 0.56472E-02g/sq.ft.
Mass in liquid phase = 0.12237E-01g/sq.ft.
Mass sorbed = 0.61948E-01g/sq.ft.

Since last printout at time = 20.00
Change in Total Mass = -0.41848E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.20773E-01g/sq.ft.
Diffusion in from atmosphere = -0.37505E-02g/sq.ft.
Diffusion in from water table = -0.17324E-01g/sq.ft.
Total inflow at boundaries = -0.41848E-01g/sq.ft.
Mass discrepancy = -0.10058E-06g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.10518 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.36152E-01g/sq.ft.
 Diffusion in from atmosphere = -0.29236E-01g/sq.ft.
 Diffusion in from water table = -0.39796E-01g/sq.ft.
 Total inflow at boundaries = -0.10518 g/sq.ft.
 Mass discrepancy = -0.52154E-07g/sq.ft.

Polygon 1
 At time = 40.00, total mass in vadose zone = 0.46162E-01g/sq.ft.
 Mass in gas phase = 0.32654E-02g/sq.ft.
 Mass in liquid phase = 0.70757E-02g/sq.ft.
 Mass sorbed = 0.35821E-01g/sq.ft.

Since last printout at time = 30.00
 Change in Total Mass = -0.33671E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.18608E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18898E-02g/sq.ft.
 Diffusion in from water table = -0.13172E-01g/sq.ft.
 Total inflow at boundaries = -0.33670E-01g/sq.ft.
 Mass discrepancy = -0.89407E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.13885 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.54760E-01g/sq.ft.
 Diffusion in from atmosphere = -0.31126E-01g/sq.ft.
 Diffusion in from water table = -0.52968E-01g/sq.ft.
 Total inflow at boundaries = -0.13885 g/sq.ft.
 Mass discrepancy = -0.14901E-06g/sq.ft.

Polygon 1
 At time = 50.00, total mass in vadose zone = 0.24865E-01g/sq.ft.
 Mass in gas phase = 0.17589E-02g/sq.ft.
 Mass in liquid phase = 0.38113E-02g/sq.ft.
 Mass sorbed = 0.19295E-01g/sq.ft.

Since last printout at time = 40.00
 Change in Total Mass = -0.21297E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.12276E-01g/sq.ft.
 Diffusion in from atmosphere = -0.96472E-03g/sq.ft.
 Diffusion in from water table = -0.80558E-02g/sq.ft.
 Total inflow at boundaries = -0.21297E-01g/sq.ft.
 Mass discrepancy = -0.31665E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.16015 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.67037E-01g/sq.ft.
 Diffusion in from atmosphere = -0.32091E-01g/sq.ft.
 Diffusion in from water table = -0.61024E-01g/sq.ft.
 Total inflow at boundaries = -0.16015 g/sq.ft.
 Mass discrepancy = -0.19372E-06g/sq.ft.

Polygon 1
 At time = 60.00, total mass in vadose zone = 0.12972E-01g/sq.ft.
 Mass in gas phase = 0.91764E-03g/sq.ft.
 Mass in liquid phase = 0.19884E-02g/sq.ft.
 Mass sorbed = 0.10066E-01g/sq.ft.

Since last printout at time = 50.00
 Change in Total Mass = -0.11893E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.69709E-02g/sq.ft.
 Diffusion in from atmosphere = -0.49412E-03g/sq.ft.
 Diffusion in from water table = -0.44278E-02g/sq.ft.
 Total inflow at boundaries = -0.11893E-01g/sq.ft.
 Mass discrepancy = -0.17695E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.17204 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.74008E-01g/sq.ft.
 Diffusion in from atmosphere = -0.32585E-01g/sq.ft.
 Diffusion in from water table = -0.65452E-01g/sq.ft.
 Total inflow at boundaries = -0.17204 g/sq.ft.
 Mass discrepancy = -0.22352E-06g/sq.ft.

Polygon 1
 At time = 70.00, total mass in vadose zone = 0.66863E-02g/sq.ft.
 Mass in gas phase = 0.47298E-03g/sq.ft.
 Mass in liquid phase = 0.10249E-02g/sq.ft.
 Mass sorbed = 0.51885E-02g/sq.ft.

Since last printout at time = 60.00
 Change in Total Mass = -0.62858E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.37070E-02g/sq.ft.
 Diffusion in from atmosphere = -0.25326E-03g/sq.ft.
 Diffusion in from water table = -0.23255E-02g/sq.ft.
 Total inflow at boundaries = -0.62858E-02g/sq.ft.
 Mass discrepancy = -0.10245E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.17833 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.77715E-01g/sq.ft.
 Diffusion in from atmosphere = -0.32838E-01g/sq.ft.
 Diffusion in from water table = -0.67777E-01g/sq.ft.
 Total inflow at boundaries = -0.17833 g/sq.ft.
 Mass discrepancy = -0.22352E-06g/sq.ft.

Polygon 1
 At time = 80.00, total mass in vadose zone = 0.34327E-02g/sq.ft.
 Mass in gas phase = 0.24283E-03g/sq.ft.
 Mass in liquid phase = 0.52617E-03g/sq.ft.
 Mass sorbed = 0.26637E-02g/sq.ft.

Since last printout at time = 70.00
 Change in Total Mass = -0.32536E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.19227E-02g/sq.ft.
 Diffusion in from atmosphere = -0.12982E-03g/sq.ft.
 Diffusion in from water table = -0.12011E-02g/sq.ft.
 Total inflow at boundaries = -0.32536E-02g/sq.ft.
 Mass discrepancy = -0.37253E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.18158 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.79637E-01g/sq.ft.
 Diffusion in from atmosphere = -0.32968E-01g/sq.ft.
 Diffusion in from water table = -0.68978E-01g/sq.ft.
 Total inflow at boundaries = -0.18158 g/sq.ft.
 Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1
 At time = 90.00, total mass in vadose zone = 0.17603E-02g/sq.ft.
 Mass in gas phase = 0.12452E-03g/sq.ft.
 Mass in liquid phase = 0.26982E-03g/sq.ft.
 Mass sorbed = 0.13660E-02g/sq.ft.

Since last printout at time = 80.00
 Change in Total Mass = -0.16724E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.98889E-03g/sq.ft.
 Diffusion in from atmosphere = -0.66549E-04g/sq.ft.
 Diffusion in from water table = -0.61699E-03g/sq.ft.
 Total inflow at boundaries = -0.16724E-02g/sq.ft.
 Mass discrepancy = -0.34925E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.18326 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.80626E-01g/sq.ft.
 Diffusion in from atmosphere = -0.33035E-01g/sq.ft.
 Diffusion in from water table = -0.69595E-01g/sq.ft.
 Total inflow at boundaries = -0.18326 g/sq.ft.
 Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1
 At time = 100.00, total mass in vadose zone = 0.90242E-03g/sq.ft.
 Mass in gas phase = 0.63836E-04g/sq.ft.
 Mass in liquid phase = 0.13832E-03g/sq.ft.
 Mass sorbed = 0.70026E-03g/sq.ft.

Since last printout at time = 90.00
 Change in Total Mass = -0.85790E-03g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.50735E-03g/sq.ft.
 Diffusion in from atmosphere = -0.34113E-04g/sq.ft.
 Diffusion in from water table = -0.31644E-03g/sq.ft.
 Total inflow at boundaries = -0.85790E-03g/sq.ft.
 Mass discrepancy = -0.12224E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.18411 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.81133E-01g/sq.ft.
 Diffusion in from atmosphere = -0.33069E-01g/sq.ft.
 Diffusion in from water table = -0.69912E-01g/sq.ft.

Total inflow at boundaries = -0.18411 g/sq.ft.
Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1
At time = 110.00, total mass in vadose zone = 0.46259E-03g/sq.ft.
Mass in gas phase = 0.32723E-04g/sq.ft.
Mass in liquid phase = 0.70905E-04g/sq.ft.
Mass sorbed = 0.35896E-03g/sq.ft.

Since last printout at time = 100.00
Change in Total Mass = -0.43983E-03g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.26012E-03g/sq.ft.
Diffusion in from atmosphere = -0.17486E-04g/sq.ft.
Diffusion in from water table = -0.16222E-03g/sq.ft.
Total inflow at boundaries = -0.43983E-03g/sq.ft.
Mass discrepancy = -0.72760E-09g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.18455 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.81394E-01g/sq.ft.
Diffusion in from atmosphere = -0.33086E-01g/sq.ft.
Diffusion in from water table = -0.70074E-01g/sq.ft.
Total inflow at boundaries = -0.18455 g/sq.ft.
Mass discrepancy = -0.22352E-06g/sq.ft.

Polygon 1
At time = 120.00, total mass in vadose zone = 0.23712E-03g/sq.ft.
Mass in gas phase = 0.16774E-04g/sq.ft.
Mass in liquid phase = 0.36346E-04g/sq.ft.
Mass sorbed = 0.18400E-03g/sq.ft.

Since last printout at time = 110.00
Change in Total Mass = -0.22546E-03g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.13334E-03g/sq.ft.
Diffusion in from atmosphere = -0.89635E-05g/sq.ft.
Diffusion in from water table = -0.83158E-04g/sq.ft.
Total inflow at boundaries = -0.22546E-03g/sq.ft.
Mass discrepancy = -0.34925E-09g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.18478 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.81527E-01g/sq.ft.
Diffusion in from atmosphere = -0.33095E-01g/sq.ft.
Diffusion in from water table = -0.70157E-01g/sq.ft.
Total inflow at boundaries = -0.18478 g/sq.ft.
Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1
At time = 130.00, total mass in vadose zone = 0.12155E-03g/sq.ft.
Mass in gas phase = 0.85982E-05g/sq.ft.
Mass in liquid phase = 0.18631E-04g/sq.ft.
Mass sorbed = 0.94319E-04g/sq.ft.

Since last printout at time = 120.00
Change in Total Mass = -0.11557E-03g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.68351E-04g/sq.ft.
Diffusion in from atmosphere = -0.45947E-05g/sq.ft.
Diffusion in from water table = -0.42627E-04g/sq.ft.
Total inflow at boundaries = -0.11557E-03g/sq.ft.
Mass discrepancy = -0.20373E-09g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.18490 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.81595E-01g/sq.ft.
Diffusion in from atmosphere = -0.33100E-01g/sq.ft.
Diffusion in from water table = -0.70200E-01g/sq.ft.
Total inflow at boundaries = -0.18489 g/sq.ft.
Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1
At time = 140.00, total mass in vadose zone = 0.62306E-04g/sq.ft.
Mass in gas phase = 0.44074E-05g/sq.ft.
Mass in liquid phase = 0.95502E-05g/sq.ft.
Mass sorbed = 0.48348E-04g/sq.ft.

Since last printout at time = 130.00
Change in Total Mass = -0.59243E-04g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.35037E-04g/sq.ft.
Diffusion in from atmosphere = -0.23552E-05g/sq.ft.

Diffusion in from water table = -0.21850E-04g/sq.ft.
Total inflow at boundaries = -0.59243E-04g/sq.ft.
Mass discrepancy = -0.98225E-10g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.18495 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.81630E-01g/sq.ft.
Diffusion in from atmosphere = -0.33102E-01g/sq.ft.
Diffusion in from water table = -0.70222E-01g/sq.ft.
Total inflow at boundaries = -0.18495 g/sq.ft.
Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1

At time = 150.00, total mass in vadose zone = 0.31938E-04g/sq.ft.
Mass in gas phase = 0.22592E-05g/sq.ft.
Mass in liquid phase = 0.48954E-05g/sq.ft.
Mass sorbed = 0.24783E-04g/sq.ft.

Since last printout at time = 140.00

Change in Total Mass = -0.30368E-04g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.17960E-04g/sq.ft.
Diffusion in from atmosphere = -0.12073E-05g/sq.ft.
Diffusion in from water table = -0.11201E-04g/sq.ft.
Total inflow at boundaries = -0.30368E-04g/sq.ft.
Mass discrepancy = -0.47294E-10g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.18498 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.81648E-01g/sq.ft.
Diffusion in from atmosphere = -0.33104E-01g/sq.ft.
Diffusion in from water table = -0.70233E-01g/sq.ft.
Total inflow at boundaries = -0.18498 g/sq.ft.
Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1

At time = 160.00, total mass in vadose zone = 0.16371E-04g/sq.ft.
Mass in gas phase = 0.11581E-05g/sq.ft.
Mass in liquid phase = 0.25094E-05g/sq.ft.
Mass sorbed = 0.12704E-04g/sq.ft.

Since last printout at time = 150.00

Change in Total Mass = -0.15566E-04g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.92062E-05g/sq.ft.
Diffusion in from atmosphere = -0.61886E-06g/sq.ft.
Diffusion in from water table = -0.57414E-05g/sq.ft.
Total inflow at boundaries = -0.15566E-04g/sq.ft.
Mass discrepancy = -0.25466E-10g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.18500 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.81657E-01g/sq.ft.
Diffusion in from atmosphere = -0.33104E-01g/sq.ft.
Diffusion in from water table = -0.70239E-01g/sq.ft.
Total inflow at boundaries = -0.18500 g/sq.ft.
Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1

At time = 170.00, total mass in vadose zone = 0.83919E-05g/sq.ft.
Mass in gas phase = 0.59363E-06g/sq.ft.
Mass in liquid phase = 0.12863E-05g/sq.ft.
Mass sorbed = 0.65120E-05g/sq.ft.

Since last printout at time = 160.00

Change in Total Mass = -0.79794E-05g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.47191E-05g/sq.ft.
Diffusion in from atmosphere = -0.31723E-06g/sq.ft.
Diffusion in from water table = -0.29430E-05g/sq.ft.
Total inflow at boundaries = -0.79794E-05g/sq.ft.
Mass discrepancy = -0.10914E-10g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.18501 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.81662E-01g/sq.ft.
Diffusion in from atmosphere = -0.33104E-01g/sq.ft.
Diffusion in from water table = -0.70242E-01g/sq.ft.
Total inflow at boundaries = -0.18501 g/sq.ft.
Mass discrepancy = -0.23842E-06g/sq.ft.

Polygon 1

At time = 180.00, total mass in vadose zone = 0.43017E-05g/sq.ft.
 Mass in gas phase = 0.30430E-06g/sq.ft.
 Mass in liquid phase = 0.65936E-06g/sq.ft.
 Mass sorbed = 0.33380E-05g/sq.ft.

Since last printout at time = 170.00
 Change in Total Mass = -0.40902E-05g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.24190E-05g/sq.ft.
 Diffusion in from atmosphere = -0.16261E-06g/sq.ft.
 Diffusion in from water table = -0.15086E-05g/sq.ft.
 Total inflow at boundaries = -0.40902E-05g/sq.ft.
 Mass discrepancy = -0.63665E-11g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.18501 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.81665E-01g/sq.ft.
 Diffusion in from atmosphere = -0.33105E-01g/sq.ft.
 Diffusion in from water table = -0.70243E-01g/sq.ft.
 Total inflow at boundaries = -0.18501 g/sq.ft.
 Mass discrepancy = -0.22352E-06g/sq.ft.

GROUNDWATER IMPACT OF POLYGON 1

Time	Mass per area (g/sq.ft.)	Total Mass (g)
10.00	0.96429E-02	0.96429E-02
20.00	0.28208E-01	0.28208E-01
30.00	0.38097E-01	0.38097E-01
40.00	0.31781E-01	0.31781E-01
50.00	0.20332E-01	0.20332E-01
60.00	0.11399E-01	0.11399E-01
70.00	0.60326E-02	0.60326E-02
80.00	0.31238E-02	0.31238E-02
90.00	0.16059E-02	0.16059E-02
100.00	0.82379E-03	0.82379E-03
110.00	0.42234E-03	0.42234E-03
120.00	0.21650E-03	0.21650E-03
130.00	0.11098E-03	0.11098E-03
140.00	0.56887E-04	0.56887E-04
150.00	0.29160E-04	0.29160E-04
160.00	0.14948E-04	0.14948E-04
170.00	0.76621E-05	0.76621E-05
180.00	0.39276E-05	0.39276E-05

TOTAL GROUNDWATER IMPACT

Time (yr)	Mass (g)	Cumulative Mass (g)
10.00	0.96429E-02	0.96429E-02
20.00	0.28208E-01	0.37851E-01
30.00	0.38097E-01	0.75948E-01
40.00	0.31781E-01	0.10773
50.00	0.20332E-01	0.12806
60.00	0.11399E-01	0.13946
70.00	0.60326E-02	0.14549
80.00	0.31238E-02	0.14862
90.00	0.16059E-02	0.15022
100.00	0.82379E-03	0.15105
110.00	0.42234E-03	0.15147
120.00	0.21650E-03	0.15168
130.00	0.11098E-03	0.15180
140.00	0.56887E-04	0.15185
150.00	0.29160E-04	0.15188
160.00	0.14948E-04	0.15190
170.00	0.76621E-05	0.15190
180.00	0.39276E-05	0.15191

VLEACH
version 2.0, 1993.

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POLYGON I

Time:	0.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.29204E-02	0.31641E-02	0.83803E-07
2	0.29204E-02	0.31641E-02	0.83803E-07
3	0.29204E-02	0.31641E-02	0.83803E-07
4	0.29204E-02	0.31641E-02	0.83803E-07
5	0.29204E-02	0.31641E-02	0.83803E-07
6	0.29204E-02	0.31641E-02	0.83803E-07
7	0.29204E-02	0.31641E-02	0.83803E-07
8	0.29204E-02	0.31641E-02	0.83803E-07
9	0.29204E-02	0.31641E-02	0.83803E-07
10	0.29204E-02	0.31641E-02	0.83803E-07
11	0.29204E-02	0.31641E-02	0.83803E-07
12	0.29204E-02	0.31641E-02	0.83803E-07
13	0.29204E-02	0.31641E-02	0.83803E-07
14	0.29204E-02	0.31641E-02	0.83803E-07
15	0.29204E-02	0.31641E-02	0.83803E-07
16	0.29204E-02	0.31641E-02	0.83803E-07
17	0.29204E-02	0.31641E-02	0.83803E-07
18	0.29204E-02	0.31641E-02	0.83803E-07
19	0.29204E-02	0.31641E-02	0.83803E-07
20	0.29204E-02	0.31641E-02	0.83803E-07
21	0.29204E-02	0.31641E-02	0.83803E-07
22	0.29204E-02	0.31641E-02	0.83803E-07
23	0.29204E-02	0.31641E-02	0.83803E-07
24	0.29204E-02	0.31641E-02	0.83803E-07
25	0.29204E-02	0.31641E-02	0.83803E-07
26	0.31908E-01	0.34570E-01	0.91563E-06
27	0.31908E-01	0.34570E-01	0.91563E-06
28	0.31908E-01	0.34570E-01	0.91563E-06
29	0.31908E-01	0.34570E-01	0.91563E-06
30	0.31908E-01	0.34570E-01	0.91563E-06
31	0.31908E-01	0.34570E-01	0.91563E-06
32	0.31908E-01	0.34570E-01	0.91563E-06
33	0.31908E-01	0.34570E-01	0.91563E-06
34	0.31908E-01	0.34570E-01	0.91563E-06
35	0.31908E-01	0.34570E-01	0.91563E-06
36	0.31908E-01	0.34570E-01	0.91563E-06
37	0.31908E-01	0.34570E-01	0.91563E-06
38	0.31908E-01	0.34570E-01	0.91563E-06
39	0.31908E-01	0.34570E-01	0.91563E-06
40	0.31908E-01	0.34570E-01	0.91563E-06
41	0.31908E-01	0.34570E-01	0.91563E-06
42	0.31908E-01	0.34570E-01	0.91563E-06
43	0.31908E-01	0.34570E-01	0.91563E-06
44	0.13521E-03	0.14648E-03	0.38798E-08
45	0.13521E-03	0.14648E-03	0.38798E-08
46	0.13521E-03	0.14648E-03	0.38798E-08
47	0.13521E-03	0.14648E-03	0.38798E-08
48	0.13521E-03	0.14648E-03	0.38798E-08
49	0.13521E-03	0.14648E-03	0.38798E-08
50	0.13521E-03	0.14648E-03	0.38798E-08
51	0.13521E-03	0.14648E-03	0.38798E-08
52	0.13521E-03	0.14648E-03	0.38798E-08
53	0.13521E-03	0.14648E-03	0.38798E-08
54	0.13521E-03	0.14648E-03	0.38798E-08
55	0.13521E-03	0.14648E-03	0.38798E-08
56	0.13521E-03	0.14648E-03	0.38798E-08
57	0.13521E-03	0.14648E-03	0.38798E-08
58	0.13521E-03	0.14648E-03	0.38798E-08
59	0.13521E-03	0.14648E-03	0.38798E-08
60	0.13521E-03	0.14648E-03	0.38798E-08
61	0.13521E-03	0.14648E-03	0.38798E-08
62	0.13521E-03	0.14648E-03	0.38798E-08
63	0.13521E-03	0.14648E-03	0.38798E-08
64	0.13521E-03	0.14648E-03	0.38798E-08
65	0.13521E-03	0.14648E-03	0.38798E-08
66	0.13521E-03	0.14648E-03	0.38798E-08
67	0.13521E-03	0.14648E-03	0.38798E-08
68	0.13521E-03	0.14648E-03	0.38798E-08
69	0.13521E-03	0.14648E-03	0.38798E-08
70	0.13521E-03	0.14648E-03	0.38798E-08
71	0.13521E-03	0.14648E-03	0.38798E-08
72	0.13521E-03	0.14648E-03	0.38798E-08

73	0.13521E-03	0.14648E-03	0.38798E-08
74	0.13521E-03	0.14648E-03	0.38798E-08
75	0.13521E-03	0.14648E-03	0.38798E-08
76	0.13521E-03	0.14648E-03	0.38798E-08
77	0.13521E-03	0.14648E-03	0.38798E-08
78	0.13521E-03	0.14648E-03	0.38798E-08
79	0.13521E-03	0.14648E-03	0.38798E-08
80	0.13521E-03	0.14648E-03	0.38798E-08
81	0.13521E-03	0.14648E-03	0.38798E-08
82	0.13521E-03	0.14648E-03	0.38798E-08
83	0.13521E-03	0.14648E-03	0.38798E-08
84	0.13521E-03	0.14648E-03	0.38798E-08
85	0.13521E-03	0.14648E-03	0.38798E-08
86	0.13521E-03	0.14648E-03	0.38798E-08
87	0.13521E-03	0.14648E-03	0.38798E-08
88	0.13521E-03	0.14648E-03	0.38798E-08
89	0.13521E-03	0.14648E-03	0.38798E-08
90	0.13521E-03	0.14648E-03	0.38798E-08
91	0.13521E-03	0.14648E-03	0.38798E-08
92	0.13521E-03	0.14648E-03	0.38798E-08
93	0.13521E-03	0.14648E-03	0.38798E-08
94	0.13521E-03	0.14648E-03	0.38798E-08
95	0.13521E-03	0.14648E-03	0.38798E-08
96	0.00000	0.00000	0.00000
97	0.00000	0.00000	0.00000
98	0.00000	0.00000	0.00000
99	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000

POLYGON 1

Time:	10.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.94990E-04	0.10291E-03	0.27258E-08
2	0.17375E-03	0.18825E-03	0.49860E-08
3	0.26123E-03	0.28302E-03	0.74961E-08
4	0.35674E-03	0.38650E-03	0.10237E-07
5	0.45963E-03	0.49797E-03	0.13189E-07
6	0.56923E-03	0.61672E-03	0.16334E-07
7	0.68493E-03	0.74207E-03	0.19654E-07
8	0.80613E-03	0.87338E-03	0.23132E-07
9	0.93227E-03	0.10100E-02	0.26752E-07
10	0.10628E-02	0.11515E-02	0.30498E-07
11	0.11973E-02	0.12972E-02	0.34358E-07
12	0.13354E-02	0.14468E-02	0.38319E-07
13	0.14765E-02	0.15997E-02	0.42369E-07
14	0.16205E-02	0.17557E-02	0.46500E-07
15	0.17669E-02	0.19143E-02	0.50703E-07
16	0.19157E-02	0.20755E-02	0.54971E-07
17	0.20665E-02	0.22389E-02	0.59298E-07
18	0.22192E-02	0.24043E-02	0.63680E-07
19	0.23737E-02	0.25717E-02	0.68114E-07
20	0.25299E-02	0.27410E-02	0.72596E-07
21	0.26878E-02	0.29120E-02	0.77127E-07
22	0.28474E-02	0.30849E-02	0.81706E-07
23	0.30086E-02	0.32596E-02	0.86334E-07
24	0.31717E-02	0.34363E-02	0.91013E-07
25	0.33366E-02	0.36149E-02	0.95745E-07
26	0.40172E-02	0.43524E-02	0.11528E-06
27	0.44821E-02	0.48560E-02	0.12862E-06
28	0.49802E-02	0.53957E-02	0.14291E-06
29	0.55064E-02	0.59658E-02	0.15801E-06
30	0.60554E-02	0.65606E-02	0.17376E-06
31	0.66222E-02	0.71746E-02	0.19003E-06
32	0.72016E-02	0.78024E-02	0.20665E-06
33	0.77890E-02	0.84388E-02	0.22351E-06
34	0.83798E-02	0.90788E-02	0.24046E-06
35	0.89696E-02	0.97178E-02	0.25739E-06
36	0.95544E-02	0.10352E-01	0.27417E-06
37	0.10131E-01	0.10976E-01	0.29070E-06
38	0.10695E-01	0.11587E-01	0.30690E-06
39	0.11244E-01	0.12182E-01	0.32266E-06
40	0.11775E-01	0.12758E-01	0.33790E-06
41	0.12286E-01	0.13311E-01	0.35256E-06
42	0.12775E-01	0.13840E-01	0.36657E-06
43	0.13238E-01	0.14343E-01	0.37988E-06
44	0.13113E-01	0.14207E-01	0.37628E-06
45	0.13198E-01	0.14299E-01	0.37873E-06
46	0.13221E-01	0.14324E-01	0.37937E-06
47	0.13185E-01	0.14285E-01	0.37834E-06
48	0.13096E-01	0.14188E-01	0.37579E-06
49	0.12959E-01	0.14040E-01	0.37185E-06
50	0.12778E-01	0.13844E-01	0.36668E-06
51	0.12560E-01	0.13608E-01	0.36042E-06
52	0.12309E-01	0.13336E-01	0.35321E-06
53	0.12029E-01	0.13032E-01	0.34517E-06
54	0.11725E-01	0.12703E-01	0.33645E-06
55	0.11401E-01	0.12352E-01	0.32715E-06
56	0.11060E-01	0.11983E-01	0.31738E-06
57	0.10708E-01	0.11601E-01	0.30726E-06
58	0.10346E-01	0.11209E-01	0.29687E-06

59	0.99773E-02	0.10810E-01	0.28630E-06
60	0.96053E-02	0.10407E-01	0.27563E-06
61	0.92321E-02	0.10002E-01	0.26492E-06
62	0.88598E-02	0.95990E-02	0.25424E-06
63	0.84903E-02	0.91986E-02	0.24363E-06
64	0.81252E-02	0.88030E-02	0.23316E-06
65	0.77659E-02	0.84137E-02	0.22284E-06
66	0.74135E-02	0.80320E-02	0.21273E-06
67	0.70692E-02	0.76589E-02	0.20285E-06
68	0.67336E-02	0.72953E-02	0.19322E-06
69	0.64075E-02	0.69420E-02	0.18386E-06
70	0.60913E-02	0.65994E-02	0.17479E-06
71	0.57854E-02	0.62680E-02	0.16601E-06
72	0.54901E-02	0.59481E-02	0.15754E-06
73	0.52055E-02	0.56398E-02	0.14937E-06
74	0.49317E-02	0.53431E-02	0.14152E-06
75	0.46687E-02	0.50581E-02	0.13397E-06
76	0.44163E-02	0.47847E-02	0.12673E-06
77	0.41744E-02	0.45226E-02	0.11979E-06
78	0.39428E-02	0.42717E-02	0.11314E-06
79	0.37213E-02	0.40317E-02	0.10678E-06
80	0.35095E-02	0.38023E-02	0.10071E-06
81	0.33072E-02	0.35831E-02	0.94902E-07
82	0.31140E-02	0.33738E-02	0.89359E-07
83	0.29297E-02	0.31741E-02	0.84068E-07
84	0.27537E-02	0.29834E-02	0.79018E-07
85	0.25857E-02	0.28014E-02	0.74198E-07
86	0.24254E-02	0.26278E-02	0.69599E-07
87	0.22724E-02	0.24620E-02	0.65208E-07
88	0.21263E-02	0.23037E-02	0.61015E-07
89	0.19867E-02	0.21524E-02	0.57009E-07
90	0.18532E-02	0.20078E-02	0.53179E-07
91	0.17255E-02	0.18695E-02	0.49514E-07
92	0.16032E-02	0.17370E-02	0.46005E-07
93	0.14860E-02	0.16099E-02	0.42641E-07
94	0.13734E-02	0.14880E-02	0.39411E-07
95	0.12652E-02	0.13708E-02	0.36307E-07
96	0.11587E-02	0.12554E-02	0.33249E-07
97	0.10569E-02	0.11451E-02	0.30328E-07
98	0.95832E-03	0.10383E-02	0.27499E-07
99	0.86274E-03	0.93471E-03	0.24757E-07
100	0.76986E-03	0.83409E-03	0.22092E-07

POLYGON 1

Time:

20.000

Cell

Cgas(g/cu.ft)

Clig(g/cu.ft)

Csol(g/g)

1	0.21337E-04	0.23117E-04	0.61227E-09
2	0.45885E-04	0.49713E-04	0.13167E-08
3	0.73958E-04	0.80128E-04	0.21222E-08
4	0.10564E-03	0.11445E-03	0.30314E-08
5	0.14101E-03	0.15277E-03	0.40463E-08
6	0.18013E-03	0.19516E-03	0.51689E-08
7	0.22306E-03	0.24167E-03	0.64009E-08
8	0.26986E-03	0.29237E-03	0.77437E-08
9	0.32054E-03	0.34729E-03	0.91981E-08
10	0.37515E-03	0.40645E-03	0.10765E-07
11	0.43370E-03	0.46988E-03	0.12445E-07
12	0.49618E-03	0.53757E-03	0.14238E-07
13	0.56259E-03	0.60952E-03	0.16144E-07
14	0.63292E-03	0.68572E-03	0.18162E-07
15	0.70714E-03	0.76614E-03	0.20292E-07
16	0.78522E-03	0.85073E-03	0.22532E-07
17	0.86712E-03	0.93945E-03	0.24882E-07
18	0.95278E-03	0.10323E-02	0.27340E-07
19	0.10422E-02	0.11291E-02	0.29905E-07
20	0.11352E-02	0.12299E-02	0.32575E-07
21	0.12318E-02	0.13346E-02	0.35348E-07
22	0.13320E-02	0.14431E-02	0.38222E-07
23	0.14356E-02	0.15554E-02	0.41196E-07
24	0.15426E-02	0.16713E-02	0.44267E-07
25	0.16530E-02	0.17909E-02	0.47434E-07
26	0.17757E-02	0.19239E-02	0.50956E-07
27	0.19031E-02	0.20618E-02	0.54609E-07
28	0.20377E-02	0.22076E-02	0.58471E-07
29	0.21799E-02	0.23617E-02	0.62553E-07
30	0.23301E-02	0.25245E-02	0.66862E-07
31	0.24884E-02	0.26960E-02	0.71407E-07
32	0.26551E-02	0.28766E-02	0.76189E-07
33	0.28301E-02	0.30662E-02	0.81212E-07
34	0.30135E-02	0.32649E-02	0.86473E-07
35	0.32050E-02	0.34723E-02	0.91968E-07
36	0.34044E-02	0.36884E-02	0.97690E-07
37	0.36113E-02	0.39126E-02	0.10363E-06
38	0.38254E-02	0.41445E-02	0.10977E-06
39	0.40461E-02	0.43836E-02	0.11610E-06
40	0.42728E-02	0.46292E-02	0.12261E-06
41	0.45048E-02	0.48806E-02	0.12927E-06
42	0.47413E-02	0.51369E-02	0.13605E-06
43	0.49816E-02	0.53972E-02	0.14295E-06
44	0.52148E-02	0.56499E-02	0.14964E-06

45	0.54485E-02	0.59030E-02	0.15635E-06
46	0.56786E-02	0.61524E-02	0.16295E-06
47	0.59038E-02	0.63963E-02	0.16941E-06
48	0.61225E-02	0.66333E-02	0.17569E-06
49	0.63335E-02	0.68619E-02	0.18174E-06
50	0.65355E-02	0.70807E-02	0.18754E-06
51	0.67272E-02	0.72885E-02	0.19304E-06
52	0.69078E-02	0.74841E-02	0.19822E-06
53	0.70762E-02	0.76666E-02	0.20306E-06
54	0.72317E-02	0.78350E-02	0.20752E-06
55	0.73735E-02	0.79886E-02	0.21158E-06
56	0.75010E-02	0.81268E-02	0.21524E-06
57	0.76139E-02	0.82491E-02	0.21848E-06
58	0.77118E-02	0.83551E-02	0.22129E-06
59	0.77944E-02	0.84446E-02	0.22366E-06
60	0.78617E-02	0.85175E-02	0.22559E-06
61	0.79136E-02	0.85738E-02	0.22708E-06
62	0.79503E-02	0.86135E-02	0.22814E-06
63	0.79719E-02	0.86369E-02	0.22876E-06
64	0.79787E-02	0.86443E-02	0.22895E-06
65	0.79709E-02	0.86359E-02	0.22873E-06
66	0.79491E-02	0.86122E-02	0.22810E-06
67	0.79135E-02	0.85737E-02	0.22708E-06
68	0.78649E-02	0.85210E-02	0.22569E-06
69	0.78036E-02	0.84546E-02	0.22393E-06
70	0.77302E-02	0.83751E-02	0.22182E-06
71	0.76454E-02	0.82832E-02	0.21939E-06
72	0.75497E-02	0.81796E-02	0.21664E-06
73	0.74439E-02	0.80649E-02	0.21361E-06
74	0.73285E-02	0.79398E-02	0.21029E-06
75	0.72041E-02	0.78051E-02	0.20672E-06
76	0.70714E-02	0.76614E-02	0.20292E-06
77	0.69311E-02	0.75093E-02	0.19889E-06
78	0.67837E-02	0.73497E-02	0.19466E-06
79	0.66299E-02	0.71830E-02	0.19025E-06
80	0.64702E-02	0.70100E-02	0.18567E-06
81	0.63052E-02	0.68312E-02	0.18093E-06
82	0.61354E-02	0.66473E-02	0.17606E-06
83	0.59614E-02	0.64587E-02	0.17106E-06
84	0.57836E-02	0.62661E-02	0.16596E-06
85	0.56024E-02	0.60698E-02	0.16076E-06
86	0.54184E-02	0.58704E-02	0.15548E-06
87	0.52319E-02	0.56683E-02	0.15013E-06
88	0.50432E-02	0.54639E-02	0.14472E-06
89	0.48527E-02	0.52575E-02	0.13925E-06
90	0.46607E-02	0.50495E-02	0.13374E-06
91	0.44674E-02	0.48401E-02	0.12819E-06
92	0.42732E-02	0.46297E-02	0.12262E-06
93	0.40781E-02	0.44183E-02	0.11702E-06
94	0.38825E-02	0.42063E-02	0.11141E-06
95	0.36863E-02	0.39938E-02	0.10578E-06
96	0.34898E-02	0.37809E-02	0.10014E-06
97	0.32930E-02	0.35677E-02	0.94494E-07
98	0.30960E-02	0.33543E-02	0.88841E-07
99	0.28988E-02	0.31406E-02	0.83182E-07
100	0.27015E-02	0.29268E-02	0.77520E-07

POLYGON 1

Time: 30.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.10047E-04	0.10885E-04	0.28830E-09
2	0.21597E-04	0.23399E-04	0.61974E-09
3	0.34680E-04	0.37573E-04	0.99516E-09
4	0.49326E-04	0.53441E-04	0.14154E-08
5	0.65568E-04	0.71038E-04	0.18815E-08
6	0.83441E-04	0.90401E-04	0.23944E-08
7	0.10298E-03	0.11157E-03	0.29550E-08
8	0.12422E-03	0.13459E-03	0.35646E-08
9	0.14721E-03	0.15949E-03	0.42242E-08
10	0.17198E-03	0.18632E-03	0.49349E-08
11	0.19856E-03	0.21513E-03	0.56979E-08
12	0.22701E-03	0.24595E-03	0.65142E-08
13	0.25736E-03	0.27883E-03	0.73851E-08
14	0.28965E-03	0.31381E-03	0.83115E-08
15	0.32390E-03	0.35093E-03	0.92946E-08
16	0.36017E-03	0.39022E-03	0.10335E-07
17	0.39848E-03	0.43173E-03	0.11435E-07
18	0.43887E-03	0.47548E-03	0.12594E-07
19	0.48136E-03	0.52151E-03	0.13813E-07
20	0.52598E-03	0.56986E-03	0.15093E-07
21	0.57275E-03	0.62053E-03	0.16435E-07
22	0.62170E-03	0.67356E-03	0.17840E-07
23	0.67284E-03	0.72897E-03	0.19307E-07
24	0.72619E-03	0.78677E-03	0.20838E-07
25	0.78176E-03	0.84698E-03	0.22433E-07
26	0.83972E-03	0.90977E-03	0.24096E-07
27	0.90003E-03	0.97511E-03	0.25827E-07
28	0.96276E-03	0.10431E-02	0.27627E-07
29	0.10280E-02	0.11137E-02	0.29498E-07
30	0.10957E-02	0.11871E-02	0.31443E-07

31	0.11661E-02	0.12634E-02	0.33462E-07
32	0.12391E-02	0.13425E-02	0.35557E-07
33	0.13149E-02	0.14245E-02	0.37730E-07
34	0.13934E-02	0.15096E-02	0.39983E-07
35	0.14747E-02	0.15977E-02	0.42318E-07
36	0.15589E-02	0.16890E-02	0.44734E-07
37	0.16460E-02	0.17833E-02	0.47234E-07
38	0.17361E-02	0.18809E-02	0.49817E-07
39	0.18290E-02	0.19816E-02	0.52485E-07
40	0.19249E-02	0.20855E-02	0.55236E-07
41	0.20237E-02	0.21925E-02	0.58071E-07
42	0.21254E-02	0.23027E-02	0.60988E-07
43	0.22298E-02	0.24159E-02	0.63986E-07
44	0.23369E-02	0.25318E-02	0.67058E-07
45	0.24464E-02	0.26505E-02	0.70201E-07
46	0.25583E-02	0.27717E-02	0.73411E-07
47	0.26722E-02	0.28952E-02	0.76681E-07
48	0.27880E-02	0.30206E-02	0.80004E-07
49	0.29055E-02	0.31478E-02	0.83373E-07
50	0.30242E-02	0.32765E-02	0.86780E-07
51	0.31439E-02	0.34062E-02	0.90215E-07
52	0.32642E-02	0.35366E-02	0.93669E-07
53	0.33849E-02	0.36673E-02	0.97130E-07
54	0.35054E-02	0.37979E-02	0.10059E-06
55	0.36255E-02	0.39279E-02	0.10403E-06
56	0.37446E-02	0.40570E-02	0.10745E-06
57	0.38625E-02	0.41847E-02	0.11084E-06
58	0.39786E-02	0.43105E-02	0.11417E-06
59	0.40925E-02	0.44340E-02	0.11744E-06
60	0.42039E-02	0.45546E-02	0.12063E-06
61	0.43123E-02	0.46720E-02	0.12374E-06
62	0.44172E-02	0.47857E-02	0.12675E-06
63	0.45183E-02	0.48952E-02	0.12965E-06
64	0.46151E-02	0.50001E-02	0.13243E-06
65	0.47074E-02	0.51001E-02	0.13508E-06
66	0.47946E-02	0.51946E-02	0.13758E-06
67	0.48765E-02	0.52833E-02	0.13993E-06
68	0.49527E-02	0.53659E-02	0.14212E-06
69	0.50230E-02	0.54420E-02	0.14414E-06
70	0.50870E-02	0.55113E-02	0.14597E-06
71	0.51444E-02	0.55735E-02	0.14762E-06
72	0.51950E-02	0.56284E-02	0.14907E-06
73	0.52386E-02	0.56756E-02	0.15032E-06
74	0.52749E-02	0.57150E-02	0.15137E-06
75	0.53039E-02	0.57464E-02	0.15220E-06
76	0.53253E-02	0.57696E-02	0.15281E-06
77	0.53391E-02	0.57845E-02	0.15321E-06
78	0.53451E-02	0.57910E-02	0.15338E-06
79	0.53431E-02	0.57889E-02	0.15332E-06
80	0.53333E-02	0.57782E-02	0.15304E-06
81	0.53155E-02	0.57589E-02	0.15253E-06
82	0.52897E-02	0.57310E-02	0.15179E-06
83	0.52559E-02	0.56943E-02	0.15082E-06
84	0.52140E-02	0.56490E-02	0.14962E-06
85	0.51642E-02	0.55951E-02	0.14819E-06
86	0.51065E-02	0.55325E-02	0.14653E-06
87	0.50409E-02	0.54614E-02	0.14465E-06
88	0.49675E-02	0.53819E-02	0.14254E-06
89	0.48863E-02	0.52939E-02	0.14021E-06
90	0.47975E-02	0.51977E-02	0.13766E-06
91	0.47010E-02	0.50932E-02	0.13490E-06
92	0.45971E-02	0.49806E-02	0.13192E-06
93	0.44857E-02	0.48600E-02	0.12872E-06
94	0.43671E-02	0.47314E-02	0.12532E-06
95	0.42412E-02	0.45950E-02	0.12170E-06
96	0.41082E-02	0.44509E-02	0.11789E-06
97	0.39682E-02	0.42992E-02	0.11387E-06
98	0.38212E-02	0.41400E-02	0.10965E-06
99	0.36674E-02	0.39733E-02	0.10524E-06
100	0.35068E-02	0.37993E-02	0.10063E-06

POLYGON I

Time:	40.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.50783E-05	0.55020E-05	0.14573E-09
2	0.10906E-04	0.11816E-04	0.31295E-09
3	0.17493E-04	0.18952E-04	0.50197E-09
4	0.24852E-04	0.26925E-04	0.71313E-09
5	0.32995E-04	0.35747E-04	0.94680E-09
6	0.41936E-04	0.45434E-04	0.12034E-08
7	0.51690E-04	0.56002E-04	0.14833E-08
8	0.62272E-04	0.67467E-04	0.17869E-08
9	0.73698E-04	0.79847E-04	0.21148E-08
10	0.85987E-04	0.93161E-04	0.24674E-08
11	0.99156E-04	0.10743E-03	0.28453E-08
12	0.11322E-03	0.12267E-03	0.32490E-08
13	0.12821E-03	0.13890E-03	0.36789E-08
14	0.14413E-03	0.15615E-03	0.41358E-08
15	0.16100E-03	0.17443E-03	0.46201E-08
16	0.17886E-03	0.19378E-03	0.51323E-08

17	0.19771E-03	0.21420E-03	0.56732E-08
18	0.21757E-03	0.23572E-03	0.62433E-08
19	0.23847E-03	0.25837E-03	0.68430E-08
20	0.26043E-03	0.28215E-03	0.74731E-08
21	0.28346E-03	0.30711E-03	0.81341E-08
22	0.30759E-03	0.33325E-03	0.88264E-08
23	0.33283E-03	0.36060E-03	0.95507E-08
24	0.35920E-03	0.38917E-03	0.10307E-07
25	0.38672E-03	0.41898E-03	0.11097E-07
26	0.41541E-03	0.45006E-03	0.11920E-07
27	0.44527E-03	0.48242E-03	0.12777E-07
28	0.47634E-03	0.51608E-03	0.13669E-07
29	0.50862E-03	0.55106E-03	0.14595E-07
30	0.54214E-03	0.58737E-03	0.15557E-07
31	0.57690E-03	0.62502E-03	0.16554E-07
32	0.61291E-03	0.66405E-03	0.17588E-07
33	0.65020E-03	0.70445E-03	0.18658E-07
34	0.68878E-03	0.74624E-03	0.19765E-07
35	0.72865E-03	0.78944E-03	0.20909E-07
36	0.76983E-03	0.83405E-03	0.22090E-07
37	0.81232E-03	0.88009E-03	0.23310E-07
38	0.85613E-03	0.92756E-03	0.24567E-07
39	0.90128E-03	0.97646E-03	0.25863E-07
40	0.94775E-03	0.10268E-02	0.27196E-07
41	0.99556E-03	0.10786E-02	0.28568E-07
42	0.10447E-02	0.11318E-02	0.29978E-07
43	0.10952E-02	0.11865E-02	0.31426E-07
44	0.11469E-02	0.12426E-02	0.32912E-07
45	0.12000E-02	0.13001E-02	0.34434E-07
46	0.12543E-02	0.13590E-02	0.35994E-07
47	0.13100E-02	0.14192E-02	0.37590E-07
48	0.13668E-02	0.14808E-02	0.39220E-07
49	0.14248E-02	0.15437E-02	0.40885E-07
50	0.14839E-02	0.16077E-02	0.42582E-07
51	0.15442E-02	0.16730E-02	0.44311E-07
52	0.16054E-02	0.17394E-02	0.46068E-07
53	0.16676E-02	0.18068E-02	0.47854E-07
54	0.17307E-02	0.18751E-02	0.49664E-07
55	0.17946E-02	0.19443E-02	0.51497E-07
56	0.18592E-02	0.20143E-02	0.53350E-07
57	0.19243E-02	0.20849E-02	0.55220E-07
58	0.19900E-02	0.21560E-02	0.57103E-07
59	0.20560E-02	0.22275E-02	0.58996E-07
60	0.21222E-02	0.22992E-02	0.60896E-07
61	0.21884E-02	0.23710E-02	0.62798E-07
62	0.22546E-02	0.24427E-02	0.64698E-07
63	0.23206E-02	0.25142E-02	0.66591E-07
64	0.23862E-02	0.25852E-02	0.68472E-07
65	0.24512E-02	0.26557E-02	0.70337E-07
66	0.25154E-02	0.27253E-02	0.72181E-07
67	0.25787E-02	0.27938E-02	0.73997E-07
68	0.26409E-02	0.28612E-02	0.75781E-07
69	0.27017E-02	0.29271E-02	0.77526E-07
70	0.27610E-02	0.29913E-02	0.79227E-07
71	0.28185E-02	0.30536E-02	0.80877E-07
72	0.28740E-02	0.31138E-02	0.82472E-07
73	0.29274E-02	0.31716E-02	0.84003E-07
74	0.29784E-02	0.32269E-02	0.85467E-07
75	0.30268E-02	0.32793E-02	0.86855E-07
76	0.30723E-02	0.33286E-02	0.88162E-07
77	0.31148E-02	0.33747E-02	0.89381E-07
78	0.31541E-02	0.34172E-02	0.90507E-07
79	0.31898E-02	0.34559E-02	0.91533E-07
80	0.32219E-02	0.34906E-02	0.92453E-07
81	0.32500E-02	0.35211E-02	0.93260E-07
82	0.32740E-02	0.35472E-02	0.93950E-07
83	0.32937E-02	0.35685E-02	0.94515E-07
84	0.33089E-02	0.35849E-02	0.94950E-07
85	0.33193E-02	0.35963E-02	0.95250E-07
86	0.33249E-02	0.36022E-02	0.95408E-07
87	0.33253E-02	0.36027E-02	0.95421E-07
88	0.33204E-02	0.35974E-02	0.95281E-07
89	0.33101E-02	0.35862E-02	0.94985E-07
90	0.32941E-02	0.35689E-02	0.94526E-07
91	0.32723E-02	0.35453E-02	0.93901E-07
92	0.32446E-02	0.35153E-02	0.93105E-07
93	0.32107E-02	0.34786E-02	0.92133E-07
94	0.31706E-02	0.34351E-02	0.90982E-07
95	0.31240E-02	0.33847E-02	0.89645E-07
96	0.30709E-02	0.33271E-02	0.88121E-07
97	0.30111E-02	0.32623E-02	0.86404E-07
98	0.29444E-02	0.31901E-02	0.84492E-07
99	0.28708E-02	0.31103E-02	0.82380E-07
100	0.27901E-02	0.30229E-02	0.80064E-07

POLYGON I

Time: 50.000

Cell Cgas(g/cu.ft)

1 0.25955E-05

2 0.55727E-05

Clig(g/cu.ft)

0.28120E-05

0.60376E-05

Csol(g/g)

0.74478E-10

0.15991E-09

3	0.89367E-05	0.96822E-05	0.25644E-09
4	0.12693E-04	0.13752E-04	0.36423E-09
5	0.16848E-04	0.18254E-04	0.48346E-09
6	0.21408E-04	0.23194E-04	0.61431E-09
7	0.26380E-04	0.28581E-04	0.75698E-09
8	0.31771E-04	0.34422E-04	0.91169E-09
9	0.37590E-04	0.40726E-04	0.10787E-08
10	0.43844E-04	0.47502E-04	0.12581E-08
11	0.50542E-04	0.54759E-04	0.14503E-08
12	0.57693E-04	0.62506E-04	0.16555E-08
13	0.65305E-04	0.70753E-04	0.18740E-08
14	0.73388E-04	0.79510E-04	0.21059E-08
15	0.81951E-04	0.88788E-04	0.23516E-08
16	0.91005E-04	0.98597E-04	0.26114E-08
17	0.10056E-03	0.10895E-03	0.28856E-08
18	0.11062E-03	0.11985E-03	0.31743E-08
19	0.12120E-03	0.13131E-03	0.34780E-08
20	0.13232E-03	0.14335E-03	0.37968E-08
21	0.14397E-03	0.15598E-03	0.41312E-08
22	0.15617E-03	0.16920E-03	0.44813E-08
23	0.16893E-03	0.18302E-03	0.48474E-08
24	0.18226E-03	0.19746E-03	0.52299E-08
25	0.19616E-03	0.21253E-03	0.56290E-08
26	0.21066E-03	0.22823E-03	0.60449E-08
27	0.22575E-03	0.24458E-03	0.64780E-08
28	0.24145E-03	0.26159E-03	0.69284E-08
29	0.25776E-03	0.27926E-03	0.73964E-08
30	0.27469E-03	0.29760E-03	0.78822E-08
31	0.29225E-03	0.31663E-03	0.83861E-08
32	0.31044E-03	0.33634E-03	0.89083E-08
33	0.32928E-03	0.35675E-03	0.94488E-08
34	0.34877E-03	0.37786E-03	0.10008E-07
35	0.36891E-03	0.39968E-03	0.10586E-07
36	0.38970E-03	0.42221E-03	0.11183E-07
37	0.41116E-03	0.44546E-03	0.11798E-07
38	0.43328E-03	0.46943E-03	0.12433E-07
39	0.45607E-03	0.49412E-03	0.13087E-07
40	0.47953E-03	0.51953E-03	0.13760E-07
41	0.50365E-03	0.54567E-03	0.14452E-07
42	0.52844E-03	0.57252E-03	0.15164E-07
43	0.55389E-03	0.60010E-03	0.15894E-07
44	0.58000E-03	0.62839E-03	0.16643E-07
45	0.60677E-03	0.65739E-03	0.17412E-07
46	0.63419E-03	0.68710E-03	0.18198E-07
47	0.66225E-03	0.71749E-03	0.19003E-07
48	0.69094E-03	0.74858E-03	0.19827E-07
49	0.72024E-03	0.78033E-03	0.20668E-07
50	0.75015E-03	0.81273E-03	0.21526E-07
51	0.78066E-03	0.84578E-03	0.22401E-07
52	0.81173E-03	0.87944E-03	0.23293E-07
53	0.84335E-03	0.91370E-03	0.24200E-07
54	0.87550E-03	0.94853E-03	0.25123E-07
55	0.90814E-03	0.98390E-03	0.26060E-07
56	0.94126E-03	0.10198E-02	0.27010E-07
57	0.97482E-03	0.10561E-02	0.27973E-07
58	0.10088E-02	0.10929E-02	0.28947E-07
59	0.10431E-02	0.11301E-02	0.29932E-07
60	0.10778E-02	0.11677E-02	0.30926E-07
61	0.11127E-02	0.12055E-02	0.31929E-07
62	0.11478E-02	0.12436E-02	0.32937E-07
63	0.11831E-02	0.12818E-02	0.33951E-07
64	0.12186E-02	0.13202E-02	0.34967E-07
65	0.12540E-02	0.13587E-02	0.35985E-07
66	0.12895E-02	0.13971E-02	0.37003E-07
67	0.13249E-02	0.14354E-02	0.38018E-07
68	0.13601E-02	0.14736E-02	0.39029E-07
69	0.13951E-02	0.15114E-02	0.40032E-07
70	0.14297E-02	0.15490E-02	0.41026E-07
71	0.14639E-02	0.15861E-02	0.42008E-07
72	0.14977E-02	0.16226E-02	0.42976E-07
73	0.15308E-02	0.16585E-02	0.43926E-07
74	0.15632E-02	0.16936E-02	0.44855E-07
75	0.15947E-02	0.17278E-02	0.45762E-07
76	0.16254E-02	0.17610E-02	0.46641E-07
77	0.16550E-02	0.17931E-02	0.47491E-07
78	0.16834E-02	0.18239E-02	0.48307E-07
79	0.17106E-02	0.18533E-02	0.49087E-07
80	0.17364E-02	0.18812E-02	0.49826E-07
81	0.17606E-02	0.19074E-02	0.50520E-07
82	0.17831E-02	0.19319E-02	0.51167E-07
83	0.18038E-02	0.19543E-02	0.51761E-07
84	0.18226E-02	0.19746E-02	0.52299E-07
85	0.18392E-02	0.19927E-02	0.52778E-07
86	0.18537E-02	0.20083E-02	0.53191E-07
87	0.18657E-02	0.20213E-02	0.53536E-07
88	0.18752E-02	0.20316E-02	0.53808E-07
89	0.18819E-02	0.20389E-02	0.54003E-07
90	0.18859E-02	0.20432E-02	0.54115E-07
91	0.18868E-02	0.20442E-02	0.54142E-07
92	0.18845E-02	0.20417E-02	0.54077E-07

93	0.18789E-02	0.20357E-02	0.53917E-07
94	0.18699E-02	0.20259E-02	0.53657E-07
95	0.18571E-02	0.20121E-02	0.53292E-07
96	0.18406E-02	0.19942E-02	0.52817E-07
97	0.18201E-02	0.19719E-02	0.52229E-07
98	0.17955E-02	0.19452E-02	0.51522E-07
99	0.17665E-02	0.19139E-02	0.50691E-07
100	0.17331E-02	0.18777E-02	0.49732E-07

POLYGON I

Time:	60.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.13297E-05	0.14407E-05	0.38157E-10
2	0.28549E-05	0.30931E-05	0.81923E-10
3	0.45781E-05	0.49600E-05	0.13137E-09
4	0.65021E-05	0.70445E-05	0.18658E-09
5	0.86300E-05	0.93500E-05	0.24764E-09
6	0.10965E-04	0.11880E-04	0.31465E-09
7	0.13511E-04	0.14638E-04	0.38771E-09
8	0.16271E-04	0.17629E-04	0.46692E-09
9	0.19250E-04	0.20856E-04	0.55239E-09
10	0.22451E-04	0.24324E-04	0.64425E-09
11	0.25879E-04	0.28038E-04	0.74262E-09
12	0.29538E-04	0.32003E-04	0.84762E-09
13	0.33433E-04	0.36222E-04	0.95938E-09
14	0.37568E-04	0.40702E-04	0.10780E-08
15	0.41948E-04	0.45448E-04	0.12037E-08
16	0.46578E-04	0.50464E-04	0.13366E-08
17	0.51462E-04	0.55756E-04	0.14767E-08
18	0.56607E-04	0.61329E-04	0.16243E-08
19	0.62015E-04	0.67189E-04	0.17796E-08
20	0.67694E-04	0.73341E-04	0.19425E-08
21	0.73647E-04	0.79790E-04	0.21133E-08
22	0.79879E-04	0.86543E-04	0.22922E-08
23	0.86396E-04	0.93603E-04	0.24792E-08
24	0.93202E-04	0.10098E-03	0.26745E-08
25	0.10030E-03	0.10867E-03	0.28782E-08
26	0.10770E-03	0.11669E-03	0.30905E-08
27	0.11540E-03	0.12503E-03	0.33116E-08
28	0.12341E-03	0.13371E-03	0.35414E-08
29	0.13174E-03	0.14273E-03	0.37802E-08
30	0.14037E-03	0.15209E-03	0.40281E-08
31	0.14933E-03	0.16179E-03	0.42852E-08
32	0.15862E-03	0.17185E-03	0.45515E-08
33	0.16822E-03	0.18226E-03	0.48273E-08
34	0.17816E-03	0.19303E-03	0.51124E-08
35	0.18843E-03	0.20415E-03	0.54072E-08
36	0.19904E-03	0.21565E-03	0.57115E-08
37	0.20998E-03	0.22750E-03	0.60256E-08
38	0.22127E-03	0.23972E-03	0.63493E-08
39	0.23289E-03	0.25232E-03	0.66828E-08
40	0.24485E-03	0.26528E-03	0.70260E-08
41	0.25715E-03	0.27860E-03	0.73791E-08
42	0.26979E-03	0.29230E-03	0.77418E-08
43	0.28277E-03	0.30636E-03	0.81143E-08
44	0.29609E-03	0.32079E-03	0.84965E-08
45	0.30975E-03	0.33559E-03	0.88883E-08
46	0.32373E-03	0.35074E-03	0.92896E-08
47	0.33805E-03	0.36625E-03	0.97004E-08
48	0.35268E-03	0.38211E-03	0.10120E-07
49	0.36764E-03	0.39831E-03	0.10550E-07
50	0.38291E-03	0.41485E-03	0.10988E-07
51	0.39848E-03	0.43172E-03	0.11435E-07
52	0.41435E-03	0.44892E-03	0.11890E-07
53	0.43051E-03	0.46642E-03	0.12354E-07
54	0.44694E-03	0.48423E-03	0.12825E-07
55	0.46364E-03	0.50232E-03	0.13304E-07
56	0.48059E-03	0.52069E-03	0.13791E-07
57	0.49778E-03	0.53931E-03	0.14284E-07
58	0.51520E-03	0.55818E-03	0.14784E-07
59	0.53282E-03	0.57727E-03	0.15289E-07
60	0.55063E-03	0.59656E-03	0.15801E-07
61	0.56861E-03	0.61604E-03	0.16316E-07
62	0.58673E-03	0.63568E-03	0.16836E-07
63	0.60498E-03	0.65545E-03	0.17360E-07
64	0.62333E-03	0.67533E-03	0.17887E-07
65	0.64175E-03	0.69529E-03	0.18415E-07
66	0.66021E-03	0.71529E-03	0.18945E-07
67	0.67869E-03	0.73531E-03	0.19475E-07
68	0.69715E-03	0.75531E-03	0.20005E-07
69	0.71556E-03	0.77525E-03	0.20533E-07
70	0.73387E-03	0.79509E-03	0.21059E-07
71	0.75206E-03	0.81480E-03	0.21581E-07
72	0.77007E-03	0.83432E-03	0.22098E-07
73	0.78787E-03	0.85360E-03	0.22608E-07
74	0.80541E-03	0.87260E-03	0.23112E-07
75	0.82264E-03	0.89127E-03	0.23606E-07
76	0.83952E-03	0.90955E-03	0.24090E-07
77	0.85597E-03	0.92738E-03	0.24562E-07
78	0.87196E-03	0.94470E-03	0.25021E-07

79	0.88742E-03	0.96145E-03	0.25465E-07
80	0.90229E-03	0.97756E-03	0.25892E-07
81	0.91650E-03	0.99296E-03	0.26299E-07
82	0.93000E-03	0.10076E-02	0.26687E-07
83	0.94270E-03	0.10213E-02	0.27051E-07
84	0.95455E-03	0.10342E-02	0.27391E-07
85	0.96545E-03	0.10460E-02	0.27704E-07
86	0.97534E-03	0.10567E-02	0.27988E-07
87	0.98413E-03	0.10662E-02	0.28240E-07
88	0.99175E-03	0.10745E-02	0.28459E-07
89	0.99810E-03	0.10814E-02	0.28641E-07
90	0.10031E-02	0.10868E-02	0.28784E-07
91	0.10067E-02	0.10906E-02	0.28887E-07
92	0.10087E-02	0.10928E-02	0.28945E-07
93	0.10091E-02	0.10933E-02	0.28956E-07
94	0.10077E-02	0.10918E-02	0.28917E-07
95	0.10046E-02	0.10884E-02	0.28826E-07
96	0.99946E-03	0.10828E-02	0.28680E-07
97	0.99232E-03	0.10751E-02	0.28475E-07
98	0.98303E-03	0.10650E-02	0.28209E-07
99	0.97149E-03	0.10525E-02	0.27877E-07
100	0.95758E-03	0.10375E-02	0.27478E-07

POLYGON I

Time:	70.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.68158E-06	0.73844E-06	0.19558E-10
2	0.14633E-05	0.15854E-05	0.41991E-10
3	0.23466E-05	0.25423E-05	0.67336E-10
4	0.33327E-05	0.36107E-05	0.95634E-10
5	0.44234E-05	0.47924E-05	0.12693E-09
6	0.56202E-05	0.60890E-05	0.16127E-09
7	0.69250E-05	0.75027E-05	0.19872E-09
8	0.83397E-05	0.90354E-05	0.23931E-09
9	0.98663E-05	0.10689E-04	0.28312E-09
10	0.11507E-04	0.12467E-04	0.33019E-09
11	0.13264E-04	0.14370E-04	0.38060E-09
12	0.15139E-04	0.16402E-04	0.43441E-09
13	0.17134E-04	0.18564E-04	0.49168E-09
14	0.19253E-04	0.20859E-04	0.55248E-09
15	0.21497E-04	0.23291E-04	0.61688E-09
16	0.23870E-04	0.25861E-04	0.68495E-09
17	0.26372E-04	0.28572E-04	0.75676E-09
18	0.29008E-04	0.31428E-04	0.83239E-09
19	0.31779E-04	0.34430E-04	0.91190E-09
20	0.34688E-04	0.37581E-04	0.99537E-09
21	0.37737E-04	0.40885E-04	0.10829E-08
22	0.40929E-04	0.44344E-04	0.11745E-08
23	0.44267E-04	0.47960E-04	0.12703E-08
24	0.47753E-04	0.51737E-04	0.13703E-08
25	0.51389E-04	0.55677E-04	0.14746E-08
26	0.55179E-04	0.59782E-04	0.15834E-08
27	0.59123E-04	0.64055E-04	0.16966E-08
28	0.63225E-04	0.68499E-04	0.18143E-08
29	0.67486E-04	0.73116E-04	0.19365E-08
30	0.71908E-04	0.77907E-04	0.20634E-08
31	0.76495E-04	0.82876E-04	0.21950E-08
32	0.81246E-04	0.88024E-04	0.23314E-08
33	0.86165E-04	0.93353E-04	0.24725E-08
34	0.91253E-04	0.98865E-04	0.26185E-08
35	0.96510E-04	0.10456E-03	0.27694E-08
36	0.10194E-03	0.11044E-03	0.29252E-08
37	0.10754E-03	0.11651E-03	0.30859E-08
38	0.11331E-03	0.12277E-03	0.32516E-08
39	0.11926E-03	0.12921E-03	0.34223E-08
40	0.12538E-03	0.13584E-03	0.35979E-08
41	0.13168E-03	0.14266E-03	0.37786E-08
42	0.13815E-03	0.14967E-03	0.39642E-08
43	0.14479E-03	0.15687E-03	0.41549E-08
44	0.15161E-03	0.16426E-03	0.43505E-08
45	0.15860E-03	0.17183E-03	0.45510E-08
46	0.16575E-03	0.17958E-03	0.47564E-08
47	0.17308E-03	0.18752E-03	0.49666E-08
48	0.18057E-03	0.19563E-03	0.51815E-08
49	0.18823E-03	0.20393E-03	0.54012E-08
50	0.19604E-03	0.21240E-03	0.56255E-08
51	0.20401E-03	0.22103E-03	0.58542E-08
52	0.21214E-03	0.22983E-03	0.60873E-08
53	0.22041E-03	0.23880E-03	0.63247E-08
54	0.22882E-03	0.24791E-03	0.65662E-08
55	0.23738E-03	0.25718E-03	0.68116E-08
56	0.24606E-03	0.26659E-03	0.70608E-08
57	0.25487E-03	0.27613E-03	0.73135E-08
58	0.26379E-03	0.28580E-03	0.75696E-08
59	0.27282E-03	0.29558E-03	0.78287E-08
60	0.28195E-03	0.30548E-03	0.80908E-08
61	0.29117E-03	0.31547E-03	0.83554E-08
62	0.30047E-03	0.32554E-03	0.86222E-08
63	0.30984E-03	0.33569E-03	0.88911E-08
64	0.31927E-03	0.34590E-03	0.91615E-08

65	0.32874E-03	0.35616E-03	0.94332E-08
66	0.33823E-03	0.36645E-03	0.97057E-08
67	0.34774E-03	0.37675E-03	0.99786E-08
68	0.35725E-03	0.38706E-03	0.10252E-07
69	0.36675E-03	0.39734E-03	0.10524E-07
70	0.37620E-03	0.40759E-03	0.10795E-07
71	0.38560E-03	0.41777E-03	0.11065E-07
72	0.39493E-03	0.42788E-03	0.11333E-07
73	0.40416E-03	0.43788E-03	0.11598E-07
74	0.41328E-03	0.44776E-03	0.11859E-07
75	0.42225E-03	0.45748E-03	0.12117E-07
76	0.43106E-03	0.46702E-03	0.12369E-07
77	0.43968E-03	0.47636E-03	0.12617E-07
78	0.44807E-03	0.48545E-03	0.12858E-07
79	0.45622E-03	0.49428E-03	0.13092E-07
80	0.46410E-03	0.50281E-03	0.13317E-07
81	0.47166E-03	0.51101E-03	0.13534E-07
82	0.47888E-03	0.51883E-03	0.13742E-07
83	0.48573E-03	0.52625E-03	0.13938E-07
84	0.49216E-03	0.53322E-03	0.14123E-07
85	0.49814E-03	0.53970E-03	0.14294E-07
86	0.50364E-03	0.54565E-03	0.14452E-07
87	0.50861E-03	0.55104E-03	0.14595E-07
88	0.51300E-03	0.55580E-03	0.14721E-07
89	0.51678E-03	0.55990E-03	0.14829E-07
90	0.51991E-03	0.56328E-03	0.14919E-07
91	0.52233E-03	0.56590E-03	0.14988E-07
92	0.52399E-03	0.56770E-03	0.15036E-07
93	0.52485E-03	0.56863E-03	0.15061E-07
94	0.52485E-03	0.56863E-03	0.15061E-07
95	0.52394E-03	0.56765E-03	0.15035E-07
96	0.52207E-03	0.56562E-03	0.14981E-07
97	0.51917E-03	0.56249E-03	0.14898E-07
98	0.51520E-03	0.55818E-03	0.14784E-07
99	0.51009E-03	0.55264E-03	0.14637E-07
100	0.50377E-03	0.54580E-03	0.14456E-07

POLYGON 1

Time:	80.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.34938E-06	0.37853E-06	0.10026E-10
2	0.75011E-06	0.81269E-06	0.21525E-10
3	0.12029E-05	0.13032E-05	0.34517E-10
4	0.17084E-05	0.18509E-05	0.49022E-10
5	0.22674E-05	0.24566E-05	0.65065E-10
6	0.28809E-05	0.31213E-05	0.82669E-10
7	0.35498E-05	0.38459E-05	0.10186E-09
8	0.42749E-05	0.46316E-05	0.12267E-09
9	0.50575E-05	0.54794E-05	0.14513E-09
10	0.58984E-05	0.63905E-05	0.16926E-09
11	0.67989E-05	0.73660E-05	0.19510E-09
12	0.77600E-05	0.84074E-05	0.22268E-09
13	0.87830E-05	0.95157E-05	0.25203E-09
14	0.98690E-05	0.10692E-04	0.28320E-09
15	0.11019E-04	0.11939E-04	0.31621E-09
16	0.12235E-04	0.13256E-04	0.35110E-09
17	0.13518E-04	0.14646E-04	0.38791E-09
18	0.14869E-04	0.16109E-04	0.42667E-09
19	0.16289E-04	0.17648E-04	0.46742E-09
20	0.17780E-04	0.19263E-04	0.51021E-09
21	0.19343E-04	0.20957E-04	0.55506E-09
22	0.20979E-04	0.22729E-04	0.60201E-09
23	0.22690E-04	0.24583E-04	0.65110E-09
24	0.24477E-04	0.26519E-04	0.70237E-09
25	0.26340E-04	0.28538E-04	0.75585E-09
26	0.28282E-04	0.30642E-04	0.81157E-09
27	0.30304E-04	0.32832E-04	0.86958E-09
28	0.32406E-04	0.35109E-04	0.92990E-09
29	0.34590E-04	0.37475E-04	0.99256E-09
30	0.36856E-04	0.39931E-04	0.10576E-08
31	0.39206E-04	0.42477E-04	0.11250E-08
32	0.41641E-04	0.45115E-04	0.11949E-08
33	0.44162E-04	0.47846E-04	0.12672E-08
34	0.46769E-04	0.50671E-04	0.13421E-08
35	0.49463E-04	0.53589E-04	0.14194E-08
36	0.52245E-04	0.56603E-04	0.14992E-08
37	0.55115E-04	0.59713E-04	0.15815E-08
38	0.58073E-04	0.62918E-04	0.16664E-08
39	0.61121E-04	0.66220E-04	0.17539E-08
40	0.64258E-04	0.69618E-04	0.18439E-08
41	0.67483E-04	0.73113E-04	0.19365E-08
42	0.70798E-04	0.76704E-04	0.20316E-08
43	0.74202E-04	0.80392E-04	0.21293E-08
44	0.77694E-04	0.84176E-04	0.22295E-08
45	0.81274E-04	0.88054E-04	0.23322E-08
46	0.84941E-04	0.92027E-04	0.24374E-08
47	0.88695E-04	0.96094E-04	0.25451E-08
48	0.92533E-04	0.10025E-03	0.26553E-08
49	0.96455E-04	0.10450E-03	0.27678E-08
50	0.10046E-03	0.10884E-03	0.28827E-08

51	0.10454E-03	0.11326E-03	0.29999E-08
52	0.10871E-03	0.11777E-03	0.31194E-08
53	0.11294E-03	0.12237E-03	0.32410E-08
54	0.11726E-03	0.12704E-03	0.33647E-08
55	0.12164E-03	0.13179E-03	0.34905E-08
56	0.12609E-03	0.13661E-03	0.36181E-08
57	0.13060E-03	0.14150E-03	0.37476E-08
58	0.13517E-03	0.14645E-03	0.38789E-08
59	0.13980E-03	0.15147E-03	0.40117E-08
60	0.14448E-03	0.15654E-03	0.41460E-08
61	0.14921E-03	0.16166E-03	0.42816E-08
62	0.15398E-03	0.16682E-03	0.44184E-08
63	0.15878E-03	0.17203E-03	0.45563E-08
64	0.16361E-03	0.17726E-03	0.46949E-08
65	0.16847E-03	0.18252E-03	0.48343E-08
66	0.17334E-03	0.18780E-03	0.49740E-08
67	0.17822E-03	0.19309E-03	0.51141E-08
68	0.18310E-03	0.19837E-03	0.52541E-08
69	0.18797E-03	0.20365E-03	0.53939E-08
70	0.19283E-03	0.20891E-03	0.55332E-08
71	0.19766E-03	0.21414E-03	0.56718E-08
72	0.20245E-03	0.21934E-03	0.58093E-08
73	0.20719E-03	0.22448E-03	0.59455E-08
74	0.21188E-03	0.22956E-03	0.60800E-08
75	0.21650E-03	0.23456E-03	0.62125E-08
76	0.22103E-03	0.23947E-03	0.63427E-08
77	0.22547E-03	0.24428E-03	0.64701E-08
78	0.22980E-03	0.24898E-03	0.65943E-08
79	0.23401E-03	0.25353E-03	0.67151E-08
80	0.23808E-03	0.25794E-03	0.68318E-08
81	0.24200E-03	0.26218E-03	0.69442E-08
82	0.24574E-03	0.26624E-03	0.70516E-08
83	0.24930E-03	0.27009E-03	0.71536E-08
84	0.25265E-03	0.27372E-03	0.72498E-08
85	0.25577E-03	0.27711E-03	0.73394E-08
86	0.25865E-03	0.28023E-03	0.74221E-08
87	0.26127E-03	0.28306E-03	0.74971E-08
88	0.26359E-03	0.28558E-03	0.75640E-08
89	0.26562E-03	0.28777E-03	0.76219E-08
90	0.26731E-03	0.28960E-03	0.76704E-08
91	0.26864E-03	0.29105E-03	0.77087E-08
92	0.26960E-03	0.29209E-03	0.77362E-08
93	0.27015E-03	0.29268E-03	0.77519E-08
94	0.27026E-03	0.29281E-03	0.77553E-08
95	0.26992E-03	0.29244E-03	0.77456E-08
96	0.26910E-03	0.29155E-03	0.77218E-08
97	0.26775E-03	0.29009E-03	0.76833E-08
98	0.26586E-03	0.28804E-03	0.76290E-08
99	0.26339E-03	0.28537E-03	0.75582E-08
100	0.26032E-03	0.28203E-03	0.74699E-08

POLYGON I

Time:	90.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.17909E-06	0.19404E-06	0.51392E-11
2	0.38451E-06	0.41659E-06	0.11034E-10
3	0.61659E-06	0.66803E-06	0.17693E-10
4	0.87572E-06	0.94877E-06	0.25129E-10
5	0.11623E-05	0.12593E-05	0.33353E-10
6	0.14768E-05	0.16000E-05	0.42377E-10
7	0.18196E-05	0.19714E-05	0.52215E-10
8	0.21914E-05	0.23742E-05	0.62882E-10
9	0.25925E-05	0.28087E-05	0.74392E-10
10	0.30235E-05	0.32758E-05	0.86762E-10
11	0.34851E-05	0.37759E-05	0.10001E-09
12	0.39778E-05	0.43096E-05	0.11414E-09
13	0.45022E-05	0.48778E-05	0.12919E-09
14	0.50589E-05	0.54809E-05	0.14517E-09
15	0.56486E-05	0.61198E-05	0.16209E-09
16	0.62719E-05	0.67951E-05	0.17997E-09
17	0.69294E-05	0.75075E-05	0.19884E-09
18	0.76218E-05	0.82577E-05	0.21871E-09
19	0.83499E-05	0.90464E-05	0.23960E-09
20	0.91141E-05	0.98745E-05	0.26153E-09
21	0.99153E-05	0.10742E-04	0.28452E-09
22	0.10754E-04	0.11651E-04	0.30859E-09
23	0.11631E-04	0.12601E-04	0.33375E-09
24	0.12547E-04	0.13593E-04	0.36003E-09
25	0.13502E-04	0.14628E-04	0.38745E-09
26	0.14497E-04	0.15707E-04	0.41601E-09
27	0.15534E-04	0.16829E-04	0.44574E-09
28	0.16611E-04	0.17997E-04	0.47666E-09
29	0.17730E-04	0.19210E-04	0.50878E-09
30	0.18892E-04	0.20468E-04	0.54212E-09
31	0.20097E-04	0.21774E-04	0.57669E-09
32	0.21345E-04	0.23126E-04	0.61251E-09
33	0.22637E-04	0.24526E-04	0.64958E-09
34	0.23973E-04	0.25973E-04	0.68792E-09
35	0.25354E-04	0.27469E-04	0.72755E-09
36	0.26780E-04	0.29014E-04	0.76846E-09

37	0.28251E-04	0.30608E-04	0.81067E-09
38	0.29767E-04	0.32251E-04	0.85419E-09
39	0.31330E-04	0.33943E-04	0.89901E-09
40	0.32937E-04	0.35685E-04	0.94515E-09
41	0.34591E-04	0.37476E-04	0.99259E-09
42	0.36290E-04	0.39317E-04	0.10413E-08
43	0.38034E-04	0.41207E-04	0.10914E-08
44	0.39824E-04	0.43146E-04	0.11428E-08
45	0.41659E-04	0.45134E-04	0.11954E-08
46	0.43538E-04	0.47171E-04	0.12494E-08
47	0.45462E-04	0.49255E-04	0.13046E-08
48	0.47429E-04	0.51386E-04	0.13610E-08
49	0.49440E-04	0.53564E-04	0.14187E-08
50	0.51492E-04	0.55787E-04	0.14776E-08
51	0.53585E-04	0.58055E-04	0.15376E-08
52	0.55718E-04	0.60367E-04	0.15989E-08
53	0.57891E-04	0.62720E-04	0.16612E-08
54	0.60101E-04	0.65114E-04	0.17246E-08
55	0.62347E-04	0.67548E-04	0.17891E-08
56	0.64627E-04	0.70019E-04	0.18545E-08
57	0.66940E-04	0.72525E-04	0.19209E-08
58	0.69284E-04	0.75064E-04	0.19881E-08
59	0.71657E-04	0.77634E-04	0.20562E-08
60	0.74055E-04	0.80233E-04	0.21251E-08
61	0.76478E-04	0.82858E-04	0.21946E-08
62	0.78922E-04	0.85506E-04	0.22647E-08
63	0.81384E-04	0.88173E-04	0.23353E-08
64	0.83861E-04	0.90857E-04	0.24064E-08
65	0.86350E-04	0.93553E-04	0.24778E-08
66	0.88847E-04	0.96259E-04	0.25495E-08
67	0.91348E-04	0.98969E-04	0.26213E-08
68	0.93850E-04	0.10168E-03	0.26931E-08
69	0.96348E-04	0.10439E-03	0.27647E-08
70	0.98838E-04	0.10708E-03	0.28362E-08
71	0.10131E-03	0.10977E-03	0.29072E-08
72	0.10377E-03	0.11243E-03	0.29778E-08
73	0.10621E-03	0.11507E-03	0.30476E-08
74	0.10861E-03	0.11767E-03	0.31166E-08
75	0.11098E-03	0.12024E-03	0.31846E-08
76	0.11331E-03	0.12276E-03	0.32514E-08
77	0.11558E-03	0.12523E-03	0.33168E-08
78	0.11781E-03	0.12764E-03	0.33806E-08
79	0.11997E-03	0.12998E-03	0.34425E-08
80	0.12206E-03	0.13224E-03	0.35025E-08
81	0.12407E-03	0.13442E-03	0.35602E-08
82	0.12599E-03	0.13651E-03	0.36155E-08
83	0.12782E-03	0.13849E-03	0.36679E-08
84	0.12955E-03	0.14035E-03	0.37174E-08
85	0.13116E-03	0.14210E-03	0.37636E-08
86	0.13264E-03	0.14371E-03	0.38062E-08
87	0.13399E-03	0.14517E-03	0.38449E-08
88	0.13520E-03	0.14647E-03	0.38795E-08
89	0.13624E-03	0.14761E-03	0.39095E-08
90	0.13712E-03	0.14856E-03	0.39348E-08
91	0.13782E-03	0.14932E-03	0.39548E-08
92	0.13832E-03	0.14986E-03	0.39693E-08
93	0.13862E-03	0.15019E-03	0.39778E-08
94	0.13870E-03	0.15027E-03	0.39801E-08
95	0.13855E-03	0.15010E-03	0.39756E-08
96	0.13814E-03	0.14967E-03	0.39640E-08
97	0.13748E-03	0.14894E-03	0.39449E-08
98	0.13653E-03	0.14792E-03	0.39178E-08
99	0.13529E-03	0.14658E-03	0.38822E-08
100	0.13374E-03	0.14490E-03	0.38377E-08

POLYGON I

Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.91804E-07	0.99463E-07	0.26344E-11
2	0.19710E-06	0.21354E-06	0.56559E-11
3	0.31607E-06	0.34243E-06	0.90696E-11
4	0.44889E-06	0.48634E-06	0.12881E-10
5	0.59580E-06	0.64550E-06	0.17097E-10
6	0.75700E-06	0.82015E-06	0.21722E-10
7	0.93275E-06	0.10106E-05	0.26766E-10
8	0.11233E-05	0.12170E-05	0.32233E-10
9	0.13289E-05	0.14398E-05	0.38134E-10
10	0.15499E-05	0.16792E-05	0.44474E-10
11	0.17865E-05	0.19355E-05	0.51264E-10
12	0.20390E-05	0.22091E-05	0.58511E-10
13	0.23078E-05	0.25004E-05	0.66224E-10
14	0.25932E-05	0.28095E-05	0.74413E-10
15	0.28955E-05	0.31370E-05	0.83087E-10
16	0.32150E-05	0.34832E-05	0.92255E-10
17	0.35520E-05	0.38484E-05	0.10193E-09
18	0.39070E-05	0.42329E-05	0.11211E-09
19	0.42802E-05	0.46372E-05	0.12282E-09
20	0.46719E-05	0.50617E-05	0.13406E-09
21	0.50826E-05	0.55066E-05	0.14585E-09
22	0.55125E-05	0.59724E-05	0.15818E-09

23	0.59620E-05	0.64594E-05	0.17108E-09
24	0.64315E-05	0.69680E-05	0.18455E-09
25	0.69212E-05	0.74986E-05	0.19861E-09
26	0.74314E-05	0.80514E-05	0.21325E-09
27	0.79626E-05	0.86268E-05	0.22849E-09
28	0.85149E-05	0.92252E-05	0.24434E-09
29	0.90887E-05	0.98469E-05	0.26080E-09
30	0.96842E-05	0.10492E-04	0.27789E-09
31	0.10302E-04	0.11161E-04	0.29561E-09
32	0.10942E-04	0.11854E-04	0.31397E-09
33	0.11604E-04	0.12572E-04	0.33298E-09
34	0.12289E-04	0.13314E-04	0.35263E-09
35	0.12997E-04	0.14081E-04	0.37294E-09
36	0.13727E-04	0.14873E-04	0.39391E-09
37	0.14481E-04	0.15690E-04	0.41555E-09
38	0.15259E-04	0.16532E-04	0.43786E-09
39	0.16059E-04	0.17399E-04	0.46083E-09
40	0.16884E-04	0.18292E-04	0.48448E-09
41	0.17731E-04	0.19210E-04	0.50880E-09
42	0.18602E-04	0.20154E-04	0.53379E-09
43	0.19496E-04	0.21123E-04	0.55945E-09
44	0.20414E-04	0.22117E-04	0.58578E-09
45	0.21354E-04	0.23136E-04	0.61277E-09
46	0.22318E-04	0.24179E-04	0.64041E-09
47	0.23304E-04	0.25248E-04	0.66871E-09
48	0.24312E-04	0.26340E-04	0.69764E-09
49	0.25342E-04	0.27457E-04	0.72721E-09
50	0.26394E-04	0.28596E-04	0.75740E-09
51	0.27467E-04	0.29759E-04	0.78819E-09
52	0.28561E-04	0.30944E-04	0.81957E-09
53	0.29674E-04	0.32150E-04	0.85152E-09
54	0.30807E-04	0.33377E-04	0.88402E-09
55	0.31958E-04	0.34624E-04	0.91706E-09
56	0.33127E-04	0.35891E-04	0.95060E-09
57	0.34313E-04	0.37175E-04	0.98462E-09
58	0.35514E-04	0.38477E-04	0.10191E-08
59	0.36730E-04	0.39795E-04	0.10540E-08
60	0.37960E-04	0.41127E-04	0.10893E-08
61	0.39202E-04	0.42472E-04	0.11249E-08
62	0.40454E-04	0.43829E-04	0.11609E-08
63	0.41716E-04	0.45196E-04	0.11971E-08
64	0.42986E-04	0.46572E-04	0.12335E-08
65	0.44262E-04	0.47954E-04	0.12701E-08
66	0.45542E-04	0.49341E-04	0.13068E-08
67	0.46824E-04	0.50730E-04	0.13436E-08
68	0.48106E-04	0.52120E-04	0.13804E-08
69	0.49387E-04	0.53507E-04	0.14172E-08
70	0.50663E-04	0.54890E-04	0.14538E-08
71	0.51932E-04	0.56265E-04	0.14902E-08
72	0.53192E-04	0.57630E-04	0.15264E-08
73	0.54440E-04	0.58982E-04	0.15622E-08
74	0.55673E-04	0.60317E-04	0.15976E-08
75	0.56887E-04	0.61633E-04	0.16324E-08
76	0.58080E-04	0.62926E-04	0.16666E-08
77	0.59249E-04	0.64191E-04	0.17002E-08
78	0.60389E-04	0.65426E-04	0.17329E-08
79	0.61496E-04	0.66627E-04	0.17647E-08
80	0.62568E-04	0.67788E-04	0.17954E-08
81	0.63600E-04	0.68905E-04	0.18250E-08
82	0.64587E-04	0.69975E-04	0.18533E-08
83	0.65525E-04	0.70991E-04	0.18803E-08
84	0.66409E-04	0.71949E-04	0.19056E-08
85	0.67235E-04	0.72844E-04	0.19293E-08
86	0.67997E-04	0.73670E-04	0.19512E-08
87	0.68690E-04	0.74421E-04	0.19711E-08
88	0.69309E-04	0.75091E-04	0.19888E-08
89	0.69847E-04	0.75674E-04	0.20043E-08
90	0.70299E-04	0.76164E-04	0.20173E-08
91	0.70659E-04	0.76554E-04	0.20276E-08
92	0.70920E-04	0.76836E-04	0.20351E-08
93	0.71075E-04	0.77004E-04	0.20395E-08
94	0.71117E-04	0.77050E-04	0.20407E-08
95	0.71040E-04	0.76967E-04	0.20385E-08
96	0.70836E-04	0.76746E-04	0.20327E-08
97	0.70498E-04	0.76379E-04	0.20230E-08
98	0.70016E-04	0.75857E-04	0.20091E-08
99	0.69384E-04	0.75173E-04	0.19910E-08
100	0.68593E-04	0.74315E-04	0.19683E-08

POLYGON I

Time:	110.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.47059E-07	0.50985E-07	0.13504E-11
2	0.10103E-06	0.10946E-06	0.28992E-11
3	0.16202E-06	0.17553E-06	0.46491E-11
4	0.23010E-06	0.24930E-06	0.66029E-11
5	0.30541E-06	0.33088E-06	0.87637E-11
6	0.38804E-06	0.42041E-06	0.11135E-10
7	0.47813E-06	0.51801E-06	0.13720E-10
8	0.57580E-06	0.62384E-06	0.16523E-10

9	0.68120E-06	0.73803E-06	0.19547E-10
10	0.79447E-06	0.86074E-06	0.22798E-10
11	0.91575E-06	0.99215E-06	0.26278E-10
12	0.10452E-05	0.11324E-05	0.29993E-10
13	0.11830E-05	0.12817E-05	0.33947E-10
14	0.13293E-05	0.14402E-05	0.38144E-10
15	0.14842E-05	0.16080E-05	0.42590E-10
16	0.16480E-05	0.17855E-05	0.47290E-10
17	0.18208E-05	0.19727E-05	0.52248E-10
18	0.20027E-05	0.21698E-05	0.57469E-10
19	0.21940E-05	0.23770E-05	0.62958E-10
20	0.23948E-05	0.25946E-05	0.68721E-10
21	0.26053E-05	0.28227E-05	0.74761E-10
22	0.28257E-05	0.30615E-05	0.81085E-10
23	0.30561E-05	0.33111E-05	0.87697E-10
24	0.32968E-05	0.35718E-05	0.94603E-10
25	0.35478E-05	0.38438E-05	0.10181E-09
26	0.38094E-05	0.41271E-05	0.10931E-09
27	0.40816E-05	0.44221E-05	0.11712E-09
28	0.43647E-05	0.47289E-05	0.12525E-09
29	0.46589E-05	0.50475E-05	0.13369E-09
30	0.49641E-05	0.53782E-05	0.14245E-09
31	0.52807E-05	0.57212E-05	0.15153E-09
32	0.56086E-05	0.60765E-05	0.16094E-09
33	0.59481E-05	0.64443E-05	0.17068E-09
34	0.62992E-05	0.68247E-05	0.18076E-09
35	0.66620E-05	0.72178E-05	0.19117E-09
36	0.70367E-05	0.76237E-05	0.20192E-09
37	0.74232E-05	0.80425E-05	0.21301E-09
38	0.78217E-05	0.84742E-05	0.22445E-09
39	0.82321E-05	0.89189E-05	0.23622E-09
40	0.86545E-05	0.93765E-05	0.24835E-09
41	0.90890E-05	0.98472E-05	0.26081E-09
42	0.95354E-05	0.10331E-04	0.27362E-09
43	0.99938E-05	0.10827E-04	0.28678E-09
44	0.10464E-04	0.11337E-04	0.30027E-09
45	0.10946E-04	0.11859E-04	0.31411E-09
46	0.11440E-04	0.12394E-04	0.32828E-09
47	0.11945E-04	0.12942E-04	0.34278E-09
48	0.12462E-04	0.13502E-04	0.35761E-09
49	0.12991E-04	0.14074E-04	0.37277E-09
50	0.13530E-04	0.14658E-04	0.38824E-09
51	0.14080E-04	0.15254E-04	0.40402E-09
52	0.14640E-04	0.15862E-04	0.42011E-09
53	0.15211E-04	0.16480E-04	0.43649E-09
54	0.15792E-04	0.17109E-04	0.45315E-09
55	0.16382E-04	0.17748E-04	0.47008E-09
56	0.16981E-04	0.18398E-04	0.48728E-09
57	0.17589E-04	0.19056E-04	0.50472E-09
58	0.18205E-04	0.19723E-04	0.52239E-09
59	0.18828E-04	0.20399E-04	0.54027E-09
60	0.19458E-04	0.21081E-04	0.55836E-09
61	0.20095E-04	0.21771E-04	0.57663E-09
62	0.20737E-04	0.22467E-04	0.59505E-09
63	0.21384E-04	0.23168E-04	0.61361E-09
64	0.22034E-04	0.23873E-04	0.63229E-09
65	0.22688E-04	0.24581E-04	0.65105E-09
66	0.23345E-04	0.25292E-04	0.66988E-09
67	0.24002E-04	0.26004E-04	0.68874E-09
68	0.24659E-04	0.26716E-04	0.70760E-09
69	0.25316E-04	0.27427E-04	0.72644E-09
70	0.25970E-04	0.28136E-04	0.74521E-09
71	0.26620E-04	0.28841E-04	0.76388E-09
72	0.27266E-04	0.29541E-04	0.78241E-09
73	0.27906E-04	0.30234E-04	0.80077E-09
74	0.28538E-04	0.30918E-04	0.81890E-09
75	0.29160E-04	0.31593E-04	0.83676E-09
76	0.29772E-04	0.32255E-04	0.85431E-09
77	0.30371E-04	0.32904E-04	0.87150E-09
78	0.30955E-04	0.33537E-04	0.88827E-09
79	0.31523E-04	0.34153E-04	0.90456E-09
80	0.32072E-04	0.34748E-04	0.92033E-09
81	0.32601E-04	0.35321E-04	0.93550E-09
82	0.33107E-04	0.35869E-04	0.95002E-09
83	0.33588E-04	0.36390E-04	0.96382E-09
84	0.34041E-04	0.36881E-04	0.97683E-09
85	0.34465E-04	0.37340E-04	0.98898E-09
86	0.34856E-04	0.37763E-04	0.10002E-08
87	0.35211E-04	0.38149E-04	0.10104E-08
88	0.35528E-04	0.38492E-04	0.10195E-08
89	0.35804E-04	0.38791E-04	0.10274E-08
90	0.36036E-04	0.39043E-04	0.10341E-08
91	0.36221E-04	0.39243E-04	0.10394E-08
92	0.36355E-04	0.39388E-04	0.10432E-08
93	0.36434E-04	0.39474E-04	0.10455E-08
94	0.36457E-04	0.39498E-04	0.10461E-08
95	0.36417E-04	0.39456E-04	0.10450E-08
96	0.36313E-04	0.39343E-04	0.10420E-08
97	0.36140E-04	0.39155E-04	0.10371E-08
98	0.35894E-04	0.38888E-04	0.10300E-08

99	0.35570E-04	0.38538E-04	0.10207E-08
100	0.35165E-04	0.38099E-04	0.10091E-08

POLYGON I

Time:

Cell

120.000

	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.24122E-07	0.26135E-07	0.69220E-12
2	0.51790E-07	0.56111E-07	0.14861E-11
3	0.83049E-07	0.89977E-07	0.23831E-11
4	0.11795E-06	0.12779E-06	0.33846E-11
5	0.15655E-06	0.16961E-06	0.44923E-11
6	0.19891E-06	0.21550E-06	0.57078E-11
7	0.24509E-06	0.26553E-06	0.70329E-11
8	0.29516E-06	0.31978E-06	0.84696E-11
9	0.34918E-06	0.37831E-06	0.10020E-10
10	0.40724E-06	0.44122E-06	0.11686E-10
11	0.46941E-06	0.50857E-06	0.13470E-10
12	0.53577E-06	0.58047E-06	0.15374E-10
13	0.60641E-06	0.65699E-06	0.17401E-10
14	0.68139E-06	0.73823E-06	0.19553E-10
15	0.76081E-06	0.82428E-06	0.21832E-10
16	0.84476E-06	0.91524E-06	0.24241E-10
17	0.93333E-06	0.10112E-05	0.26782E-10
18	0.10266E-05	0.11122E-05	0.29459E-10
19	0.11247E-05	0.12185E-05	0.32272E-10
20	0.12276E-05	0.13300E-05	0.35226E-10
21	0.13355E-05	0.14469E-05	0.38323E-10
22	0.14485E-05	0.15693E-05	0.41564E-10
23	0.15666E-05	0.16973E-05	0.44954E-10
24	0.16899E-05	0.18309E-05	0.48493E-10
25	0.18186E-05	0.19703E-05	0.52186E-10
26	0.19527E-05	0.21156E-05	0.56033E-10
27	0.20922E-05	0.22668E-05	0.60038E-10
28	0.22374E-05	0.24240E-05	0.64202E-10
29	0.23881E-05	0.25874E-05	0.68528E-10
30	0.25446E-05	0.27569E-05	0.73019E-10
31	0.27069E-05	0.29327E-05	0.77675E-10
32	0.28750E-05	0.31148E-05	0.82499E-10
33	0.30490E-05	0.33034E-05	0.87492E-10
34	0.32290E-05	0.34983E-05	0.92657E-10
35	0.34150E-05	0.36999E-05	0.97994E-10
36	0.36070E-05	0.39079E-05	0.10350E-09
37	0.38051E-05	0.41226E-05	0.10919E-09
38	0.40094E-05	0.43439E-05	0.11505E-09
39	0.42198E-05	0.45718E-05	0.12109E-09
40	0.44363E-05	0.48064E-05	0.12730E-09
41	0.46590E-05	0.50477E-05	0.13369E-09
42	0.48878E-05	0.52956E-05	0.14026E-09
43	0.51228E-05	0.55502E-05	0.14700E-09
44	0.53639E-05	0.58114E-05	0.15392E-09
45	0.56110E-05	0.60791E-05	0.16101E-09
46	0.58642E-05	0.63534E-05	0.16827E-09
47	0.61232E-05	0.66341E-05	0.17571E-09
48	0.63882E-05	0.69211E-05	0.18331E-09
49	0.66589E-05	0.72144E-05	0.19108E-09
50	0.69353E-05	0.75139E-05	0.19901E-09
51	0.72173E-05	0.78194E-05	0.20710E-09
52	0.75046E-05	0.81307E-05	0.21535E-09
53	0.77972E-05	0.84476E-05	0.22374E-09
54	0.80948E-05	0.87701E-05	0.23228E-09
55	0.83973E-05	0.90978E-05	0.24096E-09
56	0.87044E-05	0.94306E-05	0.24978E-09
57	0.90160E-05	0.97681E-05	0.25872E-09
58	0.93316E-05	0.10110E-04	0.26778E-09
59	0.96512E-05	0.10456E-04	0.27694E-09
60	0.99742E-05	0.10806E-04	0.28622E-09
61	0.10301E-04	0.11160E-04	0.29558E-09
62	0.10630E-04	0.11516E-04	0.30502E-09
63	0.10961E-04	0.11876E-04	0.31454E-09
64	0.11295E-04	0.12237E-04	0.32411E-09
65	0.11630E-04	0.12600E-04	0.33373E-09
66	0.11966E-04	0.12965E-04	0.34338E-09
67	0.12303E-04	0.13330E-04	0.35305E-09
68	0.12640E-04	0.13695E-04	0.36272E-09
69	0.12977E-04	0.14059E-04	0.37237E-09
70	0.13312E-04	0.14423E-04	0.38199E-09
71	0.13646E-04	0.14784E-04	0.39156E-09
72	0.13977E-04	0.15143E-04	0.40106E-09
73	0.14304E-04	0.15498E-04	0.41047E-09
74	0.14628E-04	0.15849E-04	0.41977E-09
75	0.14947E-04	0.16194E-04	0.42892E-09
76	0.15261E-04	0.16534E-04	0.43792E-09
77	0.15568E-04	0.16867E-04	0.44673E-09
78	0.15867E-04	0.17191E-04	0.45532E-09
79	0.16159E-04	0.17507E-04	0.46368E-09
80	0.16440E-04	0.17812E-04	0.47176E-09
81	0.16711E-04	0.18105E-04	0.47954E-09
82	0.16971E-04	0.18386E-04	0.48698E-09
83	0.17217E-04	0.18653E-04	0.49405E-09
84	0.17450E-04	0.18905E-04	0.50072E-09

85	0.17667E-04	0.19140E-04	0.50695E-09
86	0.17867E-04	0.19357E-04	0.51270E-09
87	0.18049E-04	0.19555E-04	0.51793E-09
88	0.18212E-04	0.19731E-04	0.52259E-09
89	0.18353E-04	0.19884E-04	0.52666E-09
90	0.18472E-04	0.20013E-04	0.53007E-09
91	0.18567E-04	0.20116E-04	0.53278E-09
92	0.18635E-04	0.20190E-04	0.53475E-09
93	0.18676E-04	0.20234E-04	0.53593E-09
94	0.18688E-04	0.20247E-04	0.53625E-09
95	0.18668E-04	0.20225E-04	0.53568E-09
96	0.18614E-04	0.20167E-04	0.53415E-09
97	0.18526E-04	0.20071E-04	0.53160E-09
98	0.18399E-04	0.19934E-04	0.52798E-09
99	0.18234E-04	0.19755E-04	0.52322E-09
100	0.18026E-04	0.19530E-04	0.51727E-09

POLYGON I

Time: 130.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.12365E-07	0.13397E-07	0.35482E-12
2	0.26548E-07	0.28762E-07	0.76179E-12
3	0.42571E-07	0.46122E-07	0.12216E-11
4	0.60462E-07	0.65505E-07	0.17350E-11
5	0.80248E-07	0.86942E-07	0.23027E-11
6	0.10196E-06	0.11047E-06	0.29258E-11
7	0.12563E-06	0.13611E-06	0.36051E-11
8	0.15130E-06	0.16392E-06	0.43415E-11
9	0.17899E-06	0.19392E-06	0.51362E-11
10	0.20875E-06	0.22617E-06	0.59903E-11
11	0.24062E-06	0.26070E-06	0.69047E-11
12	0.27464E-06	0.29755E-06	0.78808E-11
13	0.31084E-06	0.33677E-06	0.89198E-11
14	0.34928E-06	0.37842E-06	0.10023E-10
15	0.38999E-06	0.42253E-06	0.11191E-10
16	0.43303E-06	0.46915E-06	0.12426E-10
17	0.47842E-06	0.51834E-06	0.13729E-10
18	0.52623E-06	0.57013E-06	0.15100E-10
19	0.57650E-06	0.62459E-06	0.16543E-10
20	0.62926E-06	0.68176E-06	0.18057E-10
21	0.68458E-06	0.74169E-06	0.19644E-10
22	0.74248E-06	0.80442E-06	0.21306E-10
23	0.80303E-06	0.87002E-06	0.23043E-10
24	0.86626E-06	0.93853E-06	0.24858E-10
25	0.93222E-06	0.10100E-05	0.26750E-10
26	0.10009E-05	0.10844E-05	0.28722E-10
27	0.10725E-05	0.11620E-05	0.30775E-10
28	0.11469E-05	0.12425E-05	0.32910E-10
29	0.12242E-05	0.13263E-05	0.35128E-10
30	0.13044E-05	0.14132E-05	0.37429E-10
31	0.13875E-05	0.15033E-05	0.39816E-10
32	0.14737E-05	0.15967E-05	0.42289E-10
33	0.15629E-05	0.16933E-05	0.44849E-10
34	0.16552E-05	0.17933E-05	0.47496E-10
35	0.17505E-05	0.18965E-05	0.50232E-10
36	0.18490E-05	0.20032E-05	0.53056E-10
37	0.19505E-05	0.21132E-05	0.55971E-10
38	0.20552E-05	0.22267E-05	0.58975E-10
39	0.21631E-05	0.23435E-05	0.62070E-10
40	0.22741E-05	0.24638E-05	0.65255E-10
41	0.23882E-05	0.25874E-05	0.68530E-10
42	0.25055E-05	0.27145E-05	0.71896E-10
43	0.26260E-05	0.28450E-05	0.75353E-10
44	0.27495E-05	0.29789E-05	0.78899E-10
45	0.28762E-05	0.31161E-05	0.82534E-10
46	0.30060E-05	0.32567E-05	0.86257E-10
47	0.31388E-05	0.34006E-05	0.90068E-10
48	0.32746E-05	0.35478E-05	0.93966E-10
49	0.34134E-05	0.36981E-05	0.97948E-10
50	0.35550E-05	0.38516E-05	0.10201E-09
51	0.36996E-05	0.40082E-05	0.10616E-09
52	0.38469E-05	0.41678E-05	0.11039E-09
53	0.39968E-05	0.43303E-05	0.11469E-09
54	0.41494E-05	0.44956E-05	0.11907E-09
55	0.43045E-05	0.46635E-05	0.12352E-09
56	0.44619E-05	0.48341E-05	0.12804E-09
57	0.46216E-05	0.50071E-05	0.13262E-09
58	0.47834E-05	0.51824E-05	0.13726E-09
59	0.49472E-05	0.53599E-05	0.14196E-09
60	0.51128E-05	0.55393E-05	0.14671E-09
61	0.52800E-05	0.57205E-05	0.15151E-09
62	0.54488E-05	0.59033E-05	0.15635E-09
63	0.56187E-05	0.60875E-05	0.16123E-09
64	0.57897E-05	0.62727E-05	0.16614E-09
65	0.59616E-05	0.64589E-05	0.17107E-09
66	0.61340E-05	0.66457E-05	0.17602E-09
67	0.63067E-05	0.68328E-05	0.18097E-09
68	0.64794E-05	0.70199E-05	0.18593E-09
69	0.66518E-05	0.72068E-05	0.19088E-09
70	0.68237E-05	0.73930E-05	0.19581E-09

71	0.69947E-05	0.75782E-05	0.20072E-09
72	0.71644E-05	0.77621E-05	0.20559E-09
73	0.73325E-05	0.79442E-05	0.21041E-09
74	0.74985E-05	0.81240E-05	0.21517E-09
75	0.76621E-05	0.83013E-05	0.21987E-09
76	0.78228E-05	0.84754E-05	0.22448E-09
77	0.79801E-05	0.86458E-05	0.22899E-09
78	0.81337E-05	0.88122E-05	0.23340E-09
79	0.82829E-05	0.89739E-05	0.23768E-09
80	0.84272E-05	0.91303E-05	0.24182E-09
81	0.85662E-05	0.92808E-05	0.24581E-09
82	0.86991E-05	0.94248E-05	0.24963E-09
83	0.88255E-05	0.95618E-05	0.25325E-09
84	0.89446E-05	0.96908E-05	0.25667E-09
85	0.90559E-05	0.98114E-05	0.25986E-09
86	0.91586E-05	0.99226E-05	0.26281E-09
87	0.92520E-05	0.10024E-04	0.26549E-09
88	0.93535E-05	0.10114E-04	0.26788E-09
89	0.94079E-05	0.10193E-04	0.26996E-09
90	0.94688E-05	0.10259E-04	0.27171E-09
91	0.95173E-05	0.10311E-04	0.27310E-09
92	0.95525E-05	0.10349E-04	0.27411E-09
93	0.95735E-05	0.10372E-04	0.27472E-09
94	0.95793E-05	0.10378E-04	0.27488E-09
95	0.95691E-05	0.10367E-04	0.27459E-09
96	0.95417E-05	0.10338E-04	0.27380E-09
97	0.94962E-05	0.10288E-04	0.27250E-09
98	0.94315E-05	0.10218E-04	0.27064E-09
99	0.93465E-05	0.10126E-04	0.26820E-09
100	0.92402E-05	0.10011E-04	0.26515E-09

POLYGON I

Time:	140.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.63384E-08	0.68671E-08	0.18188E-12
2	0.13608E-07	0.14744E-07	0.39049E-12
3	0.21822E-07	0.23642E-07	0.62619E-12
4	0.30993E-07	0.33578E-07	0.88934E-12
5	0.41135E-07	0.44567E-07	0.11804E-11
6	0.52265E-07	0.56625E-07	0.14998E-11
7	0.64399E-07	0.69771E-07	0.18479E-11
8	0.77555E-07	0.84024E-07	0.22255E-11
9	0.91751E-07	0.99405E-07	0.26328E-11
10	0.10701E-06	0.11593E-06	0.30706E-11
11	0.12334E-06	0.13363E-06	0.35394E-11
12	0.14078E-06	0.15252E-06	0.40397E-11
13	0.15934E-06	0.17263E-06	0.45723E-11
14	0.17904E-06	0.19398E-06	0.51377E-11
15	0.19991E-06	0.21659E-06	0.57365E-11
16	0.22197E-06	0.24049E-06	0.63695E-11
17	0.24524E-06	0.26570E-06	0.70373E-11
18	0.26975E-06	0.29225E-06	0.77405E-11
19	0.29551E-06	0.32016E-06	0.84798E-11
20	0.32256E-06	0.34947E-06	0.92560E-11
21	0.35091E-06	0.38019E-06	0.10070E-10
22	0.38060E-06	0.41235E-06	0.10921E-10
23	0.41163E-06	0.44597E-06	0.11812E-10
24	0.44404E-06	0.48109E-06	0.12742E-10
25	0.47785E-06	0.51772E-06	0.13712E-10
26	0.51308E-06	0.55589E-06	0.14723E-10
27	0.54975E-06	0.59562E-06	0.15775E-10
28	0.58789E-06	0.63693E-06	0.16870E-10
29	0.62750E-06	0.67985E-06	0.18006E-10
30	0.66862E-06	0.72440E-06	0.19186E-10
31	0.71125E-06	0.77059E-06	0.20410E-10
32	0.75543E-06	0.81845E-06	0.21677E-10
33	0.80115E-06	0.86798E-06	0.22989E-10
34	0.84844E-06	0.91922E-06	0.24346E-10
35	0.89731E-06	0.97217E-06	0.25749E-10
36	0.94777E-06	0.10268E-05	0.27197E-10
37	0.99983E-06	0.10832E-05	0.28691E-10
38	0.10535E-05	0.11414E-05	0.30231E-10
39	0.11088E-05	0.12013E-05	0.31817E-10
40	0.11657E-05	0.12629E-05	0.33450E-10
41	0.12242E-05	0.13263E-05	0.35129E-10
42	0.12843E-05	0.13915E-05	0.36854E-10
43	0.13461E-05	0.14584E-05	0.38626E-10
44	0.14094E-05	0.15270E-05	0.40443E-10
45	0.14743E-05	0.15973E-05	0.42307E-10
46	0.15409E-05	0.16694E-05	0.44216E-10
47	0.16089E-05	0.17432E-05	0.46169E-10
48	0.16786E-05	0.18186E-05	0.48167E-10
49	0.17497E-05	0.18957E-05	0.50208E-10
50	0.18223E-05	0.19743E-05	0.52292E-10
51	0.18964E-05	0.20546E-05	0.54418E-10
52	0.19719E-05	0.21364E-05	0.56584E-10
53	0.20488E-05	0.22197E-05	0.58790E-10
54	0.21270E-05	0.23044E-05	0.61034E-10
55	0.22065E-05	0.23905E-05	0.63315E-10
56	0.22872E-05	0.24780E-05	0.65631E-10

43	0.68999E-06	0.74755E-06	0.19800E-10
44	0.72246E-06	0.78273E-06	0.20731E-10
45	0.75575E-06	0.81879E-06	0.21686E-10
46	0.78984E-06	0.85573E-06	0.22665E-10
47	0.82474E-06	0.89354E-06	0.23666E-10
48	0.86043E-06	0.93221E-06	0.24690E-10
49	0.89689E-06	0.97171E-06	0.25737E-10
50	0.93412E-06	0.10120E-05	0.26805E-10
51	0.97209E-06	0.10532E-05	0.27895E-10
52	0.10108E-05	0.10951E-05	0.29005E-10
53	0.10502E-05	0.11378E-05	0.30136E-10
54	0.10903E-05	0.11812E-05	0.31286E-10
55	0.11310E-05	0.12254E-05	0.32455E-10
56	0.11724E-05	0.12702E-05	0.33642E-10
57	0.12144E-05	0.13157E-05	0.34847E-10
58	0.12569E-05	0.13617E-05	0.36067E-10
59	0.12999E-05	0.14084E-05	0.37302E-10
60	0.13434E-05	0.14555E-05	0.38550E-10
61	0.13874E-05	0.15031E-05	0.39811E-10
62	0.14317E-05	0.15511E-05	0.41083E-10
63	0.14764E-05	0.15995E-05	0.42365E-10
64	0.15213E-05	0.16482E-05	0.43654E-10
65	0.15664E-05	0.16971E-05	0.44950E-10
66	0.16117E-05	0.17462E-05	0.46250E-10
67	0.16571E-05	0.17954E-05	0.47552E-10
68	0.17025E-05	0.18445E-05	0.48854E-10
69	0.17478E-05	0.18936E-05	0.50155E-10
70	0.17930E-05	0.19426E-05	0.51451E-10
71	0.18379E-05	0.19912E-05	0.52740E-10
72	0.18825E-05	0.20395E-05	0.54019E-10
73	0.19267E-05	0.20874E-05	0.55286E-10
74	0.19703E-05	0.21347E-05	0.56538E-10
75	0.20133E-05	0.21812E-05	0.57772E-10
76	0.20555E-05	0.22270E-05	0.58983E-10
77	0.20968E-05	0.22718E-05	0.60170E-10
78	0.21372E-05	0.23155E-05	0.61327E-10
79	0.21764E-05	0.23580E-05	0.62452E-10
80	0.22143E-05	0.23990E-05	0.63541E-10
81	0.22508E-05	0.24386E-05	0.64589E-10
82	0.22858E-05	0.24765E-05	0.65591E-10
83	0.23190E-05	0.25124E-05	0.66544E-10
84	0.23503E-05	0.25463E-05	0.67442E-10
85	0.23795E-05	0.25780E-05	0.68281E-10
86	0.24065E-05	0.26072E-05	0.69055E-10
87	0.24310E-05	0.26338E-05	0.69759E-10
88	0.24529E-05	0.26576E-05	0.70388E-10
89	0.24720E-05	0.26782E-05	0.70935E-10
90	0.24880E-05	0.26956E-05	0.71395E-10
91	0.25008E-05	0.27094E-05	0.71760E-10
92	0.25100E-05	0.27194E-05	0.72025E-10
93	0.25155E-05	0.27254E-05	0.72184E-10
94	0.25170E-05	0.27270E-05	0.72228E-10
95	0.25143E-05	0.27241E-05	0.72150E-10
96	0.25072E-05	0.27163E-05	0.71944E-10
97	0.24952E-05	0.27034E-05	0.71601E-10
98	0.24782E-05	0.26849E-05	0.71113E-10
99	0.24559E-05	0.26608E-05	0.70472E-10
100	0.24279E-05	0.26305E-05	0.69670E-10

POLYGON 1

Time:	160.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.16655E-08	0.18044E-08	0.47791E-13
2	0.35757E-08	0.38740E-08	0.10261E-12
3	0.57339E-08	0.62122E-08	0.16454E-12
4	0.81435E-08	0.88229E-08	0.23368E-12
5	0.10809E-07	0.11710E-07	0.31016E-12
6	0.13733E-07	0.14879E-07	0.39407E-12
7	0.16921E-07	0.18333E-07	0.48556E-12
8	0.20378E-07	0.22078E-07	0.58476E-12
9	0.24108E-07	0.26119E-07	0.69180E-12
10	0.28117E-07	0.30462E-07	0.80683E-12
11	0.32409E-07	0.35113E-07	0.93000E-12
12	0.36991E-07	0.40077E-07	0.10615E-11
13	0.41867E-07	0.45360E-07	0.12014E-11
14	0.47044E-07	0.50969E-07	0.13500E-11
15	0.52528E-07	0.56910E-07	0.15073E-11
16	0.58324E-07	0.63190E-07	0.16736E-11
17	0.64439E-07	0.69814E-07	0.18491E-11
18	0.70878E-07	0.76791E-07	0.20339E-11
19	0.77648E-07	0.84126E-07	0.22281E-11
20	0.84755E-07	0.91826E-07	0.24321E-11
21	0.92205E-07	0.99897E-07	0.26459E-11
22	0.10000E-06	0.10835E-06	0.28697E-11
23	0.10816E-06	0.11718E-06	0.31037E-11
24	0.11668E-06	0.12641E-06	0.33481E-11
25	0.12556E-06	0.13603E-06	0.36030E-11
26	0.13482E-06	0.14606E-06	0.38686E-11
27	0.14445E-06	0.15650E-06	0.41451E-11
28	0.15447E-06	0.16736E-06	0.44326E-11

29	0.16488E-06	0.17864E-06	0.47313E-11
30	0.17568E-06	0.19034E-06	0.50413E-11
31	0.18689E-06	0.20248E-06	0.53628E-11
32	0.19849E-06	0.21505E-06	0.56959E-11
33	0.21051E-06	0.22807E-06	0.60406E-11
34	0.22293E-06	0.24153E-06	0.63972E-11
35	0.23578E-06	0.25545E-06	0.67657E-11
36	0.24903E-06	0.26981E-06	0.71462E-11
37	0.26271E-06	0.28463E-06	0.75387E-11
38	0.27682E-06	0.29991E-06	0.79433E-11
39	0.29134E-06	0.31565E-06	0.83602E-11
40	0.30629E-06	0.33184E-06	0.87892E-11
41	0.32167E-06	0.34850E-06	0.92304E-11
42	0.33747E-06	0.36562E-06	0.96837E-11
43	0.35369E-06	0.38319E-06	0.10149E-10
44	0.37033E-06	0.40123E-06	0.10627E-10
45	0.38740E-06	0.41971E-06	0.11116E-10
46	0.40487E-06	0.43865E-06	0.11618E-10
47	0.42276E-06	0.45803E-06	0.12131E-10
48	0.44105E-06	0.47785E-06	0.12656E-10
49	0.45975E-06	0.49810E-06	0.13193E-10
50	0.47883E-06	0.51877E-06	0.13740E-10
51	0.49829E-06	0.53986E-06	0.14299E-10
52	0.51813E-06	0.56136E-06	0.14868E-10
53	0.53833E-06	0.58324E-06	0.15448E-10
54	0.55888E-06	0.60550E-06	0.16037E-10
55	0.57977E-06	0.62813E-06	0.16637E-10
56	0.60097E-06	0.65111E-06	0.17245E-10
57	0.62248E-06	0.67441E-06	0.17862E-10
58	0.64427E-06	0.69802E-06	0.18488E-10
59	0.66634E-06	0.72192E-06	0.19121E-10
60	0.68864E-06	0.74609E-06	0.19761E-10
61	0.71117E-06	0.77050E-06	0.20407E-10
62	0.73389E-06	0.79512E-06	0.21059E-10
63	0.75678E-06	0.81992E-06	0.21716E-10
64	0.77982E-06	0.84487E-06	0.22377E-10
65	0.80296E-06	0.86995E-06	0.23041E-10
66	0.82618E-06	0.89510E-06	0.23708E-10
67	0.84944E-06	0.92031E-06	0.24375E-10
68	0.87271E-06	0.94551E-06	0.25043E-10
69	0.89594E-06	0.97068E-06	0.25709E-10
70	0.91909E-06	0.99576E-06	0.26374E-10
71	0.94211E-06	0.10207E-05	0.27034E-10
72	0.96497E-06	0.10455E-05	0.27690E-10
73	0.98761E-06	0.10700E-05	0.28340E-10
74	0.10100E-05	0.10942E-05	0.28981E-10
75	0.10320E-05	0.11181E-05	0.29614E-10
76	0.10536E-05	0.11415E-05	0.30235E-10
77	0.10748E-05	0.11645E-05	0.30843E-10
78	0.10955E-05	0.11869E-05	0.31436E-10
79	0.11156E-05	0.12087E-05	0.32013E-10
80	0.11351E-05	0.12298E-05	0.32571E-10
81	0.11538E-05	0.12500E-05	0.33108E-10
82	0.11717E-05	0.12694E-05	0.33622E-10
83	0.11887E-05	0.12879E-05	0.34110E-10
84	0.12048E-05	0.13053E-05	0.34571E-10
85	0.12197E-05	0.13215E-05	0.35001E-10
86	0.12336E-05	0.13365E-05	0.35398E-10
87	0.12461E-05	0.13501E-05	0.35759E-10
88	0.12574E-05	0.13623E-05	0.36081E-10
89	0.12671E-05	0.13729E-05	0.36361E-10
90	0.12754E-05	0.13817E-05	0.36597E-10
91	0.12819E-05	0.13888E-05	0.36784E-10
92	0.12866E-05	0.13940E-05	0.36920E-10
93	0.12894E-05	0.13970E-05	0.37001E-10
94	0.12902E-05	0.13979E-05	0.37024E-10
95	0.12889E-05	0.13964E-05	0.36984E-10
96	0.12852E-05	0.13924E-05	0.36878E-10
97	0.12790E-05	0.13857E-05	0.36703E-10
98	0.12703E-05	0.13763E-05	0.36453E-10
99	0.12589E-05	0.13639E-05	0.36124E-10
100	0.12446E-05	0.13484E-05	0.35713E-10

POLYGON 1

Time:

Cell

	170.000		
	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.85371E-09	0.92493E-09	0.24498E-13
2	0.18329E-08	0.19858E-08	0.52596E-13
3	0.29392E-08	0.31844E-08	0.84341E-13
4	0.41744E-08	0.45226E-08	0.11979E-12
5	0.55405E-08	0.60027E-08	0.15899E-12
6	0.70395E-08	0.76268E-08	0.20200E-12
7	0.86739E-08	0.93975E-08	0.24890E-12
8	0.10446E-07	0.11317E-07	0.29975E-12
9	0.12358E-07	0.13389E-07	0.35461E-12
10	0.14413E-07	0.15615E-07	0.41358E-12
11	0.16613E-07	0.17999E-07	0.47672E-12
12	0.18962E-07	0.20543E-07	0.54411E-12
13	0.21461E-07	0.23252E-07	0.61584E-12
14	0.24115E-07	0.26127E-07	0.69199E-12

15	0.26926E-07	0.29172E-07	0.77265E-12
16	0.29897E-07	0.32391E-07	0.85790E-12
17	0.33031E-07	0.35787E-07	0.94785E-12
18	0.36332E-07	0.39363E-07	0.10426E-11
19	0.39802E-07	0.43123E-07	0.11421E-11
20	0.43445E-07	0.47070E-07	0.12467E-11
21	0.47264E-07	0.51207E-07	0.13563E-11
22	0.51262E-07	0.55539E-07	0.14710E-11
23	0.55443E-07	0.60068E-07	0.15910E-11
24	0.59808E-07	0.64798E-07	0.17162E-11
25	0.64362E-07	0.69731E-07	0.18469E-11
26	0.69107E-07	0.74872E-07	0.19831E-11
27	0.74046E-07	0.80223E-07	0.21248E-11
28	0.79182E-07	0.85788E-07	0.22722E-11
29	0.84518E-07	0.91569E-07	0.24253E-11
30	0.90056E-07	0.97569E-07	0.25842E-11
31	0.95799E-07	0.10379E-06	0.27490E-11
32	0.10175E-06	0.11024E-06	0.29197E-11
33	0.10791E-06	0.11691E-06	0.30964E-11
34	0.11428E-06	0.12381E-06	0.32792E-11
35	0.12086E-06	0.13094E-06	0.34681E-11
36	0.12766E-06	0.13830E-06	0.36631E-11
37	0.13467E-06	0.14590E-06	0.38643E-11
38	0.14190E-06	0.15373E-06	0.40718E-11
39	0.14934E-06	0.16180E-06	0.42854E-11
40	0.15700E-06	0.17010E-06	0.45053E-11
41	0.16489E-06	0.17864E-06	0.47315E-11
42	0.17298E-06	0.18742E-06	0.49639E-11
43	0.18130E-06	0.19643E-06	0.52025E-11
44	0.18983E-06	0.20567E-06	0.54473E-11
45	0.19858E-06	0.21514E-06	0.56983E-11
46	0.20754E-06	0.22485E-06	0.59554E-11
47	0.21671E-06	0.23479E-06	0.62185E-11
48	0.22608E-06	0.24494E-06	0.64876E-11
49	0.23567E-06	0.25533E-06	0.67625E-11
50	0.24545E-06	0.26592E-06	0.70432E-11
51	0.25543E-06	0.27673E-06	0.73295E-11
52	0.26559E-06	0.28775E-06	0.76213E-11
53	0.27595E-06	0.29897E-06	0.79185E-11
54	0.28648E-06	0.31038E-06	0.82207E-11
55	0.29719E-06	0.32198E-06	0.85279E-11
56	0.30806E-06	0.33376E-06	0.88398E-11
57	0.31908E-06	0.34570E-06	0.91562E-11
58	0.33025E-06	0.35781E-06	0.94768E-11
59	0.34156E-06	0.37006E-06	0.98013E-11
60	0.35300E-06	0.38245E-06	0.10129E-10
61	0.36454E-06	0.39496E-06	0.10461E-10
62	0.37619E-06	0.40758E-06	0.10795E-10
63	0.38793E-06	0.42029E-06	0.11132E-10
64	0.39973E-06	0.43308E-06	0.11471E-10
65	0.41160E-06	0.44593E-06	0.11811E-10
66	0.42350E-06	0.45883E-06	0.12152E-10
67	0.43542E-06	0.47175E-06	0.12495E-10
68	0.44735E-06	0.48467E-06	0.12837E-10
69	0.45926E-06	0.49757E-06	0.13179E-10
70	0.47112E-06	0.51043E-06	0.13519E-10
71	0.48293E-06	0.52321E-06	0.13858E-10
72	0.49464E-06	0.53591E-06	0.14194E-10
73	0.50625E-06	0.54848E-06	0.14527E-10
74	0.51771E-06	0.56090E-06	0.14856E-10
75	0.52900E-06	0.57313E-06	0.15180E-10
76	0.54010E-06	0.58515E-06	0.15498E-10
77	0.55096E-06	0.59693E-06	0.15810E-10
78	0.56156E-06	0.60841E-06	0.16114E-10
79	0.57186E-06	0.61957E-06	0.16410E-10
80	0.58183E-06	0.63037E-06	0.16696E-10
81	0.59142E-06	0.64076E-06	0.16971E-10
82	0.60060E-06	0.65071E-06	0.17235E-10
83	0.60933E-06	0.66016E-06	0.17485E-10
84	0.61755E-06	0.66907E-06	0.17721E-10
85	0.62524E-06	0.67740E-06	0.17941E-10
86	0.63233E-06	0.68508E-06	0.18145E-10
87	0.63877E-06	0.69206E-06	0.18330E-10
88	0.64453E-06	0.69830E-06	0.18495E-10
89	0.64954E-06	0.70373E-06	0.18639E-10
90	0.65375E-06	0.70828E-06	0.18760E-10
91	0.65709E-06	0.71191E-06	0.18856E-10
92	0.65952E-06	0.71454E-06	0.18925E-10
93	0.66097E-06	0.71611E-06	0.18967E-10
94	0.66137E-06	0.71655E-06	0.18978E-10
95	0.66066E-06	0.71578E-06	0.18958E-10
96	0.65878E-06	0.71373E-06	0.18904E-10
97	0.65563E-06	0.71033E-06	0.18814E-10
98	0.65117E-06	0.70549E-06	0.18686E-10
99	0.64530E-06	0.69914E-06	0.18517E-10
100	0.63796E-06	0.69118E-06	0.18306E-10

POLYGON I

Time: 180.000

Cell Cgas(g/cu.ft)

Cliq(g/cu.ft)

Csol(g/g)

TUT 004 2231

1	0.43761E-09	0.47412E-09	0.12557E-13
2	0.93954E-09	0.10179E-08	0.26960E-13
3	0.15066E-08	0.16323E-08	0.43233E-13
4	0.21398E-08	0.23183E-08	0.61402E-13
5	0.28400E-08	0.30770E-08	0.81496E-13
6	0.36085E-08	0.39095E-08	0.10355E-12
7	0.44462E-08	0.48171E-08	0.12759E-12
8	0.53545E-08	0.58012E-08	0.15365E-12
9	0.63346E-08	0.68631E-08	0.18178E-12
10	0.73879E-08	0.80043E-08	0.21200E-12
11	0.85158E-08	0.92262E-08	0.24436E-12
12	0.97197E-08	0.10531E-07	0.27891E-12
13	0.11001E-07	0.11919E-07	0.31568E-12
14	0.12361E-07	0.13393E-07	0.35471E-12
15	0.13802E-07	0.14954E-07	0.39606E-12
16	0.15325E-07	0.16604E-07	0.43976E-12
17	0.16932E-07	0.18344E-07	0.48587E-12
18	0.18624E-07	0.20177E-07	0.53442E-12
19	0.20403E-07	0.22105E-07	0.58546E-12
20	0.22270E-07	0.24128E-07	0.63905E-12
21	0.24228E-07	0.26249E-07	0.69522E-12
22	0.26277E-07	0.28469E-07	0.75403E-12
23	0.28420E-07	0.30791E-07	0.81552E-12
24	0.30658E-07	0.33215E-07	0.87973E-12
25	0.32992E-07	0.35744E-07	0.94672E-12
26	0.35424E-07	0.38379E-07	0.10165E-11
27	0.37956E-07	0.41122E-07	0.10892E-11
28	0.40589E-07	0.43975E-07	0.11647E-11
29	0.43324E-07	0.46938E-07	0.12432E-11
30	0.46163E-07	0.50014E-07	0.13247E-11
31	0.49106E-07	0.53203E-07	0.14091E-11
32	0.52156E-07	0.56507E-07	0.14966E-11
33	0.55313E-07	0.59927E-07	0.15872E-11
34	0.58578E-07	0.63465E-07	0.16809E-11
35	0.61952E-07	0.67120E-07	0.17777E-11
36	0.65436E-07	0.70895E-07	0.18777E-11
37	0.69030E-07	0.74789E-07	0.19809E-11
38	0.72736E-07	0.78804E-07	0.20872E-11
39	0.76552E-07	0.82939E-07	0.21967E-11
40	0.80481E-07	0.87195E-07	0.23094E-11
41	0.84521E-07	0.91572E-07	0.24254E-11
42	0.88672E-07	0.96069E-07	0.25445E-11
43	0.92935E-07	0.10069E-06	0.26668E-11
44	0.97308E-07	0.10543E-06	0.27923E-11
45	0.10179E-06	0.11028E-06	0.29209E-11
46	0.10638E-06	0.11526E-06	0.30527E-11
47	0.11108E-06	0.12035E-06	0.31876E-11
48	0.11589E-06	0.12556E-06	0.33255E-11
49	0.12080E-06	0.13088E-06	0.34665E-11
50	0.12582E-06	0.13631E-06	0.36103E-11
51	0.13093E-06	0.14185E-06	0.37571E-11
52	0.13614E-06	0.14750E-06	0.39067E-11
53	0.14145E-06	0.15325E-06	0.40590E-11
54	0.14685E-06	0.15910E-06	0.42139E-11
55	0.15234E-06	0.16505E-06	0.43714E-11
56	0.15791E-06	0.17108E-06	0.45313E-11
57	0.16356E-06	0.17721E-06	0.46935E-11
58	0.16929E-06	0.18341E-06	0.48578E-11
59	0.17509E-06	0.18969E-06	0.50241E-11
60	0.18095E-06	0.19604E-06	0.51923E-11
61	0.18687E-06	0.20245E-06	0.53622E-11
62	0.19284E-06	0.20892E-06	0.55335E-11
63	0.19885E-06	0.21544E-06	0.57061E-11
64	0.20490E-06	0.22200E-06	0.58798E-11
65	0.21098E-06	0.22859E-06	0.60543E-11
66	0.21709E-06	0.23520E-06	0.62294E-11
67	0.22320E-06	0.24182E-06	0.64048E-11
68	0.22931E-06	0.24844E-06	0.65802E-11
69	0.23541E-06	0.25505E-06	0.67553E-11
70	0.24150E-06	0.26164E-06	0.69299E-11
71	0.24755E-06	0.26820E-06	0.71035E-11
72	0.25355E-06	0.27471E-06	0.72758E-11
73	0.25950E-06	0.28115E-06	0.74465E-11
74	0.26538E-06	0.28752E-06	0.76151E-11
75	0.27117E-06	0.29379E-06	0.77812E-11
76	0.27685E-06	0.29995E-06	0.79444E-11
77	0.28242E-06	0.30598E-06	0.81042E-11
78	0.28786E-06	0.31187E-06	0.82602E-11
79	0.29314E-06	0.31759E-06	0.84117E-11
80	0.29825E-06	0.32313E-06	0.85583E-11
81	0.30316E-06	0.32845E-06	0.86994E-11
82	0.30787E-06	0.33355E-06	0.88344E-11
83	0.31234E-06	0.33840E-06	0.89628E-11
84	0.31656E-06	0.34297E-06	0.90838E-11
85	0.32050E-06	0.34723E-06	0.91968E-11
86	0.32413E-06	0.35117E-06	0.93010E-11
87	0.32744E-06	0.35475E-06	0.93959E-11
88	0.33039E-06	0.35795E-06	0.94805E-11
89	0.33295E-06	0.36073E-06	0.95542E-11
90	0.33511E-06	0.36307E-06	0.96161E-11

91	0.33683E-06	0.36493E-06	0.96654E-11
92	0.33807E-06	0.36627E-06	0.97011E-11
93	0.33881E-06	0.36708E-06	0.97224E-11
94	0.33902E-06	0.36730E-06	0.97283E-11
95	0.33866E-06	0.36691E-06	0.97179E-11
96	0.33769E-06	0.36586E-06	0.96901E-11
97	0.33608E-06	0.36411E-06	0.96439E-11
98	0.33379E-06	0.36163E-06	0.95782E-11
99	0.33078E-06	0.35838E-06	0.94919E-11
100	0.32702E-06	0.35430E-06	0.93839E-11

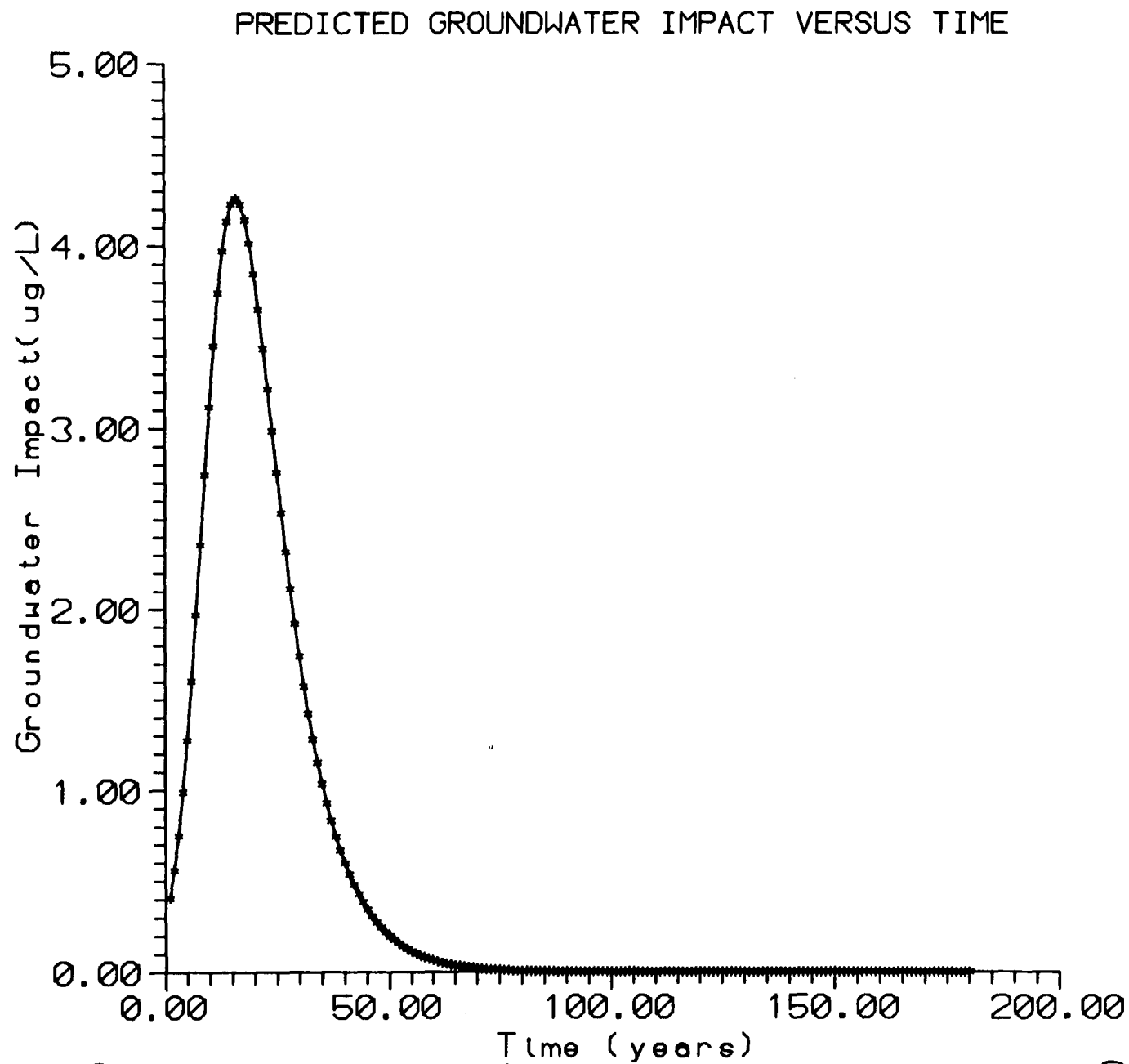


Figure B-7; Predicted groundwater impact vs Time
($\alpha = 0.001$ and soil cleanup PCF conc.)

VLEACH
version 2.0, 1993.

Developed by :

Varadhan Ravi and Jeffrey A. Johnson (Dynamac)
Center for Subsurface Modeling Support
Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

LEHENDI SIMULATION 5

1 polygons.
Timestep = 1.00 years. Simulation length = 180.00 years.
Printout every 10.00 years. Vertical profile stored every 10.00 years.
Koc = 375.00 ml/g, 0.13243E-01cu.ft./g
Kh = 0.92300 (dimensionless).
Aqueous solubility = 150.00 mg/l, 4.2476 g/cu.ft
Free air diffusion coefficient = .66000 sq. m/day, 2593.1 sq.ft./yr

Polygon 1

POLYGON 1

Polygon area = 1.0000 sq. ft.
100 cells, each cell 0.200 ft. thick.
Soil Properties:
Bulk density = 1.3500 g/ml, 38228. g/cu.ft.
Porosity = 0.3000 Volumetric water content = 0.2000
Organic carbon content = 0.00100000
Recharge Rate = 0.46000001 ft/yr
Conc. in recharge water = 0.00000 mg/l, 0.00000 g/cu.ft
Atmospheric concentration = 0.00000 mg/l, 0.00000 g/cu.ft
Water table has a fixed concentration of 0.00000 mg/l, 0.00000 g/cu.ft.
with respect to gas diffusion.

VLEACH
version 2.0, 1993.

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LHENRI SIMULATION 5

Polygon 1

At time = 0.00, total mass in vadose zone = 0.10280 g/sq.ft.
Mass in gas phase = 0.11882E-01g/sq.ft.
Mass in liquid phase = 0.25746E-01g/sq.ft.
Mass sorbed = 0.65171E-01g/sq.ft.

Polygon 1

At time = 10.00, total mass in vadose zone = 0.76089E-01g/sq.ft.
Mass in gas phase = 0.87947E-02g/sq.ft.
Mass in liquid phase = 0.19057E-01g/sq.ft.
Mass sorbed = 0.48237E-01g/sq.ft.

Since last printout at time = 0.00

Change in Total Mass = -0.26710E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.47951E-02g/sq.ft.
Diffusion in from atmosphere = -0.13088E-01g/sq.ft.
Diffusion in from water table = -0.88268E-02g/sq.ft.
Total inflow at boundaries = -0.26710E-01g/sq.ft.
Mass discrepancy = 0.65193E-07g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.26710E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.47951E-02g/sq.ft.
Diffusion in from atmosphere = -0.13088E-01g/sq.ft.
Diffusion in from water table = -0.88268E-02g/sq.ft.
Total inflow at boundaries = -0.26710E-01g/sq.ft.
Mass discrepancy = 0.65193E-07g/sq.ft.

Polygon 1

At time = 20.00, total mass in vadose zone = 0.37983E-01g/sq.ft.
Mass in gas phase = 0.43902E-02g/sq.ft.
Mass in liquid phase = 0.95129E-02g/sq.ft.
Mass sorbed = 0.24080E-01g/sq.ft.

Since last printout at time = 10.00

Change in Total Mass = -0.38106E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.18655E-01g/sq.ft.
Diffusion in from atmosphere = -0.35872E-02g/sq.ft.
Diffusion in from water table = -0.15863E-01g/sq.ft.
Total inflow at boundaries = -0.38106E-01g/sq.ft.
Mass discrepancy = -0.14156E-06g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.64816E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.23450E-01g/sq.ft.
Diffusion in from atmosphere = -0.16675E-01g/sq.ft.
Diffusion in from water table = -0.24690E-01g/sq.ft.
Total inflow at boundaries = -0.64816E-01g/sq.ft.
Mass discrepancy = -0.74506E-07g/sq.ft.

Polygon 1

At time = 30.00, total mass in vadose zone = 0.13818E-01g/sq.ft.
Mass in gas phase = 0.15971E-02g/sq.ft.
Mass in liquid phase = 0.34607E-02g/sq.ft.
Mass sorbed = 0.87599E-02g/sq.ft.

Since last printout at time = 20.00

Change in Total Mass = -0.24165E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.13793E-01g/sq.ft.
Diffusion in from atmosphere = -0.11487E-02g/sq.ft.
Diffusion in from water table = -0.92237E-02g/sq.ft.
Total inflow at boundaries = -0.24165E-01g/sq.ft.
Mass discrepancy = -0.48429E-07g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.88981E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.37243E-01g/sq.ft.
 Diffusion in from atmosphere = -0.17824E-01g/sq.ft.
 Diffusion in from water table = -0.33914E-01g/sq.ft.
 Total inflow at boundaries = -0.88981E-01g/sq.ft.
 Mass discrepancy = -0.11921E-06g/sq.ft.

Polygon 1
 At time = 40.00, total mass in vadose zone = 0.45951E-02g/sq.ft.
 Mass in gas phase = 0.53112E-03g/sq.ft.
 Mass in liquid phase = 0.11509E-02g/sq.ft.
 Mass sorbed = 0.29131E-02g/sq.ft.

Since last printout at time = 30.00
 Change in Total Mass = -0.92227E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.54264E-02g/sq.ft.
 Diffusion in from atmosphere = -0.37571E-03g/sq.ft.
 Diffusion in from water table = -0.34205E-02g/sq.ft.
 Total inflow at boundaries = -0.92226E-02g/sq.ft.
 Mass discrepancy = -0.16764E-07g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.98204E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.42669E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18200E-01g/sq.ft.
 Diffusion in from water table = -0.37334E-01g/sq.ft.
 Total inflow at boundaries = -0.98204E-01g/sq.ft.
 Mass discrepancy = -0.14901E-06g/sq.ft.

Polygon 1
 At time = 50.00, total mass in vadose zone = 0.15071E-02g/sq.ft.
 Mass in gas phase = 0.17420E-03g/sq.ft.
 Mass in liquid phase = 0.37747E-03g/sq.ft.
 Mass sorbed = 0.95546E-03g/sq.ft.

Since last printout at time = 40.00
 Change in Total Mass = -0.30879E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.18253E-02g/sq.ft.
 Diffusion in from atmosphere = -0.12305E-03g/sq.ft.
 Diffusion in from water table = -0.11396E-02g/sq.ft.
 Total inflow at boundaries = -0.30879E-02g/sq.ft.
 Mass discrepancy = -0.58208E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.10129 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.44495E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18323E-01g/sq.ft.
 Diffusion in from water table = -0.38474E-01g/sq.ft.
 Total inflow at boundaries = -0.10129 g/sq.ft.
 Mass discrepancy = -0.14901E-06g/sq.ft.

Polygon 1
 At time = 60.00, total mass in vadose zone = 0.49362E-03g/sq.ft.
 Mass in gas phase = 0.57055E-04g/sq.ft.
 Mass in liquid phase = 0.12363E-03g/sq.ft.
 Mass sorbed = 0.31294E-03g/sq.ft.

Since last printout at time = 50.00
 Change in Total Mass = -0.10135E-02g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.59938E-03g/sq.ft.
 Diffusion in from atmosphere = -0.40298E-04g/sq.ft.
 Diffusion in from water table = -0.37382E-03g/sq.ft.
 Total inflow at boundaries = -0.10135E-02g/sq.ft.
 Mass discrepancy = -0.19791E-08g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.10231 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.45094E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18363E-01g/sq.ft.
 Diffusion in from water table = -0.38848E-01g/sq.ft.
 Total inflow at boundaries = -0.10231 g/sq.ft.
 Mass discrepancy = -0.14901E-06g/sq.ft.

Polygon 1
 At time = 70.00, total mass in vadose zone = 0.16166E-03g/sq.ft.
 Mass in gas phase = 0.18685E-04g/sq.ft.
 Mass in liquid phase = 0.40489E-04g/sq.ft.
 Mass sorbed = 0.10249E-03g/sq.ft.

Since last printout at time = 60.00
 Change in Total Mass = -0.33196E-03g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.19633E-03g/sq.ft.
 Diffusion in from atmosphere = -0.13197E-04g/sq.ft.
 Diffusion in from water table = -0.12244E-03g/sq.ft.
 Total inflow at boundaries = -0.33196E-03g/sq.ft.
 Mass discrepancy = -0.58208E-09g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.10264 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.45290E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18376E-01g/sq.ft.
 Diffusion in from water table = -0.38970E-01g/sq.ft.
 Total inflow at boundaries = -0.10264 g/sq.ft.
 Mass discrepancy = -0.14901E-06g/sq.ft.

Polygon 1
 At time = 80.00, total mass in vadose zone = 0.52943E-04g/sq.ft.
 Mass in gas phase = 0.61194E-05g/sq.ft.
 Mass in liquid phase = 0.13260E-04g/sq.ft.
 Mass sorbed = 0.33564E-04g/sq.ft.

Since last printout at time = 70.00
 Change in Total Mass = -0.10872E-03g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.64297E-04g/sq.ft.
 Diffusion in from atmosphere = -0.43221E-05g/sq.ft.
 Diffusion in from water table = -0.40098E-04g/sq.ft.
 Total inflow at boundaries = -0.10872E-03g/sq.ft.
 Mass discrepancy = -0.20373E-09g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.10275 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.45355E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18381E-01g/sq.ft.
 Diffusion in from water table = -0.39010E-01g/sq.ft.
 Total inflow at boundaries = -0.10275 g/sq.ft.
 Mass discrepancy = -0.15646E-06g/sq.ft.

Polygon 1
 At time = 90.00, total mass in vadose zone = 0.17339E-04g/sq.ft.
 Mass in gas phase = 0.20041E-05g/sq.ft.
 Mass in liquid phase = 0.43426E-05g/sq.ft.
 Mass sorbed = 0.10992E-04g/sq.ft.

Since last printout at time = 80.00
 Change in Total Mass = -0.35605E-04g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.21057E-04g/sq.ft.
 Diffusion in from atmosphere = -0.14155E-05g/sq.ft.
 Diffusion in from water table = -0.13132E-04g/sq.ft.
 Total inflow at boundaries = -0.35604E-04g/sq.ft.
 Mass discrepancy = -0.69122E-10g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.10278 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.45376E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18382E-01g/sq.ft.
 Diffusion in from water table = -0.39024E-01g/sq.ft.
 Total inflow at boundaries = -0.10278 g/sq.ft.
 Mass discrepancy = -0.16391E-06g/sq.ft.

Polygon 1
 At time = 100.00, total mass in vadose zone = 0.56784E-05g/sq.ft.
 Mass in gas phase = 0.65634E-06g/sq.ft.
 Mass in liquid phase = 0.14222E-05g/sq.ft.
 Mass sorbed = 0.35999E-05g/sq.ft.

Since last printout at time = 90.00
 Change in Total Mass = -0.11660E-04g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.68961E-05g/sq.ft.
 Diffusion in from atmosphere = -0.46357E-06g/sq.ft.
 Diffusion in from water table = -0.43007E-05g/sq.ft.
 Total inflow at boundaries = -0.11660E-04g/sq.ft.
 Mass discrepancy = -0.22737E-10g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.10279 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.45383E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
 Diffusion in from water table = -0.39028E-01g/sq.ft.

Total inflow at boundaries = -0.10279 g/sq.ft.
Mass discrepancy = -0.16391E-06g/sq.ft.

Polygon 1
At time = 110.00, total mass in vadose zone = 0.18597E-05g/sq.ft.
Mass in gas phase = 0.21495E-06g/sq.ft.
Mass in liquid phase = 0.46576E-06g/sq.ft.
Mass sorbed = 0.11790E-05g/sq.ft.

Since last printout at time = 100.00
Change in Total Mass = -0.38187E-05g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22585E-05g/sq.ft.
Diffusion in from atmosphere = -0.15182E-06g/sq.ft.
Diffusion in from water table = -0.14085E-05g/sq.ft.
Total inflow at boundaries = -0.38187E-05g/sq.ft.
Mass discrepancy = -0.77307E-11g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.10280 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.45385E-01g/sq.ft.
Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
Diffusion in from water table = -0.39029E-01g/sq.ft.
Total inflow at boundaries = -0.10280 g/sq.ft.
Mass discrepancy = -0.17136E-06g/sq.ft.

Polygon 1
At time = 120.00, total mass in vadose zone = 0.60903E-06g/sq.ft.
Mass in gas phase = 0.70395E-07g/sq.ft.
Mass in liquid phase = 0.15253E-06g/sq.ft.
Mass sorbed = 0.38610E-06g/sq.ft.

Since last printout at time = 110.00
Change in Total Mass = -0.12506E-05g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.73964E-06g/sq.ft.
Diffusion in from atmosphere = -0.49720E-07g/sq.ft.
Diffusion in from water table = -0.46127E-06g/sq.ft.
Total inflow at boundaries = -0.12506E-05g/sq.ft.
Mass discrepancy = -0.22737E-11g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.10280 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.45386E-01g/sq.ft.
Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
Diffusion in from water table = -0.39030E-01g/sq.ft.
Total inflow at boundaries = -0.10280 g/sq.ft.
Mass discrepancy = -0.17881E-06g/sq.ft.

Polygon 1
At time = 130.00, total mass in vadose zone = 0.19946E-06g/sq.ft.
Mass in gas phase = 0.23054E-07g/sq.ft.
Mass in liquid phase = 0.49955E-07g/sq.ft.
Mass sorbed = 0.12645E-06g/sq.ft.

Since last printout at time = 120.00
Change in Total Mass = -0.40958E-06g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.24223E-06g/sq.ft.
Diffusion in from atmosphere = -0.16283E-07g/sq.ft.
Diffusion in from water table = -0.15106E-06g/sq.ft.
Total inflow at boundaries = -0.40958E-06g/sq.ft.
Mass discrepancy = -0.85265E-12g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.10280 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.45386E-01g/sq.ft.
Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
Diffusion in from water table = -0.39030E-01g/sq.ft.
Total inflow at boundaries = -0.10280 g/sq.ft.
Mass discrepancy = -0.17136E-06g/sq.ft.

Polygon 1
At time = 140.00, total mass in vadose zone = 0.65322E-07g/sq.ft.
Mass in gas phase = 0.75501E-08g/sq.ft.
Mass in liquid phase = 0.16360E-07g/sq.ft.
Mass sorbed = 0.41411E-07g/sq.ft.

Since last printout at time = 130.00
Change in Total Mass = -0.13414E-06g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.79329E-07g/sq.ft.
Diffusion in from atmosphere = -0.53327E-08g/sq.ft.

Diffusion in from water table = -0.49473E-07g/sq.ft.
Total inflow at boundaries = -0.13413E-06g/sq.ft.
Mass discrepancy = -0.22737E-12g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.10280 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.45386E-01g/sq.ft.
Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
Diffusion in from water table = -0.39030E-01g/sq.ft.
Total inflow at boundaries = -0.10280 g/sq.ft.
Mass discrepancy = -0.18626E-06g/sq.ft.

Polygon 1

At time = 150.00, total mass in vadose zone = 0.21393E-07g/sq.ft.
Mass in gas phase = 0.24727E-08g/sq.ft.
Mass in liquid phase = 0.53579E-08g/sq.ft.
Mass sorbed = 0.13562E-07g/sq.ft.

Since last printout at time = 140.00

Change in Total Mass = -0.43929E-07g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.25980E-07g/sq.ft.
Diffusion in from atmosphere = -0.17464E-08g/sq.ft.
Diffusion in from water table = -0.16202E-07g/sq.ft.
Total inflow at boundaries = -0.43929E-07g/sq.ft.
Mass discrepancy = -0.99476E-13g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.10280 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.45386E-01g/sq.ft.
Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
Diffusion in from water table = -0.39030E-01g/sq.ft.
Total inflow at boundaries = -0.10280 g/sq.ft.
Mass discrepancy = -0.18626E-06g/sq.ft.

Polygon 1

At time = 160.00, total mass in vadose zone = 0.70060E-08g/sq.ft.
Mass in gas phase = 0.80979E-09g/sq.ft.
Mass in liquid phase = 0.17547E-08g/sq.ft.
Mass sorbed = 0.44415E-08g/sq.ft.

Since last printout at time = 150.00

Change in Total Mass = -0.14387E-07g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.85084E-08g/sq.ft.
Diffusion in from atmosphere = -0.57195E-09g/sq.ft.
Diffusion in from water table = -0.53062E-08g/sq.ft.
Total inflow at boundaries = -0.14387E-07g/sq.ft.
Mass discrepancy = -0.27534E-13g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.10280 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.45386E-01g/sq.ft.
Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
Diffusion in from water table = -0.39030E-01g/sq.ft.
Total inflow at boundaries = -0.10280 g/sq.ft.
Mass discrepancy = -0.20117E-06g/sq.ft.

Polygon 1

At time = 170.00, total mass in vadose zone = 0.22944E-08g/sq.ft.
Mass in gas phase = 0.26520E-09g/sq.ft.
Mass in liquid phase = 0.57465E-09g/sq.ft.
Mass sorbed = 0.14546E-08g/sq.ft.

Since last printout at time = 160.00

Change in Total Mass = -0.47116E-08g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.27865E-08g/sq.ft.
Diffusion in from atmosphere = -0.18731E-09g/sq.ft.
Diffusion in from water table = -0.17378E-08g/sq.ft.
Total inflow at boundaries = -0.47116E-08g/sq.ft.
Mass discrepancy = -0.93259E-14g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.10280 g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.45386E-01g/sq.ft.
Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
Diffusion in from water table = -0.39030E-01g/sq.ft.
Total inflow at boundaries = -0.10280 g/sq.ft.
Mass discrepancy = -0.20862E-06g/sq.ft.

Polygon 1

At time = 180.00, total mass in vadose zone = 0.75143E-09g/sq.ft.
 Mass in gas phase = 0.8653E-10g/sq.ft.
 Mass in liquid phase = 0.18820E-09g/sq.ft.
 Mass sorbed = 0.47638E-09g/sq.ft.

Since last printout at time = 170.00
 Change in Total Mass = -0.15430E-08g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.91256E-09g/sq.ft.
 Diffusion in from atmosphere = -0.61344E-10g/sq.ft.
 Diffusion in from water table = -0.56911E-09g/sq.ft.
 Total inflow at boundaries = -0.15430E-08g/sq.ft.
 Mass discrepancy = -0.26645E-14g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.10280 g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.45386E-01g/sq.ft.
 Diffusion in from atmosphere = -0.18383E-01g/sq.ft.
 Diffusion in from water table = -0.39030E-01g/sq.ft.
 Total inflow at boundaries = -0.10280 g/sq.ft.
 Mass discrepancy = -0.20862E-06g/sq.ft.

GROUNDWATER IMPACT OF POLYGON 1

Time	Mass per area (g/sq.ft.)	Total Mass (g)
10.00	0.13622E-01	0.13622E-01
20.00	0.34519E-01	0.34519E-01
30.00	0.23016E-01	0.23016E-01
40.00	0.88469E-02	0.88469E-02
50.00	0.29649E-02	0.29649E-02
60.00	0.97320E-03	0.97320E-03
70.00	0.31877E-03	0.31877E-03
80.00	0.10439E-03	0.10439E-03
90.00	0.34189E-04	0.34189E-04
100.00	0.11197E-04	0.11197E-04
110.00	0.36669E-05	0.36669E-05
120.00	0.12009E-05	0.12009E-05
130.00	0.39329E-06	0.39329E-06
140.00	0.12880E-06	0.12880E-06
150.00	0.42182E-07	0.42182E-07
160.00	0.13815E-07	0.13815E-07
170.00	0.45242E-08	0.45242E-08
180.00	0.14817E-08	0.14817E-08

TOTAL GROUNDWATER IMPACT

Time (yr)	Mass (g)	Cumulative Mass (g)
10.00	0.13622E-01	0.13622E-01
20.00	0.34519E-01	0.48141E-01
30.00	0.23016E-01	0.71157E-01
40.00	0.88469E-02	0.80004E-01
50.00	0.29649E-02	0.82969E-01
60.00	0.97320E-03	0.83942E-01
70.00	0.31877E-03	0.84261E-01
80.00	0.10439E-03	0.84365E-01
90.00	0.34189E-04	0.84399E-01
100.00	0.11197E-04	0.84410E-01
110.00	0.36669E-05	0.84414E-01
120.00	0.12009E-05	0.84415E-01
130.00	0.39329E-06	0.84416E-01
140.00	0.12880E-06	0.84416E-01
150.00	0.42182E-07	0.84416E-01
160.00	0.13815E-07	0.84416E-01
170.00	0.45242E-08	0.84416E-01
180.00	0.14817E-08	0.84416E-01

VLEACH
version 2.0, 1993.

Developed by :

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P.O. Box 1198
Ada, OK 74820

POLYGON I

Time:	0.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.26510E-02	0.28722E-02	0.38036E-07
2	0.26510E-02	0.28722E-02	0.38036E-07
3	0.26510E-02	0.28722E-02	0.38036E-07
4	0.26510E-02	0.28722E-02	0.38036E-07
5	0.26510E-02	0.28722E-02	0.38036E-07
6	0.26510E-02	0.28722E-02	0.38036E-07
7	0.26510E-02	0.28722E-02	0.38036E-07
8	0.26510E-02	0.28722E-02	0.38036E-07
9	0.26510E-02	0.28722E-02	0.38036E-07
10	0.26510E-02	0.28722E-02	0.38036E-07
11	0.26510E-02	0.28722E-02	0.38036E-07
12	0.26510E-02	0.28722E-02	0.38036E-07
13	0.26510E-02	0.28722E-02	0.38036E-07
14	0.26510E-02	0.28722E-02	0.38036E-07
15	0.26510E-02	0.28722E-02	0.38036E-07
16	0.26510E-02	0.28722E-02	0.38036E-07
17	0.26510E-02	0.28722E-02	0.38036E-07
18	0.26510E-02	0.28722E-02	0.38036E-07
19	0.26510E-02	0.28722E-02	0.38036E-07
20	0.26510E-02	0.28722E-02	0.38036E-07
21	0.26510E-02	0.28722E-02	0.38036E-07
22	0.26510E-02	0.28722E-02	0.38036E-07
23	0.26510E-02	0.28722E-02	0.38036E-07
24	0.26510E-02	0.28722E-02	0.38036E-07
25	0.26510E-02	0.28722E-02	0.38036E-07
26	0.28941E-01	0.31355E-01	0.41523E-06
27	0.28941E-01	0.31355E-01	0.41523E-06
28	0.28941E-01	0.31355E-01	0.41523E-06
29	0.28941E-01	0.31355E-01	0.41523E-06
30	0.28941E-01	0.31355E-01	0.41523E-06
31	0.28941E-01	0.31355E-01	0.41523E-06
32	0.28941E-01	0.31355E-01	0.41523E-06
33	0.28941E-01	0.31355E-01	0.41523E-06
34	0.28941E-01	0.31355E-01	0.41523E-06
35	0.28941E-01	0.31355E-01	0.41523E-06
36	0.28941E-01	0.31355E-01	0.41523E-06
37	0.28941E-01	0.31355E-01	0.41523E-06
38	0.28941E-01	0.31355E-01	0.41523E-06
39	0.28941E-01	0.31355E-01	0.41523E-06
40	0.28941E-01	0.31355E-01	0.41523E-06
41	0.28941E-01	0.31355E-01	0.41523E-06
42	0.28941E-01	0.31355E-01	0.41523E-06
43	0.28941E-01	0.31355E-01	0.41523E-06
44	0.13255E-03	0.14361E-03	0.19018E-08
45	0.13255E-03	0.14361E-03	0.19018E-08
46	0.13255E-03	0.14361E-03	0.19018E-08
47	0.13255E-03	0.14361E-03	0.19018E-08
48	0.13255E-03	0.14361E-03	0.19018E-08
49	0.13255E-03	0.14361E-03	0.19018E-08
50	0.13255E-03	0.14361E-03	0.19018E-08
51	0.13255E-03	0.14361E-03	0.19018E-08
52	0.13255E-03	0.14361E-03	0.19018E-08
53	0.13255E-03	0.14361E-03	0.19018E-08
54	0.13255E-03	0.14361E-03	0.19018E-08
55	0.13255E-03	0.14361E-03	0.19018E-08
56	0.13255E-03	0.14361E-03	0.19018E-08
57	0.13255E-03	0.14361E-03	0.19018E-08
58	0.13255E-03	0.14361E-03	0.19018E-08
59	0.13255E-03	0.14361E-03	0.19018E-08
60	0.13255E-03	0.14361E-03	0.19018E-08
61	0.13255E-03	0.14361E-03	0.19018E-08
62	0.13255E-03	0.14361E-03	0.19018E-08
63	0.13255E-03	0.14361E-03	0.19018E-08
64	0.13255E-03	0.14361E-03	0.19018E-08
65	0.13255E-03	0.14361E-03	0.19018E-08
66	0.13255E-03	0.14361E-03	0.19018E-08
67	0.13255E-03	0.14361E-03	0.19018E-08
68	0.13255E-03	0.14361E-03	0.19018E-08
69	0.13255E-03	0.14361E-03	0.19018E-08
70	0.13255E-03	0.14361E-03	0.19018E-08
71	0.13255E-03	0.14361E-03	0.19018E-08
72	0.13255E-03	0.14361E-03	0.19018E-08

73	0.13255E-03	0.14361E-03	0.19018E-08
74	0.13255E-03	0.14361E-03	0.19018E-08
75	0.13255E-03	0.14361E-03	0.19018E-08
76	0.13255E-03	0.14361E-03	0.19018E-08
77	0.13255E-03	0.14361E-03	0.19018E-08
78	0.13255E-03	0.14361E-03	0.19018E-08
79	0.13255E-03	0.14361E-03	0.19018E-08
80	0.13255E-03	0.14361E-03	0.19018E-08
81	0.13255E-03	0.14361E-03	0.19018E-08
82	0.13255E-03	0.14361E-03	0.19018E-08
83	0.13255E-03	0.14361E-03	0.19018E-08
84	0.13255E-03	0.14361E-03	0.19018E-08
85	0.13255E-03	0.14361E-03	0.19018E-08
86	0.13255E-03	0.14361E-03	0.19018E-08
87	0.13255E-03	0.14361E-03	0.19018E-08
88	0.13255E-03	0.14361E-03	0.19018E-08
89	0.13255E-03	0.14361E-03	0.19018E-08
90	0.13255E-03	0.14361E-03	0.19018E-08
91	0.13255E-03	0.14361E-03	0.19018E-08
92	0.13255E-03	0.14361E-03	0.19018E-08
93	0.13255E-03	0.14361E-03	0.19018E-08
94	0.13255E-03	0.14361E-03	0.19018E-08
95	0.13255E-03	0.14361E-03	0.19018E-08
96	0.00000	0.00000	0.00000
97	0.00000	0.00000	0.00000
98	0.00000	0.00000	0.00000
99	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000

POLYGON I

Time:	10.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.24585E-04	0.26636E-04	0.35273E-09
2	0.53129E-04	0.57562E-04	0.76229E-09
3	0.85958E-04	0.93129E-04	0.12333E-08
4	0.12320E-03	0.13347E-03	0.17676E-08
5	0.16495E-03	0.17871E-03	0.23666E-08
6	0.21129E-03	0.22892E-03	0.30316E-08
7	0.26230E-03	0.28418E-03	0.37634E-08
8	0.31800E-03	0.34453E-03	0.45626E-08
9	0.37841E-03	0.40998E-03	0.54293E-08
10	0.44352E-03	0.48052E-03	0.63635E-08
11	0.51330E-03	0.55612E-03	0.73647E-08
12	0.58770E-03	0.63673E-03	0.84322E-08
13	0.66665E-03	0.72227E-03	0.95649E-08
14	0.75007E-03	0.81265E-03	0.10762E-07
15	0.83786E-03	0.90776E-03	0.12021E-07
16	0.92992E-03	0.10075E-02	0.13342E-07
17	0.10261E-02	0.11117E-02	0.14722E-07
18	0.11263E-02	0.12203E-02	0.16160E-07
19	0.12304E-02	0.13331E-02	0.17654E-07
20	0.13383E-02	0.14500E-02	0.19202E-07
21	0.14498E-02	0.15708E-02	0.20801E-07
22	0.15648E-02	0.16954E-02	0.22451E-07
23	0.16832E-02	0.18236E-02	0.24150E-07
24	0.18048E-02	0.19554E-02	0.25895E-07
25	0.19296E-02	0.20906E-02	0.27686E-07
26	0.20681E-02	0.22406E-02	0.29672E-07
27	0.22134E-02	0.23981E-02	0.31758E-07
28	0.23684E-02	0.25660E-02	0.33982E-07
29	0.25338E-02	0.27452E-02	0.36354E-07
30	0.27102E-02	0.29363E-02	0.38885E-07
31	0.28980E-02	0.31397E-02	0.41579E-07
32	0.30974E-02	0.33558E-02	0.44441E-07
33	0.33086E-02	0.35846E-02	0.47471E-07
34	0.35313E-02	0.38259E-02	0.50666E-07
35	0.37652E-02	0.40793E-02	0.54022E-07
36	0.40098E-02	0.43443E-02	0.57531E-07
37	0.42643E-02	0.46201E-02	0.61183E-07
38	0.45280E-02	0.49057E-02	0.64966E-07
39	0.47997E-02	0.52001E-02	0.68865E-07
40	0.50784E-02	0.55021E-02	0.72864E-07
41	0.53629E-02	0.58103E-02	0.76945E-07
42	0.56517E-02	0.61232E-02	0.81090E-07
43	0.59436E-02	0.64394E-02	0.85277E-07
44	0.62254E-02	0.67447E-02	0.89320E-07
45	0.65028E-02	0.70453E-02	0.93300E-07
46	0.67714E-02	0.73363E-02	0.97154E-07
47	0.70286E-02	0.76149E-02	0.10084E-06
48	0.72722E-02	0.78789E-02	0.10434E-06
49	0.75002E-02	0.81259E-02	0.10761E-06
50	0.77107E-02	0.83539E-02	0.11063E-06
51	0.79023E-02	0.85615E-02	0.11338E-06
52	0.80736E-02	0.87471E-02	0.11584E-06
53	0.82238E-02	0.89098E-02	0.11799E-06
54	0.83520E-02	0.90487E-02	0.11983E-06
55	0.84578E-02	0.91633E-02	0.12135E-06
56	0.85410E-02	0.92535E-02	0.12254E-06
57	0.86016E-02	0.93191E-02	0.12341E-06
58	0.86398E-02	0.93606E-02	0.12396E-06

59	0.86561E-02	0.93782E-02	0.12419E-06
60	0.86510E-02	0.93727E-02	0.12412E-06
61	0.86253E-02	0.93448E-02	0.12375E-06
62	0.85798E-02	0.92955E-02	0.12310E-06
63	0.85155E-02	0.92259E-02	0.12218E-06
64	0.84334E-02	0.91370E-02	0.12100E-06
65	0.83348E-02	0.90301E-02	0.11959E-06
66	0.82207E-02	0.89065E-02	0.11795E-06
67	0.80923E-02	0.87674E-02	0.11611E-06
68	0.79510E-02	0.86143E-02	0.11408E-06
69	0.77978E-02	0.84483E-02	0.11188E-06
70	0.76340E-02	0.82708E-02	0.10953E-06
71	0.74608E-02	0.80832E-02	0.10704E-06
72	0.72793E-02	0.78866E-02	0.10444E-06
73	0.70907E-02	0.76822E-02	0.10173E-06
74	0.68960E-02	0.74713E-02	0.98941E-07
75	0.66962E-02	0.72548E-02	0.96075E-07
76	0.64923E-02	0.70340E-02	0.93150E-07
77	0.62853E-02	0.68096E-02	0.90179E-07
78	0.60758E-02	0.65827E-02	0.87174E-07
79	0.58648E-02	0.63540E-02	0.84146E-07
80	0.56529E-02	0.61244E-02	0.81105E-07
81	0.54407E-02	0.58946E-02	0.78061E-07
82	0.52289E-02	0.56651E-02	0.75022E-07
83	0.50179E-02	0.54366E-02	0.71996E-07
84	0.48083E-02	0.52095E-02	0.68989E-07
85	0.46005E-02	0.49843E-02	0.66006E-07
86	0.43947E-02	0.47613E-02	0.63054E-07
87	0.41913E-02	0.45410E-02	0.60136E-07
88	0.39906E-02	0.43235E-02	0.57255E-07
89	0.37926E-02	0.41090E-02	0.54416E-07
90	0.35977E-02	0.38978E-02	0.51619E-07
91	0.34059E-02	0.36900E-02	0.48866E-07
92	0.32172E-02	0.34856E-02	0.46159E-07
93	0.30317E-02	0.32846E-02	0.43498E-07
94	0.28495E-02	0.30872E-02	0.40883E-07
95	0.26704E-02	0.28932E-02	0.38314E-07
96	0.24944E-02	0.27025E-02	0.35789E-07
97	0.23214E-02	0.25151E-02	0.33307E-07
98	0.21514E-02	0.23309E-02	0.30867E-07
99	0.19841E-02	0.21496E-02	0.28467E-07
100	0.18194E-02	0.19712E-02	0.26105E-07

POLYGON I

Time:	20.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.71793E-05	0.77783E-05	0.10301E-09
2	0.15421E-04	0.16707E-04	0.22125E-09
3	0.24740E-04	0.26804E-04	0.35496E-09
4	0.35155E-04	0.38087E-04	0.50439E-09
5	0.46684E-04	0.50579E-04	0.66981E-09
6	0.59349E-04	0.64300E-04	0.85152E-09
7	0.73172E-04	0.79276E-04	0.10498E-08
8	0.88176E-04	0.95532E-04	0.12651E-08
9	0.10439E-03	0.11309E-03	0.14977E-08
10	0.12183E-03	0.13199E-03	0.17480E-08
11	0.14053E-03	0.15226E-03	0.20163E-08
12	0.16052E-03	0.17392E-03	0.23032E-08
13	0.18183E-03	0.19700E-03	0.26089E-08
14	0.20449E-03	0.22155E-03	0.29339E-08
15	0.22852E-03	0.24758E-03	0.32787E-08
16	0.25395E-03	0.27514E-03	0.36436E-08
17	0.28082E-03	0.30425E-03	0.40292E-08
18	0.30916E-03	0.33495E-03	0.44357E-08
19	0.33899E-03	0.36727E-03	0.48637E-08
20	0.37034E-03	0.40124E-03	0.53136E-08
21	0.40324E-03	0.43688E-03	0.57856E-08
22	0.43772E-03	0.47424E-03	0.62803E-08
23	0.47379E-03	0.51332E-03	0.67979E-08
24	0.51149E-03	0.55416E-03	0.73388E-08
25	0.55084E-03	0.59679E-03	0.79032E-08
26	0.59185E-03	0.64122E-03	0.84916E-08
27	0.63454E-03	0.68748E-03	0.91043E-08
28	0.67895E-03	0.73559E-03	0.97414E-08
29	0.72508E-03	0.78557E-03	0.10403E-07
30	0.77296E-03	0.83745E-03	0.11090E-07
31	0.82261E-03	0.89124E-03	0.11803E-07
32	0.87405E-03	0.94696E-03	0.12541E-07
33	0.92729E-03	0.10046E-02	0.13304E-07
34	0.98236E-03	0.10643E-02	0.14095E-07
35	0.10393E-02	0.11260E-02	0.14911E-07
36	0.10980E-02	0.11897E-02	0.15754E-07
37	0.11587E-02	0.12554E-02	0.16625E-07
38	0.12213E-02	0.13231E-02	0.17522E-07
39	0.12857E-02	0.13930E-02	0.18447E-07
40	0.13521E-02	0.14649E-02	0.19399E-07
41	0.14204E-02	0.15389E-02	0.20379E-07
42	0.14906E-02	0.16150E-02	0.21387E-07
43	0.15627E-02	0.16931E-02	0.22422E-07
44	0.16368E-02	0.17733E-02	0.23484E-07

45	0.17127E-02	0.18556E-02	0.24573E-07
46	0.17905E-02	0.19398E-02	0.25689E-07
47	0.18700E-02	0.20260E-02	0.26831E-07
48	0.19513E-02	0.21141E-02	0.27997E-07
49	0.20343E-02	0.22040E-02	0.29187E-07
50	0.21188E-02	0.22956E-02	0.30400E-07
51	0.22048E-02	0.23888E-02	0.31634E-07
52	0.22922E-02	0.24834E-02	0.32887E-07
53	0.23807E-02	0.25793E-02	0.34158E-07
54	0.24703E-02	0.26764E-02	0.35443E-07
55	0.25607E-02	0.27744E-02	0.36741E-07
56	0.26518E-02	0.28731E-02	0.38048E-07
57	0.27434E-02	0.29723E-02	0.39361E-07
58	0.28351E-02	0.30717E-02	0.40678E-07
59	0.29269E-02	0.31710E-02	0.41994E-07
60	0.30183E-02	0.32701E-02	0.43306E-07
61	0.31091E-02	0.33685E-02	0.44609E-07
62	0.31991E-02	0.34660E-02	0.45900E-07
63	0.32879E-02	0.35622E-02	0.47174E-07
64	0.33753E-02	0.36569E-02	0.48427E-07
65	0.34608E-02	0.37495E-02	0.49655E-07
66	0.35442E-02	0.38399E-02	0.50852E-07
67	0.36252E-02	0.39276E-02	0.52013E-07
68	0.37034E-02	0.40123E-02	0.53135E-07
69	0.37785E-02	0.40937E-02	0.54213E-07
70	0.38501E-02	0.41713E-02	0.55241E-07
71	0.39181E-02	0.42449E-02	0.56215E-07
72	0.39819E-02	0.43141E-02	0.57131E-07
73	0.40414E-02	0.43785E-02	0.57984E-07
74	0.40962E-02	0.44379E-02	0.58770E-07
75	0.41460E-02	0.44919E-02	0.59485E-07
76	0.41906E-02	0.45402E-02	0.60125E-07
77	0.42296E-02	0.45825E-02	0.60686E-07
78	0.42630E-02	0.46186E-02	0.61164E-07
79	0.42903E-02	0.46482E-02	0.61556E-07
80	0.43114E-02	0.46711E-02	0.61859E-07
81	0.43261E-02	0.46870E-02	0.62070E-07
82	0.43343E-02	0.46958E-02	0.62187E-07
83	0.43356E-02	0.46973E-02	0.62206E-07
84	0.43300E-02	0.46913E-02	0.62126E-07
85	0.43174E-02	0.46776E-02	0.61945E-07
86	0.42976E-02	0.46562E-02	0.61661E-07
87	0.42706E-02	0.46268E-02	0.61273E-07
88	0.42361E-02	0.45895E-02	0.60778E-07
89	0.41942E-02	0.45441E-02	0.60177E-07
90	0.41448E-02	0.44906E-02	0.59469E-07
91	0.40879E-02	0.44289E-02	0.58652E-07
92	0.40234E-02	0.43590E-02	0.57727E-07
93	0.39513E-02	0.42809E-02	0.56692E-07
94	0.38715E-02	0.41945E-02	0.55548E-07
95	0.37842E-02	0.40999E-02	0.54294E-07
96	0.36892E-02	0.39970E-02	0.52932E-07
97	0.35866E-02	0.38858E-02	0.51460E-07
98	0.34764E-02	0.37664E-02	0.49879E-07
99	0.33587E-02	0.36389E-02	0.48189E-07
100	0.32333E-02	0.35031E-02	0.46391E-07

POLYGON 1

Time: 30.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.23363E-05	0.25312E-05	0.33521E-10
2	0.50161E-05	0.54344E-05	0.71970E-10
3	0.80439E-05	0.87150E-05	0.11541E-09
4	0.11425E-04	0.12378E-04	0.16392E-09
5	0.15164E-04	0.16429E-04	0.21757E-09
6	0.19267E-04	0.20875E-04	0.27644E-09
7	0.23741E-04	0.25722E-04	0.34063E-09
8	0.28592E-04	0.30978E-04	0.41024E-09
9	0.33828E-04	0.36650E-04	0.48535E-09
10	0.39454E-04	0.42745E-04	0.56607E-09
11	0.45479E-04	0.49273E-04	0.65252E-09
12	0.51911E-04	0.56241E-04	0.74480E-09
13	0.58757E-04	0.63659E-04	0.84303E-09
14	0.66026E-04	0.71534E-04	0.94733E-09
15	0.73727E-04	0.79877E-04	0.10578E-08
16	0.81867E-04	0.88696E-04	0.11746E-08
17	0.90455E-04	0.98002E-04	0.12978E-08
18	0.99501E-04	0.10780E-03	0.14276E-08
19	0.10901E-03	0.11811E-03	0.15641E-08
20	0.11900E-03	0.12893E-03	0.17074E-08
21	0.12947E-03	0.14027E-03	0.18576E-08
22	0.14043E-03	0.15215E-03	0.20149E-08
23	0.15190E-03	0.16457E-03	0.21794E-08
24	0.16388E-03	0.17755E-03	0.23512E-08
25	0.17637E-03	0.19108E-03	0.25305E-08
26	0.18939E-03	0.20519E-03	0.27173E-08
27	0.20295E-03	0.21988E-03	0.29118E-08
28	0.21705E-03	0.23515E-03	0.31141E-08
29	0.23170E-03	0.25103E-03	0.33243E-08
30	0.24691E-03	0.26750E-03	0.35425E-08

31	0.26268E-03	0.28459E-03	0.37688E-08
32	0.27902E-03	0.30230E-03	0.40033E-08
33	0.29594E-03	0.32063E-03	0.42461E-08
34	0.31345E-03	0.33960E-03	0.44973E-08
35	0.33154E-03	0.35920E-03	0.47568E-08
36	0.35022E-03	0.37944E-03	0.50249E-08
37	0.36950E-03	0.40032E-03	0.53014E-08
38	0.38937E-03	0.42185E-03	0.55866E-08
39	0.40984E-03	0.44403E-03	0.58803E-08
40	0.43091E-03	0.46686E-03	0.61826E-08
41	0.45259E-03	0.49034E-03	0.64936E-08
42	0.47486E-03	0.51447E-03	0.68131E-08
43	0.49772E-03	0.53924E-03	0.71412E-08
44	0.52118E-03	0.56466E-03	0.74778E-08
45	0.54523E-03	0.59072E-03	0.78228E-08
46	0.56987E-03	0.61741E-03	0.81763E-08
47	0.59507E-03	0.64472E-03	0.85379E-08
48	0.62085E-03	0.67265E-03	0.89078E-08
49	0.64719E-03	0.70118E-03	0.92856E-08
50	0.67407E-03	0.73030E-03	0.96713E-08
51	0.70148E-03	0.76000E-03	0.10065E-07
52	0.72941E-03	0.79026E-03	0.10465E-07
53	0.75785E-03	0.82107E-03	0.10873E-07
54	0.78676E-03	0.85239E-03	0.11288E-07
55	0.81613E-03	0.88422E-03	0.11710E-07
56	0.84594E-03	0.91651E-03	0.12137E-07
57	0.87616E-03	0.94925E-03	0.12571E-07
58	0.90676E-03	0.98241E-03	0.13010E-07
59	0.93771E-03	0.10159E-02	0.13454E-07
60	0.96898E-03	0.10498E-02	0.13903E-07
61	0.10005E-02	0.10840E-02	0.14355E-07
62	0.10323E-02	0.11184E-02	0.14811E-07
63	0.10643E-02	0.11531E-02	0.15270E-07
64	0.10964E-02	0.11879E-02	0.15731E-07
65	0.11286E-02	0.12228E-02	0.16193E-07
66	0.11609E-02	0.12577E-02	0.16656E-07
67	0.11931E-02	0.12926E-02	0.17118E-07
68	0.12252E-02	0.13274E-02	0.17579E-07
69	0.12572E-02	0.13621E-02	0.18038E-07
70	0.12890E-02	0.13965E-02	0.18494E-07
71	0.13205E-02	0.14306E-02	0.18946E-07
72	0.13516E-02	0.14643E-02	0.19392E-07
73	0.13822E-02	0.14975E-02	0.19832E-07
74	0.14123E-02	0.15301E-02	0.20263E-07
75	0.14417E-02	0.15620E-02	0.20686E-07
76	0.14704E-02	0.15931E-02	0.21097E-07
77	0.14983E-02	0.16233E-02	0.21497E-07
78	0.15252E-02	0.16524E-02	0.21883E-07
79	0.15510E-02	0.16804E-02	0.22254E-07
80	0.15757E-02	0.17071E-02	0.22608E-07
81	0.15991E-02	0.17325E-02	0.22943E-07
82	0.16210E-02	0.17562E-02	0.23258E-07
83	0.16414E-02	0.17783E-02	0.23550E-07
84	0.16601E-02	0.17986E-02	0.23818E-07
85	0.16770E-02	0.18168E-02	0.24060E-07
86	0.16919E-02	0.18330E-02	0.24274E-07
87	0.17047E-02	0.18469E-02	0.24458E-07
88	0.17153E-02	0.18583E-02	0.24610E-07
89	0.17234E-02	0.18672E-02	0.24727E-07
90	0.17290E-02	0.18733E-02	0.24808E-07
91	0.17319E-02	0.18764E-02	0.24850E-07
92	0.17320E-02	0.18765E-02	0.24850E-07
93	0.17290E-02	0.18733E-02	0.24808E-07
94	0.17229E-02	0.18666E-02	0.24720E-07
95	0.17134E-02	0.18563E-02	0.24583E-07
96	0.17004E-02	0.18423E-02	0.24397E-07
97	0.16838E-02	0.18242E-02	0.24158E-07
98	0.16633E-02	0.18020E-02	0.23864E-07
99	0.16388E-02	0.17755E-02	0.23513E-07
100	0.16101E-02	0.17444E-02	0.23101E-07

POLYGON I

Time:	40.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.76499E-06	0.82881E-06	0.10976E-10
2	0.16424E-05	0.17794E-05	0.23565E-10
3	0.26337E-05	0.28534E-05	0.37788E-10
4	0.37405E-05	0.40526E-05	0.53668E-10
5	0.49647E-05	0.53788E-05	0.71231E-10
6	0.63079E-05	0.68342E-05	0.90504E-10
7	0.77724E-05	0.84208E-05	0.11152E-09
8	0.93602E-05	0.10141E-04	0.13430E-09
9	0.11074E-04	0.11997E-04	0.15888E-09
10	0.12915E-04	0.13992E-04	0.18530E-09
11	0.14887E-04	0.16128E-04	0.21359E-09
12	0.16991E-04	0.18408E-04	0.24378E-09
13	0.19231E-04	0.20835E-04	0.27592E-09
14	0.21609E-04	0.23412E-04	0.31004E-09
15	0.24128E-04	0.26141E-04	0.34618E-09
16	0.26790E-04	0.29025E-04	0.38438E-09

17	0.29599E-04	0.32068E-04	0.42468E-09
18	0.32557E-04	0.35273E-04	0.46711E-09
19	0.35667E-04	0.38642E-04	0.51173E-09
20	0.38931E-04	0.42179E-04	0.55857E-09
21	0.42354E-04	0.45887E-04	0.60768E-09
22	0.45936E-04	0.49769E-04	0.65908E-09
23	0.49683E-04	0.53827E-04	0.71283E-09
24	0.53595E-04	0.58066E-04	0.76896E-09
25	0.57676E-04	0.62487E-04	0.82751E-09
26	0.61928E-04	0.67095E-04	0.88853E-09
27	0.66355E-04	0.71890E-04	0.95204E-09
28	0.70958E-04	0.76877E-04	0.10181E-08
29	0.75740E-04	0.82058E-04	0.10867E-08
30	0.80703E-04	0.87436E-04	0.11579E-08
31	0.85850E-04	0.93012E-04	0.12318E-08
32	0.91183E-04	0.98790E-04	0.13083E-08
33	0.96703E-04	0.10477E-03	0.13875E-08
34	0.10241E-03	0.11096E-03	0.14694E-08
35	0.10831E-03	0.11735E-03	0.15540E-08
36	0.11440E-03	0.12395E-03	0.16414E-08
37	0.12069E-03	0.13076E-03	0.17316E-08
38	0.12717E-03	0.13778E-03	0.18246E-08
39	0.13384E-03	0.14501E-03	0.19204E-08
40	0.14071E-03	0.15245E-03	0.20189E-08
41	0.14778E-03	0.16011E-03	0.21203E-08
42	0.15504E-03	0.16797E-03	0.22245E-08
43	0.16250E-03	0.17605E-03	0.23314E-08
44	0.17014E-03	0.18434E-03	0.24412E-08
45	0.17799E-03	0.19283E-03	0.25537E-08
46	0.18602E-03	0.20154E-03	0.26689E-08
47	0.19424E-03	0.21044E-03	0.27869E-08
48	0.20265E-03	0.21955E-03	0.29075E-08
49	0.21124E-03	0.22886E-03	0.30308E-08
50	0.22001E-03	0.23836E-03	0.31566E-08
51	0.22896E-03	0.24806E-03	0.32850E-08
52	0.23807E-03	0.25793E-03	0.34158E-08
53	0.24736E-03	0.26799E-03	0.35490E-08
54	0.25680E-03	0.27823E-03	0.36845E-08
55	0.26640E-03	0.28863E-03	0.38222E-08
56	0.27615E-03	0.29918E-03	0.39621E-08
57	0.28603E-03	0.30989E-03	0.41039E-08
58	0.29605E-03	0.32075E-03	0.42476E-08
59	0.30619E-03	0.33173E-03	0.43931E-08
60	0.31644E-03	0.34283E-03	0.45401E-08
61	0.32679E-03	0.35405E-03	0.46886E-08
62	0.33723E-03	0.36536E-03	0.48384E-08
63	0.34774E-03	0.37675E-03	0.49893E-08
64	0.35832E-03	0.38822E-03	0.51411E-08
65	0.36895E-03	0.39973E-03	0.52936E-08
66	0.37962E-03	0.41129E-03	0.54466E-08
67	0.39030E-03	0.42286E-03	0.55999E-08
68	0.40098E-03	0.43443E-03	0.57531E-08
69	0.41164E-03	0.44598E-03	0.59060E-08
70	0.42226E-03	0.45748E-03	0.60584E-08
71	0.43282E-03	0.46893E-03	0.62100E-08
72	0.44330E-03	0.48028E-03	0.63603E-08
73	0.45367E-03	0.49152E-03	0.65091E-08
74	0.46391E-03	0.50262E-03	0.66561E-08
75	0.47400E-03	0.51354E-03	0.68008E-08
76	0.48390E-03	0.52427E-03	0.69429E-08
77	0.49359E-03	0.53477E-03	0.70819E-08
78	0.50304E-03	0.54500E-03	0.72174E-08
79	0.51221E-03	0.55494E-03	0.73490E-08
80	0.52107E-03	0.56453E-03	0.74761E-08
81	0.52958E-03	0.57376E-03	0.75983E-08
82	0.53772E-03	0.58257E-03	0.77150E-08
83	0.54543E-03	0.59093E-03	0.78257E-08
84	0.55269E-03	0.59879E-03	0.79298E-08
85	0.55944E-03	0.60611E-03	0.80267E-08
86	0.56565E-03	0.61284E-03	0.81157E-08
87	0.57127E-03	0.61892E-03	0.81963E-08
88	0.57625E-03	0.62432E-03	0.82678E-08
89	0.58054E-03	0.62897E-03	0.83294E-08
90	0.58410E-03	0.63282E-03	0.83804E-08
91	0.58686E-03	0.63582E-03	0.84201E-08
92	0.58878E-03	0.63790E-03	0.84477E-08
93	0.58980E-03	0.63901E-03	0.84623E-08
94	0.58986E-03	0.63907E-03	0.84632E-08
95	0.58890E-03	0.63803E-03	0.84494E-08
96	0.58686E-03	0.63582E-03	0.84201E-08
97	0.58367E-03	0.63237E-03	0.83744E-08
98	0.57927E-03	0.62760E-03	0.83112E-08
99	0.57359E-03	0.62144E-03	0.82297E-08
100	0.56656E-03	0.61383E-03	0.81289E-08

POLYGON 1

Time: 50.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.25054E-06	0.27144E-06	0.35947E-11
2	0.53790E-06	0.58277E-06	0.77176E-11

3	0.86256E-06	0.93452E-06	0.12376E-10
4	0.12251E-05	0.13273E-05	0.17577E-10
5	0.16260E-05	0.17616E-05	0.23329E-10
6	0.20659E-05	0.22382E-05	0.29641E-10
7	0.25455E-05	0.27579E-05	0.36522E-10
8	0.30655E-05	0.33213E-05	0.43983E-10
9	0.36267E-05	0.39292E-05	0.52034E-10
10	0.42297E-05	0.45826E-05	0.60687E-10
11	0.48754E-05	0.52821E-05	0.69951E-10
12	0.55646E-05	0.60289E-05	0.79840E-10
13	0.62982E-05	0.68236E-05	0.90365E-10
14	0.70770E-05	0.76674E-05	0.10154E-09
15	0.79019E-05	0.85611E-05	0.11337E-09
16	0.87739E-05	0.95058E-05	0.12588E-09
17	0.96937E-05	0.10502E-04	0.13908E-09
18	0.10662E-04	0.11552E-04	0.15298E-09
19	0.11681E-04	0.12655E-04	0.16759E-09
20	0.12750E-04	0.13814E-04	0.18293E-09
21	0.13871E-04	0.15028E-04	0.19901E-09
22	0.15044E-04	0.16299E-04	0.21585E-09
23	0.16271E-04	0.17628E-04	0.23345E-09
24	0.17552E-04	0.19016E-04	0.25183E-09
25	0.18888E-04	0.20464E-04	0.27100E-09
26	0.20281E-04	0.21973E-04	0.29098E-09
27	0.21730E-04	0.23543E-04	0.31178E-09
28	0.23238E-04	0.25176E-04	0.33341E-09
29	0.24803E-04	0.26873E-04	0.35587E-09
30	0.26429E-04	0.28633E-04	0.37919E-09
31	0.28114E-04	0.30459E-04	0.40337E-09
32	0.29860E-04	0.32351E-04	0.42842E-09
33	0.31667E-04	0.34309E-04	0.45435E-09
34	0.33537E-04	0.36334E-04	0.48117E-09
35	0.35468E-04	0.38427E-04	0.50889E-09
36	0.37463E-04	0.40588E-04	0.53751E-09
37	0.39521E-04	0.42818E-04	0.56703E-09
38	0.41642E-04	0.45116E-04	0.59747E-09
39	0.43827E-04	0.47484E-04	0.62882E-09
40	0.46076E-04	0.49920E-04	0.66109E-09
41	0.48389E-04	0.52426E-04	0.69428E-09
42	0.50766E-04	0.55001E-04	0.72838E-09
43	0.53207E-04	0.57645E-04	0.76339E-09
44	0.55711E-04	0.60358E-04	0.79932E-09
45	0.58277E-04	0.63139E-04	0.83615E-09
46	0.60907E-04	0.65988E-04	0.87387E-09
47	0.63598E-04	0.68903E-04	0.91248E-09
48	0.66350E-04	0.71885E-04	0.95197E-09
49	0.69162E-04	0.74932E-04	0.99231E-09
50	0.72033E-04	0.78042E-04	0.10335E-08
51	0.74961E-04	0.81215E-04	0.10755E-08
52	0.77946E-04	0.84448E-04	0.11183E-08
53	0.80985E-04	0.87741E-04	0.11619E-08
54	0.84076E-04	0.91090E-04	0.12063E-08
55	0.87218E-04	0.94494E-04	0.12514E-08
56	0.90408E-04	0.97950E-04	0.12971E-08
57	0.93644E-04	0.10146E-03	0.13436E-08
58	0.96923E-04	0.10501E-03	0.13906E-08
59	0.10024E-03	0.10860E-03	0.14382E-08
60	0.10360E-03	0.11224E-03	0.14864E-08
61	0.10699E-03	0.11591E-03	0.15350E-08
62	0.11041E-03	0.11962E-03	0.15841E-08
63	0.11385E-03	0.12335E-03	0.16335E-08
64	0.11732E-03	0.12710E-03	0.16832E-08
65	0.12080E-03	0.13087E-03	0.17332E-08
66	0.12429E-03	0.13466E-03	0.17833E-08
67	0.12779E-03	0.13845E-03	0.18335E-08
68	0.13129E-03	0.14224E-03	0.18837E-08
69	0.13478E-03	0.14603E-03	0.19338E-08
70	0.13827E-03	0.14980E-03	0.19838E-08
71	0.14173E-03	0.15356E-03	0.20335E-08
72	0.14517E-03	0.15728E-03	0.20829E-08
73	0.14858E-03	0.16097E-03	0.21317E-08
74	0.15194E-03	0.16461E-03	0.21800E-08
75	0.15525E-03	0.16821E-03	0.22275E-08
76	0.15851E-03	0.17173E-03	0.22742E-08
77	0.16170E-03	0.17519E-03	0.23200E-08
78	0.16481E-03	0.17856E-03	0.23646E-08
79	0.16783E-03	0.18183E-03	0.24080E-08
80	0.17075E-03	0.18500E-03	0.24499E-08
81	0.17357E-03	0.18805E-03	0.24903E-08
82	0.17626E-03	0.19096E-03	0.25289E-08
83	0.17882E-03	0.19374E-03	0.25656E-08
84	0.18123E-03	0.19635E-03	0.26002E-08
85	0.18348E-03	0.19879E-03	0.26325E-08
86	0.18556E-03	0.20104E-03	0.26624E-08
87	0.18745E-03	0.20309E-03	0.26895E-08
88	0.18913E-03	0.20491E-03	0.27136E-08
89	0.19060E-03	0.20650E-03	0.27347E-08
90	0.19183E-03	0.20783E-03	0.27523E-08
91	0.19281E-03	0.20889E-03	0.27663E-08
92	0.19351E-03	0.20965E-03	0.27764E-08

93	0.19393E-03	0.21011E-03	0.27824E-08
94	0.19404E-03	0.21023E-03	0.27840E-08
95	0.19382E-03	0.20999E-03	0.27809E-08
96	0.19326E-03	0.20938E-03	0.27728E-08
97	0.19232E-03	0.20837E-03	0.27594E-08
98	0.19100E-03	0.20693E-03	0.27404E-08
99	0.18927E-03	0.20505E-03	0.27155E-08
100	0.18710E-03	0.20270E-03	0.26844E-08

POLYGON 1

Time:	60.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.82052E-07	0.88897E-07	0.11773E-11
2	0.17616E-06	0.19086E-06	0.25275E-11
3	0.28249E-06	0.30606E-06	0.40531E-11
4	0.40121E-06	0.43468E-06	0.57564E-11
5	0.53250E-06	0.57693E-06	0.76402E-11
6	0.67658E-06	0.73302E-06	0.97074E-11
7	0.83366E-06	0.90320E-06	0.11961E-10
8	0.10040E-05	0.10877E-05	0.14405E-10
9	0.11877E-05	0.12868E-05	0.17041E-10
10	0.13852E-05	0.15008E-05	0.19875E-10
11	0.15967E-05	0.17299E-05	0.22909E-10
12	0.18224E-05	0.19745E-05	0.26148E-10
13	0.20627E-05	0.22347E-05	0.29595E-10
14	0.23177E-05	0.25111E-05	0.33254E-10
15	0.25879E-05	0.28038E-05	0.37130E-10
16	0.28734E-05	0.31132E-05	0.41227E-10
17	0.31747E-05	0.34395E-05	0.45549E-10
18	0.34919E-05	0.37832E-05	0.50101E-10
19	0.38255E-05	0.41446E-05	0.54887E-10
20	0.41756E-05	0.45240E-05	0.59910E-10
21	0.45427E-05	0.49216E-05	0.65177E-10
22	0.49269E-05	0.53379E-05	0.70690E-10
23	0.53287E-05	0.57732E-05	0.76454E-10
24	0.57483E-05	0.62278E-05	0.82474E-10
25	0.61859E-05	0.67020E-05	0.88754E-10
26	0.66420E-05	0.71961E-05	0.95297E-10
27	0.71167E-05	0.77104E-05	0.10211E-09
28	0.76103E-05	0.82452E-05	0.10919E-09
29	0.81232E-05	0.88008E-05	0.11655E-09
30	0.86554E-05	0.93775E-05	0.12419E-09
31	0.92073E-05	0.99755E-05	0.13210E-09
32	0.97792E-05	0.10595E-04	0.14031E-09
33	0.10371E-04	0.11236E-04	0.14880E-09
34	0.10983E-04	0.11900E-04	0.15758E-09
35	0.11616E-04	0.12585E-04	0.16666E-09
36	0.12269E-04	0.13293E-04	0.17603E-09
37	0.12943E-04	0.14023E-04	0.18570E-09
38	0.13638E-04	0.14776E-04	0.19567E-09
39	0.14353E-04	0.15551E-04	0.20594E-09
40	0.15090E-04	0.16349E-04	0.21651E-09
41	0.15847E-04	0.17170E-04	0.22737E-09
42	0.16626E-04	0.18013E-04	0.23854E-09
43	0.17425E-04	0.18879E-04	0.25001E-09
44	0.18245E-04	0.19767E-04	0.26177E-09
45	0.19086E-04	0.20678E-04	0.27384E-09
46	0.19947E-04	0.21611E-04	0.28619E-09
47	0.20828E-04	0.22566E-04	0.29883E-09
48	0.21729E-04	0.23542E-04	0.31177E-09
49	0.22650E-04	0.24540E-04	0.32498E-09
50	0.23590E-04	0.25558E-04	0.33847E-09
51	0.24549E-04	0.26597E-04	0.35223E-09
52	0.25527E-04	0.27656E-04	0.36625E-09
53	0.26522E-04	0.28734E-04	0.38053E-09
54	0.27534E-04	0.29831E-04	0.39505E-09
55	0.28563E-04	0.30946E-04	0.40982E-09
56	0.29608E-04	0.32078E-04	0.42481E-09
57	0.30668E-04	0.33226E-04	0.44001E-09
58	0.31741E-04	0.34389E-04	0.45542E-09
59	0.32828E-04	0.35567E-04	0.47101E-09
60	0.33927E-04	0.36758E-04	0.48678E-09
61	0.35037E-04	0.37960E-04	0.50270E-09
62	0.36157E-04	0.39173E-04	0.51876E-09
63	0.37284E-04	0.40395E-04	0.53495E-09
64	0.38419E-04	0.41624E-04	0.55123E-09
65	0.39559E-04	0.42860E-04	0.56759E-09
66	0.40703E-04	0.44099E-04	0.58400E-09
67	0.41849E-04	0.45341E-04	0.60044E-09
68	0.42996E-04	0.46583E-04	0.61689E-09
69	0.44140E-04	0.47822E-04	0.63331E-09
70	0.45281E-04	0.49058E-04	0.64967E-09
71	0.46415E-04	0.50287E-04	0.66595E-09
72	0.47541E-04	0.51507E-04	0.68211E-09
73	0.48656E-04	0.52716E-04	0.69811E-09
74	0.49758E-04	0.53909E-04	0.71392E-09
75	0.50844E-04	0.55085E-04	0.72949E-09
76	0.51910E-04	0.56241E-04	0.74479E-09
77	0.52954E-04	0.57372E-04	0.75977E-09
78	0.53973E-04	0.58476E-04	0.77439E-09

79	0.54963E-04	0.59549E-04	0.78860E-09
80	0.55921E-04	0.60586E-04	0.80234E-09
81	0.56843E-04	0.61585E-04	0.81557E-09
82	0.57726E-04	0.62541E-04	0.82823E-09
83	0.58564E-04	0.63450E-04	0.84026E-09
84	0.59355E-04	0.64306E-04	0.85161E-09
85	0.60093E-04	0.65106E-04	0.86220E-09
86	0.60774E-04	0.65844E-04	0.87197E-09
87	0.61394E-04	0.66516E-04	0.88087E-09
88	0.61947E-04	0.67115E-04	0.88880E-09
89	0.62429E-04	0.67637E-04	0.89571E-09
90	0.62833E-04	0.68075E-04	0.90151E-09
91	0.63155E-04	0.68423E-04	0.90613E-09
92	0.63388E-04	0.68676E-04	0.90948E-09
93	0.63527E-04	0.68827E-04	0.91147E-09
94	0.63566E-04	0.68869E-04	0.91202E-09
95	0.63498E-04	0.68795E-04	0.91104E-09
96	0.63316E-04	0.68598E-04	0.90844E-09
97	0.63014E-04	0.68271E-04	0.90410E-09
98	0.62584E-04	0.67805E-04	0.89794E-09
99	0.62020E-04	0.67194E-04	0.88985E-09
100	0.61314E-04	0.66429E-04	0.87971E-09

POLYGON I

Time: 70.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.26872E-07	0.29113E-07	0.38555E-12
2	0.57693E-07	0.62506E-07	0.82776E-12
3	0.92515E-07	0.10023E-06	0.13274E-11
4	0.13139E-06	0.14236E-06	0.18852E-11
5	0.17439E-06	0.18894E-06	0.25021E-11
6	0.22158E-06	0.24006E-06	0.31791E-11
7	0.27302E-06	0.29580E-06	0.39172E-11
8	0.32880E-06	0.35622E-06	0.47175E-11
9	0.38898E-06	0.42143E-06	0.55810E-11
10	0.45366E-06	0.49150E-06	0.65090E-11
11	0.52292E-06	0.56654E-06	0.75026E-11
12	0.59684E-06	0.64663E-06	0.85633E-11
13	0.67552E-06	0.73187E-06	0.96922E-11
14	0.75905E-06	0.82237E-06	0.10891E-10
15	0.84753E-06	0.91823E-06	0.12160E-10
16	0.94105E-06	0.10196E-05	0.13502E-10
17	0.10397E-05	0.11264E-05	0.14917E-10
18	0.11436E-05	0.12390E-05	0.16408E-10
19	0.12528E-05	0.13573E-05	0.17975E-10
20	0.13675E-05	0.14816E-05	0.19621E-10
21	0.14877E-05	0.16118E-05	0.21345E-10
22	0.16136E-05	0.17482E-05	0.23151E-10
23	0.17451E-05	0.18907E-05	0.25039E-10
24	0.18825E-05	0.20396E-05	0.27010E-10
25	0.20259E-05	0.21949E-05	0.29067E-10
26	0.21752E-05	0.23567E-05	0.31210E-10
27	0.23307E-05	0.25251E-05	0.33440E-10
28	0.24924E-05	0.27003E-05	0.35760E-10
29	0.26603E-05	0.28822E-05	0.38169E-10
30	0.28346E-05	0.30711E-05	0.40670E-10
31	0.30154E-05	0.32669E-05	0.43264E-10
32	0.32027E-05	0.34698E-05	0.45951E-10
33	0.33965E-05	0.36799E-05	0.48732E-10
34	0.35970E-05	0.38971E-05	0.51609E-10
35	0.38042E-05	0.41215E-05	0.54581E-10
36	0.40181E-05	0.43533E-05	0.57651E-10
37	0.42388E-05	0.45924E-05	0.60817E-10
38	0.44664E-05	0.48390E-05	0.64082E-10
39	0.47007E-05	0.50929E-05	0.67445E-10
40	0.49419E-05	0.53542E-05	0.70905E-10
41	0.51900E-05	0.56230E-05	0.74465E-10
42	0.54449E-05	0.58992E-05	0.78122E-10
43	0.57067E-05	0.61828E-05	0.81878E-10
44	0.59752E-05	0.64737E-05	0.85731E-10
45	0.62505E-05	0.67720E-05	0.89681E-10
46	0.65325E-05	0.70775E-05	0.93727E-10
47	0.68211E-05	0.73902E-05	0.97868E-10
48	0.71163E-05	0.77100E-05	0.10210E-09
49	0.74179E-05	0.80367E-05	0.10643E-09
50	0.77258E-05	0.83703E-05	0.11085E-09
51	0.80399E-05	0.87106E-05	0.11535E-09
52	0.83599E-05	0.90574E-05	0.11995E-09
53	0.86859E-05	0.94105E-05	0.12462E-09
54	0.90174E-05	0.97697E-05	0.12938E-09
55	0.93544E-05	0.10135E-04	0.13421E-09
56	0.96965E-05	0.10505E-04	0.13912E-09
57	0.10044E-04	0.10881E-04	0.14410E-09
58	0.10395E-04	0.11262E-04	0.14915E-09
59	0.10751E-04	0.11648E-04	0.15425E-09
60	0.11111E-04	0.12038E-04	0.15942E-09
61	0.11475E-04	0.12432E-04	0.16463E-09
62	0.11841E-04	0.12829E-04	0.16989E-09
63	0.12211E-04	0.13229E-04	0.17519E-09
64	0.12582E-04	0.13632E-04	0.18053E-09

65	0.12956E-04	0.14036E-04	0.18588E-09
66	0.13330E-04	0.14442E-04	0.19126E-09
67	0.13706E-04	0.14849E-04	0.19664E-09
68	0.14081E-04	0.15256E-04	0.20203E-09
69	0.14456E-04	0.15662E-04	0.20741E-09
70	0.14829E-04	0.16066E-04	0.21277E-09
71	0.15201E-04	0.16469E-04	0.21810E-09
72	0.15570E-04	0.16868E-04	0.22339E-09
73	0.15935E-04	0.17264E-04	0.22863E-09
74	0.16296E-04	0.17655E-04	0.23380E-09
75	0.16651E-04	0.18040E-04	0.23890E-09
76	0.17000E-04	0.18419E-04	0.24392E-09
77	0.17342E-04	0.18789E-04	0.24882E-09
78	0.17676E-04	0.19151E-04	0.25361E-09
79	0.18000E-04	0.19502E-04	0.25826E-09
80	0.18314E-04	0.19842E-04	0.26276E-09
81	0.18616E-04	0.20169E-04	0.26710E-09
82	0.18905E-04	0.20482E-04	0.27124E-09
83	0.19179E-04	0.20779E-04	0.27518E-09
84	0.19438E-04	0.21060E-04	0.27890E-09
85	0.19680E-04	0.21322E-04	0.28237E-09
86	0.19903E-04	0.21564E-04	0.28557E-09
87	0.20106E-04	0.21784E-04	0.28848E-09
88	0.20287E-04	0.21980E-04	0.29108E-09
89	0.20445E-04	0.22151E-04	0.29334E-09
90	0.20578E-04	0.22294E-04	0.29524E-09
91	0.20683E-04	0.22408E-04	0.29675E-09
92	0.20759E-04	0.22491E-04	0.29785E-09
93	0.20805E-04	0.22541E-04	0.29850E-09
94	0.20818E-04	0.22554E-04	0.29869E-09
95	0.20795E-04	0.22530E-04	0.29837E-09
96	0.20736E-04	0.22466E-04	0.29751E-09
97	0.20637E-04	0.22359E-04	0.29609E-09
98	0.20496E-04	0.22206E-04	0.29408E-09
99	0.20312E-04	0.22006E-04	0.29143E-09
100	0.20081E-04	0.21756E-04	0.28811E-09

POLYGON 1

Time: 80.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.88004E-08	0.95346E-08	0.12627E-12
2	0.18894E-07	0.20470E-07	0.27109E-12
3	0.30298E-07	0.32826E-07	0.43471E-12
4	0.43031E-07	0.46621E-07	0.61740E-12
5	0.57113E-07	0.61878E-07	0.81944E-12
6	0.72566E-07	0.78620E-07	0.10412E-11
7	0.89414E-07	0.96873E-07	0.12829E-11
8	0.10768E-06	0.11666E-06	0.15450E-11
9	0.12739E-06	0.13802E-06	0.18278E-11
10	0.14857E-06	0.16097E-06	0.21317E-11
11	0.17125E-06	0.18554E-06	0.24571E-11
12	0.19546E-06	0.21177E-06	0.28044E-11
13	0.22123E-06	0.23969E-06	0.31742E-11
14	0.24859E-06	0.26933E-06	0.35667E-11
15	0.27756E-06	0.30072E-06	0.39824E-11
16	0.30819E-06	0.33390E-06	0.44218E-11
17	0.34050E-06	0.36891E-06	0.48854E-11
18	0.37453E-06	0.40577E-06	0.53736E-11
19	0.41030E-06	0.44453E-06	0.58869E-11
20	0.44785E-06	0.48522E-06	0.64257E-11
21	0.48722E-06	0.52787E-06	0.69905E-11
22	0.52843E-06	0.57252E-06	0.75818E-11
23	0.57153E-06	0.61920E-06	0.82001E-11
24	0.61653E-06	0.66796E-06	0.88457E-11
25	0.66347E-06	0.71882E-06	0.95193E-11
26	0.71238E-06	0.77181E-06	0.10221E-10
27	0.76330E-06	0.82697E-06	0.10952E-10
28	0.81624E-06	0.88434E-06	0.11711E-10
29	0.87125E-06	0.94393E-06	0.12500E-10
30	0.92833E-06	0.10058E-05	0.13319E-10
31	0.98753E-06	0.10699E-05	0.14169E-10
32	0.10489E-05	0.11364E-05	0.15049E-10
33	0.11123E-05	0.12051E-05	0.15960E-10
34	0.11780E-05	0.12763E-05	0.16902E-10
35	0.12459E-05	0.13498E-05	0.17875E-10
36	0.13159E-05	0.14257E-05	0.18880E-10
37	0.13882E-05	0.15040E-05	0.19918E-10
38	0.14627E-05	0.15847E-05	0.20987E-10
39	0.15395E-05	0.16679E-05	0.22088E-10
40	0.16185E-05	0.17535E-05	0.23221E-10
41	0.16997E-05	0.18415E-05	0.24387E-10
42	0.17832E-05	0.19320E-05	0.25585E-10
43	0.18689E-05	0.20248E-05	0.26815E-10
44	0.19569E-05	0.21201E-05	0.28077E-10
45	0.20470E-05	0.22178E-05	0.29370E-10
46	0.21394E-05	0.23179E-05	0.30695E-10
47	0.22339E-05	0.24203E-05	0.32051E-10
48	0.23306E-05	0.25250E-05	0.33438E-10
49	0.24293E-05	0.26320E-05	0.34855E-10
50	0.25302E-05	0.27412E-05	0.36302E-10

51	0.26330E-05	0.28527E-05	0.37778E-10
52	0.27379E-05	0.29663E-05	0.39282E-10
53	0.28446E-05	0.30819E-05	0.40813E-10
54	0.29532E-05	0.31995E-05	0.42371E-10
55	0.30635E-05	0.33191E-05	0.43955E-10
56	0.31756E-05	0.34405E-05	0.45562E-10
57	0.32892E-05	0.35636E-05	0.47193E-10
58	0.34044E-05	0.36884E-05	0.48845E-10
59	0.35210E-05	0.38147E-05	0.50518E-10
60	0.36388E-05	0.39424E-05	0.52209E-10
61	0.37579E-05	0.40714E-05	0.53917E-10
62	0.38779E-05	0.42015E-05	0.55640E-10
63	0.39989E-05	0.43325E-05	0.57375E-10
64	0.41206E-05	0.44644E-05	0.59121E-10
65	0.42429E-05	0.45969E-05	0.60876E-10
66	0.43656E-05	0.47298E-05	0.62636E-10
67	0.44885E-05	0.48630E-05	0.64400E-10
68	0.46115E-05	0.49962E-05	0.66164E-10
69	0.47342E-05	0.51291E-05	0.67925E-10
70	0.48565E-05	0.52617E-05	0.69680E-10
71	0.49782E-05	0.53935E-05	0.71426E-10
72	0.50990E-05	0.55244E-05	0.73159E-10
73	0.52186E-05	0.56539E-05	0.74875E-10
74	0.53368E-05	0.57820E-05	0.76570E-10
75	0.54532E-05	0.59081E-05	0.78241E-10
76	0.55676E-05	0.60320E-05	0.79882E-10
77	0.56795E-05	0.61534E-05	0.81488E-10
78	0.57888E-05	0.62717E-05	0.83056E-10
79	0.58950E-05	0.63868E-05	0.84580E-10
80	0.59978E-05	0.64981E-05	0.86054E-10
81	0.60966E-05	0.66053E-05	0.87473E-10
82	0.61913E-05	0.67078E-05	0.88831E-10
83	0.62812E-05	0.68052E-05	0.90121E-10
84	0.63660E-05	0.68971E-05	0.91338E-10
85	0.64452E-05	0.69829E-05	0.92474E-10
86	0.65183E-05	0.70621E-05	0.93522E-10
87	0.65847E-05	0.71341E-05	0.94476E-10
88	0.66441E-05	0.71983E-05	0.95327E-10
89	0.66957E-05	0.72543E-05	0.96068E-10
90	0.67391E-05	0.73013E-05	0.96690E-10
91	0.67736E-05	0.73387E-05	0.97186E-10
92	0.67986E-05	0.73658E-05	0.97545E-10
93	0.68136E-05	0.73820E-05	0.97759E-10
94	0.68177E-05	0.73865E-05	0.97819E-10
95	0.68104E-05	0.73786E-05	0.97714E-10
96	0.67909E-05	0.73575E-05	0.97434E-10
97	0.67586E-05	0.73224E-05	0.96970E-10
98	0.67125E-05	0.72725E-05	0.96309E-10
99	0.66520E-05	0.72070E-05	0.95442E-10
100	0.65763E-05	0.71250E-05	0.94355E-10

POLYGON I

Time: 90.000

Cell	Cgas(g/cu.ft)	Clq(g/cu.ft)	Csol(g/g)
1	0.28821E-08	0.31225E-08	0.41352E-13
2	0.61878E-08	0.67040E-08	0.88781E-13
3	0.99226E-08	0.10750E-07	0.14237E-12
4	0.14093E-07	0.15268E-07	0.20220E-12
5	0.18704E-07	0.20265E-07	0.26837E-12
6	0.23765E-07	0.25748E-07	0.34098E-12
7	0.29283E-07	0.31726E-07	0.42014E-12
8	0.35265E-07	0.38207E-07	0.50597E-12
9	0.41720E-07	0.45200E-07	0.59858E-12
10	0.48657E-07	0.52716E-07	0.69812E-12
11	0.56085E-07	0.60764E-07	0.80469E-12
12	0.64014E-07	0.69354E-07	0.91845E-12
13	0.72452E-07	0.78497E-07	0.10395E-11
14	0.81412E-07	0.88203E-07	0.11681E-11
15	0.90901E-07	0.98484E-07	0.13042E-11
16	0.10093E-06	0.10935E-06	0.14481E-11
17	0.11151E-06	0.12082E-06	0.16000E-11
18	0.12266E-06	0.13289E-06	0.17598E-11
19	0.13437E-06	0.14558E-06	0.19279E-11
20	0.14667E-06	0.15891E-06	0.21044E-11
21	0.15956E-06	0.17287E-06	0.22894E-11
22	0.17306E-06	0.18750E-06	0.24830E-11
23	0.18717E-06	0.20279E-06	0.26855E-11
24	0.20191E-06	0.21876E-06	0.28970E-11
25	0.21728E-06	0.23541E-06	0.31175E-11
26	0.23330E-06	0.25277E-06	0.33474E-11
27	0.24998E-06	0.27083E-06	0.35866E-11
28	0.26732E-06	0.28962E-06	0.38354E-11
29	0.28533E-06	0.30913E-06	0.40938E-11
30	0.30403E-06	0.32939E-06	0.43621E-11
31	0.32341E-06	0.35039E-06	0.46402E-11
32	0.34350E-06	0.37216E-06	0.49284E-11
33	0.36429E-06	0.39468E-06	0.52267E-11
34	0.38579E-06	0.41798E-06	0.55353E-11
35	0.40802E-06	0.44205E-06	0.58541E-11
36	0.43096E-06	0.46691E-06	0.61833E-11

37	0.45463E-06	0.49256E-06	0.65229E-11
38	0.47904E-06	0.51900E-06	0.68731E-11
39	0.50417E-06	0.54623E-06	0.72337E-11
40	0.53004E-06	0.57426E-06	0.76049E-11
41	0.55665E-06	0.60309E-06	0.79867E-11
42	0.58399E-06	0.63271E-06	0.83790E-11
43	0.61207E-06	0.66313E-06	0.87817E-11
44	0.64087E-06	0.69433E-06	0.91950E-11
45	0.67040E-06	0.72632E-06	0.96186E-11
46	0.70064E-06	0.75909E-06	0.10053E-10
47	0.73160E-06	0.79263E-06	0.10497E-10
48	0.76325E-06	0.82693E-06	0.10951E-10
49	0.79560E-06	0.86197E-06	0.11415E-10
50	0.82862E-06	0.89775E-06	0.11889E-10
51	0.86231E-06	0.93425E-06	0.12372E-10
52	0.89664E-06	0.97144E-06	0.12865E-10
53	0.93160E-06	0.10093E-05	0.13366E-10
54	0.96716E-06	0.10478E-05	0.13876E-10
55	0.10033E-05	0.10870E-05	0.14395E-10
56	0.10400E-05	0.11268E-05	0.14922E-10
57	0.10772E-05	0.11671E-05	0.15456E-10
58	0.11149E-05	0.12079E-05	0.15997E-10
59	0.11531E-05	0.12493E-05	0.16544E-10
60	0.11917E-05	0.12911E-05	0.17098E-10
61	0.12307E-05	0.13334E-05	0.17658E-10
62	0.12700E-05	0.13760E-05	0.18222E-10
63	0.13096E-05	0.14189E-05	0.18790E-10
64	0.13495E-05	0.14621E-05	0.19362E-10
65	0.13895E-05	0.15055E-05	0.19937E-10
66	0.14297E-05	0.15490E-05	0.20513E-10
67	0.14700E-05	0.15926E-05	0.21091E-10
68	0.15102E-05	0.16362E-05	0.21668E-10
69	0.15504E-05	0.16798E-05	0.22245E-10
70	0.15905E-05	0.17232E-05	0.22820E-10
71	0.16303E-05	0.17664E-05	0.23392E-10
72	0.16699E-05	0.18092E-05	0.23959E-10
73	0.17091E-05	0.18517E-05	0.24521E-10
74	0.17478E-05	0.18936E-05	0.25077E-10
75	0.17859E-05	0.19349E-05	0.25624E-10
76	0.18234E-05	0.19755E-05	0.26161E-10
77	0.18600E-05	0.20152E-05	0.26687E-10
78	0.18958E-05	0.20540E-05	0.27201E-10
79	0.19306E-05	0.20917E-05	0.27700E-10
80	0.19642E-05	0.21281E-05	0.28182E-10
81	0.19966E-05	0.21632E-05	0.28647E-10
82	0.20276E-05	0.21968E-05	0.29092E-10
83	0.20571E-05	0.22287E-05	0.29514E-10
84	0.20848E-05	0.22588E-05	0.29913E-10
85	0.21108E-05	0.22869E-05	0.30285E-10
86	0.21347E-05	0.23128E-05	0.30628E-10
87	0.21565E-05	0.23364E-05	0.30941E-10
88	0.21759E-05	0.23574E-05	0.31219E-10
89	0.21928E-05	0.23758E-05	0.31462E-10
90	0.22070E-05	0.23911E-05	0.31666E-10
91	0.22183E-05	0.24034E-05	0.31828E-10
92	0.22265E-05	0.24123E-05	0.31946E-10
93	0.22314E-05	0.24176E-05	0.32016E-10
94	0.22328E-05	0.24190E-05	0.32035E-10
95	0.22304E-05	0.24165E-05	0.32001E-10
96	0.22240E-05	0.24095E-05	0.31909E-10
97	0.22134E-05	0.23981E-05	0.31757E-10
98	0.21983E-05	0.23817E-05	0.31541E-10
99	0.21785E-05	0.23603E-05	0.31257E-10
100	0.21537E-05	0.23334E-05	0.30901E-10

POLYGON I

Time: 100.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.94388E-09	0.10226E-08	0.13543E-13
2	0.20265E-08	0.21955E-08	0.29075E-13
3	0.32496E-08	0.35207E-08	0.46625E-13
4	0.46153E-08	0.50003E-08	0.66219E-13
5	0.61257E-08	0.66367E-08	0.87889E-13
6	0.77831E-08	0.84324E-08	0.11167E-12
7	0.95900E-08	0.10390E-07	0.13759E-12
8	0.11549E-07	0.12513E-07	0.16570E-12
9	0.13663E-07	0.14803E-07	0.19603E-12
10	0.15935E-07	0.17264E-07	0.22863E-12
11	0.18368E-07	0.19900E-07	0.26353E-12
12	0.20964E-07	0.22713E-07	0.30079E-12
13	0.23728E-07	0.25707E-07	0.34044E-12
14	0.26662E-07	0.28886E-07	0.38254E-12
15	0.29770E-07	0.32253E-07	0.42713E-12
16	0.33055E-07	0.35812E-07	0.47426E-12
17	0.36520E-07	0.39567E-07	0.52398E-12
18	0.40169E-07	0.43521E-07	0.57634E-12
19	0.44006E-07	0.47678E-07	0.63139E-12
20	0.48034E-07	0.52041E-07	0.68918E-12
21	0.52257E-07	0.56616E-07	0.74976E-12
22	0.56677E-07	0.61405E-07	0.81318E-12

23	0.61299E-07	0.66412E-07	0.87950E-12
24	0.66125E-07	0.71642E-07	0.94875E-12
25	0.71160E-07	0.77096E-07	0.10210E-11
26	0.76406E-07	0.82780E-07	0.10963E-11
27	0.81867E-07	0.88697E-07	0.11746E-11
28	0.87546E-07	0.94849E-07	0.12561E-11
29	0.93445E-07	0.10124E-06	0.13407E-11
30	0.99568E-07	0.10787E-06	0.14286E-11
31	0.10592E-06	0.11475E-06	0.15197E-11
32	0.11249E-06	0.12188E-06	0.16140E-11
33	0.11930E-06	0.12926E-06	0.17117E-11
34	0.12635E-06	0.13689E-06	0.18128E-11
35	0.13362E-06	0.14477E-06	0.19172E-11
36	0.14114E-06	0.15291E-06	0.20250E-11
37	0.14889E-06	0.16131E-06	0.21362E-11
38	0.15688E-06	0.16997E-06	0.22509E-11
39	0.16512E-06	0.17889E-06	0.23690E-11
40	0.17359E-06	0.18807E-06	0.24906E-11
41	0.18230E-06	0.19751E-06	0.26156E-11
42	0.19126E-06	0.20721E-06	0.27441E-11
43	0.20045E-06	0.21717E-06	0.28760E-11
44	0.20988E-06	0.22739E-06	0.30113E-11
45	0.21955E-06	0.23787E-06	0.31501E-11
46	0.22946E-06	0.24860E-06	0.32922E-11
47	0.23960E-06	0.25958E-06	0.34377E-11
48	0.24996E-06	0.27082E-06	0.35864E-11
49	0.26056E-06	0.28229E-06	0.37384E-11
50	0.27137E-06	0.29401E-06	0.38936E-11
51	0.28240E-06	0.30596E-06	0.40518E-11
52	0.29365E-06	0.31814E-06	0.42132E-11
53	0.30510E-06	0.33055E-06	0.43774E-11
54	0.31674E-06	0.34316E-06	0.45445E-11
55	0.32858E-06	0.35599E-06	0.47143E-11
56	0.34060E-06	0.36901E-06	0.48868E-11
57	0.35279E-06	0.38222E-06	0.50617E-11
58	0.36514E-06	0.39560E-06	0.52389E-11
59	0.37764E-06	0.40914E-06	0.54183E-11
60	0.39028E-06	0.42284E-06	0.55996E-11
61	0.40305E-06	0.43667E-06	0.57828E-11
62	0.41593E-06	0.45062E-06	0.59676E-11
63	0.42890E-06	0.46468E-06	0.61537E-11
64	0.44196E-06	0.47882E-06	0.63410E-11
65	0.45507E-06	0.49304E-06	0.65292E-11
66	0.46823E-06	0.50729E-06	0.67180E-11
67	0.48141E-06	0.52158E-06	0.69072E-11
68	0.49460E-06	0.53586E-06	0.70964E-11
69	0.50776E-06	0.55012E-06	0.72852E-11
70	0.52088E-06	0.56434E-06	0.74735E-11
71	0.53393E-06	0.57848E-06	0.76607E-11
72	0.54689E-06	0.59251E-06	0.78466E-11
73	0.55972E-06	0.60641E-06	0.80307E-11
74	0.57239E-06	0.62014E-06	0.82125E-11
75	0.58488E-06	0.63367E-06	0.83916E-11
76	0.59714E-06	0.64696E-06	0.85676E-11
77	0.60916E-06	0.65997E-06	0.87400E-11
78	0.62088E-06	0.67267E-06	0.89081E-11
79	0.63227E-06	0.68501E-06	0.90716E-11
80	0.64329E-06	0.69695E-06	0.92297E-11
81	0.65389E-06	0.70844E-06	0.93818E-11
82	0.66404E-06	0.71944E-06	0.95275E-11
83	0.67369E-06	0.72989E-06	0.96659E-11
84	0.68278E-06	0.73974E-06	0.97964E-11
85	0.69127E-06	0.74894E-06	0.99182E-11
86	0.69911E-06	0.75744E-06	0.10031E-10
87	0.70624E-06	0.76516E-06	0.10133E-10
88	0.71261E-06	0.77205E-06	0.10224E-10
89	0.71814E-06	0.77805E-06	0.10304E-10
90	0.72280E-06	0.78309E-06	0.10370E-10
91	0.72650E-06	0.78711E-06	0.10424E-10
92	0.72918E-06	0.79002E-06	0.10462E-10
93	0.73078E-06	0.79175E-06	0.10485E-10
94	0.73123E-06	0.79223E-06	0.10491E-10
95	0.73045E-06	0.79138E-06	0.10480E-10
96	0.72836E-06	0.78912E-06	0.10450E-10
97	0.72488E-06	0.78536E-06	0.10400E-10
98	0.71995E-06	0.78001E-06	0.10330E-10
99	0.71346E-06	0.77298E-06	0.10237E-10
100	0.70534E-06	0.76418E-06	0.10120E-10

POLYGON I

Time: 110.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.30912E-09	0.33491E-09	0.44352E-14
2	0.66367E-09	0.71903E-09	0.95221E-14
3	0.10642E-08	0.11530E-08	0.15269E-13
4	0.15115E-08	0.16376E-08	0.21686E-13
5	0.20061E-08	0.21735E-08	0.28783E-13
6	0.25489E-08	0.27616E-08	0.36571E-13
7	0.31407E-08	0.34027E-08	0.45062E-13
8	0.37823E-08	0.40978E-08	0.54267E-13

9	0.44746E-08	0.48479E-08	0.64201E-13
10	0.52187E-08	0.56540E-08	0.74876E-13
11	0.60154E-08	0.65172E-08	0.86307E-13
12	0.68657E-08	0.74385E-08	0.98508E-13
13	0.77708E-08	0.84191E-08	0.11149E-12
14	0.87317E-08	0.94602E-08	0.12528E-12
15	0.97495E-08	0.10563E-07	0.13988E-12
16	0.10825E-07	0.11728E-07	0.15532E-12
17	0.11960E-07	0.12958E-07	0.17160E-12
18	0.13155E-07	0.14253E-07	0.18875E-12
19	0.14412E-07	0.15614E-07	0.20678E-12
20	0.15731E-07	0.17043E-07	0.22570E-12
21	0.17114E-07	0.18542E-07	0.24555E-12
22	0.18562E-07	0.20110E-07	0.26632E-12
23	0.20075E-07	0.21750E-07	0.28803E-12
24	0.21656E-07	0.23462E-07	0.31071E-12
25	0.23305E-07	0.25249E-07	0.33437E-12
26	0.25023E-07	0.27110E-07	0.35902E-12
27	0.26811E-07	0.29048E-07	0.38468E-12
28	0.28671E-07	0.31063E-07	0.41136E-12
29	0.30603E-07	0.33156E-07	0.43908E-12
30	0.32608E-07	0.35328E-07	0.46785E-12
31	0.34688E-07	0.37581E-07	0.49769E-12
32	0.36842E-07	0.39915E-07	0.52859E-12
33	0.39072E-07	0.42331E-07	0.56059E-12
34	0.41378E-07	0.44830E-07	0.59368E-12
35	0.43761E-07	0.47412E-07	0.62788E-12
36	0.46222E-07	0.50078E-07	0.66319E-12
37	0.48761E-07	0.52829E-07	0.69961E-12
38	0.51379E-07	0.55665E-07	0.73717E-12
39	0.54075E-07	0.58586E-07	0.77585E-12
40	0.56850E-07	0.61592E-07	0.81566E-12
41	0.59703E-07	0.64684E-07	0.85661E-12
42	0.62636E-07	0.67861E-07	0.89868E-12
43	0.65647E-07	0.71123E-07	0.94188E-12
44	0.68736E-07	0.74470E-07	0.98620E-12
45	0.71903E-07	0.77901E-07	0.10316E-11
46	0.75147E-07	0.81416E-07	0.10782E-11
47	0.78467E-07	0.85013E-07	0.11258E-11
48	0.81862E-07	0.88692E-07	0.11745E-11
49	0.85332E-07	0.92450E-07	0.12243E-11
50	0.88874E-07	0.96288E-07	0.12751E-11
51	0.92486E-07	0.10020E-06	0.13270E-11
52	0.96169E-07	0.10419E-06	0.13798E-11
53	0.99918E-07	0.10825E-06	0.14336E-11
54	0.10373E-06	0.11239E-06	0.14883E-11
55	0.10761E-06	0.11659E-06	0.15439E-11
56	0.11154E-06	0.12085E-06	0.16004E-11
57	0.11554E-06	0.12517E-06	0.16577E-11
58	0.11958E-06	0.12956E-06	0.17157E-11
59	0.12368E-06	0.13399E-06	0.17745E-11
60	0.12782E-06	0.13848E-06	0.18339E-11
61	0.13200E-06	0.14301E-06	0.18939E-11
62	0.13621E-06	0.14758E-06	0.19544E-11
63	0.14046E-06	0.15218E-06	0.20153E-11
64	0.14474E-06	0.15681E-06	0.20767E-11
65	0.14903E-06	0.16147E-06	0.21383E-11
66	0.15334E-06	0.16614E-06	0.22001E-11
67	0.15766E-06	0.17081E-06	0.22621E-11
68	0.16198E-06	0.17549E-06	0.23240E-11
69	0.16629E-06	0.18016E-06	0.23859E-11
70	0.17059E-06	0.18482E-06	0.24475E-11
71	0.17486E-06	0.18945E-06	0.25089E-11
72	0.17910E-06	0.19405E-06	0.25697E-11
73	0.18331E-06	0.19860E-06	0.26300E-11
74	0.18746E-06	0.20309E-06	0.26896E-11
75	0.19155E-06	0.20753E-06	0.27482E-11
76	0.19556E-06	0.21188E-06	0.28059E-11
77	0.19950E-06	0.21614E-06	0.28623E-11
78	0.20334E-06	0.22030E-06	0.29174E-11
79	0.20707E-06	0.22434E-06	0.29709E-11
80	0.21067E-06	0.22825E-06	0.30227E-11
81	0.21415E-06	0.23201E-06	0.30725E-11
82	0.21747E-06	0.23561E-06	0.31202E-11
83	0.22063E-06	0.23904E-06	0.31655E-11
84	0.22361E-06	0.24226E-06	0.32083E-11
85	0.22639E-06	0.24528E-06	0.32482E-11
86	0.22896E-06	0.24806E-06	0.32850E-11
87	0.23129E-06	0.25059E-06	0.33185E-11
88	0.23338E-06	0.25285E-06	0.33484E-11
89	0.23519E-06	0.25481E-06	0.33744E-11
90	0.23671E-06	0.25646E-06	0.33963E-11
91	0.23793E-06	0.25777E-06	0.34137E-11
92	0.23881E-06	0.25873E-06	0.34263E-11
93	0.23933E-06	0.25930E-06	0.34338E-11
94	0.23948E-06	0.25945E-06	0.34359E-11
95	0.23922E-06	0.25918E-06	0.34322E-11
96	0.23853E-06	0.25843E-06	0.34224E-11
97	0.23740E-06	0.25720E-06	0.34061E-11
98	0.23578E-06	0.25545E-06	0.33829E-11

99	0.23366E-06	0.25315E-06	0.33524E-11
100	0.23100E-06	0.25027E-06	0.33143E-11

POLYGON I

Time:	120.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10124E-09	0.10968E-09	0.14525E-14
2	0.21735E-09	0.23548E-09	0.31185E-14
3	0.34854E-09	0.37761E-09	0.50007E-14
4	0.49501E-09	0.53631E-09	0.71023E-14
5	0.65700E-09	0.71181E-09	0.94265E-14
6	0.83477E-09	0.90441E-09	0.11977E-13
7	0.10286E-08	0.11144E-08	0.14758E-13
8	0.12387E-08	0.13420E-08	0.17772E-13
9	0.14654E-08	0.15877E-08	0.21026E-13
10	0.17091E-08	0.18517E-08	0.24522E-13
11	0.19700E-08	0.21344E-08	0.28265E-13
12	0.22485E-08	0.24361E-08	0.32261E-13
13	0.25449E-08	0.27572E-08	0.36514E-13
14	0.28596E-08	0.30982E-08	0.41029E-13
15	0.31929E-08	0.34593E-08	0.45811E-13
16	0.35453E-08	0.38410E-08	0.50866E-13
17	0.39169E-08	0.42437E-08	0.56199E-13
18	0.43084E-08	0.46678E-08	0.61815E-13
19	0.47199E-08	0.51136E-08	0.67719E-13
20	0.51519E-08	0.55817E-08	0.73918E-13
21	0.56048E-08	0.60723E-08	0.80415E-13
22	0.60788E-08	0.65860E-08	0.87218E-13
23	0.65746E-08	0.71230E-08	0.94330E-13
24	0.70922E-08	0.76839E-08	0.10176E-12
25	0.76322E-08	0.82689E-08	0.10950E-12
26	0.81949E-08	0.88785E-08	0.11758E-12
27	0.87806E-08	0.95131E-08	0.12598E-12
28	0.93897E-08	0.10173E-07	0.13472E-12
29	0.10022E-07	0.10858E-07	0.14380E-12
30	0.10679E-07	0.11570E-07	0.15322E-12
31	0.11360E-07	0.12308E-07	0.16299E-12
32	0.12066E-07	0.13072E-07	0.17311E-12
33	0.12796E-07	0.13863E-07	0.18359E-12
34	0.13551E-07	0.14682E-07	0.19443E-12
35	0.14332E-07	0.15527E-07	0.20563E-12
36	0.15138E-07	0.16401E-07	0.21719E-12
37	0.15969E-07	0.17301E-07	0.22912E-12
38	0.16826E-07	0.18230E-07	0.24142E-12
39	0.17709E-07	0.19187E-07	0.25409E-12
40	0.18618E-07	0.20171E-07	0.26713E-12
41	0.19553E-07	0.21184E-07	0.28054E-12
42	0.20513E-07	0.22224E-07	0.29432E-12
43	0.21499E-07	0.23293E-07	0.30846E-12
44	0.22511E-07	0.24389E-07	0.32298E-12
45	0.23548E-07	0.25512E-07	0.33786E-12
46	0.24610E-07	0.26663E-07	0.35310E-12
47	0.25698E-07	0.27842E-07	0.36870E-12
48	0.26810E-07	0.29046E-07	0.38466E-12
49	0.27946E-07	0.30277E-07	0.40096E-12
50	0.29106E-07	0.31534E-07	0.41760E-12
51	0.30289E-07	0.32816E-07	0.43458E-12
52	0.31495E-07	0.34122E-07	0.45188E-12
53	0.32723E-07	0.35453E-07	0.46950E-12
54	0.33972E-07	0.36806E-07	0.48742E-12
55	0.35241E-07	0.38181E-07	0.50563E-12
56	0.36530E-07	0.39578E-07	0.52413E-12
57	0.37838E-07	0.40994E-07	0.54288E-12
58	0.39163E-07	0.42430E-07	0.56189E-12
59	0.40504E-07	0.43883E-07	0.58113E-12
60	0.41859E-07	0.45351E-07	0.60059E-12
61	0.43229E-07	0.46835E-07	0.62023E-12
62	0.44610E-07	0.48332E-07	0.64005E-12
63	0.46002E-07	0.49839E-07	0.66002E-12
64	0.47402E-07	0.51356E-07	0.68010E-12
65	0.48808E-07	0.52880E-07	0.70029E-12
66	0.50220E-07	0.54409E-07	0.72054E-12
67	0.51634E-07	0.55941E-07	0.74083E-12
68	0.53048E-07	0.57473E-07	0.76112E-12
69	0.54460E-07	0.59003E-07	0.78137E-12
70	0.55867E-07	0.60528E-07	0.80156E-12
71	0.57267E-07	0.62044E-07	0.82165E-12
72	0.58656E-07	0.63550E-07	0.84158E-12
73	0.60032E-07	0.65040E-07	0.86132E-12
74	0.61391E-07	0.66513E-07	0.88083E-12
75	0.62731E-07	0.67964E-07	0.90004E-12
76	0.64046E-07	0.69389E-07	0.91892E-12
77	0.65335E-07	0.70785E-07	0.93740E-12
78	0.66592E-07	0.72147E-07	0.95544E-12
79	0.67813E-07	0.73471E-07	0.97297E-12
80	0.68995E-07	0.74751E-07	0.98992E-12
81	0.70133E-07	0.75984E-07	0.10062E-11
82	0.71221E-07	0.77163E-07	0.10219E-11
83	0.72256E-07	0.78284E-07	0.10367E-11
84	0.73231E-07	0.79341E-07	0.10507E-11

85	0.74142E-07	0.80327E-07	0.10638E-11
86	0.74983E-07	0.81238E-07	0.10758E-11
87	0.75748E-07	0.82067E-07	0.10868E-11
88	0.76430E-07	0.82806E-07	0.10966E-11
89	0.77024E-07	0.83450E-07	0.11051E-11
90	0.77523E-07	0.83990E-07	0.11123E-11
91	0.77920E-07	0.84420E-07	0.11180E-11
92	0.78208E-07	0.84733E-07	0.11221E-11
93	0.78380E-07	0.84919E-07	0.11246E-11
94	0.78428E-07	0.84970E-07	0.11253E-11
95	0.78344E-07	0.84879E-07	0.11240E-11
96	0.78119E-07	0.84636E-07	0.11208E-11
97	0.77747E-07	0.84233E-07	0.11155E-11
98	0.77217E-07	0.83659E-07	0.11079E-11
99	0.76522E-07	0.82906E-07	0.10979E-11
100	0.75651E-07	0.81962E-07	0.10854E-11

POLYGON 1

Time:	130.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.33154E-10	0.35920E-10	0.47569E-15
2	0.71181E-10	0.77120E-10	0.10213E-14
3	0.11414E-09	0.12367E-09	0.16377E-14
4	0.16211E-09	0.17564E-09	0.23260E-14
5	0.21517E-09	0.23312E-09	0.30871E-14
6	0.27338E-09	0.29619E-09	0.39224E-14
7	0.33685E-09	0.36496E-09	0.48331E-14
8	0.40567E-09	0.43951E-09	0.58204E-14
9	0.47992E-09	0.51996E-09	0.68858E-14
10	0.55973E-09	0.60642E-09	0.80308E-14
11	0.64517E-09	0.69900E-09	0.92568E-14
12	0.73638E-09	0.79781E-09	0.10565E-13
13	0.83346E-09	0.90299E-09	0.11958E-13
14	0.93652E-09	0.10146E-08	0.13437E-13
15	0.10457E-08	0.11329E-08	0.15003E-13
16	0.11611E-08	0.12579E-08	0.16659E-13
17	0.12828E-08	0.13898E-08	0.18405E-13
18	0.14110E-08	0.15287E-08	0.20244E-13
19	0.15457E-08	0.16747E-08	0.22178E-13
20	0.16872E-08	0.18280E-08	0.24208E-13
21	0.18355E-08	0.19887E-08	0.26336E-13
22	0.19908E-08	0.21569E-08	0.28563E-13
23	0.21531E-08	0.23328E-08	0.30893E-13
24	0.23227E-08	0.25164E-08	0.33325E-13
25	0.24995E-08	0.27080E-08	0.35863E-13
26	0.26838E-08	0.29077E-08	0.38506E-13
27	0.28756E-08	0.31155E-08	0.41259E-13
28	0.30751E-08	0.33316E-08	0.44120E-13
29	0.32823E-08	0.35561E-08	0.47093E-13
30	0.34974E-08	0.37891E-08	0.50179E-13
31	0.37204E-08	0.40308E-08	0.53379E-13
32	0.39514E-08	0.42811E-08	0.56694E-13
33	0.41906E-08	0.45402E-08	0.60126E-13
34	0.44380E-08	0.48082E-08	0.63675E-13
35	0.46936E-08	0.50852E-08	0.67343E-13
36	0.49576E-08	0.53711E-08	0.71130E-13
37	0.52299E-08	0.56662E-08	0.75037E-13
38	0.55106E-08	0.59703E-08	0.79064E-13
39	0.57998E-08	0.62836E-08	0.83213E-13
40	0.60974E-08	0.66060E-08	0.87483E-13
41	0.64034E-08	0.69376E-08	0.91875E-13
42	0.67180E-08	0.72784E-08	0.96387E-13
43	0.70409E-08	0.76283E-08	0.10102E-12
44	0.73722E-08	0.79873E-08	0.10577E-12
45	0.77119E-08	0.83553E-08	0.11065E-12
46	0.80598E-08	0.87322E-08	0.11564E-12
47	0.84159E-08	0.91180E-08	0.12075E-12
48	0.87801E-08	0.95126E-08	0.12597E-12
49	0.91522E-08	0.99157E-08	0.13131E-12
50	0.95321E-08	0.10327E-07	0.13676E-12
51	0.99196E-08	0.10747E-07	0.14232E-12
52	0.10314E-07	0.11175E-07	0.14799E-12
53	0.10717E-07	0.11611E-07	0.15376E-12
54	0.11126E-07	0.12054E-07	0.15963E-12
55	0.11541E-07	0.12504E-07	0.16559E-12
56	0.11964E-07	0.12962E-07	0.17165E-12
57	0.12392E-07	0.13426E-07	0.17779E-12
58	0.12826E-07	0.13896E-07	0.18402E-12
59	0.13265E-07	0.14371E-07	0.19032E-12
60	0.13709E-07	0.14852E-07	0.19669E-12
61	0.14157E-07	0.15338E-07	0.20312E-12
62	0.14610E-07	0.15828E-07	0.20961E-12
63	0.15065E-07	0.16322E-07	0.21615E-12
64	0.15524E-07	0.16819E-07	0.22273E-12
65	0.15985E-07	0.17318E-07	0.22934E-12
66	0.16447E-07	0.17819E-07	0.23597E-12
67	0.16910E-07	0.18321E-07	0.24262E-12
68	0.17373E-07	0.18822E-07	0.24926E-12
69	0.17835E-07	0.19323E-07	0.25590E-12
70	0.18296E-07	0.19823E-07	0.26251E-12

71	0.18755E-07	0.20319E-07	0.26909E-12
72	0.19210E-07	0.20812E-07	0.27562E-12
73	0.19660E-07	0.21300E-07	0.28208E-12
74	0.20106E-07	0.21783E-07	0.28847E-12
75	0.20544E-07	0.22258E-07	0.29476E-12
76	0.20975E-07	0.22725E-07	0.30094E-12
77	0.21397E-07	0.23182E-07	0.30700E-12
78	0.21809E-07	0.23628E-07	0.31290E-12
79	0.22209E-07	0.24061E-07	0.31864E-12
80	0.22596E-07	0.24481E-07	0.32420E-12
81	0.22968E-07	0.24884E-07	0.32954E-12
82	0.23325E-07	0.25271E-07	0.33466E-12
83	0.23664E-07	0.25638E-07	0.33952E-12
84	0.23983E-07	0.25984E-07	0.34410E-12
85	0.24281E-07	0.26307E-07	0.34838E-12
86	0.24557E-07	0.26605E-07	0.35233E-12
87	0.24807E-07	0.26877E-07	0.35593E-12
88	0.25031E-07	0.27119E-07	0.35913E-12
89	0.25225E-07	0.27330E-07	0.36192E-12
90	0.25389E-07	0.27507E-07	0.36427E-12
91	0.25519E-07	0.27647E-07	0.36613E-12
92	0.25613E-07	0.27750E-07	0.36749E-12
93	0.25669E-07	0.27811E-07	0.36829E-12
94	0.25685E-07	0.27828E-07	0.36852E-12
95	0.25657E-07	0.27798E-07	0.36812E-12
96	0.25584E-07	0.27718E-07	0.36707E-12
97	0.25462E-07	0.27586E-07	0.36532E-12
98	0.25288E-07	0.27398E-07	0.36283E-12
99	0.25061E-07	0.27151E-07	0.35956E-12
100	0.24775E-07	0.26842E-07	0.35547E-12

POLYGON I

Time: 140.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10858E-10	0.11764E-10	0.15579E-15
2	0.23312E-10	0.25256E-10	0.33447E-15
3	0.37382E-10	0.40501E-10	0.53635E-15
4	0.53092E-10	0.57521E-10	0.76175E-15
5	0.70466E-10	0.76345E-10	0.10110E-14
6	0.89532E-10	0.97002E-10	0.12846E-14
7	0.11032E-09	0.11952E-09	0.15828E-14
8	0.13286E-09	0.14394E-09	0.19062E-14
9	0.15717E-09	0.17029E-09	0.22551E-14
10	0.18331E-09	0.19860E-09	0.26301E-14
11	0.21129E-09	0.22892E-09	0.30316E-14
12	0.24116E-09	0.26128E-09	0.34601E-14
13	0.27295E-09	0.29573E-09	0.39163E-14
14	0.30671E-09	0.33229E-09	0.44005E-14
15	0.34246E-09	0.37103E-09	0.49135E-14
16	0.38024E-09	0.41197E-09	0.54556E-14
17	0.42011E-09	0.45516E-09	0.60276E-14
18	0.46209E-09	0.50064E-09	0.66299E-14
19	0.50623E-09	0.54846E-09	0.72632E-14
20	0.55256E-09	0.59866E-09	0.79280E-14
21	0.60113E-09	0.65128E-09	0.86249E-14
22	0.65198E-09	0.70637E-09	0.93545E-14
23	0.70515E-09	0.76398E-09	0.10117E-13
24	0.76067E-09	0.82413E-09	0.10914E-13
25	0.81859E-09	0.88688E-09	0.11745E-13
26	0.87894E-09	0.95226E-09	0.12611E-13
27	0.94176E-09	0.10203E-08	0.13512E-13
28	0.10071E-08	0.10911E-08	0.14449E-13
29	0.10749E-08	0.11646E-08	0.15423E-13
30	0.11454E-08	0.12409E-08	0.16434E-13
31	0.12184E-08	0.13201E-08	0.17481E-13
32	0.12941E-08	0.14020E-08	0.18567E-13
33	0.13724E-08	0.14869E-08	0.19691E-13
34	0.14534E-08	0.15747E-08	0.20853E-13
35	0.15371E-08	0.16654E-08	0.22054E-13
36	0.16236E-08	0.17590E-08	0.23295E-13
37	0.17128E-08	0.18557E-08	0.24574E-13
38	0.18047E-08	0.19553E-08	0.25893E-13
39	0.18994E-08	0.20579E-08	0.27252E-13
40	0.19969E-08	0.21635E-08	0.28651E-13
41	0.20971E-08	0.22721E-08	0.30089E-13
42	0.22001E-08	0.23837E-08	0.31567E-13
43	0.23059E-08	0.24982E-08	0.33084E-13
44	0.24144E-08	0.26158E-08	0.34641E-13
45	0.25256E-08	0.27363E-08	0.36237E-13
46	0.26396E-08	0.28598E-08	0.37872E-13
47	0.27562E-08	0.29861E-08	0.39545E-13
48	0.28755E-08	0.31153E-08	0.41256E-13
49	0.29973E-08	0.32474E-08	0.43005E-13
50	0.31217E-08	0.33822E-08	0.44790E-13
51	0.32486E-08	0.35196E-08	0.46610E-13
52	0.33780E-08	0.36598E-08	0.48466E-13
53	0.35097E-08	0.38025E-08	0.50356E-13
54	0.36436E-08	0.39476E-08	0.52278E-13
55	0.37798E-08	0.40951E-08	0.54231E-13
56	0.39180E-08	0.42449E-08	0.56215E-13

57	0.40583E-08	0.43968E-08	0.58227E-13
58	0.42004E-08	0.45508E-08	0.60265E-13
59	0.43442E-08	0.47066E-08	0.62329E-13
60	0.44896E-08	0.48641E-08	0.64416E-13
61	0.46365E-08	0.50233E-08	0.66523E-13
62	0.47846E-08	0.51838E-08	0.68648E-13
63	0.49339E-08	0.53455E-08	0.70790E-13
64	0.50840E-08	0.55082E-08	0.72944E-13
65	0.52349E-08	0.56716E-08	0.75109E-13
66	0.53863E-08	0.58356E-08	0.77281E-13
67	0.55379E-08	0.59999E-08	0.79457E-13
68	0.56896E-08	0.61643E-08	0.81633E-13
69	0.58411E-08	0.63283E-08	0.83806E-13
70	0.59920E-08	0.64919E-08	0.85971E-13
71	0.61421E-08	0.66545E-08	0.88125E-13
72	0.62911E-08	0.68160E-08	0.90263E-13
73	0.64387E-08	0.69758E-08	0.92381E-13
74	0.65845E-08	0.71338E-08	0.94472E-13
75	0.67281E-08	0.72894E-08	0.96533E-13
76	0.68693E-08	0.74423E-08	0.98558E-13
77	0.70074E-08	0.75920E-08	0.10054E-12
78	0.71423E-08	0.77381E-08	0.10247E-12
79	0.72733E-08	0.78800E-08	0.10435E-12
80	0.74000E-08	0.80174E-08	0.10617E-12
81	0.75220E-08	0.81496E-08	0.10792E-12
82	0.76388E-08	0.82761E-08	0.10960E-12
83	0.77498E-08	0.83963E-08	0.11119E-12
84	0.78544E-08	0.85096E-08	0.11269E-12
85	0.79521E-08	0.86155E-08	0.11409E-12
86	0.80423E-08	0.87132E-08	0.11539E-12
87	0.81243E-08	0.88020E-08	0.11656E-12
88	0.81975E-08	0.88813E-08	0.11761E-12
89	0.82612E-08	0.89504E-08	0.11853E-12
90	0.83147E-08	0.90083E-08	0.11930E-12
91	0.83573E-08	0.90545E-08	0.11991E-12
92	0.83882E-08	0.90879E-08	0.12035E-12
93	0.84066E-08	0.91079E-08	0.12062E-12
94	0.84117E-08	0.91134E-08	0.12069E-12
95	0.84027E-08	0.91037E-08	0.12056E-12
96	0.83787E-08	0.90776E-08	0.12021E-12
97	0.83387E-08	0.90343E-08	0.11964E-12
98	0.82819E-08	0.89728E-08	0.11883E-12
99	0.82073E-08	0.88920E-08	0.11776E-12
100	0.81139E-08	0.87908E-08	0.11642E-12

POLYGON 1

Time: 150.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.35560E-11	0.38526E-11	0.51020E-16
2	0.76345E-11	0.82714E-11	0.10954E-15
3	0.12243E-10	0.13264E-10	0.17565E-15
4	0.17387E-10	0.18838E-10	0.24947E-15
5	0.23078E-10	0.25003E-10	0.33111E-15
6	0.29322E-10	0.31768E-10	0.42070E-15
7	0.36129E-10	0.39143E-10	0.51837E-15
8	0.43510E-10	0.47139E-10	0.62426E-15
9	0.51474E-10	0.55768E-10	0.73853E-15
10	0.60033E-10	0.65041E-10	0.86134E-15
11	0.69198E-10	0.74970E-10	0.99283E-15
12	0.78980E-10	0.85569E-10	0.11332E-14
13	0.89392E-10	0.96849E-10	0.12826E-14
14	0.10045E-09	0.10883E-09	0.14412E-14
15	0.11215E-09	0.12151E-09	0.16091E-14
16	0.12453E-09	0.13492E-09	0.17867E-14
17	0.13758E-09	0.14906E-09	0.19740E-14
18	0.15133E-09	0.16396E-09	0.21713E-14
19	0.16579E-09	0.17962E-09	0.23787E-14
20	0.18096E-09	0.19606E-09	0.25964E-14
21	0.19687E-09	0.21329E-09	0.28246E-14
22	0.21352E-09	0.23134E-09	0.30636E-14
23	0.23093E-09	0.25020E-09	0.33134E-14
24	0.24912E-09	0.26990E-09	0.35743E-14
25	0.26809E-09	0.29045E-09	0.38464E-14
26	0.28785E-09	0.31186E-09	0.41300E-14
27	0.30842E-09	0.33415E-09	0.44252E-14
28	0.32982E-09	0.35733E-09	0.47321E-14
29	0.35204E-09	0.38141E-09	0.50510E-14
30	0.37511E-09	0.40640E-09	0.53819E-14
31	0.39903E-09	0.43232E-09	0.57251E-14
32	0.42381E-09	0.45917E-09	0.60807E-14
33	0.44946E-09	0.48696E-09	0.64487E-14
34	0.47599E-09	0.51570E-09	0.68294E-14
35	0.50341E-09	0.54541E-09	0.72228E-14
36	0.53172E-09	0.57608E-09	0.76290E-14
37	0.56093E-09	0.60772E-09	0.80480E-14
38	0.59104E-09	0.64034E-09	0.84800E-14
39	0.62205E-09	0.67394E-09	0.89250E-14
40	0.65397E-09	0.70853E-09	0.93830E-14
41	0.68680E-09	0.74409E-09	0.98540E-14
42	0.72053E-09	0.78064E-09	0.10338E-13

43	0.75517E-09	0.81817E-09	0.10835E-13
44	0.79071E-09	0.85667E-09	0.11345E-13
45	0.82714E-09	0.89614E-09	0.11867E-13
46	0.86445E-09	0.93657E-09	0.12403E-13
47	0.90265E-09	0.97795E-09	0.12951E-13
48	0.94170E-09	0.10203E-08	0.13511E-13
49	0.98161E-09	0.10635E-08	0.14084E-13
50	0.10224E-08	0.11076E-08	0.14668E-13
51	0.10639E-08	0.11527E-08	0.15265E-13
52	0.11063E-08	0.11986E-08	0.15873E-13
53	0.11494E-08	0.12453E-08	0.16491E-13
54	0.11933E-08	0.12928E-08	0.17121E-13
55	0.12379E-08	0.13411E-08	0.17761E-13
56	0.12831E-08	0.13902E-08	0.18410E-13
57	0.13291E-08	0.14399E-08	0.19069E-13
58	0.13756E-08	0.14904E-08	0.19737E-13
59	0.14227E-08	0.15414E-08	0.20413E-13
60	0.14703E-08	0.15930E-08	0.21096E-13
61	0.15184E-08	0.16451E-08	0.21786E-13
62	0.15669E-08	0.16977E-08	0.22482E-13
63	0.16158E-08	0.17506E-08	0.23183E-13
64	0.16650E-08	0.18039E-08	0.23889E-13
65	0.17144E-08	0.18574E-08	0.24598E-13
66	0.17640E-08	0.19112E-08	0.25309E-13
67	0.18137E-08	0.19650E-08	0.26022E-13
68	0.18633E-08	0.20188E-08	0.26735E-13
69	0.19129E-08	0.20725E-08	0.27446E-13
70	0.19624E-08	0.21261E-08	0.28155E-13
71	0.20115E-08	0.21793E-08	0.28861E-13
72	0.20603E-08	0.22322E-08	0.29561E-13
73	0.21087E-08	0.22846E-08	0.30254E-13
74	0.21564E-08	0.23363E-08	0.30939E-13
75	0.22034E-08	0.23873E-08	0.31614E-13
76	0.22497E-08	0.24373E-08	0.32277E-13
77	0.22949E-08	0.24864E-08	0.32927E-13
78	0.23391E-08	0.25342E-08	0.33560E-13
79	0.23820E-08	0.25807E-08	0.34176E-13
80	0.24235E-08	0.26257E-08	0.34772E-13
81	0.24634E-08	0.26690E-08	0.35345E-13
82	0.25017E-08	0.27104E-08	0.35893E-13
83	0.25380E-08	0.27498E-08	0.36415E-13
84	0.25723E-08	0.27869E-08	0.36906E-13
85	0.26043E-08	0.28215E-08	0.37365E-13
86	0.26338E-08	0.28535E-08	0.37789E-13
87	0.26607E-08	0.28826E-08	0.38175E-13
88	0.26846E-08	0.29086E-08	0.38518E-13
89	0.27055E-08	0.29312E-08	0.38818E-13
90	0.27230E-08	0.29502E-08	0.39069E-13
91	0.27370E-08	0.29653E-08	0.39269E-13
92	0.27471E-08	0.29763E-08	0.39415E-13
93	0.27531E-08	0.29828E-08	0.39501E-13
94	0.27548E-08	0.29846E-08	0.39525E-13
95	0.27519E-08	0.29814E-08	0.39483E-13
96	0.27440E-08	0.29729E-08	0.39370E-13
97	0.27309E-08	0.29587E-08	0.39182E-13
98	0.27123E-08	0.29386E-08	0.38915E-13
99	0.26879E-08	0.29121E-08	0.38565E-13
100	0.26573E-08	0.28790E-08	0.38126E-13

POLYGON I

Time:	160.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.11646E-11	0.12617E-11	0.16709E-16
2	0.25003E-11	0.27089E-11	0.35873E-16
3	0.40094E-11	0.43439E-11	0.57526E-16
4	0.56943E-11	0.61694E-11	0.81701E-16
5	0.75578E-11	0.81883E-11	0.10844E-15
6	0.96028E-11	0.10404E-10	0.13778E-15
7	0.11832E-10	0.12819E-10	0.16976E-15
8	0.14249E-10	0.15438E-10	0.20444E-15
9	0.16858E-10	0.18264E-10	0.24187E-15
10	0.19661E-10	0.21301E-10	0.28208E-15
11	0.22662E-10	0.24553E-10	0.32515E-15
12	0.25866E-10	0.28024E-10	0.37111E-15
13	0.29276E-10	0.31718E-10	0.42004E-15
14	0.32896E-10	0.35640E-10	0.47198E-15
15	0.36730E-10	0.39794E-10	0.52699E-15
16	0.40783E-10	0.44185E-10	0.58514E-15
17	0.45059E-10	0.48817E-10	0.64649E-15
18	0.49561E-10	0.53696E-10	0.71109E-15
19	0.54295E-10	0.58825E-10	0.77901E-15
20	0.59265E-10	0.64209E-10	0.85031E-15
21	0.64474E-10	0.69853E-10	0.92506E-15
22	0.69928E-10	0.75762E-10	0.10033E-14
23	0.75630E-10	0.81940E-10	0.10851E-14
24	0.81585E-10	0.88392E-10	0.11706E-14
25	0.87797E-10	0.95122E-10	0.12597E-14
26	0.94270E-10	0.10213E-09	0.13526E-14
27	0.10101E-09	0.10943E-09	0.14492E-14
28	0.10801E-09	0.11702E-09	0.15498E-14

29	0.11529E-09	0.12491E-09	0.16542E-14
30	0.12285E-09	0.13310E-09	0.17626E-14
31	0.13068E-09	0.14158E-09	0.18750E-14
32	0.13880E-09	0.15038E-09	0.19914E-14
33	0.14720E-09	0.15948E-09	0.21119E-14
34	0.15589E-09	0.16889E-09	0.22366E-14
35	0.16487E-09	0.17862E-09	0.23654E-14
36	0.17414E-09	0.18866E-09	0.24985E-14
37	0.18370E-09	0.19903E-09	0.26357E-14
38	0.19356E-09	0.20971E-09	0.27772E-14
39	0.20372E-09	0.22071E-09	0.29229E-14
40	0.21417E-09	0.23204E-09	0.30729E-14
41	0.22492E-09	0.24369E-09	0.32271E-14
42	0.23597E-09	0.25566E-09	0.33857E-14
43	0.24732E-09	0.26795E-09	0.35484E-14
44	0.25895E-09	0.28056E-09	0.37154E-14
45	0.27088E-09	0.29348E-09	0.38866E-14
46	0.28311E-09	0.30672E-09	0.40619E-14
47	0.29561E-09	0.32028E-09	0.42414E-14
48	0.30841E-09	0.33413E-09	0.44249E-14
49	0.32148E-09	0.34829E-09	0.46124E-14
50	0.33482E-09	0.36275E-09	0.48039E-14
51	0.34843E-09	0.37750E-09	0.49992E-14
52	0.36230E-09	0.39253E-09	0.51982E-14
53	0.37643E-09	0.40783E-09	0.54009E-14
54	0.39080E-09	0.42340E-09	0.56070E-14
55	0.40540E-09	0.43922E-09	0.58165E-14
56	0.42023E-09	0.45528E-09	0.60293E-14
57	0.43527E-09	0.47158E-09	0.62451E-14
58	0.45051E-09	0.48809E-09	0.64637E-14
59	0.46593E-09	0.50480E-09	0.66851E-14
60	0.48153E-09	0.52170E-09	0.69088E-14
61	0.49728E-09	0.53877E-09	0.71348E-14
62	0.51317E-09	0.55598E-09	0.73628E-14
63	0.52918E-09	0.57332E-09	0.75925E-14
64	0.54528E-09	0.59077E-09	0.78236E-14
65	0.56147E-09	0.60831E-09	0.80558E-14
66	0.57770E-09	0.62590E-09	0.82887E-14
67	0.59397E-09	0.64352E-09	0.85221E-14
68	0.61024E-09	0.66115E-09	0.87555E-14
69	0.62648E-09	0.67874E-09	0.89885E-14
70	0.64267E-09	0.69628E-09	0.92208E-14
71	0.65877E-09	0.71373E-09	0.94518E-14
72	0.67475E-09	0.73104E-09	0.96811E-14
73	0.69058E-09	0.74819E-09	0.99082E-14
74	0.70622E-09	0.76513E-09	0.10133E-13
75	0.72162E-09	0.78182E-09	0.10354E-13
76	0.73676E-09	0.79822E-09	0.10571E-13
77	0.75158E-09	0.81428E-09	0.10783E-13
78	0.76604E-09	0.82994E-09	0.10991E-13
79	0.78009E-09	0.84517E-09	0.11193E-13
80	0.79369E-09	0.85990E-09	0.11388E-13
81	0.80677E-09	0.87408E-09	0.11575E-13
82	0.81930E-09	0.88764E-09	0.11755E-13
83	0.83120E-09	0.90054E-09	0.11926E-13
84	0.84242E-09	0.91269E-09	0.12087E-13
85	0.85290E-09	0.92405E-09	0.12237E-13
86	0.86257E-09	0.93453E-09	0.12376E-13
87	0.87136E-09	0.94405E-09	0.12502E-13
88	0.87921E-09	0.95256E-09	0.12615E-13
89	0.88605E-09	0.95996E-09	0.12713E-13
90	0.89179E-09	0.96618E-09	0.12795E-13
91	0.89635E-09	0.97113E-09	0.12861E-13
92	0.89967E-09	0.97472E-09	0.12908E-13
93	0.90164E-09	0.97686E-09	0.12937E-13
94	0.90219E-09	0.97746E-09	0.12944E-13
95	0.90122E-09	0.97641E-09	0.12931E-13
96	0.89865E-09	0.97362E-09	0.12894E-13
97	0.89436E-09	0.96897E-09	0.12832E-13
98	0.88827E-09	0.96237E-09	0.12745E-13
99	0.88027E-09	0.95370E-09	0.12630E-13
100	0.87025E-09	0.94285E-09	0.12486E-13

POLYGON 1

Time: 170.000

Cell	Cgas(g/cu.ft)	Clq(g/cu.ft)	Csol(g/g)
1	0.38139E-12	0.41321E-12	0.54721E-17
2	0.81884E-12	0.88715E-12	0.11748E-16
3	0.13131E-11	0.14226E-11	0.18839E-16
4	0.18649E-11	0.20205E-11	0.26757E-16
5	0.24752E-11	0.26817E-11	0.35513E-16
6	0.31449E-11	0.34072E-11	0.45122E-16
7	0.38750E-11	0.41983E-11	0.55597E-16
8	0.46666E-11	0.50559E-11	0.66955E-16
9	0.55208E-11	0.59814E-11	0.79211E-16
10	0.64388E-11	0.69759E-11	0.92382E-16
11	0.74218E-11	0.80409E-11	0.10649E-15
12	0.84710E-11	0.91776E-11	0.12154E-15
13	0.95877E-11	0.10388E-10	0.13756E-15
14	0.10773E-10	0.11672E-10	0.15457E-15

15	0.12029E-10	0.13032E-10	0.17259E-15
16	0.13356E-10	0.14471E-10	0.19163E-15
17	0.14757E-10	0.15988E-10	0.21172E-15
18	0.16231E-10	0.17585E-10	0.23288E-15
19	0.17781E-10	0.19265E-10	0.25512E-15
20	0.19409E-10	0.21028E-10	0.27847E-15
21	0.21115E-10	0.22877E-10	0.30295E-15
22	0.22901E-10	0.24812E-10	0.32858E-15
23	0.24769E-10	0.26835E-10	0.35537E-15
24	0.26719E-10	0.28948E-10	0.38336E-15
25	0.28753E-10	0.31152E-10	0.41254E-15
26	0.30873E-10	0.33449E-10	0.44296E-15
27	0.33080E-10	0.35839E-10	0.47462E-15
28	0.35374E-10	0.38325E-10	0.50754E-15
29	0.37758E-10	0.40908E-10	0.54174E-15
30	0.40232E-10	0.43588E-10	0.57724E-15
31	0.42797E-10	0.46368E-10	0.61405E-15
32	0.45455E-10	0.49247E-10	0.65218E-15
33	0.48207E-10	0.52228E-10	0.69166E-15
34	0.51052E-10	0.55311E-10	0.73248E-15
35	0.53993E-10	0.58497E-10	0.77467E-15
36	0.57029E-10	0.61787E-10	0.81824E-15
37	0.60162E-10	0.65181E-10	0.86318E-15
38	0.63391E-10	0.68679E-10	0.90952E-15
39	0.66718E-10	0.72283E-10	0.95724E-15
40	0.70141E-10	0.75993E-10	0.10064E-14
41	0.73662E-10	0.79807E-10	0.10569E-14
42	0.77280E-10	0.83727E-10	0.11088E-14
43	0.80995E-10	0.87752E-10	0.11621E-14
44	0.84807E-10	0.91881E-10	0.12168E-14
45	0.88714E-10	0.96115E-10	0.12728E-14
46	0.92716E-10	0.10045E-09	0.13303E-14
47	0.96813E-10	0.10489E-09	0.13890E-14
48	0.10100E-09	0.10943E-09	0.14491E-14
49	0.10528E-09	0.11407E-09	0.15106E-14
50	0.10965E-09	0.11880E-09	0.15733E-14
51	0.11411E-09	0.12363E-09	0.16372E-14
52	0.11865E-09	0.12855E-09	0.17024E-14
53	0.12328E-09	0.13356E-09	0.17688E-14
54	0.12798E-09	0.13866E-09	0.18363E-14
55	0.13277E-09	0.14384E-09	0.19049E-14
56	0.13762E-09	0.14910E-09	0.19746E-14
57	0.14255E-09	0.15444E-09	0.20452E-14
58	0.14754E-09	0.15985E-09	0.21169E-14
59	0.15259E-09	0.16532E-09	0.21893E-14
60	0.15770E-09	0.17086E-09	0.22626E-14
61	0.16286E-09	0.17644E-09	0.23366E-14
62	0.16806E-09	0.18208E-09	0.24113E-14
63	0.17330E-09	0.18776E-09	0.24865E-14
64	0.17858E-09	0.19348E-09	0.25622E-14
65	0.18388E-09	0.19922E-09	0.26382E-14
66	0.18920E-09	0.20498E-09	0.27145E-14
67	0.19452E-09	0.21075E-09	0.27910E-14
68	0.19985E-09	0.21652E-09	0.28674E-14
69	0.20517E-09	0.22229E-09	0.29437E-14
70	0.21047E-09	0.22803E-09	0.30198E-14
71	0.21575E-09	0.23374E-09	0.30954E-14
72	0.22098E-09	0.23941E-09	0.31705E-14
73	0.22616E-09	0.24503E-09	0.32449E-14
74	0.23128E-09	0.25058E-09	0.33184E-14
75	0.23633E-09	0.25604E-09	0.33908E-14
76	0.24129E-09	0.26141E-09	0.34619E-14
77	0.24614E-09	0.26667E-09	0.35315E-14
78	0.25088E-09	0.27180E-09	0.35995E-14
79	0.25548E-09	0.27679E-09	0.36655E-14
80	0.25993E-09	0.28161E-09	0.37294E-14
81	0.26422E-09	0.28626E-09	0.37909E-14
82	0.26832E-09	0.29070E-09	0.38497E-14
83	0.27221E-09	0.29492E-09	0.39057E-14
84	0.27589E-09	0.29891E-09	0.39584E-14
85	0.27932E-09	0.30262E-09	0.40076E-14
86	0.28249E-09	0.30605E-09	0.40531E-14
87	0.28537E-09	0.30918E-09	0.40944E-14
88	0.28794E-09	0.31196E-09	0.41313E-14
89	0.29018E-09	0.31439E-09	0.41634E-14
90	0.29206E-09	0.31642E-09	0.41904E-14
91	0.29355E-09	0.31804E-09	0.42118E-14
92	0.29464E-09	0.31922E-09	0.42274E-14
93	0.29529E-09	0.31992E-09	0.42367E-14
94	0.29547E-09	0.32011E-09	0.42392E-14
95	0.29515E-09	0.31977E-09	0.42347E-14
96	0.29430E-09	0.31886E-09	0.42226E-14
97	0.29290E-09	0.31734E-09	0.42025E-14
98	0.29091E-09	0.31517E-09	0.41738E-14
99	0.28829E-09	0.31234E-09	0.41362E-14
100	0.28500E-09	0.30878E-09	0.40892E-14

POLYGON I

Time: 180.000

Cell Cgas(g/cu.ft)

Clig(g/cu.ft)

Csol(g/g)

1	0.12490E-12	0.13532E-12	0.17921E-17
2	0.26817E-12	0.29054E-12	0.38476E-17
3	0.43002E-12	0.46590E-12	0.61699E-17
4	0.61074E-12	0.66169E-12	0.87628E-17
5	0.81061E-12	0.87824E-12	0.11630E-16
6	0.10299E-11	0.11159E-11	0.14777E-16
7	0.12691E-11	0.13749E-11	0.18208E-16
8	0.15283E-11	0.16558E-11	0.21928E-16
9	0.18081E-11	0.19589E-11	0.25941E-16
10	0.21087E-11	0.22846E-11	0.30255E-16
11	0.24306E-11	0.26334E-11	0.34874E-16
12	0.27742E-11	0.30056E-11	0.39804E-16
13	0.31399E-11	0.34019E-11	0.45051E-16
14	0.35282E-11	0.38225E-11	0.50622E-16
15	0.39395E-11	0.42681E-11	0.56522E-16
16	0.43741E-11	0.47391E-11	0.62759E-16
17	0.48327E-11	0.52359E-11	0.69339E-16
18	0.53157E-11	0.57591E-11	0.76267E-16
19	0.58234E-11	0.63092E-11	0.83552E-16
20	0.63564E-11	0.68867E-11	0.91200E-16
21	0.69151E-11	0.74920E-11	0.99216E-16
22	0.75001E-11	0.81258E-11	0.10761E-15
23	0.81117E-11	0.87884E-11	0.11638E-15
24	0.87504E-11	0.94804E-11	0.12555E-15
25	0.94166E-11	0.10202E-10	0.13511E-15
26	0.10111E-10	0.10954E-10	0.14507E-15
27	0.10834E-10	0.11737E-10	0.15544E-15
28	0.11585E-10	0.12551E-10	0.16622E-15
29	0.12366E-10	0.13397E-10	0.17742E-15
30	0.13176E-10	0.14275E-10	0.18904E-15
31	0.14016E-10	0.15185E-10	0.20110E-15
32	0.14887E-10	0.16128E-10	0.21359E-15
33	0.15788E-10	0.17105E-10	0.22652E-15
34	0.16719E-10	0.18114E-10	0.23989E-15
35	0.17683E-10	0.19158E-10	0.25370E-15
36	0.18677E-10	0.20235E-10	0.26797E-15
37	0.19703E-10	0.21347E-10	0.28269E-15
38	0.20760E-10	0.22492E-10	0.29786E-15
39	0.21850E-10	0.23673E-10	0.31349E-15
40	0.22971E-10	0.24887E-10	0.32958E-15
41	0.24124E-10	0.26137E-10	0.34613E-15
42	0.25309E-10	0.27420E-10	0.36313E-15
43	0.26526E-10	0.28739E-10	0.38058E-15
44	0.27774E-10	0.30091E-10	0.39849E-15
45	0.29054E-10	0.31477E-10	0.41685E-15
46	0.30364E-10	0.32897E-10	0.43566E-15
47	0.31706E-10	0.34351E-10	0.45491E-15
48	0.33078E-10	0.35837E-10	0.47459E-15
49	0.34480E-10	0.37356E-10	0.49470E-15
50	0.35911E-10	0.38907E-10	0.51524E-15
51	0.37371E-10	0.40488E-10	0.53618E-15
52	0.38858E-10	0.42100E-10	0.55753E-15
53	0.40373E-10	0.43741E-10	0.57927E-15
54	0.41915E-10	0.45411E-10	0.60138E-15
55	0.43481E-10	0.47108E-10	0.62385E-15
56	0.45071E-10	0.48831E-10	0.64667E-15
57	0.46684E-10	0.50579E-10	0.66981E-15
58	0.48319E-10	0.52350E-10	0.69326E-15
59	0.49973E-10	0.54142E-10	0.71700E-15
60	0.51646E-10	0.55955E-10	0.74100E-15
61	0.53336E-10	0.57785E-10	0.76524E-15
62	0.55040E-10	0.59631E-10	0.78970E-15
63	0.56757E-10	0.61492E-10	0.81433E-15
64	0.58484E-10	0.63363E-10	0.83911E-15
65	0.60220E-10	0.65244E-10	0.86402E-15
66	0.61961E-10	0.67130E-10	0.88900E-15
67	0.63706E-10	0.69020E-10	0.91403E-15
68	0.65451E-10	0.70911E-10	0.93907E-15
69	0.67193E-10	0.72798E-10	0.96406E-15
70	0.68929E-10	0.74679E-10	0.98897E-15
71	0.70656E-10	0.76550E-10	0.10137E-14
72	0.72370E-10	0.78407E-10	0.10383E-14
73	0.74068E-10	0.80247E-10	0.10627E-14
74	0.75745E-10	0.82064E-10	0.10868E-14
75	0.77397E-10	0.83854E-10	0.11105E-14
76	0.79020E-10	0.85613E-10	0.11338E-14
77	0.80610E-10	0.87335E-10	0.11566E-14
78	0.82161E-10	0.89015E-10	0.11788E-14
79	0.83668E-10	0.90648E-10	0.12004E-14
80	0.85126E-10	0.92228E-10	0.12214E-14
81	0.86530E-10	0.93749E-10	0.12415E-14
82	0.87873E-10	0.95204E-10	0.12608E-14
83	0.89149E-10	0.96587E-10	0.12791E-14
84	0.90353E-10	0.97891E-10	0.12964E-14
85	0.91477E-10	0.99108E-10	0.13125E-14
86	0.92514E-10	0.10023E-09	0.13274E-14
87	0.93457E-10	0.10125E-09	0.13409E-14
88	0.94300E-10	0.10217E-09	0.13530E-14
89	0.95032E-10	0.10296E-09	0.13635E-14
90	0.95648E-10	0.10363E-09	0.13723E-14

91	0.96138E-10	0.10416E-09	0.13794E-14
92	0.96493E-10	0.10454E-09	0.13845E-14
93	0.96705E-10	0.10477E-09	0.13875E-14
94	0.96764E-10	0.10484E-09	0.13883E-14
95	0.96660E-10	0.10472E-09	0.13869E-14
96	0.96384E-10	0.10442E-09	0.13829E-14
97	0.95924E-10	0.10393E-09	0.13763E-14
98	0.95271E-10	0.10322E-09	0.13669E-14
99	0.94413E-10	0.10229E-09	0.13546E-14
100	0.93338E-10	0.10112E-09	0.13392E-14

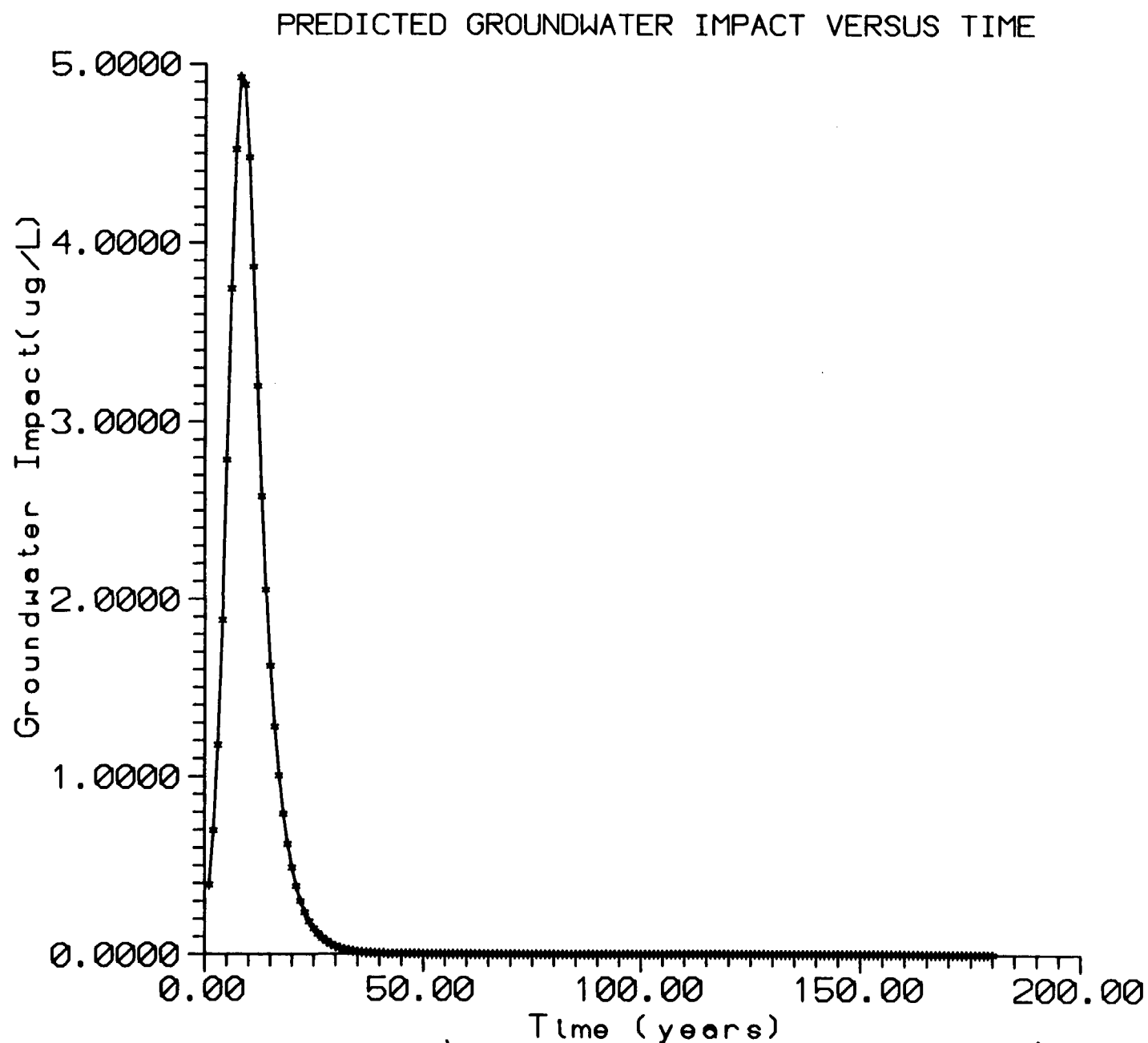


Figure B-8: Predicted Groundwater Impact Versus Time
(50000000 and soil clean up PCB concentrations)

VLEACH
version 2.0, 1993.

Developed by :

Varadhan Ravi and Jeffrey A. Johnson (Dynamac)
Center for Subsurface Modeling Support
Robert S. Kerr Environmental Research Laboratory
U.S. Environmental Protection Agency
P.O. Box 1198
Ada, OK 74820

LNENRI SIMULATION 6

1 polygons.

Timestep = 1.00 years. Simulation length = 180.00 years.
Printout every 10.00 years. Vertical profile stored every 10.00 years.
Koc = 375.00 ml/g, 0.13243E-01cu.ft./g
Kh = 0.92300 (dimensionless).
Aqueous solubility = 150.00 mg/l, 4.2476 g/cu.ft
Free air diffusion coefficient = .66000 sq. m/day, 2593.1 sq.ft./yr

Polygon 1

POLYGON 1

Polygon area = 1.0000 sq. ft.
100 cells, each cell 0.200 ft. thick.

Soil Properties:

Bulk density = 1.3500 g/ml, 38228. g/cu.ft.

Porosity = 0.3000 Volumetric water content = 0.2000

Organic carbon content = 0.00020000

Recharge Rate = 0.46000001 ft/yr

Conc. in recharge water = 0.00000 mg/l, 0.00000 g/cu.ft

Atmospheric concentration = 0.00000 mg/l, 0.00000 g/cu.ft

Water table has a fixed concentration of 0.00000 mg/l, 0.00000 g/cu.ft.
with respect to gas diffusion.

VLEACH
version 2.0, 1993.

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Ada, OK 74820

LHNMRI SIMULATION 6

Polygon 1
At time = 0.00, total mass in vadose zone = 0.51270E-01g/sq.ft.
Mass in gas phase = 0.12024E-01g/sq.ft.
Mass in liquid phase = 0.26055E-01g/sq.ft.
Mass sorbed = 0.13190E-01g/sq.ft.

Polygon 1
At time = 10.00, total mass in vadose zone = 0.17353E-01g/sq.ft.
Mass in gas phase = 0.40698E-02g/sq.ft.
Mass in liquid phase = 0.88186E-02g/sq.ft.
Mass sorbed = 0.44644E-02g/sq.ft.

Since last printout at time = 0.00
Change in Total Mass = -0.33917E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.12425E-01g/sq.ft.
Diffusion in from atmosphere = -0.84818E-02g/sq.ft.
Diffusion in from water table = -0.13010E-01g/sq.ft.
Total inflow at boundaries = -0.33917E-01g/sq.ft.
Mass discrepancy = -0.59605E-07g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.33917E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.12425E-01g/sq.ft.
Diffusion in from atmosphere = -0.84818E-02g/sq.ft.
Diffusion in from water table = -0.13010E-01g/sq.ft.
Total inflow at boundaries = -0.33917E-01g/sq.ft.
Mass discrepancy = -0.59605E-07g/sq.ft.

Polygon 1
At time = 20.00, total mass in vadose zone = 0.16076E-02g/sq.ft.
Mass in gas phase = 0.37703E-03g/sq.ft.
Mass in liquid phase = 0.81696E-03g/sq.ft.
Mass sorbed = 0.41359E-03g/sq.ft.

Since last printout at time = 10.00
Change in Total Mass = -0.15745E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.92356E-02g/sq.ft.
Diffusion in from atmosphere = -0.64899E-03g/sq.ft.
Diffusion in from water table = -0.58607E-02g/sq.ft.
Total inflow at boundaries = -0.15745E-01g/sq.ft.
Mass discrepancy = -0.27940E-07g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.49662E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.21661E-01g/sq.ft.
Diffusion in from atmosphere = -0.91308E-02g/sq.ft.
Diffusion in from water table = -0.18870E-01g/sq.ft.
Total inflow at boundaries = -0.49662E-01g/sq.ft.
Mass discrepancy = -0.93132E-07g/sq.ft.

Polygon 1
At time = 30.00, total mass in vadose zone = 0.14409E-03g/sq.ft.
Mass in gas phase = 0.33793E-04g/sq.ft.
Mass in liquid phase = 0.73223E-04g/sq.ft.
Mass sorbed = 0.37069E-04g/sq.ft.

Since last printout at time = 20.00
Change in Total Mass = -0.14635E-02g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.86554E-03g/sq.ft.
Diffusion in from atmosphere = -0.58180E-04g/sq.ft.
Diffusion in from water table = -0.53978E-03g/sq.ft.
Total inflow at boundaries = -0.14635E-02g/sq.ft.
Mass discrepancy = -0.23283E-08g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51125E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22526E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91889E-02g/sq.ft.
 Diffusion in from water table = -0.19410E-01g/sq.ft.
 Total inflow at boundaries = -0.51125E-01g/sq.ft.
 Mass discrepancy = -0.93132E-07g/sq.ft.

Polygon 1

At time = 40.00, total mass in vadose zone = 0.12915E-04g/sq.ft.
 Mass in gas phase = 0.30289E-05g/sq.ft.
 Mass in liquid phase = 0.65632E-05g/sq.ft.
 Mass sorbed = 0.33226E-05g/sq.ft.

Since last printout at time = 30.00

Change in Total Mass = -0.13117E-03g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.77576E-04g/sq.ft.
 Diffusion in from atmosphere = -0.52148E-05g/sq.ft.
 Diffusion in from water table = -0.48380E-04g/sq.ft.
 Total inflow at boundaries = -0.13117E-03g/sq.ft.
 Mass discrepancy = -0.21828E-09g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51257E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22604E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91942E-02g/sq.ft.
 Diffusion in from water table = -0.19458E-01g/sq.ft.
 Total inflow at boundaries = -0.51257E-01g/sq.ft.
 Mass discrepancy = -0.93132E-07g/sq.ft.

Polygon 1

At time = 50.00, total mass in vadose zone = 0.11576E-05g/sq.ft.
 Mass in gas phase = 0.27149E-06g/sq.ft.
 Mass in liquid phase = 0.58828E-06g/sq.ft.
 Mass sorbed = 0.29781E-06g/sq.ft.

Since last printout at time = 40.00

Change in Total Mass = -0.11757E-04g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.69533E-05g/sq.ft.
 Diffusion in from atmosphere = -0.46742E-06g/sq.ft.
 Diffusion in from water table = -0.43364E-05g/sq.ft.
 Total inflow at boundaries = -0.11757E-04g/sq.ft.
 Mass discrepancy = -0.17280E-10g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51268E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22611E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91946E-02g/sq.ft.
 Diffusion in from water table = -0.19463E-01g/sq.ft.
 Total inflow at boundaries = -0.51268E-01g/sq.ft.
 Mass discrepancy = -0.93132E-07g/sq.ft.

Polygon 1

At time = 60.00, total mass in vadose zone = 0.10376E-06g/sq.ft.
 Mass in gas phase = 0.24334E-07g/sq.ft.
 Mass in liquid phase = 0.52729E-07g/sq.ft.
 Mass sorbed = 0.26694E-07g/sq.ft.

Since last printout at time = 50.00

Change in Total Mass = -0.10538E-05g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.62325E-06g/sq.ft.
 Diffusion in from atmosphere = -0.41896E-07g/sq.ft.
 Diffusion in from water table = -0.38868E-06g/sq.ft.
 Total inflow at boundaries = -0.10538E-05g/sq.ft.
 Mass discrepancy = -0.19327E-11g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51269E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22612E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
 Diffusion in from water table = -0.19463E-01g/sq.ft.
 Total inflow at boundaries = -0.51269E-01g/sq.ft.
 Mass discrepancy = -0.89407E-07g/sq.ft.

Polygon 1

At time = 70.00, total mass in vadose zone = 0.93000E-08g/sq.ft.
 Mass in gas phase = 0.21811E-08g/sq.ft.
 Mass in liquid phase = 0.47262E-08g/sq.ft.
 Mass sorbed = 0.23926E-08g/sq.ft.

Since last printout at time = 60.00
 Change in Total Mass = -0.94457E-07g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.55863E-07g/sq.ft.
 Diffusion in from atmosphere = -0.37552E-08g/sq.ft.
 Diffusion in from water table = -0.34839E-07g/sq.ft.
 Total inflow at boundaries = -0.94457E-07g/sq.ft.
 Mass discrepancy = -0.14211E-12g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.51270E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22612E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
 Diffusion in from water table = -0.19463E-01g/sq.ft.
 Total inflow at boundaries = -0.51269E-01g/sq.ft.
 Mass discrepancy = -0.93132E-07g/sq.ft.

Polygon 1
 At time = 80.00, total mass in vadose zone = 0.83358E-09g/sq.ft.
 Mass in gas phase = 0.19550E-09g/sq.ft.
 Mass in liquid phase = 0.42362E-09g/sq.ft.
 Mass sorbed = 0.21446E-09g/sq.ft.

Since last printout at time = 70.00
 Change in Total Mass = -0.84664E-08g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.50071E-08g/sq.ft.
 Diffusion in from atmosphere = -0.33659E-09g/sq.ft.
 Diffusion in from water table = -0.31227E-08g/sq.ft.
 Total inflow at boundaries = -0.84664E-08g/sq.ft.
 Mass discrepancy = -0.13323E-13g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.51270E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22612E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
 Diffusion in from water table = -0.19463E-01g/sq.ft.
 Total inflow at boundaries = -0.51269E-01g/sq.ft.
 Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1
 At time = 90.00, total mass in vadose zone = 0.74716E-10g/sq.ft.
 Mass in gas phase = 0.17523E-10g/sq.ft.
 Mass in liquid phase = 0.37970E-10g/sq.ft.
 Mass sorbed = 0.19222E-10g/sq.ft.

Since last printout at time = 80.00
 Change in Total Mass = -0.75887E-09g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.44880E-09g/sq.ft.
 Diffusion in from atmosphere = -0.30169E-10g/sq.ft.
 Diffusion in from water table = -0.27989E-09g/sq.ft.
 Total inflow at boundaries = -0.75887E-09g/sq.ft.
 Mass discrepancy = -0.13878E-14g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.51270E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22612E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
 Diffusion in from water table = -0.19463E-01g/sq.ft.
 Total inflow at boundaries = -0.51269E-01g/sq.ft.
 Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1
 At time = 100.00, total mass in vadose zone = 0.66970E-11g/sq.ft.
 Mass in gas phase = 0.15707E-11g/sq.ft.
 Mass in liquid phase = 0.34034E-11g/sq.ft.
 Mass sorbed = 0.17230E-11g/sq.ft.

Since last printout at time = 90.00
 Change in Total Mass = -0.68019E-10g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.40227E-10g/sq.ft.
 Diffusion in from atmosphere = -0.27042E-11g/sq.ft.
 Diffusion in from water table = -0.25087E-10g/sq.ft.
 Total inflow at boundaries = -0.68019E-10g/sq.ft.
 Mass discrepancy = -0.11796E-15g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.51270E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22612E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
 Diffusion in from water table = -0.19463E-01g/sq.ft.

Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1
At time = 110.00, total mass in vadose zone = 0.60027E-12g/sq.ft.
Mass in gas phase = 0.14078E-12g/sq.ft.
Mass in liquid phase = 0.30505E-12g/sq.ft.
Mass sorbed = 0.15443E-12g/sq.ft.

Since last printout at time = 100.00
Change in Total Mass = -0.60967E-11g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.36057E-11g/sq.ft.
Diffusion in from atmosphere = -0.24238E-12g/sq.ft.
Diffusion in from water table = -0.22487E-11g/sq.ft.
Total inflow at boundaries = -0.60967E-11g/sq.ft.
Mass discrepancy = -0.86736E-17g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.51270E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22612E-01g/sq.ft.
Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
Diffusion in from water table = -0.19463E-01g/sq.ft.
Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1
At time = 120.00, total mass in vadose zone = 0.53804E-13g/sq.ft.
Mass in gas phase = 0.12619E-13g/sq.ft.
Mass in liquid phase = 0.27343E-13g/sq.ft.
Mass sorbed = 0.13842E-13g/sq.ft.

Since last printout at time = 110.00
Change in Total Mass = -0.54647E-12g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.32319E-12g/sq.ft.
Diffusion in from atmosphere = -0.21725E-13g/sq.ft.
Diffusion in from water table = -0.20155E-12g/sq.ft.
Total inflow at boundaries = -0.54646E-12g/sq.ft.
Mass discrepancy = -0.10300E-17g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.51270E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22612E-01g/sq.ft.
Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
Diffusion in from water table = -0.19463E-01g/sq.ft.
Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1
At time = 130.00, total mass in vadose zone = 0.48226E-14g/sq.ft.
Mass in gas phase = 0.11310E-14g/sq.ft.
Mass in liquid phase = 0.24508E-14g/sq.ft.
Mass sorbed = 0.12407E-14g/sq.ft.

Since last printout at time = 120.00
Change in Total Mass = -0.48981E-13g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.28968E-13g/sq.ft.
Diffusion in from atmosphere = -0.19473E-14g/sq.ft.
Diffusion in from water table = -0.18066E-13g/sq.ft.
Total inflow at boundaries = -0.48981E-13g/sq.ft.
Mass discrepancy = -0.81315E-19g/sq.ft.

Since beginning of run at time = 0.0
Change in Total Mass = -0.51270E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22612E-01g/sq.ft.
Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
Diffusion in from water table = -0.19463E-01g/sq.ft.
Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1
At time = 140.00, total mass in vadose zone = 0.43226E-15g/sq.ft.
Mass in gas phase = 0.10138E-15g/sq.ft.
Mass in liquid phase = 0.21967E-15g/sq.ft.
Mass sorbed = 0.11121E-15g/sq.ft.

Since last printout at time = 130.00
Change in Total Mass = -0.43903E-14g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.25965E-14g/sq.ft.
Diffusion in from atmosphere = -0.17454E-15g/sq.ft.

Diffusion in from water table = -0.16193E-14g/sq.ft.
Total inflow at boundaries = -0.43903E-14g/sq.ft.
Mass discrepancy = -0.71998E-20g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51270E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22612E-01g/sq.ft.
Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
Diffusion in from water table = -0.19463E-01g/sq.ft.
Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1

At time = 150.00, total mass in vadose zone = 0.38744E-16g/sq.ft.
Mass in gas phase = 0.90868E-17g/sq.ft.
Mass in liquid phase = 0.19690E-16g/sq.ft.
Mass sorbed = 0.99679E-17g/sq.ft.

Since last printout at time = 140.00

Change in Total Mass = -0.39351E-15g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.23273E-15g/sq.ft.
Diffusion in from atmosphere = -0.15644E-16g/sq.ft.
Diffusion in from water table = -0.14514E-15g/sq.ft.
Total inflow at boundaries = -0.39351E-15g/sq.ft.
Mass discrepancy = -0.63527E-21g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51270E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22612E-01g/sq.ft.
Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
Diffusion in from water table = -0.19463E-01g/sq.ft.
Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1

At time = 160.00, total mass in vadose zone = 0.34728E-17g/sq.ft.
Mass in gas phase = 0.81447E-18g/sq.ft.
Mass in liquid phase = 0.17648E-17g/sq.ft.
Mass sorbed = 0.89345E-18g/sq.ft.

Since last printout at time = 150.00

Change in Total Mass = -0.35272E-16g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.20860E-16g/sq.ft.
Diffusion in from atmosphere = -0.14023E-17g/sq.ft.
Diffusion in from water table = -0.13009E-16g/sq.ft.
Total inflow at boundaries = -0.35272E-16g/sq.ft.
Mass discrepancy = -0.59557E-22g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51270E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22612E-01g/sq.ft.
Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
Diffusion in from water table = -0.19463E-01g/sq.ft.
Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1

At time = 170.00, total mass in vadose zone = 0.31127E-18g/sq.ft.
Mass in gas phase = 0.73003E-19g/sq.ft.
Mass in liquid phase = 0.15819E-18g/sq.ft.
Mass sorbed = 0.80082E-19g/sq.ft.

Since last printout at time = 160.00

Change in Total Mass = -0.31615E-17g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.18697E-17g/sq.ft.
Diffusion in from atmosphere = -0.12569E-18g/sq.ft.
Diffusion in from water table = -0.11660E-17g/sq.ft.
Total inflow at boundaries = -0.31615E-17g/sq.ft.
Mass discrepancy = -0.45495E-23g/sq.ft.

Since beginning of run at time = 0.0

Change in Total Mass = -0.51270E-01g/sq.ft.
Advection in from atmosphere = 0.00000 g/sq.ft.
Advection in from water table = -0.22612E-01g/sq.ft.
Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
Diffusion in from water table = -0.19463E-01g/sq.ft.
Total inflow at boundaries = -0.51269E-01g/sq.ft.
Mass discrepancy = -0.96858E-07g/sq.ft.

Polygon 1

At time = 180.00, total mass in vadose zone = 0.27900E-19g/sq.ft.
 Mass in gas phase = 0.65435E-20g/sq.ft.
 Mass in liquid phase = 0.14179E-19g/sq.ft.
 Mass sorbed = 0.71780E-20g/sq.ft.

Since last printout at time = 170.00
 Change in Total Mass = -0.28337E-18g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.16759E-18g/sq.ft.
 Diffusion in from atmosphere = -0.11266E-19g/sq.ft.
 Diffusion in from water table = -0.10452E-18g/sq.ft.
 Total inflow at boundaries = -0.28337E-18g/sq.ft.
 Mass discrepancy = -0.43944E-24g/sq.ft.

Since beginning of run at time = 0.0
 Change in Total Mass = -0.51270E-01g/sq.ft.
 Advection in from atmosphere = 0.00000 g/sq.ft.
 Advection in from water table = -0.22612E-01g/sq.ft.
 Diffusion in from atmosphere = -0.91947E-02g/sq.ft.
 Diffusion in from water table = -0.19463E-01g/sq.ft.
 Total inflow at boundaries = -0.51269E-01g/sq.ft.
 Mass discrepancy = -0.96858E-07g/sq.ft.

GROUNDWATER IMPACT OF POLYGON 1

Time	Mass per area (g/sq.ft.)	Total Mass (g)
10.00	0.25435E-01	0.25435E-01
20.00	0.15096E-01	0.15096E-01
30.00	0.14053E-02	0.14053E-02
40.00	0.12596E-03	0.12596E-03
50.00	0.11290E-04	0.11290E-04
60.00	0.10119E-05	0.10119E-05
70.00	0.90702E-07	0.90702E-07
80.00	0.81298E-08	0.81298E-08
90.00	0.72870E-09	0.72870E-09
100.00	0.65315E-10	0.65315E-10
110.00	0.58543E-11	0.58543E-11
120.00	0.52474E-12	0.52474E-12
130.00	0.47034E-13	0.47034E-13
140.00	0.42158E-14	0.42158E-14
150.00	0.37787E-15	0.37787E-15
160.00	0.33869E-16	0.33869E-16
170.00	0.30358E-17	0.30358E-17
180.00	0.27211E-18	0.27211E-18

***** TOTAL GROUNDWATER IMPACT

Time (yr)	Mass (g)	Cumulative Mass (g)
10.00	0.25435E-01	0.25435E-01
20.00	0.15096E-01	0.40531E-01
30.00	0.14053E-02	0.41936E-01
40.00	0.12596E-03	0.42062E-01
50.00	0.11290E-04	0.42074E-01
60.00	0.10119E-05	0.42075E-01
70.00	0.90702E-07	0.42075E-01
80.00	0.81298E-08	0.42075E-01
90.00	0.72870E-09	0.42075E-01
100.00	0.65315E-10	0.42075E-01
110.00	0.58543E-11	0.42075E-01
120.00	0.52474E-12	0.42075E-01
130.00	0.47034E-13	0.42075E-01
140.00	0.42158E-14	0.42075E-01
150.00	0.37787E-15	0.42075E-01
160.00	0.33869E-16	0.42075E-01
170.00	0.30358E-17	0.42075E-01
180.00	0.27211E-18	0.42075E-01

VLEACH
version 2.0, 1993.

Developed by :

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POLYGON 1

Time:	0.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.26896E-02	0.29140E-02	0.77179E-08
2	0.26896E-02	0.29140E-02	0.77179E-08
3	0.26896E-02	0.29140E-02	0.77179E-08
4	0.26896E-02	0.29140E-02	0.77179E-08
5	0.26896E-02	0.29140E-02	0.77179E-08
6	0.26896E-02	0.29140E-02	0.77179E-08
7	0.26896E-02	0.29140E-02	0.77179E-08
8	0.26896E-02	0.29140E-02	0.77179E-08
9	0.26896E-02	0.29140E-02	0.77179E-08
10	0.26896E-02	0.29140E-02	0.77179E-08
11	0.26896E-02	0.29140E-02	0.77179E-08
12	0.26896E-02	0.29140E-02	0.77179E-08
13	0.26896E-02	0.29140E-02	0.77179E-08
14	0.26896E-02	0.29140E-02	0.77179E-08
15	0.26896E-02	0.29140E-02	0.77179E-08
16	0.26896E-02	0.29140E-02	0.77179E-08
17	0.26896E-02	0.29140E-02	0.77179E-08
18	0.26896E-02	0.29140E-02	0.77179E-08
19	0.26896E-02	0.29140E-02	0.77179E-08
20	0.26896E-02	0.29140E-02	0.77179E-08
21	0.26896E-02	0.29140E-02	0.77179E-08
22	0.26896E-02	0.29140E-02	0.77179E-08
23	0.26896E-02	0.29140E-02	0.77179E-08
24	0.26896E-02	0.29140E-02	0.77179E-08
25	0.26896E-02	0.29140E-02	0.77179E-08
26	0.29406E-01	0.31860E-01	0.84383E-07
27	0.29406E-01	0.31860E-01	0.84383E-07
28	0.29406E-01	0.31860E-01	0.84383E-07
29	0.29406E-01	0.31860E-01	0.84383E-07
30	0.29406E-01	0.31860E-01	0.84383E-07
31	0.29406E-01	0.31860E-01	0.84383E-07
32	0.29406E-01	0.31860E-01	0.84383E-07
33	0.29406E-01	0.31860E-01	0.84383E-07
34	0.29406E-01	0.31860E-01	0.84383E-07
35	0.29406E-01	0.31860E-01	0.84383E-07
36	0.29406E-01	0.31860E-01	0.84383E-07
37	0.29406E-01	0.31860E-01	0.84383E-07
38	0.29406E-01	0.31860E-01	0.84383E-07
39	0.29406E-01	0.31860E-01	0.84383E-07
40	0.29406E-01	0.31860E-01	0.84383E-07
41	0.29406E-01	0.31860E-01	0.84383E-07
42	0.29406E-01	0.31860E-01	0.84383E-07
43	0.29406E-01	0.31860E-01	0.84383E-07
44	0.89654E-04	0.97133E-04	0.25726E-09
45	0.89654E-04	0.97133E-04	0.25726E-09
46	0.89654E-04	0.97133E-04	0.25726E-09
47	0.89654E-04	0.97133E-04	0.25726E-09
48	0.89654E-04	0.97133E-04	0.25726E-09
49	0.89654E-04	0.97133E-04	0.25726E-09
50	0.89654E-04	0.97133E-04	0.25726E-09
51	0.89654E-04	0.97133E-04	0.25726E-09
52	0.89654E-04	0.97133E-04	0.25726E-09
53	0.89654E-04	0.97133E-04	0.25726E-09
54	0.89654E-04	0.97133E-04	0.25726E-09
55	0.89654E-04	0.97133E-04	0.25726E-09
56	0.89654E-04	0.97133E-04	0.25726E-09
57	0.89654E-04	0.97133E-04	0.25726E-09
58	0.89654E-04	0.97133E-04	0.25726E-09
59	0.89654E-04	0.97133E-04	0.25726E-09
60	0.89654E-04	0.97133E-04	0.25726E-09
61	0.89654E-04	0.97133E-04	0.25726E-09
62	0.89654E-04	0.97133E-04	0.25726E-09
63	0.89654E-04	0.97133E-04	0.25726E-09
64	0.89654E-04	0.97133E-04	0.25726E-09
65	0.89654E-04	0.97133E-04	0.25726E-09
66	0.89654E-04	0.97133E-04	0.25726E-09
67	0.89654E-04	0.97133E-04	0.25726E-09
68	0.89654E-04	0.97133E-04	0.25726E-09
69	0.89654E-04	0.97133E-04	0.25726E-09
70	0.89654E-04	0.97133E-04	0.25726E-09
71	0.89654E-04	0.97133E-04	0.25726E-09
72	0.89654E-04	0.97133E-04	0.25726E-09

73	0.89654E-04	0.97133E-04	0.25726E-09
74	0.89654E-04	0.97133E-04	0.25726E-09
75	0.89654E-04	0.97133E-04	0.25726E-09
76	0.89654E-04	0.97133E-04	0.25726E-09
77	0.89654E-04	0.97133E-04	0.25726E-09
78	0.89654E-04	0.97133E-04	0.25726E-09
79	0.89654E-04	0.97133E-04	0.25726E-09
80	0.89654E-04	0.97133E-04	0.25726E-09
81	0.89654E-04	0.97133E-04	0.25726E-09
82	0.89654E-04	0.97133E-04	0.25726E-09
83	0.89654E-04	0.97133E-04	0.25726E-09
84	0.89654E-04	0.97133E-04	0.25726E-09
85	0.89654E-04	0.97133E-04	0.25726E-09
86	0.89654E-04	0.97133E-04	0.25726E-09
87	0.89654E-04	0.97133E-04	0.25726E-09
88	0.89654E-04	0.97133E-04	0.25726E-09
89	0.89654E-04	0.97133E-04	0.25726E-09
90	0.89654E-04	0.97133E-04	0.25726E-09
91	0.89654E-04	0.97133E-04	0.25726E-09
92	0.89654E-04	0.97133E-04	0.25726E-09
93	0.89654E-04	0.97133E-04	0.25726E-09
94	0.89654E-04	0.97133E-04	0.25726E-09
95	0.89654E-04	0.97133E-04	0.25726E-09
96	0.00000	0.00000	0.00000
97	0.00000	0.00000	0.00000
98	0.00000	0.00000	0.00000
99	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000

POLYGON I

Time:	10.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.60474E-05	0.65519E-05	0.17353E-10
2	0.12984E-04	0.14067E-04	0.37258E-10
3	0.20821E-04	0.22558E-04	0.59747E-10
4	0.29572E-04	0.32039E-04	0.84857E-10
5	0.39250E-04	0.42525E-04	0.11263E-09
6	0.49872E-04	0.54032E-04	0.14311E-09
7	0.61452E-04	0.66579E-04	0.17634E-09
8	0.74009E-04	0.80183E-04	0.21237E-09
9	0.87560E-04	0.94865E-04	0.25126E-09
10	0.10212E-03	0.11064E-03	0.29305E-09
11	0.11772E-03	0.12754E-03	0.33781E-09
12	0.13437E-03	0.14558E-03	0.38558E-09
13	0.15210E-03	0.16478E-03	0.43644E-09
14	0.17091E-03	0.18517E-03	0.49045E-09
15	0.19085E-03	0.20677E-03	0.54765E-09
16	0.21193E-03	0.22961E-03	0.60813E-09
17	0.23417E-03	0.25370E-03	0.67195E-09
18	0.25759E-03	0.27908E-03	0.73916E-09
19	0.28222E-03	0.30577E-03	0.80985E-09
20	0.30809E-03	0.33379E-03	0.88407E-09
21	0.33521E-03	0.36317E-03	0.96189E-09
22	0.36361E-03	0.39394E-03	0.10434E-08
23	0.39331E-03	0.42612E-03	0.11286E-08
24	0.42433E-03	0.45973E-03	0.12176E-08
25	0.45670E-03	0.49480E-03	0.13105E-08
26	0.49044E-03	0.53135E-03	0.14073E-08
27	0.52556E-03	0.56941E-03	0.15081E-08
28	0.56210E-03	0.60899E-03	0.16130E-08
29	0.60007E-03	0.65013E-03	0.17219E-08
30	0.63949E-03	0.69284E-03	0.18350E-08
31	0.68038E-03	0.73714E-03	0.19524E-08
32	0.72277E-03	0.78306E-03	0.20740E-08
33	0.76667E-03	0.83063E-03	0.22000E-08
34	0.81210E-03	0.87985E-03	0.23303E-08
35	0.85908E-03	0.93074E-03	0.24652E-08
36	0.90762E-03	0.98334E-03	0.26044E-08
37	0.95774E-03	0.10376E-02	0.27483E-08
38	0.10095E-02	0.10937E-02	0.28967E-08
39	0.10628E-02	0.11514E-02	0.30496E-08
40	0.11177E-02	0.12109E-02	0.32072E-08
41	0.11742E-02	0.12721E-02	0.33693E-08
42	0.12323E-02	0.13351E-02	0.35361E-08
43	0.12920E-02	0.13998E-02	0.37074E-08
44	0.13533E-02	0.14662E-02	0.38833E-08
45	0.14161E-02	0.15343E-02	0.40637E-08
46	0.14805E-02	0.16041E-02	0.42485E-08
47	0.15465E-02	0.16755E-02	0.44376E-08
48	0.16138E-02	0.17484E-02	0.46309E-08
49	0.16826E-02	0.18230E-02	0.48283E-08
50	0.17527E-02	0.18990E-02	0.50296E-08
51	0.18242E-02	0.19764E-02	0.52345E-08
52	0.18968E-02	0.20551E-02	0.54431E-08
53	0.19707E-02	0.21351E-02	0.56549E-08
54	0.20456E-02	0.22162E-02	0.58699E-08
55	0.21215E-02	0.22985E-02	0.60878E-08
56	0.21984E-02	0.23818E-02	0.63084E-08
57	0.22762E-02	0.24660E-02	0.65315E-08
58	0.23547E-02	0.25512E-02	0.67570E-08

59	0.24341E-02	0.26371E-02	0.69846E-08
60	0.25141E-02	0.27238E-02	0.72142E-08
61	0.25947E-02	0.28111E-02	0.74455E-08
62	0.26758E-02	0.28990E-02	0.76784E-08
63	0.27574E-02	0.29875E-02	0.79126E-08
64	0.28394E-02	0.30763E-02	0.81479E-08
65	0.29218E-02	0.31655E-02	0.83841E-08
66	0.30043E-02	0.32549E-02	0.86209E-08
67	0.30869E-02	0.33444E-02	0.88579E-08
68	0.31694E-02	0.34338E-02	0.90948E-08
69	0.32518E-02	0.35231E-02	0.93312E-08
70	0.33338E-02	0.36119E-02	0.95665E-08
71	0.34152E-02	0.37002E-02	0.98002E-08
72	0.34959E-02	0.37875E-02	0.10032E-07
73	0.35754E-02	0.38737E-02	0.10260E-07
74	0.36536E-02	0.39584E-02	0.10484E-07
75	0.37301E-02	0.40412E-02	0.10704E-07
76	0.38044E-02	0.41218E-02	0.10917E-07
77	0.38763E-02	0.41996E-02	0.11123E-07
78	0.39452E-02	0.42743E-02	0.11321E-07
79	0.40107E-02	0.43453E-02	0.11509E-07
80	0.40723E-02	0.44120E-02	0.11686E-07
81	0.41294E-02	0.44739E-02	0.11850E-07
82	0.41816E-02	0.45305E-02	0.11999E-07
83	0.42283E-02	0.45811E-02	0.12133E-07
84	0.42690E-02	0.46251E-02	0.12250E-07
85	0.43031E-02	0.46621E-02	0.12348E-07
86	0.43301E-02	0.46913E-02	0.12425E-07
87	0.43495E-02	0.47123E-02	0.12481E-07
88	0.43607E-02	0.47245E-02	0.12513E-07
89	0.43634E-02	0.47274E-02	0.12521E-07
90	0.43571E-02	0.47205E-02	0.12503E-07
91	0.43413E-02	0.47034E-02	0.12457E-07
92	0.43157E-02	0.46757E-02	0.12384E-07
93	0.42799E-02	0.46370E-02	0.12281E-07
94	0.42338E-02	0.45870E-02	0.12149E-07
95	0.41769E-02	0.45253E-02	0.11986E-07
96	0.41091E-02	0.44519E-02	0.11791E-07
97	0.40303E-02	0.43665E-02	0.11565E-07
98	0.39402E-02	0.42689E-02	0.11307E-07
99	0.38388E-02	0.41590E-02	0.11016E-07
100	0.37260E-02	0.40369E-02	0.10692E-07

POLYGON 1

Time: 20.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.54219E-06	0.58742E-06	0.15558E-11
2	0.11641E-05	0.12612E-05	0.33403E-11
3	0.18666E-05	0.20224E-05	0.53564E-11
4	0.26511E-05	0.28723E-05	0.76075E-11
5	0.35187E-05	0.38122E-05	0.10097E-10
6	0.44707E-05	0.48437E-05	0.12829E-10
7	0.55087E-05	0.59682E-05	0.15807E-10
8	0.66340E-05	0.71875E-05	0.19037E-10
9	0.78484E-05	0.85031E-05	0.22521E-10
10	0.91534E-05	0.99170E-05	0.26266E-10
11	0.10551E-04	0.11431E-04	0.30276E-10
12	0.12042E-04	0.13047E-04	0.34556E-10
13	0.13630E-04	0.14767E-04	0.39111E-10
14	0.15315E-04	0.16593E-04	0.43948E-10
15	0.17100E-04	0.18527E-04	0.49070E-10
16	0.18987E-04	0.20571E-04	0.54485E-10
17	0.20978E-04	0.22728E-04	0.60197E-10
18	0.23074E-04	0.24999E-04	0.66212E-10
19	0.25278E-04	0.27387E-04	0.72536E-10
20	0.27592E-04	0.29894E-04	0.79176E-10
21	0.30017E-04	0.32521E-04	0.86135E-10
22	0.32556E-04	0.35272E-04	0.93421E-10
23	0.35211E-04	0.38148E-04	0.10104E-09
24	0.37983E-04	0.41152E-04	0.10900E-09
25	0.40875E-04	0.44285E-04	0.11729E-09
26	0.43889E-04	0.47550E-04	0.12594E-09
27	0.47026E-04	0.50949E-04	0.13494E-09
28	0.50288E-04	0.54483E-04	0.14430E-09
29	0.53676E-04	0.58154E-04	0.15403E-09
30	0.57193E-04	0.61965E-04	0.16412E-09
31	0.60840E-04	0.65916E-04	0.17458E-09
32	0.64619E-04	0.70010E-04	0.18543E-09
33	0.68530E-04	0.74247E-04	0.19665E-09
34	0.72575E-04	0.78630E-04	0.20826E-09
35	0.76756E-04	0.83159E-04	0.22025E-09
36	0.81072E-04	0.87835E-04	0.23264E-09
37	0.85525E-04	0.92660E-04	0.24542E-09
38	0.90116E-04	0.97634E-04	0.25859E-09
39	0.94845E-04	0.10276E-03	0.27216E-09
40	0.99711E-04	0.10803E-03	0.28613E-09
41	0.10472E-03	0.11345E-03	0.30049E-09
42	0.10986E-03	0.11903E-03	0.31525E-09
43	0.11514E-03	0.12475E-03	0.33040E-09
44	0.12056E-03	0.13062E-03	0.34595E-09

45	0.12611E-03	0.13664E-03	0.36189E-09
46	0.13180E-03	0.14280E-03	0.37822E-09
47	0.13763E-03	0.14911E-03	0.39493E-09
48	0.14358E-03	0.15556E-03	0.41202E-09
49	0.14967E-03	0.16215E-03	0.42948E-09
50	0.15588E-03	0.16888E-03	0.44730E-09
51	0.16222E-03	0.17575E-03	0.46549E-09
52	0.16868E-03	0.18275E-03	0.48402E-09
53	0.17525E-03	0.18987E-03	0.50289E-09
54	0.18194E-03	0.19712E-03	0.52209E-09
55	0.18874E-03	0.20448E-03	0.54160E-09
56	0.19564E-03	0.21196E-03	0.56141E-09
57	0.20265E-03	0.21955E-03	0.58150E-09
58	0.20974E-03	0.22724E-03	0.60186E-09
59	0.21692E-03	0.23502E-03	0.62247E-09
60	0.22418E-03	0.24289E-03	0.64331E-09
61	0.23152E-03	0.25083E-03	0.66435E-09
62	0.23892E-03	0.25885E-03	0.68558E-09
63	0.24637E-03	0.26692E-03	0.70697E-09
64	0.25387E-03	0.27505E-03	0.72848E-09
65	0.26140E-03	0.28321E-03	0.75010E-09
66	0.26896E-03	0.29140E-03	0.77180E-09
67	0.27653E-03	0.29960E-03	0.79353E-09
68	0.28411E-03	0.30781E-03	0.81526E-09
69	0.29167E-03	0.31600E-03	0.83696E-09
70	0.29921E-03	0.32417E-03	0.85859E-09
71	0.30671E-03	0.33229E-03	0.88011E-09
72	0.31415E-03	0.34036E-03	0.90146E-09
73	0.32152E-03	0.34834E-03	0.92261E-09
74	0.32880E-03	0.35623E-03	0.94350E-09
75	0.33597E-03	0.36400E-03	0.96409E-09
76	0.34302E-03	0.37164E-03	0.98431E-09
77	0.34992E-03	0.37911E-03	0.10041E-08
78	0.35666E-03	0.38641E-03	0.10234E-08
79	0.36320E-03	0.39350E-03	0.10422E-08
80	0.36953E-03	0.40036E-03	0.10604E-08
81	0.37563E-03	0.40696E-03	0.10779E-08
82	0.38146E-03	0.41328E-03	0.10946E-08
83	0.38700E-03	0.41929E-03	0.11105E-08
84	0.39223E-03	0.42495E-03	0.11255E-08
85	0.39711E-03	0.43024E-03	0.11395E-08
86	0.40161E-03	0.43512E-03	0.11524E-08
87	0.40571E-03	0.43956E-03	0.11642E-08
88	0.40937E-03	0.44352E-03	0.11747E-08
89	0.41255E-03	0.44697E-03	0.11838E-08
90	0.41523E-03	0.44987E-03	0.11915E-08
91	0.41736E-03	0.45218E-03	0.11976E-08
92	0.41890E-03	0.45385E-03	0.12021E-08
93	0.41983E-03	0.45485E-03	0.12047E-08
94	0.42008E-03	0.45513E-03	0.12055E-08
95	0.41964E-03	0.45464E-03	0.12042E-08
96	0.41844E-03	0.45335E-03	0.12007E-08
97	0.41644E-03	0.45118E-03	0.11950E-08
98	0.41361E-03	0.44811E-03	0.11869E-08
99	0.40988E-03	0.44408E-03	0.11762E-08
100	0.40522E-03	0.43902E-03	0.11628E-08

POLYGON I

Time: 30.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.48598E-07	0.52652E-07	0.13945E-12
2	0.10434E-06	0.11304E-06	0.29940E-12
3	0.16731E-06	0.18127E-06	0.48011E-12
4	0.23763E-06	0.25745E-06	0.68188E-12
5	0.31539E-06	0.34170E-06	0.90503E-12
6	0.40073E-06	0.43416E-06	0.11499E-11
7	0.49376E-06	0.53495E-06	0.14169E-11
8	0.59463E-06	0.64423E-06	0.17063E-11
9	0.70347E-06	0.76216E-06	0.20186E-11
10	0.82044E-06	0.88889E-06	0.23543E-11
11	0.94569E-06	0.10246E-05	0.27137E-11
12	0.10794E-05	0.11694E-05	0.30973E-11
13	0.12217E-05	0.13236E-05	0.35057E-11
14	0.13727E-05	0.14873E-05	0.39391E-11
15	0.15328E-05	0.16606E-05	0.43983E-11
16	0.17019E-05	0.18439E-05	0.48836E-11
17	0.18803E-05	0.20372E-05	0.53956E-11
18	0.20682E-05	0.22407E-05	0.59348E-11
19	0.22657E-05	0.24548E-05	0.65017E-11
20	0.24731E-05	0.26795E-05	0.70968E-11
21	0.26905E-05	0.29150E-05	0.77206E-11
22	0.29181E-05	0.31616E-05	0.83737E-11
23	0.31561E-05	0.34194E-05	0.90565E-11
24	0.34046E-05	0.36886E-05	0.97696E-11
25	0.36638E-05	0.39694E-05	0.10513E-10
26	0.39339E-05	0.42621E-05	0.11289E-10
27	0.42151E-05	0.45667E-05	0.12095E-10
28	0.45074E-05	0.48835E-05	0.12934E-10
29	0.48112E-05	0.52126E-05	0.13806E-10
30	0.51264E-05	0.55541E-05	0.14711E-10

31	0.54533E-05	0.59083E-05	0.15649E-10
32	0.57920E-05	0.62752E-05	0.16620E-10
33	0.61426E-05	0.66550E-05	0.17626E-10
34	0.65052E-05	0.70479E-05	0.18667E-10
35	0.68799E-05	0.74538E-05	0.19742E-10
36	0.72668E-05	0.78730E-05	0.20852E-10
37	0.76659E-05	0.83054E-05	0.21998E-10
38	0.80774E-05	0.87513E-05	0.23178E-10
39	0.85013E-05	0.92105E-05	0.24395E-10
40	0.89375E-05	0.96831E-05	0.25647E-10
41	0.93861E-05	0.10169E-04	0.26934E-10
42	0.98472E-05	0.10669E-04	0.28257E-10
43	0.10321E-04	0.11182E-04	0.29615E-10
44	0.10806E-04	0.11708E-04	0.31009E-10
45	0.11304E-04	0.12247E-04	0.32438E-10
46	0.11814E-04	0.12800E-04	0.33901E-10
47	0.12336E-04	0.13365E-04	0.35399E-10
48	0.12870E-04	0.13943E-04	0.36931E-10
49	0.13415E-04	0.14534E-04	0.38496E-10
50	0.13972E-04	0.15138E-04	0.40093E-10
51	0.14540E-04	0.15753E-04	0.41723E-10
52	0.15119E-04	0.16380E-04	0.43384E-10
53	0.15708E-04	0.17019E-04	0.45076E-10
54	0.16308E-04	0.17668E-04	0.46796E-10
55	0.16917E-04	0.18329E-04	0.48545E-10
56	0.17536E-04	0.18999E-04	0.50321E-10
57	0.18164E-04	0.19679E-04	0.52122E-10
58	0.18800E-04	0.20368E-04	0.53947E-10
59	0.19443E-04	0.21066E-04	0.55794E-10
60	0.20094E-04	0.21771E-04	0.57662E-10
61	0.20752E-04	0.22483E-04	0.59548E-10
62	0.21415E-04	0.23201E-04	0.61451E-10
63	0.22083E-04	0.23925E-04	0.63367E-10
64	0.22755E-04	0.24653E-04	0.65296E-10
65	0.23430E-04	0.25385E-04	0.67234E-10
66	0.24108E-04	0.26119E-04	0.69178E-10
67	0.24786E-04	0.26854E-04	0.71126E-10
68	0.25465E-04	0.27590E-04	0.73074E-10
69	0.26143E-04	0.28324E-04	0.75019E-10
70	0.26819E-04	0.29056E-04	0.76957E-10
71	0.27491E-04	0.29784E-04	0.78885E-10
72	0.28158E-04	0.30507E-04	0.80799E-10
73	0.28818E-04	0.31222E-04	0.82695E-10
74	0.29471E-04	0.31929E-04	0.84567E-10
75	0.30113E-04	0.32626E-04	0.86412E-10
76	0.30745E-04	0.33310E-04	0.88224E-10
77	0.31364E-04	0.33980E-04	0.89999E-10
78	0.31967E-04	0.34634E-04	0.91730E-10
79	0.32553E-04	0.35269E-04	0.93413E-10
80	0.33121E-04	0.35884E-04	0.95041E-10
81	0.33667E-04	0.36475E-04	0.96608E-10
82	0.34189E-04	0.37042E-04	0.98108E-10
83	0.34686E-04	0.37580E-04	0.99533E-10
84	0.35154E-04	0.38087E-04	0.10088E-09
85	0.35592E-04	0.38561E-04	0.10213E-09
86	0.35995E-04	0.38998E-04	0.10329E-09
87	0.36362E-04	0.39396E-04	0.10434E-09
88	0.36690E-04	0.39751E-04	0.10528E-09
89	0.36975E-04	0.40060E-04	0.10610E-09
90	0.37215E-04	0.40319E-04	0.10679E-09
91	0.37405E-04	0.40526E-04	0.10734E-09
92	0.37543E-04	0.40675E-04	0.10773E-09
93	0.37626E-04	0.40765E-04	0.10797E-09
94	0.37649E-04	0.40790E-04	0.10803E-09
95	0.37608E-04	0.40746E-04	0.10792E-09
96	0.37501E-04	0.40629E-04	0.10761E-09
97	0.37322E-04	0.40436E-04	0.10710E-09
98	0.37068E-04	0.40160E-04	0.10637E-09
99	0.36734E-04	0.39798E-04	0.10541E-09
100	0.36316E-04	0.39345E-04	0.10421E-09

POLYGON I

Time:

40.000

Cell

Cgas(g/cu.ft)

Clig(g/cu.ft)

Csol(g/g)

1	0.43559E-08	0.47193E-08	0.12500E-13
2	0.93520E-08	0.10132E-07	0.26836E-13
3	0.14997E-07	0.16248E-07	0.43034E-13
4	0.21299E-07	0.23076E-07	0.61119E-13
5	0.28269E-07	0.30628E-07	0.81120E-13
6	0.35918E-07	0.38914E-07	0.10307E-12
7	0.44257E-07	0.47949E-07	0.12700E-12
8	0.53298E-07	0.57744E-07	0.15294E-12
9	0.63054E-07	0.68314E-07	0.18094E-12
10	0.73538E-07	0.79673E-07	0.21102E-12
11	0.84765E-07	0.91836E-07	0.24324E-12
12	0.96748E-07	0.10482E-06	0.27762E-12
13	0.10950E-06	0.11864E-06	0.31422E-12
14	0.12304E-06	0.13331E-06	0.35308E-12
15	0.13738E-06	0.14885E-06	0.39423E-12
16	0.15254E-06	0.16527E-06	0.43773E-12

17	0.16854E-06	0.18260E-06	0.48362E-12
18	0.18538E-06	0.20084E-06	0.53195E-12
19	0.20308E-06	0.22003E-06	0.58276E-12
20	0.22167E-06	0.24017E-06	0.63610E-12
21	0.24116E-06	0.26128E-06	0.69202E-12
22	0.26156E-06	0.28338E-06	0.75055E-12
23	0.28289E-06	0.30649E-06	0.81176E-12
24	0.30516E-06	0.33062E-06	0.87567E-12
25	0.32840E-06	0.35579E-06	0.94235E-12
26	0.35261E-06	0.38202E-06	0.10118E-11
27	0.37781E-06	0.40933E-06	0.10841E-11
28	0.40401E-06	0.43772E-06	0.11593E-11
29	0.43124E-06	0.46721E-06	0.12375E-11
30	0.45950E-06	0.49783E-06	0.13185E-11
31	0.48880E-06	0.52957E-06	0.14026E-11
32	0.51915E-06	0.56246E-06	0.14897E-11
33	0.55058E-06	0.59651E-06	0.15799E-11
34	0.58308E-06	0.63172E-06	0.16732E-11
35	0.61666E-06	0.66810E-06	0.17695E-11
36	0.65134E-06	0.70568E-06	0.18690E-11
37	0.68712E-06	0.74444E-06	0.19717E-11
38	0.72400E-06	0.78440E-06	0.20775E-11
39	0.76199E-06	0.82556E-06	0.21866E-11
40	0.80109E-06	0.86792E-06	0.22988E-11
41	0.84130E-06	0.91149E-06	0.24142E-11
42	0.88263E-06	0.95626E-06	0.25327E-11
43	0.92506E-06	0.10022E-05	0.26545E-11
44	0.96859E-06	0.10494E-05	0.27794E-11
45	0.10132E-05	0.10977E-05	0.29075E-11
46	0.10589E-05	0.11473E-05	0.30386E-11
47	0.11057E-05	0.11980E-05	0.31729E-11
48	0.11536E-05	0.12498E-05	0.33102E-11
49	0.12024E-05	0.13028E-05	0.34505E-11
50	0.12524E-05	0.13568E-05	0.35937E-11
51	0.13033E-05	0.14120E-05	0.37398E-11
52	0.13552E-05	0.14682E-05	0.38887E-11
53	0.14080E-05	0.15254E-05	0.40403E-11
54	0.14617E-05	0.15837E-05	0.41945E-11
55	0.15163E-05	0.16428E-05	0.43512E-11
56	0.15718E-05	0.17029E-05	0.45104E-11
57	0.16281E-05	0.17639E-05	0.46718E-11
58	0.16851E-05	0.18256E-05	0.48354E-11
59	0.17428E-05	0.18882E-05	0.50009E-11
60	0.18011E-05	0.19514E-05	0.51684E-11
61	0.18600E-05	0.20152E-05	0.53374E-11
62	0.19195E-05	0.20796E-05	0.55080E-11
63	0.19793E-05	0.21445E-05	0.56798E-11
64	0.20396E-05	0.22097E-05	0.58526E-11
65	0.21001E-05	0.22753E-05	0.60263E-11
66	0.21608E-05	0.23411E-05	0.62006E-11
67	0.22217E-05	0.24070E-05	0.63752E-11
68	0.22825E-05	0.24729E-05	0.65498E-11
69	0.23433E-05	0.25388E-05	0.67241E-11
70	0.24038E-05	0.26044E-05	0.68979E-11
71	0.24641E-05	0.26696E-05	0.70707E-11
72	0.25238E-05	0.27344E-05	0.72422E-11
73	0.25830E-05	0.27985E-05	0.74121E-11
74	0.26415E-05	0.28619E-05	0.75800E-11
75	0.26991E-05	0.29243E-05	0.77453E-11
76	0.27558E-05	0.29857E-05	0.79078E-11
77	0.28112E-05	0.30457E-05	0.80668E-11
78	0.28653E-05	0.31043E-05	0.82220E-11
79	0.29178E-05	0.31613E-05	0.83729E-11
80	0.29687E-05	0.32164E-05	0.85188E-11
81	0.30176E-05	0.32694E-05	0.86593E-11
82	0.30645E-05	0.33201E-05	0.87937E-11
83	0.31090E-05	0.33684E-05	0.89214E-11
84	0.31510E-05	0.34138E-05	0.90418E-11
85	0.31902E-05	0.34563E-05	0.91543E-11
86	0.32263E-05	0.34955E-05	0.92581E-11
87	0.32592E-05	0.35311E-05	0.93525E-11
88	0.32886E-05	0.35629E-05	0.94368E-11
89	0.33142E-05	0.35906E-05	0.95101E-11
90	0.33356E-05	0.36139E-05	0.95717E-11
91	0.33527E-05	0.36324E-05	0.96208E-11
92	0.33651E-05	0.36458E-05	0.96563E-11
93	0.33725E-05	0.36538E-05	0.96775E-11
94	0.33746E-05	0.36561E-05	0.96834E-11
95	0.33709E-05	0.36521E-05	0.96730E-11
96	0.33613E-05	0.36417E-05	0.96454E-11
97	0.33453E-05	0.36243E-05	0.95994E-11
98	0.33225E-05	0.35997E-05	0.95340E-11
99	0.32925E-05	0.35672E-05	0.94481E-11
100	0.32551E-05	0.35266E-05	0.93406E-11

POLYGON I

Time: 50.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.39043E-09	0.42300E-09	0.11204E-14
2	0.83825E-09	0.90818E-09	0.24054E-14

3	0.13442E-08	0.14563E-08	0.38572E-14
4	0.19091E-08	0.20684E-08	0.54782E-14
5	0.25338E-08	0.27452E-08	0.72710E-14
6	0.32194E-08	0.34880E-08	0.92383E-14
7	0.39669E-08	0.42978E-08	0.11383E-13
8	0.47772E-08	0.51758E-08	0.13708E-13
9	0.56517E-08	0.61232E-08	0.16218E-13
10	0.65914E-08	0.71413E-08	0.18914E-13
11	0.75977E-08	0.82315E-08	0.21802E-13
12	0.86718E-08	0.93952E-08	0.24884E-13
13	0.98150E-08	0.10634E-07	0.28164E-13
14	0.11029E-07	0.11949E-07	0.31647E-13
15	0.12314E-07	0.13341E-07	0.35336E-13
16	0.13673E-07	0.14814E-07	0.39235E-13
17	0.15106E-07	0.16367E-07	0.43348E-13
18	0.16616E-07	0.18002E-07	0.47680E-13
19	0.18203E-07	0.19722E-07	0.52234E-13
20	0.19869E-07	0.21527E-07	0.57015E-13
21	0.21616E-07	0.23419E-07	0.62027E-13
22	0.23444E-07	0.25400E-07	0.67274E-13
23	0.25356E-07	0.27471E-07	0.72760E-13
24	0.27352E-07	0.29634E-07	0.78489E-13
25	0.29435E-07	0.31891E-07	0.84465E-13
26	0.31605E-07	0.34242E-07	0.90692E-13
27	0.33864E-07	0.36689E-07	0.97174E-13
28	0.36213E-07	0.39234E-07	0.10391E-12
29	0.38653E-07	0.41878E-07	0.11092E-12
30	0.41186E-07	0.44622E-07	0.11818E-12
31	0.43812E-07	0.47467E-07	0.12572E-12
32	0.46533E-07	0.50415E-07	0.13353E-12
33	0.49350E-07	0.53466E-07	0.14161E-12
34	0.52263E-07	0.56622E-07	0.14997E-12
35	0.55273E-07	0.59884E-07	0.15861E-12
36	0.58381E-07	0.63252E-07	0.16753E-12
37	0.61588E-07	0.66726E-07	0.17673E-12
38	0.64894E-07	0.70308E-07	0.18622E-12
39	0.68299E-07	0.73997E-07	0.19599E-12
40	0.71804E-07	0.77794E-07	0.20604E-12
41	0.75408E-07	0.81699E-07	0.21639E-12
42	0.79112E-07	0.85712E-07	0.22702E-12
43	0.82915E-07	0.89832E-07	0.23793E-12
44	0.86817E-07	0.94060E-07	0.24912E-12
45	0.90817E-07	0.98393E-07	0.26060E-12
46	0.94914E-07	0.10283E-06	0.27236E-12
47	0.99108E-07	0.10738E-06	0.28439E-12
48	0.10340E-06	0.11202E-06	0.29670E-12
49	0.10778E-06	0.11677E-06	0.30927E-12
50	0.11225E-06	0.12162E-06	0.32211E-12
51	0.11681E-06	0.12656E-06	0.33521E-12
52	0.12147E-06	0.13160E-06	0.34855E-12
53	0.12620E-06	0.13673E-06	0.36214E-12
54	0.13102E-06	0.14195E-06	0.37596E-12
55	0.13591E-06	0.14725E-06	0.39001E-12
56	0.14089E-06	0.15264E-06	0.40428E-12
57	0.14593E-06	0.15810E-06	0.41875E-12
58	0.15104E-06	0.16364E-06	0.43341E-12
59	0.15621E-06	0.16924E-06	0.44825E-12
60	0.16144E-06	0.17491E-06	0.46325E-12
61	0.16672E-06	0.18063E-06	0.47841E-12
62	0.17205E-06	0.18640E-06	0.49369E-12
63	0.17741E-06	0.19221E-06	0.50909E-12
64	0.18281E-06	0.19806E-06	0.52459E-12
65	0.18824E-06	0.20394E-06	0.54016E-12
66	0.19368E-06	0.20984E-06	0.55578E-12
67	0.19913E-06	0.21575E-06	0.57142E-12
68	0.20459E-06	0.22166E-06	0.58707E-12
69	0.21003E-06	0.22756E-06	0.60270E-12
70	0.21546E-06	0.23344E-06	0.61827E-12
71	0.22086E-06	0.23928E-06	0.63377E-12
72	0.22622E-06	0.24509E-06	0.64914E-12
73	0.23152E-06	0.25084E-06	0.66437E-12
74	0.23677E-06	0.25652E-06	0.67941E-12
75	0.24193E-06	0.26211E-06	0.69423E-12
76	0.24701E-06	0.26761E-06	0.70879E-12
77	0.25197E-06	0.27299E-06	0.72305E-12
78	0.25682E-06	0.27825E-06	0.73696E-12
79	0.26153E-06	0.28335E-06	0.75048E-12
80	0.26609E-06	0.28829E-06	0.76356E-12
81	0.27048E-06	0.29304E-06	0.77615E-12
82	0.27468E-06	0.29759E-06	0.78820E-12
83	0.27867E-06	0.30191E-06	0.79965E-12
84	0.28243E-06	0.30599E-06	0.81044E-12
85	0.28594E-06	0.30980E-06	0.82052E-12
86	0.28918E-06	0.31331E-06	0.82983E-12
87	0.29213E-06	0.31650E-06	0.83829E-12
88	0.29477E-06	0.31936E-06	0.84584E-12
89	0.29706E-06	0.32184E-06	0.85242E-12
90	0.29898E-06	0.32392E-06	0.85794E-12
91	0.30051E-06	0.32558E-06	0.86233E-12
92	0.30162E-06	0.32679E-06	0.86552E-12

93	0.30229E-06	0.32750E-06	0.86742E-12
94	0.30247E-06	0.32770E-06	0.86795E-12
95	0.30215E-06	0.32735E-06	0.86702E-12
96	0.30128E-06	0.32641E-06	0.86454E-12
97	0.29984E-06	0.32486E-06	0.86042E-12
98	0.29780E-06	0.32265E-06	0.85456E-12
99	0.29512E-06	0.31974E-06	0.84686E-12
100	0.29176E-06	0.31610E-06	0.83722E-12

POLYGON I

Time:	60.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.34995E-10	0.37915E-10	0.10042E-15
2	0.75134E-10	0.81402E-10	0.21560E-15
3	0.12048E-09	0.13053E-09	0.34573E-15
4	0.17112E-09	0.18539E-09	0.49103E-15
5	0.22712E-09	0.24606E-09	0.65172E-15
6	0.28857E-09	0.31264E-09	0.82805E-15
7	0.35556E-09	0.38522E-09	0.10203E-14
8	0.42820E-09	0.46392E-09	0.12287E-14
9	0.50658E-09	0.54884E-09	0.14536E-14
10	0.59081E-09	0.64009E-09	0.16953E-14
11	0.68100E-09	0.73781E-09	0.19542E-14
12	0.77727E-09	0.84212E-09	0.22304E-14
13	0.87974E-09	0.95313E-09	0.25244E-14
14	0.98852E-09	0.10710E-08	0.28366E-14
15	0.11037E-08	0.11958E-08	0.31672E-14
16	0.12255E-08	0.13278E-08	0.35167E-14
17	0.13540E-08	0.14670E-08	0.38854E-14
18	0.14893E-08	0.16136E-08	0.42737E-14
19	0.16316E-08	0.17677E-08	0.46819E-14
20	0.17809E-08	0.19295E-08	0.51104E-14
21	0.19375E-08	0.20991E-08	0.55596E-14
22	0.21014E-08	0.22767E-08	0.60299E-14
23	0.22727E-08	0.24623E-08	0.65216E-14
24	0.24517E-08	0.26562E-08	0.70351E-14
25	0.26383E-08	0.28584E-08	0.75708E-14
26	0.28328E-08	0.30692E-08	0.81289E-14
27	0.30353E-08	0.32885E-08	0.87099E-14
28	0.32458E-08	0.35166E-08	0.93141E-14
29	0.34646E-08	0.37536E-08	0.99417E-14
30	0.36916E-08	0.39995E-08	0.10593E-13
31	0.39270E-08	0.42546E-08	0.11269E-13
32	0.41709E-08	0.45188E-08	0.11968E-13
33	0.44233E-08	0.47923E-08	0.12693E-13
34	0.46844E-08	0.50752E-08	0.13442E-13
35	0.49542E-08	0.53676E-08	0.14216E-13
36	0.52329E-08	0.56694E-08	0.15016E-13
37	0.55203E-08	0.59808E-08	0.15841E-13
38	0.58166E-08	0.63018E-08	0.16691E-13
39	0.61218E-08	0.66325E-08	0.17567E-13
40	0.64360E-08	0.69729E-08	0.18468E-13
41	0.67590E-08	0.73229E-08	0.19395E-13
42	0.70910E-08	0.76826E-08	0.20348E-13
43	0.74319E-08	0.80519E-08	0.21326E-13
44	0.77816E-08	0.84308E-08	0.22330E-13
45	0.81402E-08	0.88192E-08	0.23359E-13
46	0.85074E-08	0.92171E-08	0.24412E-13
47	0.88833E-08	0.96244E-08	0.25491E-13
48	0.92677E-08	0.10041E-07	0.26594E-13
49	0.96604E-08	0.10466E-07	0.27721E-13
50	0.10061E-07	0.10901E-07	0.28872E-13
51	0.10470E-07	0.11344E-07	0.30045E-13
52	0.10887E-07	0.11796E-07	0.31241E-13
53	0.11312E-07	0.12255E-07	0.32459E-13
54	0.11744E-07	0.12723E-07	0.33698E-13
55	0.12182E-07	0.13199E-07	0.34958E-13
56	0.12628E-07	0.13681E-07	0.36236E-13
57	0.13080E-07	0.14171E-07	0.37533E-13
58	0.13538E-07	0.14667E-07	0.38847E-13
59	0.14001E-07	0.15169E-07	0.40178E-13
60	0.14470E-07	0.15677E-07	0.41523E-13
61	0.14943E-07	0.16190E-07	0.42881E-13
62	0.15421E-07	0.16707E-07	0.44251E-13
63	0.15902E-07	0.17229E-07	0.45631E-13
64	0.16386E-07	0.17753E-07	0.47020E-13
65	0.16872E-07	0.18280E-07	0.48416E-13
66	0.17360E-07	0.18808E-07	0.49816E-13
67	0.17849E-07	0.19338E-07	0.51218E-13
68	0.18338E-07	0.19868E-07	0.52621E-13
69	0.18826E-07	0.20396E-07	0.54022E-13
70	0.19312E-07	0.20923E-07	0.55418E-13
71	0.19796E-07	0.21448E-07	0.56806E-13
72	0.20276E-07	0.21968E-07	0.58184E-13
73	0.20752E-07	0.22483E-07	0.59549E-13
74	0.21222E-07	0.22992E-07	0.60897E-13
75	0.21685E-07	0.23494E-07	0.62226E-13
76	0.22140E-07	0.23987E-07	0.63531E-13
77	0.22585E-07	0.24469E-07	0.64809E-13
78	0.23020E-07	0.24940E-07	0.66056E-13

79	0.23442E-07	0.25398E-07	0.67268E-13
80	0.23850E-07	0.25840E-07	0.68440E-13
81	0.24244E-07	0.26266E-07	0.69568E-13
82	0.24620E-07	0.26674E-07	0.70648E-13
83	0.24978E-07	0.27061E-07	0.71674E-13
84	0.25315E-07	0.27427E-07	0.72642E-13
85	0.25630E-07	0.27768E-07	0.73546E-13
86	0.25920E-07	0.28083E-07	0.74380E-13
87	0.26185E-07	0.28369E-07	0.75138E-13
88	0.26421E-07	0.28625E-07	0.75815E-13
89	0.26626E-07	0.28847E-07	0.76404E-13
90	0.26798E-07	0.29034E-07	0.76899E-13
91	0.26936E-07	0.29183E-07	0.77293E-13
92	0.27035E-07	0.29291E-07	0.77579E-13
93	0.27095E-07	0.29355E-07	0.77749E-13
94	0.27111E-07	0.29373E-07	0.77796E-13
95	0.27082E-07	0.29341E-07	0.77713E-13
96	0.27005E-07	0.29257E-07	0.77491E-13
97	0.26876E-07	0.29118E-07	0.77121E-13
98	0.26693E-07	0.28920E-07	0.76596E-13
99	0.26452E-07	0.28659E-07	0.75906E-13
100	0.26151E-07	0.28333E-07	0.75042E-13

POLYGON I

Time:

70.000

Cell

Cgas(g/cu.ft)

Clig(g/cu.ft)

Csol(g/g)

1	0.31367E-11	0.33984E-11	0.90010E-17
2	0.67345E-11	0.72963E-11	0.19325E-16
3	0.10799E-10	0.11700E-10	0.30989E-16
4	0.15338E-10	0.16617E-10	0.44012E-16
5	0.20357E-10	0.22055E-10	0.58415E-16
6	0.25865E-10	0.28023E-10	0.74220E-16
7	0.31870E-10	0.34528E-10	0.91451E-16
8	0.38380E-10	0.41582E-10	0.11013E-15
9	0.45406E-10	0.49194E-10	0.13029E-15
10	0.52956E-10	0.57373E-10	0.15196E-15
11	0.61040E-10	0.66132E-10	0.17516E-15
12	0.69669E-10	0.75481E-10	0.19992E-15
13	0.78853E-10	0.85432E-10	0.22627E-15
14	0.88604E-10	0.95996E-10	0.25425E-15
15	0.98932E-10	0.10718E-09	0.28389E-15
16	0.10985E-09	0.11901E-09	0.31521E-15
17	0.12136E-09	0.13149E-09	0.34826E-15
18	0.13349E-09	0.14463E-09	0.38306E-15
19	0.14624E-09	0.15844E-09	0.41965E-15
20	0.15963E-09	0.17295E-09	0.45806E-15
21	0.17366E-09	0.18815E-09	0.49833E-15
22	0.18835E-09	0.20406E-09	0.54048E-15
23	0.20371E-09	0.22070E-09	0.58455E-15
24	0.21975E-09	0.23808E-09	0.63058E-15
25	0.23648E-09	0.25621E-09	0.67859E-15
26	0.25391E-09	0.27510E-09	0.72862E-15
27	0.27206E-09	0.29476E-09	0.78069E-15
28	0.29093E-09	0.31520E-09	0.83484E-15
29	0.31054E-09	0.33644E-09	0.89110E-15
30	0.33089E-09	0.35849E-09	0.94949E-15
31	0.35199E-09	0.38135E-09	0.10100E-14
32	0.37385E-09	0.40503E-09	0.10728E-14
33	0.39647E-09	0.42955E-09	0.11377E-14
34	0.41988E-09	0.45490E-09	0.12049E-14
35	0.44406E-09	0.48111E-09	0.12743E-14
36	0.46903E-09	0.50816E-09	0.13459E-14
37	0.49480E-09	0.53608E-09	0.14198E-14
38	0.52136E-09	0.56485E-09	0.14961E-14
39	0.54871E-09	0.59449E-09	0.15746E-14
40	0.57687E-09	0.62500E-09	0.16554E-14
41	0.60583E-09	0.65637E-09	0.17385E-14
42	0.63559E-09	0.68861E-09	0.18238E-14
43	0.66614E-09	0.72171E-09	0.19115E-14
44	0.69749E-09	0.75567E-09	0.20015E-14
45	0.72962E-09	0.79049E-09	0.20937E-14
46	0.76254E-09	0.82615E-09	0.21881E-14
47	0.79623E-09	0.86266E-09	0.22848E-14
48	0.83068E-09	0.89998E-09	0.23837E-14
49	0.86589E-09	0.93812E-09	0.24847E-14
50	0.90183E-09	0.97706E-09	0.25878E-14
51	0.93849E-09	0.10168E-08	0.26930E-14
52	0.97585E-09	0.10573E-08	0.28003E-14
53	0.10139E-08	0.10985E-08	0.29094E-14
54	0.10526E-08	0.11404E-08	0.30205E-14
55	0.10919E-08	0.11830E-08	0.31334E-14
56	0.11319E-08	0.12263E-08	0.32480E-14
57	0.11724E-08	0.12702E-08	0.33642E-14
58	0.12134E-08	0.13147E-08	0.34820E-14
59	0.12550E-08	0.13597E-08	0.36012E-14
60	0.12970E-08	0.14052E-08	0.37218E-14
61	0.13394E-08	0.14512E-08	0.38435E-14
62	0.13822E-08	0.14975E-08	0.39663E-14
63	0.14253E-08	0.15442E-08	0.40901E-14
64	0.14687E-08	0.15912E-08	0.42145E-14

65	0.15123E-08	0.16385E-08	0.43396E-14
66	0.15560E-08	0.16858E-08	0.44651E-14
67	0.15998E-08	0.17333E-08	0.45908E-14
68	0.16437E-08	0.17808E-08	0.47166E-14
69	0.16874E-08	0.18282E-08	0.48421E-14
70	0.17310E-08	0.18754E-08	0.49672E-14
71	0.17744E-08	0.19224E-08	0.50917E-14
72	0.18174E-08	0.19690E-08	0.52152E-14
73	0.18601E-08	0.20152E-08	0.53375E-14
74	0.19022E-08	0.20609E-08	0.54584E-14
75	0.19437E-08	0.21058E-08	0.55775E-14
76	0.19844E-08	0.21500E-08	0.56944E-14
77	0.20244E-08	0.21932E-08	0.58090E-14
78	0.20633E-08	0.22354E-08	0.59207E-14
79	0.21012E-08	0.22764E-08	0.60294E-14
80	0.21378E-08	0.23161E-08	0.61344E-14
81	0.21730E-08	0.23543E-08	0.62356E-14
82	0.22068E-08	0.23909E-08	0.63324E-14
83	0.22388E-08	0.24256E-08	0.64244E-14
84	0.22690E-08	0.24583E-08	0.65111E-14
85	0.22973E-08	0.24889E-08	0.65921E-14
86	0.23233E-08	0.25171E-08	0.66668E-14
87	0.23470E-08	0.25428E-08	0.67348E-14
88	0.23681E-08	0.25657E-08	0.67955E-14
89	0.23866E-08	0.25856E-08	0.68483E-14
90	0.24020E-08	0.26024E-08	0.68927E-14
91	0.24143E-08	0.26157E-08	0.69280E-14
92	0.24232E-08	0.26254E-08	0.69536E-14
93	0.24286E-08	0.26312E-08	0.69688E-14
94	0.24300E-08	0.26328E-08	0.69731E-14
95	0.24274E-08	0.26299E-08	0.69656E-14
96	0.24205E-08	0.26224E-08	0.69457E-14
97	0.24089E-08	0.26099E-08	0.69126E-14
98	0.23925E-08	0.25921E-08	0.68655E-14
99	0.23710E-08	0.25688E-08	0.68036E-14
100	0.23440E-08	0.25395E-08	0.67262E-14

POLYGON I

Time: 80.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.28115E-12	0.30461E-12	0.80678E-18
2	0.60363E-12	0.65398E-12	0.17321E-17
3	0.96796E-12	0.10487E-11	0.27776E-17
4	0.13747E-11	0.14894E-11	0.39449E-17
5	0.18246E-11	0.19769E-11	0.52359E-17
6	0.23183E-11	0.25117E-11	0.66525E-17
7	0.28566E-11	0.30949E-11	0.81970E-17
8	0.34401E-11	0.37271E-11	0.98716E-17
9	0.40698E-11	0.44093E-11	0.11679E-16
10	0.47465E-11	0.51425E-11	0.13620E-16
11	0.54712E-11	0.59276E-11	0.15700E-16
12	0.62446E-11	0.67655E-11	0.17919E-16
13	0.70678E-11	0.76574E-11	0.20281E-16
14	0.79418E-11	0.86043E-11	0.22789E-16
15	0.88675E-11	0.96073E-11	0.25446E-16
16	0.98460E-11	0.10667E-10	0.28253E-16
17	0.10878E-10	0.11786E-10	0.31215E-16
18	0.11965E-10	0.12963E-10	0.34335E-16
19	0.13108E-10	0.14202E-10	0.37614E-16
20	0.14308E-10	0.15502E-10	0.41057E-16
21	0.15566E-10	0.16864E-10	0.44666E-16
22	0.16882E-10	0.18291E-10	0.48444E-16
23	0.18259E-10	0.19782E-10	0.52395E-16
24	0.19697E-10	0.21340E-10	0.56520E-16
25	0.21196E-10	0.22965E-10	0.60824E-16
26	0.22759E-10	0.24658E-10	0.65308E-16
27	0.24386E-10	0.26420E-10	0.69976E-16
28	0.26077E-10	0.28253E-10	0.74829E-16
29	0.27834E-10	0.30156E-10	0.79872E-16
30	0.29658E-10	0.32132E-10	0.85105E-16
31	0.31549E-10	0.34181E-10	0.90532E-16
32	0.33509E-10	0.36304E-10	0.96155E-16
33	0.35537E-10	0.38502E-10	0.10197E-15
34	0.37635E-10	0.40774E-10	0.10799E-15
35	0.39802E-10	0.43123E-10	0.11421E-15
36	0.42041E-10	0.45548E-10	0.12064E-15
37	0.44350E-10	0.48050E-10	0.12726E-15
38	0.46731E-10	0.50629E-10	0.13410E-15
39	0.49183E-10	0.53286E-10	0.14113E-15
40	0.51706E-10	0.56020E-10	0.14837E-15
41	0.54302E-10	0.58832E-10	0.15582E-15
42	0.56969E-10	0.61722E-10	0.16348E-15
43	0.59708E-10	0.64689E-10	0.17133E-15
44	0.62518E-10	0.67733E-10	0.17940E-15
45	0.65398E-10	0.70854E-10	0.18766E-15
46	0.68348E-10	0.74050E-10	0.19613E-15
47	0.71368E-10	0.77322E-10	0.20479E-15
48	0.74456E-10	0.80668E-10	0.21366E-15
49	0.77612E-10	0.84086E-10	0.22271E-15
50	0.80833E-10	0.87577E-10	0.23195E-15

51	0.84119E-10	0.91137E-10	0.24138E-15
52	0.87468E-10	0.94765E-10	0.25099E-15
53	0.90878E-10	0.98460E-10	0.26078E-15
54	0.94347E-10	0.10222E-09	0.27073E-15
55	0.97873E-10	0.10604E-09	0.28085E-15
56	0.10145E-09	0.10992E-09	0.29112E-15
57	0.10508E-09	0.11385E-09	0.30154E-15
58	0.10876E-09	0.11784E-09	0.31210E-15
59	0.11249E-09	0.12187E-09	0.32279E-15
60	0.11625E-09	0.12595E-09	0.33359E-15
61	0.12006E-09	0.13007E-09	0.34450E-15
62	0.12389E-09	0.13423E-09	0.35551E-15
63	0.12776E-09	0.13841E-09	0.36660E-15
64	0.13164E-09	0.14263E-09	0.37776E-15
65	0.13555E-09	0.14686E-09	0.38897E-15
66	0.13947E-09	0.15111E-09	0.40022E-15
67	0.14340E-09	0.15536E-09	0.41149E-15
68	0.14733E-09	0.15962E-09	0.42276E-15
69	0.15125E-09	0.16386E-09	0.43401E-15
70	0.15516E-09	0.16810E-09	0.44522E-15
71	0.15904E-09	0.17231E-09	0.45638E-15
72	0.16290E-09	0.17649E-09	0.46745E-15
73	0.16672E-09	0.18063E-09	0.47842E-15
74	0.17050E-09	0.18472E-09	0.48925E-15
75	0.17422E-09	0.18875E-09	0.49992E-15
76	0.17787E-09	0.19271E-09	0.51041E-15
77	0.18145E-09	0.19659E-09	0.52067E-15
78	0.18494E-09	0.20037E-09	0.53069E-15
79	0.18833E-09	0.20404E-09	0.54043E-15
80	0.19161E-09	0.20760E-09	0.54985E-15
81	0.19477E-09	0.21102E-09	0.55891E-15
82	0.19780E-09	0.21430E-09	0.56759E-15
83	0.20067E-09	0.21741E-09	0.57583E-15
84	0.20338E-09	0.22035E-09	0.58361E-15
85	0.20591E-09	0.22309E-09	0.59086E-15
86	0.20824E-09	0.22562E-09	0.59756E-15
87	0.21037E-09	0.22792E-09	0.60366E-15
88	0.21226E-09	0.22997E-09	0.60910E-15
89	0.21391E-09	0.23176E-09	0.61383E-15
90	0.21530E-09	0.23326E-09	0.61781E-15
91	0.21640E-09	0.23445E-09	0.62097E-15
92	0.21720E-09	0.23532E-09	0.62327E-15
93	0.21768E-09	0.23584E-09	0.62464E-15
94	0.21781E-09	0.23598E-09	0.62502E-15
95	0.21758E-09	0.23573E-09	0.62435E-15
96	0.21695E-09	0.23505E-09	0.62256E-15
97	0.21592E-09	0.23393E-09	0.61959E-15
98	0.21445E-09	0.23234E-09	0.61537E-15
99	0.21252E-09	0.23025E-09	0.60983E-15
100	0.21010E-09	0.22763E-09	0.60289E-15

POLYGON I

Time:	90.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.25200E-13	0.27303E-13	0.72314E-19
2	0.54105E-13	0.58618E-13	0.15526E-18
3	0.86761E-13	0.93999E-13	0.24896E-18
4	0.12322E-12	0.13350E-12	0.35359E-18
5	0.16355E-12	0.17719E-12	0.46931E-18
6	0.20780E-12	0.22513E-12	0.59628E-18
7	0.25604E-12	0.27740E-12	0.73472E-18
8	0.30835E-12	0.33407E-12	0.88481E-18
9	0.36479E-12	0.39522E-12	0.10468E-17
10	0.42544E-12	0.46094E-12	0.12208E-17
11	0.49039E-12	0.53130E-12	0.14072E-17
12	0.55972E-12	0.60641E-12	0.16061E-17
13	0.63351E-12	0.68636E-12	0.18179E-17
14	0.71184E-12	0.77123E-12	0.20427E-17
15	0.79482E-12	0.86112E-12	0.22808E-17
16	0.88252E-12	0.95614E-12	0.25324E-17
17	0.97504E-12	0.10564E-11	0.27979E-17
18	0.10725E-11	0.11619E-11	0.30775E-17
19	0.11749E-11	0.12729E-11	0.33715E-17
20	0.12825E-11	0.13894E-11	0.36801E-17
21	0.13952E-11	0.15116E-11	0.40035E-17
22	0.15132E-11	0.16394E-11	0.43422E-17
23	0.16366E-11	0.17731E-11	0.46963E-17
24	0.17655E-11	0.19127E-11	0.50661E-17
25	0.18999E-11	0.20584E-11	0.54518E-17
26	0.20399E-11	0.22101E-11	0.58537E-17
27	0.21857E-11	0.23681E-11	0.62721E-17
28	0.23374E-11	0.25323E-11	0.67071E-17
29	0.24949E-11	0.27030E-11	0.71591E-17
30	0.26583E-11	0.28801E-11	0.76282E-17
31	0.28278E-11	0.30638E-11	0.81146E-17
32	0.30035E-11	0.32540E-11	0.86186E-17
33	0.31853E-11	0.34510E-11	0.91402E-17
34	0.33733E-11	0.36547E-11	0.96798E-17
35	0.35676E-11	0.38652E-11	0.10237E-16
36	0.37682E-11	0.40826E-11	0.10813E-16

37	0.39752E-11	0.43068E-11	0.11407E-16
38	0.41886E-11	0.45380E-11	0.12019E-16
39	0.44084E-11	0.47761E-11	0.12650E-16
40	0.46346E-11	0.50212E-11	0.13299E-16
41	0.48672E-11	0.52733E-11	0.13967E-16
42	0.51063E-11	0.55323E-11	0.14653E-16
43	0.53518E-11	0.57982E-11	0.15357E-16
44	0.56036E-11	0.60711E-11	0.16080E-16
45	0.58618E-11	0.63508E-11	0.16821E-16
46	0.61262E-11	0.66373E-11	0.17579E-16
47	0.63969E-11	0.69306E-11	0.18356E-16
48	0.66737E-11	0.72305E-11	0.19150E-16
49	0.69565E-11	0.75369E-11	0.19962E-16
50	0.72453E-11	0.78497E-11	0.20791E-16
51	0.75398E-11	0.81688E-11	0.21636E-16
52	0.78400E-11	0.84940E-11	0.22497E-16
53	0.81456E-11	0.88252E-11	0.23374E-16
54	0.84566E-11	0.91621E-11	0.24267E-16
55	0.87726E-11	0.95044E-11	0.25173E-16
56	0.90935E-11	0.98521E-11	0.26094E-16
57	0.94189E-11	0.10205E-10	0.27028E-16
58	0.97487E-11	0.10562E-10	0.27974E-16
59	0.10083E-10	0.10924E-10	0.28932E-16
60	0.10420E-10	0.11289E-10	0.29901E-16
61	0.10761E-10	0.11659E-10	0.30879E-16
62	0.11105E-10	0.12031E-10	0.31865E-16
63	0.11451E-10	0.12406E-10	0.32859E-16
64	0.11800E-10	0.12784E-10	0.33860E-16
65	0.12150E-10	0.13163E-10	0.34864E-16
66	0.12501E-10	0.13544E-10	0.35873E-16
67	0.12853E-10	0.13925E-10	0.36883E-16
68	0.13205E-10	0.14307E-10	0.37893E-16
69	0.13557E-10	0.14688E-10	0.38901E-16
70	0.13907E-10	0.15067E-10	0.39907E-16
71	0.14255E-10	0.15445E-10	0.40906E-16
72	0.14601E-10	0.15819E-10	0.41899E-16
73	0.14944E-10	0.16190E-10	0.42882E-16
74	0.15282E-10	0.16557E-10	0.43853E-16
75	0.15615E-10	0.16918E-10	0.44809E-16
76	0.15943E-10	0.17273E-10	0.45749E-16
77	0.16264E-10	0.17620E-10	0.46669E-16
78	0.16577E-10	0.17959E-10	0.47567E-16
79	0.16881E-10	0.18289E-10	0.48440E-16
80	0.17175E-10	0.18608E-10	0.49284E-16
81	0.17458E-10	0.18915E-10	0.50097E-16
82	0.17729E-10	0.19208E-10	0.50874E-16
83	0.17987E-10	0.19487E-10	0.51613E-16
84	0.18229E-10	0.19750E-10	0.52310E-16
85	0.18456E-10	0.19996E-10	0.52961E-16
86	0.18665E-10	0.20223E-10	0.53561E-16
87	0.18856E-10	0.20429E-10	0.54107E-16
88	0.19026E-10	0.20613E-10	0.54595E-16
89	0.19174E-10	0.20773E-10	0.55019E-16
90	0.19298E-10	0.20908E-10	0.55376E-16
91	0.19397E-10	0.21015E-10	0.55659E-16
92	0.19468E-10	0.21092E-10	0.55865E-16
93	0.19511E-10	0.21139E-10	0.55988E-16
94	0.19523E-10	0.21152E-10	0.56022E-16
95	0.19502E-10	0.21129E-10	0.55962E-16
96	0.19446E-10	0.21068E-10	0.55802E-16
97	0.19353E-10	0.20968E-10	0.55536E-16
98	0.19222E-10	0.20825E-10	0.55157E-16
99	0.19048E-10	0.20638E-10	0.54660E-16
100	0.18832E-10	0.20403E-10	0.54038E-16

POLYGON I

Time: 100.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.22588E-14	0.24472E-14	0.64817E-20
2	0.48495E-14	0.52541E-14	0.13916E-19
3	0.77766E-14	0.84253E-14	0.22315E-19
4	0.11045E-13	0.11966E-13	0.31693E-19
5	0.14659E-13	0.15882E-13	0.42065E-19
6	0.18625E-13	0.20179E-13	0.53446E-19
7	0.22950E-13	0.24864E-13	0.65855E-19
8	0.27638E-13	0.29944E-13	0.79308E-19
9	0.32697E-13	0.35425E-13	0.93825E-19
10	0.38134E-13	0.41315E-13	0.10943E-18
11	0.43955E-13	0.47622E-13	0.12613E-18
12	0.50169E-13	0.54354E-13	0.14396E-18
13	0.56783E-13	0.61520E-13	0.16294E-18
14	0.63804E-13	0.69127E-13	0.18309E-18
15	0.71241E-13	0.77185E-13	0.20443E-18
16	0.79102E-13	0.85701E-13	0.22699E-18
17	0.87395E-13	0.94686E-13	0.25078E-18
18	0.96129E-13	0.10415E-12	0.27584E-18
19	0.10531E-12	0.11410E-12	0.30219E-18
20	0.11495E-12	0.12454E-12	0.32985E-18
21	0.12505E-12	0.13549E-12	0.35885E-18
22	0.13563E-12	0.14695E-12	0.38920E-18

23	0.14669E-12	0.15893E-12	0.42094E-18
24	0.15824E-12	0.17144E-12	0.45408E-18
25	0.17029E-12	0.18450E-12	0.48866E-18
26	0.18285E-12	0.19810E-12	0.52468E-18
27	0.19591E-12	0.21226E-12	0.56218E-18
28	0.20950E-12	0.22698E-12	0.60118E-18
29	0.22362E-12	0.24228E-12	0.64169E-18
30	0.23827E-12	0.25815E-12	0.68373E-18
31	0.25347E-12	0.27461E-12	0.72733E-18
32	0.26921E-12	0.29167E-12	0.77251E-18
33	0.28550E-12	0.30932E-12	0.81926E-18
34	0.30236E-12	0.32758E-12	0.86762E-18
35	0.31977E-12	0.34645E-12	0.91760E-18
36	0.33775E-12	0.36593E-12	0.96920E-18
37	0.35631E-12	0.38603E-12	0.10224E-17
38	0.37543E-12	0.40675E-12	0.10773E-17
39	0.39513E-12	0.42810E-12	0.11339E-17
40	0.41541E-12	0.45006E-12	0.11920E-17
41	0.43626E-12	0.47266E-12	0.12519E-17
42	0.45769E-12	0.49587E-12	0.13134E-17
43	0.47969E-12	0.51971E-12	0.13765E-17
44	0.50227E-12	0.54417E-12	0.14413E-17
45	0.52541E-12	0.56924E-12	0.15077E-17
46	0.54911E-12	0.59492E-12	0.15757E-17
47	0.57337E-12	0.62120E-12	0.16453E-17
48	0.59818E-12	0.64808E-12	0.17165E-17
49	0.62353E-12	0.67555E-12	0.17893E-17
50	0.64941E-12	0.70359E-12	0.18635E-17
51	0.67581E-12	0.73219E-12	0.19393E-17
52	0.70272E-12	0.76134E-12	0.20165E-17
53	0.73012E-12	0.79102E-12	0.20951E-17
54	0.75798E-12	0.82122E-12	0.21751E-17
55	0.78631E-12	0.85191E-12	0.22563E-17
56	0.81507E-12	0.88307E-12	0.23389E-17
57	0.84424E-12	0.91467E-12	0.24226E-17
58	0.87380E-12	0.94670E-12	0.25074E-17
59	0.90372E-12	0.97911E-12	0.25933E-17
60	0.93397E-12	0.10119E-11	0.26801E-17
61	0.96453E-12	0.10450E-11	0.27677E-17
62	0.99534E-12	0.10784E-11	0.28562E-17
63	0.10264E-11	0.11120E-11	0.29453E-17
64	0.10576E-11	0.11459E-11	0.30349E-17
65	0.10890E-11	0.11799E-11	0.31250E-17
66	0.11205E-11	0.12140E-11	0.32154E-17
67	0.11521E-11	0.12482E-11	0.33059E-17
68	0.11836E-11	0.12824E-11	0.33964E-17
69	0.12151E-11	0.13165E-11	0.34868E-17
70	0.12465E-11	0.13505E-11	0.35769E-17
71	0.12777E-11	0.13843E-11	0.36665E-17
72	0.13087E-11	0.14179E-11	0.37555E-17
73	0.13394E-11	0.14512E-11	0.38436E-17
74	0.13698E-11	0.14840E-11	0.39306E-17
75	0.13997E-11	0.15164E-11	0.40164E-17
76	0.14290E-11	0.15482E-11	0.41006E-17
77	0.14578E-11	0.15794E-11	0.41831E-17
78	0.14858E-11	0.16098E-11	0.42636E-17
79	0.15131E-11	0.16393E-11	0.43418E-17
80	0.15394E-11	0.16679E-11	0.44175E-17
81	0.15648E-11	0.16954E-11	0.44903E-17
82	0.15891E-11	0.17217E-11	0.45600E-17
83	0.16122E-11	0.17467E-11	0.46262E-17
84	0.16339E-11	0.17703E-11	0.46887E-17
85	0.16543E-11	0.17923E-11	0.47470E-17
86	0.16730E-11	0.18126E-11	0.48008E-17
87	0.16901E-11	0.18311E-11	0.48498E-17
88	0.17053E-11	0.18476E-11	0.48935E-17
89	0.17186E-11	0.18619E-11	0.49315E-17
90	0.17297E-11	0.18740E-11	0.49635E-17
91	0.17386E-11	0.18836E-11	0.49889E-17
92	0.17450E-11	0.18906E-11	0.50073E-17
93	0.17488E-11	0.18947E-11	0.50183E-17
94	0.17499E-11	0.18959E-11	0.50214E-17
95	0.17480E-11	0.18938E-11	0.50160E-17
96	0.17430E-11	0.18884E-11	0.50016E-17
97	0.17347E-11	0.18794E-11	0.49778E-17
98	0.17229E-11	0.18666E-11	0.49439E-17
99	0.17074E-11	0.18498E-11	0.48994E-17
100	0.16879E-11	0.18287E-11	0.48436E-17

POLYGON 1

Time:	110.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.20246E-15	0.21935E-15	0.58097E-21
2	0.43468E-15	0.47094E-15	0.12473E-20
3	0.69704E-15	0.75519E-15	0.20002E-20
4	0.98997E-15	0.10726E-14	0.28408E-20
5	0.13139E-14	0.14236E-14	0.37704E-20
6	0.16694E-14	0.18087E-14	0.47905E-20
7	0.20570E-14	0.22286E-14	0.59027E-20
8	0.24773E-14	0.26839E-14	0.71086E-20

9	0.29307E-14	0.31752E-14	0.84098E-20
10	0.34180E-14	0.37032E-14	0.98081E-20
11	0.39398E-14	0.42685E-14	0.11305E-19
12	0.44968E-14	0.48719E-14	0.12904E-19
13	0.50896E-14	0.55142E-14	0.14605E-19
14	0.57189E-14	0.61960E-14	0.16411E-19
15	0.63856E-14	0.69183E-14	0.18324E-19
16	0.70901E-14	0.76816E-14	0.20345E-19
17	0.78335E-14	0.84870E-14	0.22478E-19
18	0.86163E-14	0.93351E-14	0.24725E-19
19	0.94393E-14	0.10227E-13	0.27086E-19
20	0.10303E-13	0.11163E-13	0.29566E-19
21	0.11209E-13	0.12144E-13	0.32164E-19
22	0.12157E-13	0.13171E-13	0.34885E-19
23	0.13148E-13	0.14245E-13	0.37730E-19
24	0.14184E-13	0.15367E-13	0.40701E-19
25	0.15264E-13	0.16537E-13	0.43800E-19
26	0.16389E-13	0.17756E-13	0.47029E-19
27	0.17560E-13	0.19025E-13	0.50390E-19
28	0.18778E-13	0.20345E-13	0.53885E-19
29	0.20044E-13	0.21716E-13	0.57516E-19
30	0.21357E-13	0.23139E-13	0.61285E-19
31	0.22719E-13	0.24614E-13	0.65193E-19
32	0.24130E-13	0.26143E-13	0.69242E-19
33	0.25590E-13	0.27725E-13	0.73433E-19
34	0.27101E-13	0.29362E-13	0.77767E-19
35	0.28662E-13	0.31053E-13	0.82247E-19
36	0.30274E-13	0.32799E-13	0.86872E-19
37	0.31937E-13	0.34601E-13	0.91644E-19
38	0.33651E-13	0.36458E-13	0.96563E-19
39	0.35417E-13	0.38371E-13	0.10163E-18
40	0.37234E-13	0.40340E-13	0.10685E-18
41	0.39103E-13	0.42365E-13	0.11221E-18
42	0.41024E-13	0.44446E-13	0.11772E-18
43	0.42996E-13	0.46583E-13	0.12338E-18
44	0.45019E-13	0.48775E-13	0.12918E-18
45	0.47094E-13	0.51022E-13	0.13514E-18
46	0.49218E-13	0.53324E-13	0.14123E-18
47	0.51393E-13	0.55680E-13	0.14747E-18
48	0.53617E-13	0.58089E-13	0.15385E-18
49	0.55889E-13	0.60551E-13	0.16038E-18
50	0.58209E-13	0.63065E-13	0.16703E-18
51	0.60575E-13	0.65628E-13	0.17382E-18
52	0.62987E-13	0.68241E-13	0.18074E-18
53	0.65442E-13	0.70902E-13	0.18779E-18
54	0.67940E-13	0.73608E-13	0.19496E-18
55	0.70479E-13	0.76359E-13	0.20224E-18
56	0.73057E-13	0.79151E-13	0.20964E-18
57	0.75671E-13	0.81984E-13	0.21714E-18
58	0.78321E-13	0.84855E-13	0.22475E-18
59	0.81003E-13	0.87760E-13	0.23244E-18
60	0.83714E-13	0.90698E-13	0.24022E-18
61	0.86453E-13	0.93665E-13	0.24808E-18
62	0.89215E-13	0.96658E-13	0.25601E-18
63	0.91998E-13	0.99673E-13	0.26399E-18
64	0.94798E-13	0.10271E-12	0.27203E-18
65	0.97612E-13	0.10575E-12	0.28010E-18
66	0.10043E-12	0.10881E-12	0.28820E-18
67	0.10326E-12	0.11188E-12	0.29631E-18
68	0.10609E-12	0.11494E-12	0.30443E-18
69	0.10891E-12	0.11800E-12	0.31253E-18
70	0.11173E-12	0.12105E-12	0.32061E-18
71	0.11453E-12	0.12408E-12	0.32864E-18
72	0.11731E-12	0.12709E-12	0.33661E-18
73	0.12006E-12	0.13007E-12	0.34451E-18
74	0.12278E-12	0.13302E-12	0.35231E-18
75	0.12545E-12	0.13592E-12	0.36000E-18
76	0.12809E-12	0.13877E-12	0.36755E-18
77	0.13066E-12	0.14156E-12	0.37494E-18
78	0.13318E-12	0.14429E-12	0.38215E-18
79	0.13562E-12	0.14693E-12	0.38917E-18
80	0.13798E-12	0.14949E-12	0.39595E-18
81	0.14026E-12	0.15196E-12	0.40248E-18
82	0.14244E-12	0.15432E-12	0.40872E-18
83	0.14450E-12	0.15656E-12	0.41466E-18
84	0.14645E-12	0.15867E-12	0.42026E-18
85	0.14828E-12	0.16065E-12	0.42549E-18
86	0.14996E-12	0.16247E-12	0.43031E-18
87	0.15149E-12	0.16412E-12	0.43470E-18
88	0.15285E-12	0.16560E-12	0.43862E-18
89	0.15404E-12	0.16689E-12	0.44202E-18
90	0.15504E-12	0.16797E-12	0.44489E-18
91	0.15583E-12	0.16883E-12	0.44717E-18
92	0.15641E-12	0.16946E-12	0.44882E-18
93	0.15675E-12	0.16983E-12	0.44980E-18
94	0.15685E-12	0.16993E-12	0.45008E-18
95	0.15668E-12	0.16975E-12	0.44960E-18
96	0.15623E-12	0.16926E-12	0.44831E-18
97	0.15549E-12	0.16846E-12	0.44617E-18
98	0.15443E-12	0.16731E-12	0.44313E-18

99	0.15304E-12	0.16580E-12	0.43914E-18
100	0.15129E-12	0.16392E-12	0.43414E-18

POLYGON I

Time:

120.000

Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.18147E-16	0.19661E-16	0.52074E-22
2	0.38961E-16	0.42211E-16	0.11180E-21
3	0.62477E-16	0.67689E-16	0.17928E-21
4	0.88733E-16	0.96136E-16	0.25462E-21
5	0.11777E-15	0.12760E-15	0.33795E-21
6	0.14964E-15	0.16212E-15	0.42939E-21
7	0.18438E-15	0.19976E-15	0.52908E-21
8	0.22204E-15	0.24057E-15	0.63716E-21
9	0.26269E-15	0.28460E-15	0.75379E-21
10	0.30637E-15	0.33192E-15	0.87913E-21
11	0.35314E-15	0.38260E-15	0.10133E-20
12	0.40306E-15	0.43668E-15	0.11566E-20
13	0.45619E-15	0.49425E-15	0.13091E-20
14	0.51260E-15	0.55537E-15	0.14709E-20
15	0.57235E-15	0.62010E-15	0.16424E-20
16	0.63551E-15	0.68852E-15	0.18236E-20
17	0.70213E-15	0.76071E-15	0.20148E-20
18	0.77230E-15	0.83672E-15	0.22161E-20
19	0.84606E-15	0.91665E-15	0.24278E-20
20	0.92350E-15	0.10005E-14	0.26500E-20
21	0.10047E-14	0.10885E-14	0.28830E-20
22	0.10897E-14	0.11806E-14	0.31268E-20
23	0.11785E-14	0.12768E-14	0.33818E-20
24	0.12713E-14	0.13774E-14	0.36481E-20
25	0.13681E-14	0.14823E-14	0.39259E-20
26	0.14690E-14	0.15915E-14	0.42153E-20
27	0.15740E-14	0.17053E-14	0.45166E-20
28	0.16831E-14	0.18236E-14	0.48299E-20
29	0.17966E-14	0.19464E-14	0.51553E-20
30	0.19143E-14	0.20740E-14	0.54931E-20
31	0.20364E-14	0.22062E-14	0.58434E-20
32	0.21628E-14	0.23433E-14	0.62063E-20
33	0.22937E-14	0.24851E-14	0.65820E-20
34	0.24291E-14	0.26318E-14	0.69705E-20
35	0.25690E-14	0.27834E-14	0.73720E-20
36	0.27135E-14	0.29399E-14	0.77866E-20
37	0.28626E-14	0.31014E-14	0.82143E-20
38	0.30162E-14	0.32678E-14	0.86552E-20
39	0.31745E-14	0.34393E-14	0.91093E-20
40	0.33374E-14	0.36158E-14	0.95768E-20
41	0.35049E-14	0.37973E-14	0.10058E-19
42	0.36771E-14	0.39838E-14	0.10552E-19
43	0.38538E-14	0.41753E-14	0.11059E-19
44	0.40352E-14	0.43718E-14	0.11579E-19
45	0.42211E-14	0.45733E-14	0.12113E-19
46	0.44116E-14	0.47796E-14	0.12659E-19
47	0.46065E-14	0.49907E-14	0.13218E-19
48	0.48058E-14	0.52067E-14	0.13790E-19
49	0.50095E-14	0.54274E-14	0.14375E-19
50	0.52174E-14	0.56526E-14	0.14971E-19
51	0.54295E-14	0.58824E-14	0.15580E-19
52	0.56456E-14	0.61166E-14	0.16200E-19
53	0.58657E-14	0.63551E-14	0.16832E-19
54	0.60896E-14	0.65977E-14	0.17474E-19
55	0.63172E-14	0.68442E-14	0.18127E-19
56	0.65483E-14	0.70945E-14	0.18791E-19
57	0.67826E-14	0.73485E-14	0.19463E-19
58	0.70201E-14	0.76058E-14	0.20144E-19
59	0.72605E-14	0.78662E-14	0.20834E-19
60	0.75035E-14	0.81295E-14	0.21532E-19
61	0.77490E-14	0.83954E-14	0.22236E-19
62	0.79966E-14	0.86637E-14	0.22947E-19
63	0.82460E-14	0.89339E-14	0.23662E-19
64	0.84970E-14	0.92059E-14	0.24383E-19
65	0.87492E-14	0.94791E-14	0.25106E-19
66	0.90022E-14	0.97532E-14	0.25832E-19
67	0.92566E-14	0.10028E-13	0.26559E-19
68	0.95091E-14	0.10302E-13	0.27287E-19
69	0.97622E-14	0.10577E-13	0.28013E-19
70	0.10014E-13	0.10850E-13	0.28737E-19
71	0.10265E-13	0.11122E-13	0.29457E-19
72	0.10514E-13	0.11392E-13	0.30172E-19
73	0.10761E-13	0.11659E-13	0.30879E-19
74	0.11005E-13	0.11923E-13	0.31579E-19
75	0.11245E-13	0.12183E-13	0.32267E-19
76	0.11481E-13	0.12438E-13	0.32944E-19
77	0.11712E-13	0.12689E-13	0.33607E-19
78	0.11937E-13	0.12933E-13	0.34254E-19
79	0.12156E-13	0.13170E-13	0.34882E-19
80	0.12368E-13	0.13400E-13	0.35490E-19
81	0.12572E-13	0.13620E-13	0.36075E-19
82	0.12767E-13	0.13832E-13	0.36635E-19
83	0.12952E-13	0.14033E-13	0.37167E-19
84	0.13127E-13	0.14222E-13	0.37669E-19

85	0.13290E-13	0.14399E-13	0.38137E-19
86	0.13441E-13	0.14562E-13	0.38570E-19
87	0.13578E-13	0.14711E-13	0.38963E-19
88	0.13701E-13	0.14843E-13	0.39314E-19
89	0.13807E-13	0.14959E-13	0.39620E-19
90	0.13896E-13	0.15056E-13	0.39876E-19
91	0.13968E-13	0.15133E-13	0.40081E-19
92	0.14019E-13	0.15189E-13	0.40229E-19
93	0.14050E-13	0.15222E-13	0.40317E-19
94	0.14059E-13	0.15231E-13	0.40342E-19
95	0.14044E-13	0.15215E-13	0.40298E-19
96	0.14003E-13	0.15172E-13	0.40183E-19
97	0.13937E-13	0.15099E-13	0.39992E-19
98	0.13842E-13	0.14996E-13	0.39719E-19
99	0.13717E-13	0.14861E-13	0.39361E-19
100	0.13561E-13	0.14692E-13	0.38913E-19

POLYGON I

Time:	130.000		
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.16266E-17	0.17623E-17	0.46675E-23
2	0.34922E-17	0.37835E-17	0.10021E-22
3	0.56000E-17	0.60672E-17	0.16069E-22
4	0.79534E-17	0.86169E-17	0.22823E-22
5	0.10556E-16	0.11437E-16	0.30291E-22
6	0.13412E-16	0.14531E-16	0.38487E-22
7	0.16526E-16	0.17905E-16	0.47423E-22
8	0.19902E-16	0.21563E-16	0.57110E-22
9	0.23545E-16	0.25510E-16	0.67564E-22
10	0.27460E-16	0.29751E-16	0.78799E-22
11	0.31652E-16	0.34293E-16	0.90828E-22
12	0.36127E-16	0.39141E-16	0.10367E-21
13	0.40890E-16	0.44301E-16	0.11733E-21
14	0.45946E-16	0.49779E-16	0.13184E-21
15	0.51301E-16	0.55581E-16	0.14721E-21
16	0.56962E-16	0.61714E-16	0.16344E-21
17	0.62934E-16	0.68184E-16	0.18059E-21
18	0.69223E-16	0.74998E-16	0.19864E-21
19	0.75835E-16	0.82161E-16	0.21761E-21
20	0.82776E-16	0.89682E-16	0.23753E-21
21	0.90052E-16	0.97565E-16	0.25841E-21
22	0.97670E-16	0.10582E-15	0.28027E-21
23	0.10563E-15	0.11445E-15	0.30312E-21
24	0.11395E-15	0.12346E-15	0.32699E-21
25	0.12263E-15	0.13286E-15	0.35189E-21
26	0.13167E-15	0.14265E-15	0.37783E-21
27	0.14108E-15	0.15285E-15	0.40483E-21
28	0.15086E-15	0.16345E-15	0.43291E-21
29	0.16103E-15	0.17446E-15	0.46208E-21
30	0.17158E-15	0.18590E-15	0.49236E-21
31	0.18252E-15	0.19775E-15	0.52376E-21
32	0.19386E-15	0.21003E-15	0.55629E-21
33	0.20559E-15	0.22274E-15	0.58996E-21
34	0.21773E-15	0.23589E-15	0.62478E-21
35	0.23027E-15	0.24948E-15	0.66077E-21
36	0.24322E-15	0.26351E-15	0.69793E-21
37	0.25658E-15	0.27798E-15	0.73627E-21
38	0.27035E-15	0.29291E-15	0.77579E-21
39	0.28454E-15	0.30828E-15	0.81649E-21
40	0.29914E-15	0.32409E-15	0.85839E-21
41	0.31416E-15	0.34036E-15	0.90148E-21
42	0.32959E-15	0.35708E-15	0.94576E-21
43	0.34543E-15	0.37425E-15	0.99122E-21
44	0.36169E-15	0.39186E-15	0.10379E-20
45	0.37835E-15	0.40991E-15	0.10857E-20
46	0.39542E-15	0.42841E-15	0.11347E-20
47	0.41289E-15	0.44733E-15	0.11848E-20
48	0.43075E-15	0.46669E-15	0.12361E-20
49	0.44901E-15	0.48647E-15	0.12885E-20
50	0.46765E-15	0.50666E-15	0.13419E-20
51	0.48666E-15	0.52726E-15	0.13965E-20
52	0.50603E-15	0.54825E-15	0.14521E-20
53	0.52576E-15	0.56962E-15	0.15087E-20
54	0.54583E-15	0.59137E-15	0.15663E-20
55	0.56623E-15	0.61346E-15	0.16248E-20
56	0.58694E-15	0.63590E-15	0.16842E-20
57	0.60794E-15	0.65866E-15	0.17445E-20
58	0.62923E-15	0.68172E-15	0.18056E-20
59	0.65078E-15	0.70507E-15	0.18674E-20
60	0.67256E-15	0.72867E-15	0.19299E-20
61	0.69456E-15	0.75250E-15	0.19931E-20
62	0.71675E-15	0.77655E-15	0.20568E-20
63	0.73911E-15	0.80077E-15	0.21209E-20
64	0.76161E-15	0.82514E-15	0.21855E-20
65	0.78421E-15	0.84963E-15	0.22503E-20
66	0.80689E-15	0.87420E-15	0.23154E-20
67	0.82961E-15	0.89882E-15	0.23806E-20
68	0.85233E-15	0.92343E-15	0.24458E-20
69	0.87501E-15	0.94801E-15	0.25109E-20
70	0.89762E-15	0.97251E-15	0.25758E-20

71	0.92011E-15	0.99687E-15	0.26403E-20
72	0.94244E-15	0.10211E-14	0.27044E-20
73	0.96454E-15	0.10450E-14	0.27678E-20
74	0.98638E-15	0.10687E-14	0.28305E-20
75	0.10079E-14	0.10920E-14	0.28922E-20
76	0.10290E-14	0.11149E-14	0.29529E-20
77	0.10497E-14	0.11373E-14	0.30123E-20
78	0.10699E-14	0.11592E-14	0.30702E-20
79	0.10896E-14	0.11805E-14	0.31266E-20
80	0.11086E-14	0.12010E-14	0.31810E-20
81	0.11268E-14	0.12208E-14	0.32335E-20
82	0.11443E-14	0.12398E-14	0.32837E-20
83	0.11609E-14	0.12578E-14	0.33314E-20
84	0.11766E-14	0.12748E-14	0.33764E-20
85	0.11913E-14	0.12906E-14	0.34184E-20
86	0.12048E-14	0.13053E-14	0.34571E-20
87	0.12170E-14	0.13186E-14	0.34924E-20
88	0.12280E-14	0.13305E-14	0.35238E-20
89	0.12376E-14	0.13408E-14	0.35512E-20
90	0.12456E-14	0.13495E-14	0.35742E-20
91	0.12520E-14	0.13564E-14	0.35925E-20
92	0.12566E-14	0.13614E-14	0.36058E-20
93	0.12593E-14	0.13644E-14	0.36137E-20
94	0.12601E-14	0.13652E-14	0.36159E-20
95	0.12588E-14	0.13638E-14	0.36121E-20
96	0.12552E-14	0.13599E-14	0.36017E-20
97	0.12492E-14	0.13534E-14	0.35845E-20
98	0.12407E-14	0.13442E-14	0.35601E-20
99	0.12295E-14	0.13321E-14	0.35281E-20
100	0.12155E-14	0.13169E-14	0.34879E-20

POLYGON I

Time: 140.000

Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.14579E-18	0.15796E-18	0.41836E-24
2	0.31301E-18	0.33913E-18	0.89821E-24
3	0.50194E-18	0.54381E-18	0.14403E-23
4	0.71288E-18	0.77235E-18	0.20456E-23
5	0.94618E-18	0.10251E-17	0.27151E-23
6	0.12022E-17	0.13025E-17	0.34497E-23
7	0.14813E-17	0.16049E-17	0.42506E-23
8	0.17839E-17	0.19327E-17	0.51189E-23
9	0.21104E-17	0.22865E-17	0.60560E-23
10	0.24613E-17	0.26667E-17	0.70629E-23
11	0.28371E-17	0.30738E-17	0.81412E-23
12	0.32382E-17	0.35083E-17	0.92921E-23
13	0.36651E-17	0.39708E-17	0.10517E-22
14	0.41183E-17	0.44618E-17	0.11817E-22
15	0.45983E-17	0.49819E-17	0.13195E-22
16	0.51057E-17	0.55316E-17	0.14651E-22
17	0.56409E-17	0.61115E-17	0.16187E-22
18	0.62046E-17	0.67222E-17	0.17804E-22
19	0.67973E-17	0.73643E-17	0.19505E-22
20	0.74194E-17	0.80384E-17	0.21290E-22
21	0.80716E-17	0.87450E-17	0.23162E-22
22	0.87544E-17	0.94847E-17	0.25121E-22
23	0.94683E-17	0.10258E-16	0.27170E-22
24	0.10214E-16	0.11066E-16	0.29309E-22
25	0.10991E-16	0.11908E-16	0.31540E-22
26	0.11802E-16	0.12786E-16	0.33866E-22
27	0.12645E-16	0.13700E-16	0.36286E-22
28	0.13522E-16	0.14650E-16	0.38803E-22
29	0.14434E-16	0.15638E-16	0.41418E-22
30	0.15379E-16	0.16662E-16	0.44132E-22
31	0.16360E-16	0.17725E-16	0.46946E-22
32	0.17376E-16	0.18826E-16	0.49861E-22
33	0.18428E-16	0.19965E-16	0.52879E-22
34	0.19516E-16	0.21144E-16	0.56001E-22
35	0.20640E-16	0.22362E-16	0.59226E-22
36	0.21800E-16	0.23619E-16	0.62557E-22
37	0.22998E-16	0.24916E-16	0.65993E-22
38	0.24232E-16	0.26254E-16	0.69536E-22
39	0.25504E-16	0.27632E-16	0.73184E-22
40	0.26813E-16	0.29049E-16	0.76940E-22
41	0.28159E-16	0.30508E-16	0.80802E-22
42	0.29542E-16	0.32006E-16	0.84771E-22
43	0.30962E-16	0.33545E-16	0.88846E-22
44	0.32419E-16	0.35123E-16	0.93027E-22
45	0.33912E-16	0.36741E-16	0.97313E-22
46	0.35442E-16	0.38399E-16	0.10170E-21
47	0.37008E-16	0.40096E-16	0.10620E-21
48	0.38610E-16	0.41831E-16	0.11079E-21
49	0.40246E-16	0.43603E-16	0.11549E-21
50	0.41916E-16	0.45413E-16	0.12028E-21
51	0.43620E-16	0.47259E-16	0.12517E-21
52	0.45357E-16	0.49141E-16	0.13015E-21
53	0.47125E-16	0.51057E-16	0.13523E-21
54	0.48924E-16	0.53006E-16	0.14039E-21
55	0.50752E-16	0.54986E-16	0.14564E-21
56	0.52609E-16	0.56998E-16	0.15096E-21

57	0.54492E-16	0.59037E-16	0.15637E-21
58	0.56400E-16	0.61105E-16	0.16184E-21
59	0.58331E-16	0.63197E-16	0.16738E-21
60	0.60283E-16	0.65312E-16	0.17299E-21
61	0.62255E-16	0.67449E-16	0.17864E-21
62	0.64245E-16	0.69604E-16	0.18435E-21
63	0.66249E-16	0.71775E-16	0.19010E-21
64	0.68265E-16	0.73960E-16	0.19589E-21
65	0.70291E-16	0.76155E-16	0.20170E-21
66	0.72323E-16	0.78357E-16	0.20754E-21
67	0.74360E-16	0.80563E-16	0.21338E-21
68	0.76396E-16	0.82770E-16	0.21922E-21
69	0.78430E-16	0.84973E-16	0.22506E-21
70	0.80456E-16	0.87168E-16	0.23087E-21
71	0.82472E-16	0.89352E-16	0.23666E-21
72	0.84473E-16	0.91520E-16	0.24240E-21
73	0.86455E-16	0.93667E-16	0.24808E-21
74	0.88412E-16	0.95788E-16	0.25370E-21
75	0.90341E-16	0.97877E-16	0.25924E-21
76	0.92236E-16	0.99930E-16	0.26467E-21
77	0.94091E-16	0.10194E-15	0.27000E-21
78	0.95901E-16	0.10390E-15	0.27519E-21
79	0.97661E-16	0.10581E-15	0.28024E-21
80	0.99363E-16	0.10765E-15	0.28513E-21
81	0.10100E-15	0.10943E-15	0.28983E-21
82	0.10257E-15	0.11113E-15	0.29432E-21
83	0.10406E-15	0.11274E-15	0.29860E-21
84	0.10546E-15	0.11426E-15	0.30263E-21
85	0.10678E-15	0.11568E-15	0.30640E-21
86	0.10799E-15	0.11699E-15	0.30987E-21
87	0.10909E-15	0.11819E-15	0.31303E-21
88	0.11007E-15	0.11925E-15	0.31585E-21
89	0.11093E-15	0.12018E-15	0.31830E-21
90	0.11164E-15	0.12096E-15	0.32037E-21
91	0.11222E-15	0.12158E-15	0.32201E-21
92	0.11263E-15	0.12203E-15	0.32320E-21
93	0.11288E-15	0.12229E-15	0.32391E-21
94	0.11295E-15	0.12237E-15	0.32410E-21
95	0.11283E-15	0.12224E-15	0.32376E-21
96	0.11250E-15	0.12189E-15	0.32283E-21
97	0.11197E-15	0.12131E-15	0.32129E-21
98	0.11120E-15	0.12048E-15	0.31910E-21
99	0.11020E-15	0.11940E-15	0.31623E-21
100	0.10895E-15	0.11804E-15	0.31263E-21

POLYGON I

Time: 150.000			
Cell	Cgas(g/cu.ft)	Clig(g/cu.ft)	Csol(g/g)
1	0.13068E-19	0.14158E-19	0.37499E-25
2	0.28056E-19	0.30397E-19	0.80508E-25
3	0.44990E-19	0.48743E-19	0.12910E-24
4	0.63897E-19	0.69228E-19	0.18336E-24
5	0.84808E-19	0.91883E-19	0.24336E-24
6	0.10775E-18	0.11674E-18	0.30921E-24
7	0.13277E-18	0.14385E-18	0.38099E-24
8	0.15989E-18	0.17323E-18	0.45882E-24
9	0.18916E-18	0.20494E-18	0.54281E-24
10	0.22062E-18	0.23902E-18	0.63307E-24
11	0.25430E-18	0.27551E-18	0.72971E-24
12	0.29025E-18	0.31446E-18	0.83287E-24
13	0.32851E-18	0.35591E-18	0.94267E-24
14	0.36913E-18	0.39992E-18	0.10592E-23
15	0.41216E-18	0.44654E-18	0.11827E-23
16	0.45763E-18	0.49581E-18	0.13132E-23
17	0.50561E-18	0.54779E-18	0.14509E-23
18	0.55614E-18	0.60253E-18	0.15959E-23
19	0.60926E-18	0.66008E-18	0.17483E-23
20	0.66502E-18	0.72050E-18	0.19083E-23
21	0.72348E-18	0.78383E-18	0.20761E-23
22	0.78468E-18	0.85014E-18	0.22517E-23
23	0.84866E-18	0.91946E-18	0.24353E-23
24	0.91549E-18	0.99186E-18	0.26270E-23
25	0.98519E-18	0.10674E-17	0.28270E-23
26	0.10578E-17	0.11461E-17	0.30355E-23
27	0.11334E-17	0.12280E-17	0.32524E-23
28	0.12120E-17	0.13132E-17	0.34780E-23
29	0.12937E-17	0.14016E-17	0.37124E-23
30	0.13785E-17	0.14935E-17	0.39556E-23
31	0.14664E-17	0.15887E-17	0.42079E-23
32	0.15575E-17	0.16874E-17	0.44692E-23
33	0.16517E-17	0.17895E-17	0.47397E-23
34	0.17492E-17	0.18952E-17	0.50195E-23
35	0.18500E-17	0.20043E-17	0.53086E-23
36	0.19540E-17	0.21170E-17	0.56072E-23
37	0.20614E-17	0.22333E-17	0.59152E-23
38	0.21720E-17	0.23532E-17	0.62327E-23
39	0.22860E-17	0.24767E-17	0.65597E-23
40	0.24033E-17	0.26038E-17	0.68963E-23
41	0.25239E-17	0.27345E-17	0.72425E-23
42	0.26479E-17	0.28688E-17	0.75982E-23

43	0.27752E-17	0.30067E-17	0.79635E-23
44	0.29058E-17	0.31482E-17	0.83382E-23
45	0.30397E-17	0.32932E-17	0.87224E-23
46	0.31768E-17	0.34418E-17	0.91159E-23
47	0.33171E-17	0.35939E-17	0.95187E-23
48	0.34607E-17	0.37494E-17	0.99306E-23
49	0.36073E-17	0.39083E-17	0.10351E-22
50	0.37571E-17	0.40705E-17	0.10781E-22
51	0.39098E-17	0.42360E-17	0.11219E-22
52	0.40655E-17	0.44046E-17	0.11666E-22
53	0.42240E-17	0.45763E-17	0.12121E-22
54	0.43852E-17	0.47510E-17	0.12584E-22
55	0.45491E-17	0.49286E-17	0.13054E-22
56	0.47155E-17	0.51088E-17	0.13531E-22
57	0.48842E-17	0.52917E-17	0.14015E-22
58	0.50552E-17	0.54770E-17	0.14506E-22
59	0.52283E-17	0.56645E-17	0.15003E-22
60	0.54034E-17	0.58541E-17	0.15505E-22
61	0.55801E-17	0.60456E-17	0.16012E-22
62	0.57584E-17	0.62388E-17	0.16524E-22
63	0.59380E-17	0.64334E-17	0.17039E-22
64	0.61188E-17	0.66292E-17	0.17558E-22
65	0.63003E-17	0.68259E-17	0.18079E-22
66	0.64825E-17	0.70233E-17	0.18602E-22
67	0.66651E-17	0.72211E-17	0.19126E-22
68	0.68476E-17	0.74189E-17	0.19649E-22
69	0.70299E-17	0.76163E-17	0.20172E-22
70	0.72115E-17	0.78131E-17	0.20694E-22
71	0.73922E-17	0.80089E-17	0.21212E-22
72	0.75715E-17	0.82032E-17	0.21727E-22
73	0.77491E-17	0.83956E-17	0.22236E-22
74	0.79246E-17	0.85857E-17	0.22740E-22
75	0.80975E-17	0.87730E-17	0.23236E-22
76	0.82673E-17	0.89570E-17	0.23723E-22
77	0.84336E-17	0.91372E-17	0.24201E-22
78	0.85959E-17	0.93130E-17	0.24666E-22
79	0.87536E-17	0.94838E-17	0.25119E-22
80	0.89061E-17	0.96491E-17	0.25556E-22
81	0.90530E-17	0.98082E-17	0.25978E-22
82	0.91935E-17	0.99604E-17	0.26381E-22
83	0.93270E-17	0.10105E-16	0.26764E-22
84	0.94529E-17	0.10242E-16	0.27126E-22
85	0.95705E-17	0.10369E-16	0.27463E-22
86	0.96790E-17	0.10487E-16	0.27774E-22
87	0.97777E-17	0.10593E-16	0.28058E-22
88	0.98658E-17	0.10689E-16	0.28310E-22
89	0.99425E-17	0.10772E-16	0.28530E-22
90	0.10007E-16	0.10842E-16	0.28715E-22
91	0.10058E-16	0.10897E-16	0.28862E-22
92	0.10095E-16	0.10938E-16	0.28969E-22
93	0.10118E-16	0.10962E-16	0.29033E-22
94	0.10124E-16	0.10968E-16	0.29050E-22
95	0.10113E-16	0.10956E-16	0.29019E-22
96	0.10084E-16	0.10925E-16	0.28936E-22
97	0.10036E-16	0.10873E-16	0.28798E-22
98	0.99675E-17	0.10799E-16	0.28602E-22
99	0.98777E-17	0.10702E-16	0.28344E-22
100	0.97653E-17	0.10580E-16	0.28022E-22

POLYGON 1

Time:	160.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.11713E-20	0.12690E-20	0.33611E-26
2	0.25147E-20	0.27245E-20	0.72162E-26
3	0.40326E-20	0.43690E-20	0.11572E-25
4	0.57273E-20	0.62051E-20	0.16435E-25
5	0.76016E-20	0.82357E-20	0.21813E-25
6	0.96583E-20	0.10464E-19	0.27715E-25
7	0.11901E-19	0.12893E-19	0.34149E-25
8	0.14332E-19	0.15527E-19	0.41126E-25
9	0.16955E-19	0.18370E-19	0.48653E-25
10	0.19774E-19	0.21424E-19	0.56743E-25
11	0.22793E-19	0.24695E-19	0.65406E-25
12	0.26015E-19	0.28186E-19	0.74652E-25
13	0.29445E-19	0.31901E-19	0.84494E-25
14	0.33086E-19	0.35846E-19	0.94942E-25
15	0.36943E-19	0.40024E-19	0.10601E-24
16	0.41019E-19	0.44441E-19	0.11771E-24
17	0.45319E-19	0.49100E-19	0.13005E-24
18	0.49848E-19	0.54006E-19	0.14304E-24
19	0.54609E-19	0.59165E-19	0.15670E-24
20	0.59608E-19	0.64580E-19	0.17105E-24
21	0.64847E-19	0.70257E-19	0.18608E-24
22	0.70333E-19	0.76200E-19	0.20182E-24
23	0.76068E-19	0.82414E-19	0.21828E-24
24	0.82057E-19	0.88903E-19	0.23547E-24
25	0.88305E-19	0.95672E-19	0.25340E-24
26	0.94815E-19	0.10273E-18	0.27208E-24
27	0.10159E-18	0.11007E-18	0.29152E-24
28	0.10864E-18	0.11770E-18	0.31174E-24

29	0.11596E-18	0.12563E-18	0.33275E-24
30	0.12356E-18	0.13387E-18	0.35455E-24
31	0.13144E-18	0.14240E-18	0.37716E-24
32	0.13960E-18	0.15125E-18	0.40059E-24
33	0.14805E-18	0.16040E-18	0.42483E-24
34	0.15679E-18	0.16987E-18	0.44991E-24
35	0.16582E-18	0.17965E-18	0.47583E-24
36	0.17514E-18	0.18976E-18	0.50258E-24
37	0.18476E-18	0.20018E-18	0.53019E-24
38	0.19468E-18	0.21092E-18	0.55865E-24
39	0.20490E-18	0.22199E-18	0.58796E-24
40	0.21541E-18	0.23338E-18	0.61813E-24
41	0.22623E-18	0.24510E-18	0.64916E-24
42	0.23734E-18	0.25714E-18	0.68105E-24
43	0.24875E-18	0.26950E-18	0.71379E-24
44	0.26045E-18	0.28218E-18	0.74738E-24
45	0.27245E-18	0.29518E-18	0.78181E-24
46	0.28474E-18	0.30850E-18	0.81708E-24
47	0.29732E-18	0.32213E-18	0.85318E-24
48	0.31019E-18	0.33607E-18	0.89010E-24
49	0.32334E-18	0.35031E-18	0.92782E-24
50	0.33676E-18	0.36485E-18	0.96634E-24
51	0.35045E-18	0.37968E-18	0.10056E-23
52	0.36440E-18	0.39480E-18	0.10457E-23
53	0.37860E-18	0.41019E-18	0.10864E-23
54	0.39306E-18	0.42585E-18	0.11279E-23
55	0.40774E-18	0.44176E-18	0.11700E-23
56	0.42266E-18	0.45792E-18	0.12128E-23
57	0.43779E-18	0.47431E-18	0.12562E-23
58	0.45311E-18	0.49091E-18	0.13002E-23
59	0.46863E-18	0.50772E-18	0.13447E-23
60	0.48432E-18	0.52472E-18	0.13898E-23
61	0.50016E-18	0.54188E-18	0.14352E-23
62	0.51614E-18	0.55920E-18	0.14811E-23
63	0.53224E-18	0.57664E-18	0.15273E-23
64	0.54844E-18	0.59419E-18	0.15738E-23
65	0.56472E-18	0.61183E-18	0.16205E-23
66	0.58105E-18	0.62952E-18	0.16673E-23
67	0.59741E-18	0.64724E-18	0.17143E-23
68	0.61377E-18	0.66497E-18	0.17612E-23
69	0.63010E-18	0.68267E-18	0.18081E-23
70	0.64639E-18	0.70031E-18	0.18548E-23
71	0.66258E-18	0.71786E-18	0.19013E-23
72	0.67866E-18	0.73527E-18	0.19474E-23
73	0.69458E-18	0.75252E-18	0.19931E-23
74	0.71030E-18	0.76956E-18	0.20382E-23
75	0.72580E-18	0.78635E-18	0.20827E-23
76	0.74102E-18	0.80284E-18	0.21264E-23
77	0.75593E-18	0.81899E-18	0.21692E-23
78	0.77047E-18	0.83475E-18	0.22109E-23
79	0.78460E-18	0.85006E-18	0.22515E-23
80	0.79828E-18	0.86487E-18	0.22907E-23
81	0.81144E-18	0.87913E-18	0.23285E-23
82	0.82404E-18	0.89278E-18	0.23646E-23
83	0.83601E-18	0.90575E-18	0.23990E-23
84	0.84729E-18	0.91798E-18	0.24313E-23
85	0.85783E-18	0.92939E-18	0.24616E-23
86	0.86756E-18	0.93993E-18	0.24895E-23
87	0.87640E-18	0.94952E-18	0.25149E-23
88	0.88430E-18	0.95807E-18	0.25375E-23
89	0.89117E-18	0.96552E-18	0.25573E-23
90	0.89695E-18	0.97177E-18	0.25738E-23
91	0.90154E-18	0.97675E-18	0.25870E-23
92	0.90487E-18	0.98036E-18	0.25966E-23
93	0.90686E-18	0.98251E-18	0.26023E-23
94	0.90741E-18	0.98311E-18	0.26039E-23
95	0.90644E-18	0.98206E-18	0.26011E-23
96	0.90385E-18	0.97925E-18	0.25936E-23
97	0.89954E-18	0.97458E-18	0.25813E-23
98	0.89341E-18	0.96794E-18	0.25637E-23
99	0.88536E-18	0.95922E-18	0.25406E-23
100	0.87529E-18	0.94830E-18	0.25117E-23

POLYGON I

Time:	170.000		
Cell	Cgas(g/cu.ft)	Cliq(g/cu.ft)	Csol(g/g)
1	0.10499E-21	0.11375E-21	0.30126E-27
2	0.22540E-21	0.24421E-21	0.64680E-27
3	0.36145E-21	0.39160E-21	0.10372E-26
4	0.51335E-21	0.55618E-21	0.14731E-26
5	0.68135E-21	0.73819E-21	0.19552E-26
6	0.86570E-21	0.93792E-21	0.24842E-26
7	0.10667E-20	0.11557E-20	0.30609E-26
8	0.12846E-20	0.13918E-20	0.36862E-26
9	0.15197E-20	0.16465E-20	0.43609E-26
10	0.17724E-20	0.19203E-20	0.50861E-26
11	0.20430E-20	0.22134E-20	0.58625E-26
12	0.23318E-20	0.25264E-20	0.66913E-26
13	0.26392E-20	0.28594E-20	0.75734E-26
14	0.29656E-20	0.32130E-20	0.85099E-26

15	0.33113E-20	0.35875E-20	0.95018E-26
16	0.36766E-20	0.39833E-20	0.10550E-25
17	0.40621E-20	0.44010E-20	0.11656E-25
18	0.44680E-20	0.48407E-20	0.12821E-25
19	0.48948E-20	0.53031E-20	0.14046E-25
20	0.53428E-20	0.57885E-20	0.15331E-25
21	0.58124E-20	0.62973E-20	0.16679E-25
22	0.63041E-20	0.68300E-20	0.18090E-25
23	0.68182E-20	0.73870E-20	0.19565E-25
24	0.73550E-20	0.79686E-20	0.21106E-25
25	0.79150E-20	0.85753E-20	0.22712E-25
26	0.84985E-20	0.92075E-20	0.24387E-25
27	0.91060E-20	0.98656E-20	0.26130E-25
28	0.97376E-20	0.10550E-19	0.27942E-25
29	0.10394E-19	0.11261E-19	0.29825E-25
30	0.11075E-19	0.11999E-19	0.31780E-25
31	0.11781E-19	0.12764E-19	0.33806E-25
32	0.12513E-19	0.13557E-19	0.35906E-25
33	0.13270E-19	0.14377E-19	0.38079E-25
34	0.14053E-19	0.15226E-19	0.40327E-25
35	0.14863E-19	0.16103E-19	0.42649E-25
36	0.15699E-19	0.17008E-19	0.45048E-25
37	0.16561E-19	0.17943E-19	0.47522E-25
38	0.17450E-19	0.18906E-19	0.50073E-25
39	0.18366E-19	0.19898E-19	0.52701E-25
40	0.19308E-19	0.20919E-19	0.55405E-25
41	0.20277E-19	0.21969E-19	0.58186E-25
42	0.21273E-19	0.23048E-19	0.61044E-25
43	0.22296E-19	0.24156E-19	0.63979E-25
44	0.23345E-19	0.25292E-19	0.66989E-25
45	0.24421E-19	0.26458E-19	0.70076E-25
46	0.25522E-19	0.27651E-19	0.73237E-25
47	0.26650E-19	0.28873E-19	0.76473E-25
48	0.27803E-19	0.30123E-19	0.79782E-25
49	0.28981E-19	0.31399E-19	0.83163E-25
50	0.30184E-19	0.32702E-19	0.86615E-25
51	0.31411E-19	0.34032E-19	0.90136E-25
52	0.32662E-19	0.35387E-19	0.93725E-25
53	0.33935E-19	0.36766E-19	0.97379E-25
54	0.35231E-19	0.38170E-19	0.10110E-24
55	0.36547E-19	0.39596E-19	0.10487E-24
56	0.37884E-19	0.41044E-19	0.10871E-24
57	0.39240E-19	0.42513E-19	0.11260E-24
58	0.40614E-19	0.44002E-19	0.11654E-24
59	0.42004E-19	0.45509E-19	0.12053E-24
60	0.43410E-19	0.47032E-19	0.12457E-24
61	0.44831E-19	0.48570E-19	0.12864E-24
62	0.46263E-19	0.50122E-19	0.13275E-24
63	0.47706E-19	0.51686E-19	0.13689E-24
64	0.49158E-19	0.53259E-19	0.14106E-24
65	0.50617E-19	0.54840E-19	0.14525E-24
66	0.52081E-19	0.56425E-19	0.14945E-24
67	0.53547E-19	0.58014E-19	0.15366E-24
68	0.55014E-19	0.59603E-19	0.15786E-24
69	0.56478E-19	0.61189E-19	0.16207E-24
70	0.57937E-19	0.62771E-19	0.16625E-24
71	0.59389E-19	0.64343E-19	0.17042E-24
72	0.60830E-19	0.65904E-19	0.17455E-24
73	0.62257E-19	0.67450E-19	0.17865E-24
74	0.63666E-19	0.68977E-19	0.18269E-24
75	0.65055E-19	0.70482E-19	0.18668E-24
76	0.66420E-19	0.71960E-19	0.19059E-24
77	0.67756E-19	0.73408E-19	0.19443E-24
78	0.69059E-19	0.74820E-19	0.19817E-24
79	0.70326E-19	0.76193E-19	0.20180E-24
80	0.71552E-19	0.77521E-19	0.20532E-24
81	0.72731E-19	0.78799E-19	0.20871E-24
82	0.73860E-19	0.80022E-19	0.21195E-24
83	0.74933E-19	0.81185E-19	0.21502E-24
84	0.75945E-19	0.82281E-19	0.21793E-24
85	0.76890E-19	0.83304E-19	0.22064E-24
86	0.77761E-19	0.84249E-19	0.22314E-24
87	0.78554E-19	0.85108E-19	0.22541E-24
88	0.79262E-19	0.85874E-19	0.22745E-24
89	0.79878E-19	0.86542E-19	0.22921E-24
90	0.80396E-19	0.87103E-19	0.23070E-24
91	0.80807E-19	0.87549E-19	0.23188E-24
92	0.81106E-19	0.87872E-19	0.23274E-24
93	0.81284E-19	0.88065E-19	0.23325E-24
94	0.81334E-19	0.88119E-19	0.23339E-24
95	0.81246E-19	0.88024E-19	0.23314E-24
96	0.81014E-19	0.87773E-19	0.23247E-24
97	0.80628E-19	0.87354E-19	0.23136E-24
98	0.80079E-19	0.86759E-19	0.22979E-24
99	0.79357E-19	0.85977E-19	0.22772E-24
100	0.78454E-19	0.84999E-19	0.22513E-24

POLYGON I

Time: 180.000

Cell Cgas(g/cu.ft)

Cliq(g/cu.ft)

Csol(g/g)

1	0.94102E-23	0.10195E-22	0.27003E-28
2	0.20203E-22	0.21889E-22	0.57975E-28
3	0.32398E-22	0.35101E-22	0.92967E-28
4	0.46013E-22	0.49852E-22	0.13204E-27
5	0.61071E-22	0.66166E-22	0.17525E-27
6	0.77595E-22	0.84068E-22	0.22266E-27
7	0.95609E-22	0.10359E-21	0.27436E-27
8	0.11514E-21	0.12475E-21	0.33040E-27
9	0.13622E-21	0.14758E-21	0.39088E-27
10	0.15887E-21	0.17212E-21	0.45588E-27
11	0.18312E-21	0.19840E-21	0.52547E-27
12	0.20901E-21	0.22644E-21	0.59976E-27
13	0.23656E-21	0.25630E-21	0.67882E-27
14	0.26581E-21	0.28799E-21	0.76276E-27
15	0.29680E-21	0.32156E-21	0.85167E-27
16	0.32955E-21	0.35704E-21	0.94564E-27
17	0.36409E-21	0.39447E-21	0.10448E-26
18	0.40048E-21	0.43389E-21	0.11492E-26
19	0.43873E-21	0.47533E-21	0.12590E-26
20	0.47889E-21	0.51884E-21	0.13742E-26
21	0.52098E-21	0.56445E-21	0.14950E-26
22	0.56505E-21	0.61219E-21	0.16214E-26
23	0.61113E-21	0.66211E-21	0.17537E-26
24	0.65925E-21	0.71425E-21	0.18917E-26
25	0.70944E-21	0.76863E-21	0.20358E-26
26	0.76175E-21	0.82529E-21	0.21859E-26
27	0.81619E-21	0.88428E-21	0.23421E-26
28	0.87280E-21	0.94562E-21	0.25045E-26
29	0.93162E-21	0.10093E-20	0.26733E-26
30	0.99266E-21	0.10755E-20	0.28485E-26
31	0.10560E-20	0.11441E-20	0.30301E-26
32	0.11215E-20	0.12151E-20	0.32183E-26
33	0.11894E-20	0.12887E-20	0.34131E-26
34	0.12596E-20	0.13647E-20	0.36146E-26
35	0.13322E-20	0.14433E-20	0.38228E-26
36	0.14071E-20	0.15245E-20	0.40378E-26
37	0.14844E-20	0.16082E-20	0.42595E-26
38	0.15641E-20	0.16946E-20	0.44882E-26
39	0.16462E-20	0.17835E-20	0.47237E-26
40	0.17306E-20	0.18750E-20	0.49661E-26
41	0.18175E-20	0.19691E-20	0.52154E-26
42	0.19068E-20	0.20658E-20	0.54715E-26
43	0.19984E-20	0.21651E-20	0.57346E-26
44	0.20925E-20	0.22670E-20	0.60044E-26
45	0.21889E-20	0.23715E-20	0.62811E-26
46	0.22876E-20	0.24785E-20	0.65644E-26
47	0.23887E-20	0.25880E-20	0.68545E-26
48	0.24921E-20	0.27000E-20	0.71511E-26
49	0.25977E-20	0.28144E-20	0.74541E-26
50	0.27055E-20	0.29312E-20	0.77635E-26
51	0.28155E-20	0.30504E-20	0.80791E-26
52	0.29276E-20	0.31718E-20	0.84008E-26
53	0.30417E-20	0.32955E-20	0.87283E-26
54	0.31578E-20	0.34213E-20	0.90615E-26
55	0.32758E-20	0.35491E-20	0.94001E-26
56	0.33956E-20	0.36789E-20	0.97439E-26
57	0.35172E-20	0.38106E-20	0.10093E-25
58	0.36403E-20	0.39440E-20	0.10446E-25
59	0.37650E-20	0.40790E-20	0.10804E-25
60	0.38910E-20	0.42156E-20	0.11165E-25
61	0.40183E-20	0.43535E-20	0.11531E-25
62	0.41467E-20	0.44926E-20	0.11899E-25
63	0.42760E-20	0.46327E-20	0.12270E-25
64	0.44062E-20	0.47737E-20	0.12644E-25
65	0.45369E-20	0.49154E-20	0.13019E-25
66	0.46681E-20	0.50576E-20	0.13395E-25
67	0.47996E-20	0.52000E-20	0.13773E-25
68	0.49310E-20	0.53424E-20	0.14150E-25
69	0.50623E-20	0.54846E-20	0.14526E-25
70	0.51931E-20	0.56263E-20	0.14902E-25
71	0.53232E-20	0.57672E-20	0.15275E-25
72	0.54523E-20	0.59072E-20	0.15646E-25
73	0.55802E-20	0.60457E-20	0.16013E-25
74	0.57066E-20	0.61826E-20	0.16375E-25
75	0.58311E-20	0.63175E-20	0.16732E-25
76	0.59534E-20	0.64500E-20	0.17083E-25
77	0.60731E-20	0.65797E-20	0.17427E-25
78	0.61900E-20	0.67063E-20	0.17762E-25
79	0.63035E-20	0.68294E-20	0.18088E-25
80	0.64134E-20	0.69484E-20	0.18403E-25
81	0.65191E-20	0.70630E-20	0.18707E-25
82	0.66203E-20	0.71726E-20	0.18997E-25
83	0.67165E-20	0.72768E-20	0.19273E-25
84	0.68071E-20	0.73750E-20	0.19533E-25
85	0.68918E-20	0.74667E-20	0.19776E-25
86	0.69699E-20	0.75514E-20	0.20001E-25
87	0.70410E-20	0.76284E-20	0.20205E-25
88	0.71045E-20	0.76971E-20	0.20387E-25
89	0.71597E-20	0.77570E-20	0.20545E-25
90	0.72061E-20	0.78072E-20	0.20678E-25

91	0.72430E-20	0.78472E-20	0.20784E-25
92	0.72697E-20	0.78762E-20	0.20861E-25
93	0.72857E-20	0.78935E-20	0.20907E-25
94	0.72901E-20	0.78983E-20	0.20919E-25
95	0.72823E-20	0.78898E-20	0.20897E-25
96	0.72615E-20	0.78673E-20	0.20837E-25
97	0.72269E-20	0.78298E-20	0.20738E-25
98	0.71776E-20	0.77764E-20	0.20597E-25
99	0.71130E-20	0.77064E-20	0.20411E-25
100	0.70320E-20	0.76187E-20	0.20179E-25

Appendix C

Direct Soil Exposure Preliminary Remediation Goal Calculation

Appendix C

Direct Soil Exposure Preliminary Remediation Goal Calculation

The Preliminary Remediation Goal (PRG) for tetrachloroethene (PCE) in soil was developed using a risk-based direct exposure scenario according to U.S. Environmental Protection Agency (EPA) guidance (EPA, 1991).

In developing the risk-based PRG, it was assumed that the O'Henry Laundry is classified as a commercial/industrial site. Exposure pathways considered in the PRG included incidental soil ingestion, inhalation of organic compounds volatilized from surface soil, and inhalation of particulates suspended in air due to site activities. Dermal contact was not considered because most of the site is paved, and any workers involved in excavating contaminated subsurface soil will have adequate levels of personnel protective equipment.

Since PCE is a carcinogen, the PRG was developed for a target risk of 10^{-6} cancer incidence in excess of background. The equation to derive the PRG is as follows (EPA, 1991):

$$C(\text{mg/kg}) = \frac{\text{TR BW AT 365 days/yr}}{\text{EF ED } [(SF_o 10^{-6} \text{ kg/mg IR}_{\text{soil}}) + (SF_i \text{ IR}_{\text{air}} [1/\text{VF} + 1/\text{PEF}])]}$$

where:

C	chemical PRG (mg/kg)
TR	target risk (10^{-6})
SF_i	inhalation cancer slope factor (mg/kg-d) $^{-1}$ (2.0×10^{-3})
SF_o	oral cancer slope factor (mg/kg-d) $^{-1}$ (5.2×10^{-2})
BW	adult body weight (kg) (70)
AT	averaging time (yr) (70)
EF	exposure frequency (days/yr) (250)
ED	exposure duration (yr) (25)
IR_{soil}	soil ingestion rate (mg/d) (50)
IR_{air}	workday inhalation rate (m ³ /d) (20)
VF	soil-to-air volatilization factor (m ³ /kg)
PEF	particulate emission factor (m ³ /kg) (4.63×10^9)

$$VF \text{ (m}^3\text{/kg)} = \frac{(LS \quad V \quad DH)}{A} \frac{(3.14 \quad \alpha \quad T)^{1/2}}{(2 \quad D_{ei} \quad E \quad K_{as} \quad 10^{-3} \text{ kg/g})}$$

where:

LS	length of side of contaminated area (m) (45)
V	wind speed in mixing zone (m/s) (2.25)
DH	diffusion height (m) (2)
A	area of contamination (cm ²) (20,250,000)
D _{ei}	effective diffusivity (cm ² /s) (D _i E ^{0.33})
E	true soil porosity (unitless) 0.35
K _{as}	soil/air partition coefficient (g soil/cm ³ air) = (H/K _d) 41
p _s	true soil density or particulate density (g/cm ³) (2.65)
T	exposure interval (s) (7.9 x 10 ⁸)
D _i	molecular diffusivity (cm ² /s) (tetrachloroethylene: 0.08)
H	Henry's law constant (atm-m ³ /mol) (tetrachloroethylene: 2.87 x 10 ⁻²)
K _d	soil-water partition coefficient (cm ³ /g), chemical specific or K _{oc} OC
K _{oc}	organic carbon partition coefficient (cm ³ /g) = 0.63 K _{ow} (Mills, et al., 1985)
K _{ow}	octanol water partition coefficient (unitless) (tetrachloroethylene: 338.84, EPA, WERL Database, Cincinnati, OH)
OC	organic carbon content of soil (fraction), site specific, or 0.02

$$\alpha \text{ (cm}^2\text{/s)} = \frac{(D_{ei} \quad E)}{E + (p_s)(1-E)/K_{as}}$$

Site-specific values were used for the parameters wherever applicable; otherwise, default values approved by EPA were used in the calculation.

References

Mills, W. B., et al., 1985, "Water Quality Assessment: A Screening Procedure for Toxic and Conventional Pollutants in Surface and Groundwater, Revised 1985, Parts 1 and 2," EPA/600/6-85/002, EPA, Office of Research and Development, Environmental Research Laboratory, Athens, GA.

U.S. Environmental Protection Agency (EPA), 1991, *Human Health Evaluation Manual, Part B: Development of Risk-Based Preliminary Remediation Goals*, OSWER Directive 9285.7-01B.

APPENDIX D

**EPA COMMENTS ON DRAFT WORK PLAN
WITH RESPONSES**

**Responses to EPA Comments on the Draft Work Plan
for Evaluation and Interim Remediation of Soils,
O'Henry Laundry, Tutu, St. Thomas, USVI**

General Comments

Comment 1: Cleanup levels will be driven by the VLEACH modeling results rather than by direct soil exposure risk-based calculations, because more stringent cleanup levels will be necessary to assure groundwater protection than to assure human health from soil exposure. However, IT has not provided sufficient supporting evidence for some of the assumptions they elected to use in the model. In particular, documentation for the presumed thickness of the vadose zone (depth to water) must be provided.

If the distance from the PCE soil source to water is less than the 20 feet assumed in the model, lower cleanup levels than 328 ppm may be needed to result in concentrations below the federal drinking water standard of 5 parts per billion at the water table. This in turn would result in a larger soil volume to be excavated.

Response: Appendix V (VLEACH Modeling) will be augmented to provide additional supporting documentation. Please refer to Specific Comments 2 and 8.

We acknowledge that if the actual vadoze zone thickness is less than 20 feet modeled using VLEACH, this will tend to drive cleanup levels to concentrations less than 328 ppb. However, the work plan has been designed so that soils will be removed to concentrations much less than this value (see Section 3.1), which could result in excavation of soil volumes greater than estimated in the draft work plan. The total soil volume will be revised to 1,575 ft³ in the work plan (refer to Specific Comment 1, below). However, not all of this volume may contain detectable levels of PCE. Only soil with detectable PCE will be excavated and stored. Soil which does not contain detectable levels of PCE will be backfilled. Please note that all data collected by IT and previous contractors (with the exception of work performed as part of the site-wide RI) was transmitted to the EPA on February 22, 1994.

Comment 2: The plan admits that excavation may be limited by safety considerations or physical limitations imposed by buildings, not just PCE concentrations. No information is provided concerning structural support of the excavation by way of sheeting, bracing, or some other method. As the excavation is immediately adjacent to the laundry facility and the soil is sandy clay loam, acceptable engineering practice and OSHA requirements for open excavations must be followed.

Response: This comment is addressed below. Please refer to Specific Comments 3 and 4.

Comment 3: Based on the PCE concentrations in soils reported for boring SS1, the area of excavation probably needs to extend south of the boundary shown in Figure 3-1. As shown, the perimeter of the excavation coincides with boring SS1.

Response: Figure 3-1 will be revised to show the assumed perimeter of the excavation extending to the south of boring SS1.

Specific Comments

Comment 1: Section 1.1 - Scope and Objectives, Page 1-1, 1st Paragraph - The 100 ft³ volume of soil that is estimated for removal does not match the volume implied on Figure 3-1 - Soil Excavation and Storage Locations. Based on the area shown on this figure and the approximate 7-foot depth of excavation indicated in Section 3.1 - Soil Excavation and Storage, Page 3-1, the unit should be cubic yards instead of cubic feet.

Response: Concur. The volume implied by Section 3.1 and Figure 3-1 is approximately 15 feet by 15 feet by 7 feet or 1,575 ft³ (58 cubic yards). This revised volume estimate will be included in Section 1.1, Page 1.1, 1st Paragraph. During excavation soils will be segregated based on the field screening and staged in separate areas. Soils with detectable PCE (and total VOCs) will be classified as dirty. These soils will be containerized and stored for future treatment and/or disposal. Soils which do not have detectable PCE (and total VOCs) will be classified as clean. These soils will be used as backfill for the excavation once all PCE contaminated soils have been removed from the interim remediation area.

Comment 2: Section 1.2 - Background, Page 1-1 - In order to adequately evaluate this interim remedy work plan, boring logs for the soil borings (especially SS1) should be included in this work plan to portray soil conditions, groundwater levels, and contamination locations.

Response: Section 1.2, Page 1-1 will be revised to include a reference to Appendix B. A cross section of the O'Henry site will be included in Appendix B. Refer also to Specific Comment 8.

Comment 3: Section 3.1 - Soil Excavation and Storage, Page 3-1, 1st Paragraph - See General Comment 2.

Response: A Health and Safety Plan for the soil excavation will be developed and included as an appendix to the work plan. OSHA compliance will be addressed in the Health and Safety Plan. The text of the work plan (Section 3.1, Page 3-1, 1st Paragraph) will be amended to include a statement that the excavation work will be conducted according to OSHA requirements. Also, excavation will be performed according to accepted engineering practices to ensure that the structural integrity of the laundry is not compromised. This

will be done without sheet pilings or other structural support for the building and excavation. Costs of these measures have been evaluated and were found to be prohibitive. Therefore, the dimensions of the excavation will be limited according to OSHA and engineering standards in such a way that structural supports will not be needed. This may result in inability to remove contaminated soil in the immediate vicinity of the foundation. This will be addressed by sampling and analysis of soils near the foundation to be conducted during the removal action. The results will be submitted to the EPA and evaluated to determine whether an in situ remedy is necessary. Samples will be collected for on-site VOC analysis and for VOC analysis (CLP method) at a fixed based laboratory.

Comment 4: There is no indication that a Health and Safety Plan will be used during the excavation.

Response: A Health and Safety Plan has been developed and incorporated into the work plan as Appendix A. The text of the work plan (Section 1.0 - Introduction, Page 1-1, 1st Paragraph and Section 3.1, Page 3-1, 1st paragraph) has been revised to include the Health and Safety Plan by reference.

Comment 5: Section 3.1 - Soil Excavation and Storage, Page 3-1, 3rd Paragraph - As the final remedy and remediation schedule for soil removed from the excavation is undetermined at this time, excavated soils could be contained more securely, for example, in roll-off containers.

Response: Appropriate containers will be utilized.

Comment 6: Section 3.2.2 - Soil Screening Analytical Methods, Page 3-2, 4th and 5th Bullets - As the total number of samples is unknown at this time, the minimum number of analytical duplicates and matrix spikes should be 1 per 20, not a total of 3. [Note - comment refers to Page 3-3, 5th and 6th bullets.]

Response: The text as revised by EPA states that analytical duplicates and matrix spikes will be analyzed for 1 in 20 samples and that a minimum of 3 samples will be analyzed as analytical duplicates and matrix spikes. The text will be revised to state this more clearly.

Comment 7: Section 3.5 - Investigation-Derived Waste, Page 3-4 - Although the method for storing decon fluids is indicated, the method for collection is not. This should be identified.

Response: Section 3.5 of the work plan will be amended to include a description of the decontamination area. A decontamination area will be constructed by lining an appropriate area with 4-millimeter plastic sheeting. Straw bales will be placed around the perimeter of the area (beneath the sheeting) to contain runoff, which will be collected in a shallow sump. The fluids will be

pumped from the sump to 55-gallon DOT-approved drums as described in the work plan.

Comment 8: Appendix B, the input printout for the VLEACH model appears to indicate a 20-foot thick vadose zone (0.2-ft/cell X 100 cells) has been modeled. This is probably a reasonable assumption based on the depth to water reported by Geraghty and Miller for upgradient wells in Technical Memorandum II. However, no site-specific information (boring logs or water level elevations) has been provided for the O'Henry property in this work plan to confirm the accuracy of this assumption.

In borings B-11, B-12, and B-13, installed by Geraghty and Miller, the top of bedrock is inferred at 3.5 ft, 8.4 ft, and 6.4 ft, respectively, so we presume the water table is within bedrock. The geologist's log indicated wet samples at 24 feet during drilling of O'Henry's monitoring well MW-3. However, EPA has never seen monitoring well elevations or water level measurements for this property. As indicated in General Comment 1, more stringent soil cleanup levels will be necessary if the distance from the PCE source to the water table is less than 20 feet.

Response: Appendix B will be revised to include a cross section and accompanying text. The cross section will show geologic conditions, water level measurements for three periods (August 1990, March 1993, and May 1993), and contaminant concentrations as detected in SS-1.