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GROUNDWATER DATA SUMMARY REPORT FOR THE 1100-EM-1 OPERABLE UNIT-HANFORD SITE FOR

ROUND 9
ROUND 10
ROUND 11

December 1992

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TABLE OF CONTENTS

	PAGE
ACRONYMS	
1.0 INTRODUCTION	1-1
2.0 DATA QUALITY OBJECTIVES	2-1
3.0 DATA QUALITY SUMMARY	3-1
3.1 Round 9 Field Quality Control Summary	3-1
3.1.1 Field Blanks	3-1
3.1.2 Field Duplicate Samples	3-1
3.2 Round 10 Field Quality Control Summary	3-2
3.2.1 Field Blanks	3-2
3.2.2 Field Duplicate Samples	3-2
3.3 Round 11 Field Quality Control Summary	3-3
3.3.1 Field Blanks	3-3
3.3.2 Field Duplicate Samples	3-3
REFERENCES	
APPENDIX A - ROUND 9, 10, AND 11 FIELD DUPLICATE RESULTS	
APPENDIX B - ROUND 9 DATA SUMMARY TABLES	
APPENDIX C - ROUND 10 DATA SUMMARY TABLES	
APPENDIX D - ROUND 11 DATA SUMMARY TABLES	

Table of Contents

LIST OF TABLES

TABLE NO.	TITLE	PAGE
1-1	General Chemistry Parameters and Metals Included in Analyses	1-2
1-2	Summary of Wells Sampled for Each Round	1-3
2-1	Scheduled Analyses for Field Duplicates for Rounds 9, 10, and 11	2-3
2-2	Scheduled Analyses for Split Samples for Rounds 9, 10, and 11	2-4
A-1	Round 9 General Chemistry Field Duplicate Results	A-1
A-2	Round 9 Metals Field Duplicate Results	A-2
A-3	Round 9 Volatile Organic Field Duplicate Results	A-3
A-4	Round 10 General Chemistry Field Duplicate Results	A-4
A-5	Round 10 Metals Field Duplicate Results	A-5
A-6	Round 10 Volatile Organic Field Duplicate Results	A-6
A-7	Round 11 General Chemistry Field Duplicate Results	A-7
A-8	Round 11 Metals Field Duplicate Results	A-8
A-9	Round 11 Volatile Organic Field Duplicate Results	A-9
B-1	Round 9 General Chemistry Analysis, Water Matrix	B-1
B-2	Round 9 Metals Analysis, Water Matrix	B-5
B-3	Round 9 Volatile Organic Analysis, Water Matrix	B-9
C-1	Round 10 General Chemistry Analysis, Water Matrix	C-1
C-2	Round 10 Metals Analysis, Water Matrix	C-5
C-3	Round 10 Volatile Organic Analysis, Water Matrix	C-10
C-4	Round 10 Pesticide/PCB Analysis, Water Matrix	C-17
D-1	Round 11 General Chemistry Analysis, Water Matrix	D-1
D-2	Round 11 Metals Analysis, Water Matrix	D-5
D-3	Round 11 Volatile Organic Analysis, Water Matrix	D-9

ACRONYMS

CLP	Contract Laboratory Program
CRQL	Contract Required Quantitation Limits
MCL	Maximum Contaminant Level
QC	Quality Control
RPD	Relative percent difference
SOW	Scope of Work
TIC	Tentatively Identified Compound
USACE	U.S. Army Corps of Engineers

1.0 INTRODUCTION

The purpose of this report is to summarize the data quality for the ninth, tenth, and eleventh groundwater monitoring events for the 1100-EM-1 operable unit. These sampling rounds all occurred in calendar year 1992. Samples were collected by U.S. Army Corps of Engineers (USACE) Walla Walla District personnel in support of the 1100-EM-1 Remedial Investigation (RI) currently being performed for the U.S. Department of Energy. The Walla Walla District USACE contracted with James M. Montgomery, Consulting Engineers, Inc. (JMM) to provide coolers and bottles for sample collection, to perform analyses on the samples, and to validate the subsequent analytical data. Additional Quality Assurance (QA) split samples were sent to the USACE Missouri River Division (MRD) laboratory. The dates of the three sampling events are as follows:

- Round 9 - March 9, 1992 through March 17, 1992
- Round 10 - May 11, 1992 through June 10, 1992
- Round 11 - September 14, 1992 through September 30, 1992

The analyses performed on the samples varied with each round as specified in the Scope of Work (SOW; USACE, 1992). Groundwater samples collected during Rounds 9 and 11 were analyzed for general chemistry parameters, metals, and volatile organic parameters (see Table 1-1 and Appendices B and D). In addition to these parameters, Round 10 groundwater samples were analyzed for additional metals (see Table 1-1), volatile organic tentatively identified compounds (TICs), and pesticides (see Appendix C). Montgomery Laboratories of Pasadena, California performed all analyses. The wells sampled during Rounds 9, 10, and 11 are shown in Table 1-2 using the well identifications shown in the SOW. Also shown in this table are the new well identification provided by USACE field personnel, the Hanford Environmental Information System (HEIS) sample number, and the laboratory sample number. The HEIS numbers were obtained by JMM from Mike Schwab of the Westinghouse Hanford Company (WHC) prior to each round of sampling.

This report is a compilation of all of the analytical and quality control data generated during these three rounds of sampling. In addition, a summary of the anion and volatile organic data validation reports for each round is provided (JMM 1992, 1992a, 1992b, 1992c, 1992d, 1992e). The data validation reports were prepared by JMM chemists in Salt Lake City, Utah who are not affiliated with the laboratory. Sections 2.0 and 3.0 of this report provide summaries of the data quality objectives and data quality evaluations, respectively. Appendix A presents tabulated summaries of the field duplicate results. Appendix B

presents tabulated summaries of the Round 9 sample results, Appendix C presents tabulated summaries of the Round 10 sample results, and Appendix D presents tabulated summaries of the Round 11 sample results. Split sample results were not received, and thus could not be included in this report.

TABLE 1-1

SUMMARY OF PARAMETERS INCLUDED IN ANALYSES FOR EACH ROUND

Parameter	Round 9	Round 10	Round 11
General Chemistry			
Ortho-phosphate	X	X	X
Fluoride	X	X	X
Alkalinity	X	X	X
Ammonia	X	X	X
Chloride	X	X	X
Nitrate	X	X	X
Nitrite	X	X	X
Sulfate	X	X	X
Total Dissolved Solids			X
Metals			
Arsenic			X
Barium	X	X	X
Beryllium		X	
Calcium	X	X	X
Chromium		X	
Copper		X	
Iron	X	X	X
Magnesium	X	X	X
Manganese	X	X	X
Nickel		X	
Potassium	X	X	X
Silver		X	
Sodium	X	X	X
Organics*			
Volatile Organic Compounds (VOCs)	X	X	X
VOC Tentatively Identified Compounds		X	
Pesticides		X	

* See Appendices B, C, and D for lists of individual analytes

TABLE 1-2

SUMMARY OF WELLS SAMPLED FOR EACH ROUND

Old Well Identification	New Well Identification	HEIS Number	Laboratory Sample Number
Round 9			
MW-20	S29-E11	B06208	920310001
S29-E12	S29-E12	B06210	920318001
MW-10	S30-E10A	B06196	920312004
MW-11	S30-E10B	B06197	920312007
MW-12	S31-E10A	B06198	920311001
MW-12 Dup	S31-E10A Dup	B06199	920311003
MW-14	S31-E10C	B06202	920311008
MW-14 Dup	S31-E10C Dup	B06203	920311010
MW-15	S31-E10D	B06206	920311015
MW-8	S31-E8	B06195	920312010
MW-22	S31-E11	B06209	920310004
MW-19	S32-E11	B06207	920313004
MW-2	S34-E10	B06194	920313001
SNP-SPL	SNP-SPL	B06211	920312013
SNP-SPL Dup	SNP-SPL Dup	B06212	920312015
Round 10			
MW-20	S29-E11	B06251	920512003
S29-E12	S29-E12	B06263	920605002
MW-10	S30-E10A	B06260	920515018
MW-11	S30-E10B	B06261	920515021
MW-12	S31-E10A	B06252	920512006
MW-12 Dup	S31-E10A Dup	B06253	920512007
MW-14	S31-E10C	B06255	920513006
MW-14 Dup	S31-E10C Dup	B06256	920513007
MW-15	S31-E10D	B06257	920513012
MW-8	S31-E8	B061C7	920611057
MW-22	S31-E11	B06254	920512012
MW-19	S32-E11	B06264	920604011
MW-2	S34-E10	B06265	920604014
MW-6	S37-E11	B06266	920519021
MW-4	S38-E12A	B061C3	920611053
MW-1	S41-E11	B06268	920519024
MW-1 Dup	S41-E11 Dup	B06269	920519027
MW-3	S41-E12	B06270	920605005
MW-3 Dup	S41-E12 Dup	B06271	920605008
Round 11			
MW-20	S29-E11	B061H1	920917085
S29-E12	S29-E12	B061G8	920916186
MW-10	S30-E10A	B061D0	921001079
MW-11	S30-E10B	B061D3	920916157
MW-8	S31-E8	B061J2	920917096
MW-12	S31-E10A	B061D6	920916160
MW-12 Dup	S31-E10A Dup	B061D9	920916165
MW-14	S31-E10C	B061F1	920916167
MW-14 Dup	S31-E10C Dup	B061F4	920916172
MW-15	S31-E10D	B061F6	920916174
MW-22	S31-E11	B061H4	920917088
MW-19	S32-E11	B061G5	920916183
MW-2	S34-E10	B061G2	920916180
MW-3	S41-E12	B061F9	920916177
SNP-SPL	SNP-SPL	B061H7	920917091
SNP-SPL Dup	SNP-SPL Dup	B061J0	920917094

HEIS - Hanford Environmental Information System.

2.0 DATA QUALITY OBJECTIVES

Results of Rounds 9, 10, and 11 groundwater data were reviewed against generally accepted data quality criteria and criteria specified in the Scope of Work (SOW; USACE, 1992). The precision of the data from field duplicates for all analytes was evaluated against the generally accepted criterion of 25 percent relative percent difference. The SOW criterion for completeness for each analytical method was 95 percent. Detailed data quality objectives provided in the analytical methods (SW-846) were reviewed in the data validation reports for anions and volatile organics (JMM 1992, 1992a, 1992b, 1992c, 1992d, 1992e). Data validation was conducted using the guidelines in Westinghouse Hanford Corporation *Data Validation Procedures for Chemical Analyses* (WHC, 1992). Data quality objectives for reported sample results as stated in the SOW were achieved. The following sections describe the parameters reviewed based on the SOW requirements.

Analytical data objectives were Level IV SW-846 (Third Edition, 1986) analytical methods for metals, volatile organics, and pesticides, and Level III analytical methods for general chemistry parameters. A review of the results indicates that the proper analytical methods were used by the laboratory. Data validation was conducted on the volatile organic and anion (ortho-phosphate, fluoride, nitrate and nitrite) analyses only as required in the SOW.

The reported sample detection limits were reviewed against those specified in the SOW. The reported detection limits were at or below maximum contaminant levels (MCLs) and Contract Required Quantitation Limits (CRQLs) for all analyzed parameters as required by the SOW.

Field quality control (QC) samples were collected and analyzed with each sampling round as specified in the SOW. Four types of field QC samples were collected to support the evaluation of accuracy, precision, and representativeness of the sampling project as follows:

- Trip blanks for volatile organic analyses were prepared by the laboratory and accompanied the samples to and from the site. These were submitted daily or for each day of sampling activity. At least one trip blank was prepared for each well sampled. A total of 15 trip blanks were submitted for analysis during each of Rounds 9 and 10 and a total of 13 trip blanks were submitted for analysis during Round 11.

- At least one equipment blank was collected for each volatile organic, anion, and metals analysis for each sampling event. Equipment blanks were generated at a rate of one per well sampled during the subject sampling rounds. These were collected by passing contaminant-free deionized water through the field sampling equipment and were submitted to the laboratory for analysis. Twelve equipment blanks were collected for Round 9, fifteen were collected for Round 10, and thirteen were collected for Round 11.

- Three field duplicates were collected for Rounds 9 and 11, and four were collected for Round 10. The analyses performed for field duplicates for Rounds 9, 10, and 11 are shown in Table 2-1.

- Five field split samples were collected for Rounds 9 and 11, and seven were collected for Round 10. Scheduled analyses for field split samples for Rounds 9, 10, and 11 are shown in Table 2-2. The split samples were sent to the USACE Missouri River Division (MRD) laboratory for analysis. At the time of this report results for the field split samples for Rounds 9, 10, and 11 were unavailable. Therefore, per the SOW, these MRD data were not incorporated into the data validation reports nor could these data be included in this report.

TABLE 2-1

ANALYSES PERFORMED FOR FIELD DUPLICATES
FOR ROUNDS 9, 10, AND 11

Sample ID	General Chemistry Analytes	Metals	Volatile Organics	Pesticides
Round 9				
S31-E10A DUP	X	X	X	
S31-E10C DUP	X		X	
SNP-SPL DUP			X	
Round 10				
S31-E10A DUP	X	X	X	X
S31-E10C DUP	X		X	
S41-E11 DUP		X		
S41-E12 DUP		X		
Round 11				
S31-E10A DUP	X	X	X	
S31-E10C DUP	X		X	
SNP-SPL DUP	X		X	

X Indicates analysis conducted

TABLE 2-2

SCHEDULED ANALYSES FOR SPLIT SAMPLES FOR ROUNDS 9, 10, AND 11

Sample ID	Volatile Organics	Anions[a]	General Chemistry Parameters[b]	Metals	Pesticides
Rounds 9 & 11					
S30-E10A SPLIT		X			
S30-E10B SPLIT		X			
S31-E10A SPLIT	X	X	X	X	
S31-E10C SPLIT	X	X			
S31-E10D SPLIT	X				
Round 10					
S41-E11 SPLIT				X	
S41-E12 SPLIT				X	
S30-E10A SPLIT		X			
S30-E10B SPLIT		X			
S31-E10A SPLIT	X	X	X	X	X
S31-E10C SPLIT	X	X			
S31-E10D SPLIT	X				

(a) Includes nitrite, nitrate, ortho-phosphate, and fluoride
(b) Includes ammonia, alkalinity, chloride, and sulfate
X Indicates analysis scheduled

3.0 DATA QUALITY SUMMARY

Results for the field QC samples were reviewed and compiled into summary tables for field duplicate samples (Tables A-1 through A-9). Relative percent difference (RPD) values were calculated for duplicates using the following equation:

$$RPD = \frac{|A-B|}{([A+B]/2)} \times 100$$

where: A and B are the reported concentrations for sample duplicate analyses.

The data evaluation criterion used to identify significant data discrepancies between duplicate samples is that RPD values should be less than or equal to 25 percent for sample results.

3.1 ROUND 9 FIELD QC SUMMARY

This section presents the results for field blanks and field duplicate samples collected during the Round 9 sampling.

3.1.1. Field Blanks

No volatile organics were detected in the trip blanks. Results for volatile compounds in the equipment blanks indicate toluene, meta- and para-xylenes, and chloroform were detected at low concentrations. None of these compounds were found in the field samples, therefore data qualification was not required.

Results for metals in the equipment blanks show calcium, magnesium, manganese, and sodium present at levels above the instrument detection limit. Associated sample values at less than five times the equipment blank results were qualified as non-detects in the attached summary tables (see Appendix B) in accordance with the data validation guidelines (WHC, 1992).

3.1.2. Field Duplicate Samples

General chemistry results for Round 9 for the field duplicate samples are provided in Table A-1. RPD values for the general chemistry parameters ranged from 0 percent to 9 percent.

RPD values for the metals ranged from 1 percent to 3 percent (see Table A-2). RPD values for the volatile organic analyses ranged from 15 percent to 22 percent (see Table A-3). Based on the review of the Round 9 field duplicate data, no significant data discrepancies were identified.

3.2 ROUND 10 FIELD QC SUMMARY

This section presents the results for field blanks and field duplicate samples collected during the Round 10 sampling.

3.2.1. Field Blanks

No volatile organics were detected in the trip blanks. Acetone and one TIC, trimethylsilanol, were the only volatile compounds detected in the equipment blanks. Since other samples had peaks corresponding to these analytes at levels below the reporting level, these detections are probably laboratory artifacts. Both of these compounds are commonly detected laboratory contaminants (WHC, 1992). Neither of these compounds was found in the field samples, therefore, no data qualification was required.

Results for metals in the equipment blanks show calcium, copper, lead, and magnesium present at levels above the instrument detection limit. Associated sample values at less than five times the equipment blank results were qualified as non-detects in the attached data summary tables (see Appendix C) in accordance with the data validation guidelines (WHC, 1992).

No general chemistry analytes were detected in the equipment blanks.

3.2.2. Field Duplicate Samples

Field duplicate results for general chemistry parameters, metals, and volatile organic compounds are summarized in Tables A-4 through A-6. Duplicate results for pesticides are not summarized since no pesticides were detected in the field duplicate samples. RPD values for general chemistry parameters ranged from 0 percent to 31 percent. RPD values for metals ranged from 0 percent to 107 percent. Finally, RPD values for the volatile organic compounds ranged from 0 percent to 67 percent. The RPD values that did not meet the data evaluation criterion were considered acceptable since the other RPD data (for the other two or three duplicates analyzed for the same parameter) indicated that there was no general

problem with the precision of the data. For example, iron in the S41-E11 field sample and duplicate had an RPD of 107 percent but the iron result for the S41-E12 pair was 10 percent RPD. Similar results occurred for all of the other isolated instances where the RPD exceeded 25 percent.

Based on the review of the Round 10 duplicate data, no significant data discrepancies were identified.

3.3 ROUND 11 FIELD QC SUMMARY

This section presents the results for field blanks and field duplicate samples collected during the Round 11 sampling.

3.3.1 Field Blanks

No volatile organics were detected in any of the trip blanks. Toluene and meta- and para-xylenes were the only volatile compounds detected in the equipment blanks. Toluene is among the commonly detected laboratory contaminants (WHC, 1992). None of these compounds was found in the field samples, therefore data qualification was not required.

No metals were detected in the equipment blanks.

General chemistry analyses of the equipment blanks show ortho-phosphate and nitrite present at levels above the instrument detection limit. Associated sample values at less than five times the equipment blank values were qualified as non-detects in the attached data summary tables (see Appendix D) in accordance with the data validation guidelines (WHC, 1992).

3.3.2. Field Duplicate Samples

Field duplicate results for general chemistry parameters, metals, and volatile organic compounds are summarized in Table A-7 through Table A-9. RPD values for general chemistry parameters ranged from 0 percent to 23 percent. RPD values for metals ranged from 1 percent to 2 percent. Finally, RPD values for the volatile organic compounds ranged from 0 percent to 41 percent. The RPDs that did not meet the data evaluation criterion were considered acceptable since other RPD data (for the other two or three duplicates analyzed

for the same parameter) indicated that there was no general problem with the precision of the data.

Based on the review of the Round 11 duplicate data, no significant data discrepancies were identified.

4.0 CONCLUSIONS

In summary, all of the data reviewed for this report is considered acceptable based on the criteria specified. In a few isolated cases, the RPDs noted for some analytes were elevated. However, other RPDs for the same analytes in other samples in the identical sampling round had acceptable RPDs. Therefore, the isolated RPD problems were not considered indicative of general quality control problems in the laboratory.

Equipment and trip blank results were considered acceptable. Very few of the analytes that were found in these blanks were found in the associated field samples. Therefore, this field blank data along with the other QC data indicates that the field sample data are representative of environmental concentrations at the time of sampling.

The data quality objectives in the SOW were met by the data from Rounds 9, 10, and 11. This data is considered usable in the RI.

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APPENDIX A

ROUNDS 9, 10, AND 11
FIELD DUPLICATE RESULTS

9 3 1 2 0 3 1 0 6 4

TABLE A-1

ROUND 9, GENERAL CHEMISTRY FIELD DUPLICATE RESULTS

Well ID HEIS Sample No.	S31-E10A (B06198)	Dup S31-E10A (B06199)		S31-E10C (B06202)	Dup S31-E10C (B06203)		SNP-SPL (B06211)	Dup SNP-SPL (B06212)	
Parameter			**RPD (%)**			**RPD (%)**			**RPD (%)**
Ortho-phosphate	31 B	31 B	0	31 B	32 B	3	130	130	0
Fluoride	370	390	5	430	430	0	2100	2100	0
Alkalinity	171,000	169,000	1	172,000	NA	NC	156,000	NA	NC
Ammonia	50 U	50 U	NC	50 U	NA	NC	6700	NA	NC
Chloride	18,000	17,000	6	17,000	17,000	0	11,000	12,000	9
Nitrite	100 U	100 U	NC	100 U	100 U	NC	100 U	100 U	NC
Nitrate	52,000	51,000	2	51,000	51,000	0	20,000	20,000	0
Sulfate	71,000	69,000	3	70,000	70,000	0	50,000	50,000	0

Note: All results are in μg/L

NC Not calculated
NA Not analyzed
B Analyte found between the instrument detection limit and the contract-required detection limit
U Not detected

TABLE A-2

ROUND 9, METALS FIELD DUPLICATE RESULTS

Well ID HEIS Sample No.	S31-E10A (B06198)	Dup S31-E10A (B06199)	
Metal			**RPD (%)**
Barium	103	106	3
Calcium	102,000	103,000	1
Iron	100 U	100 U	NC
Magnesium	20,800	21,000	1
Manganese	15.0 U	15.0 U	NC
Potassium	7,790	7,670	2
Sodium	30,900	30,600	1

Note: All results are in µg/L

NC Not calculated
U Not detected

TABLE A-3

ROUND 9, VOLATILE ORGANIC COMPOUND FIELD DUPLICATE RESULTS

Well ID	S31-E10ADIL	Dup S31-E10ADIL		S31-E10CDIL	Dup S31-E10CDIL		SNP-SPLDIL	Dup SNP-SPLDIL	
HEIS Sample No.	(B06198)	(B06199)		(B06202)	(B06203)		(B06211)	(B06212)	
Compound			RPD (%)			RPD (%)			RPD (%)
Chloromethane	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
Trichlorofluoromethane	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
Bromomethane	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
Vinyl chloride	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
Chloroethane	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
Methylene chloride	30 U	30 U	NC	30 U	30 U	NC	8 U	8 U	NC
Acetone	100 U	100 U	NC	100 U	100 U	NC	25 U	25 U	NC
Carbon disulfide	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,1-Dichloroethene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,1-Dichloroethane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
cis-1,2-Dichloroethene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
trans-1,2-Dichloroethene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Chloroform	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,2-Dichloroethane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
2-Butanone	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
Tetrahydrofuran	100 U	100 U	NC	100 U	100 U	NC	25 U	25 U	NC
1,1,1-Trichloroethane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Carbon tetrachloride	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Vinyl acetate	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Bromodichloromethane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,2-Dichloropropane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
cis-1,3-Dichloropropene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
trans-1,3-Dichloropropene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Trichloroethene	58 D	72 D	22	58 D	72 D	22	21 D	18 D	15
Dibromochloromethane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,1,2-Trichloroethane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Benzene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Bromoform	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
4-Methyl-2-pentanone	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
2-Hexanone	10 U	10 U	NC	10 U	10 U	NC	2 U	2 U	NC
Tetrachloroethene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
m,p-Xylene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
o-Xylene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,1,2,2-Tetrachloroethane	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Toluene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Chlorobenzene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Ethylbenzene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
Styrene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,3-Dichlorobenzene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,4-Dichlorobenzene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC
1,2-Dichlorobenzene	5 U	5 U	NC	5 U	5 U	NC	1 U	1 U	NC

Note: All results are in µg/L NC Not calculated U Not detected D Quantitated on diluted sample

TABLE A-4

ROUND 10, GENERAL CHEMISTRY FIELD DUPLICATE RESULTS

Well ID	S31-E10A	Dup S31-E10A		S31-E10C	Dup S31-E10C	
HEIS Sample No.	(B06252)	(B06253)		(B06255)	(B06256)	
Parameter			RPD (%)			RPD (%)
Ortho-phosphate	25 B	26 B	4	24 B	23 B	4
Fluoride	371	385	4	438	451	3
Alkalinity	167,000	168,000	1	171,000	NA	NC
Ammonia	50 U	50 U	NC	50 U	NA	NC
Chloride	22,700	16,600	31	17,400	17,200	1
Nitrite	600 U	100 U	NC	100 U	100 U	NC
Nitrate	47,600	42,900 E	10	50,900	51,600	1
Sulfate	65,200	65,300	0	70,900	69,000	3

Note: All results are in µg/L

NC Not calculated
NA Not analyzed
B Analyte found between the instrument detection limit and the contract-required detection limit
U Not detected
E Analyte exceeded the calibration range

TABLE A-5

ROUND 10, METALS FIELD DUPLICATE RESULTS

Well ID	S31-E10A	Dup S31-E10A		S41-E11	Dup S41-E11		S41-E12	Dup S41-E12	
HEIS Sample No.	(B06252)	(B06253)		(B06268)	(B06269)		(B06270)	(B06271)	
Metal			RPD (%)			RPD (%)			RPD (%)
Barium	111	106	5	50.0 U	50.0 U	NC	198	215	8
Beryllium	1.0 U	1.0 U	NC	1.0 U	1.0 U	NC	1.0 U	1.0 U	NC
Calcium	101,000	99,000	2	54,000	53,700	1	123,000	124,000	1
Chromium	10.0 U	10.0 U	NC	15.6	16.8	7	2,810	2,950	5
Copper	10.0 U	10.0 U	NC	10.0 U	10.0 U	NC	74.0	84.7	13
Iron	100 U	100 U	NC	434	131	107	30,900	34,300	10
Magnesium	20,700	20,100	3	11,200	11,100	1	26,500	26,600	0
Manganese	15.0 U	15.0 U	NC	15.0 U	15.0 U	NC	347	552	46
Nickel	15.0 U	15.0 U	NC	24.9	31.9	25	242	269	11
Potassium	7,980	7,710	3	5,830	5,700	2	9,140	9,000	2
Silver	10.0 U	10.0 U	NC	10.0 U	10.0 U	NC	10.0 U	10.0 U	NC
Sodium	31,100	29,900	4	22,100	21,900	1	38,500	38,800	1

Note: All results are in µg/L

NC Not calculated
U Not detected

TABLE A-6

ROUND 10, VOLATILE ORGANIC COMPOUND FIELD DUPLICATE RESULTS

Well ID HEIS Sample No.	SS1-E10A (B06252)	Dup SS1-E10A (B06253)		SS1-E10ADIL (B06252)	Dup SS1-E10ADIL (B06253)		SS1-E10C (B06255)	Dup SS1-E10C (B06256)		SS1-E10CDIL (B06255)	Dup SS1-E10CDIL (B06256)	
Compound			RPD (%)			RPD (%)			RPD (%)			RPD (%)
Chloromethane	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
Trichlorofluoromethane	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
Bromomethane	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
Vinyl chloride	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
Chloroethane	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
Methylene chloride	3 U	3 U	NC	30 U	30 U	NC	3 U	3 U	NC	30 U	30 U	NC
Acetone	10 U	10 U	NC	100 U	100 U	NC	10 U	10 U	NC	100 U	100 U	NC
Carbon disulfide	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,1-Dichloroethene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,1-Dichloroethane	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
cis-1,2-Dichloroethene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
trans-1,2-Dichloroethene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Chloroform	0.5	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,2-Dichloroethane	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
2-Butanone	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
Tetrahydrofuran	10 U	10 U	NC	100 U	100 U	NC	10 U	10 U	NC	100 U	100 U	NC
1,1,1-Trichloroethane	2	2	0	5 U	5 U	NC	2	1	67	5 U	5 U	NC
Carbon tetrachloride	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Vinyl acetate	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Bromodichloromethane	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,2-Dichloropropane	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
cis-1,3-Dichloropropene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
trans-1,3-Dichloropropene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Trichloroethene	46 E	45 E	2	57 D	44 D	26	48 E	43 E	11	66 D	56 D	16
Dibromochloromethane	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,1,2-Trichloroethane	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Benzene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Bromoform	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
4-Methyl-2-pentanone	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
2-Hexanone	1 U	1 U	NC	10 U	10 U	NC	1 U	1 U	NC	10 U	10 U	NC
Tetrachloroethene	0.5	0.5 U	NC	5 U	5 U	NC	0.5	0.5 U	NC	5 U	5 U	NC
m,p-Xylene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
o-Xylene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Toluene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Chlorobenzene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Ethylbenzene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
Styrene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,3-Dichlorobenzene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,4-Dichlorobenzene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC
1,2-Dichlorobenzene	0.5 U	0.5 U	NC	5 U	5 U	NC	0.5 U	0.5 U	NC	5 U	5 U	NC

Note: All results are in µg/L

NC Not calculated
U Not detected
E Analyte exceeded calibration range
D Quantitated on diluted sample

TABLE A-7

ROUND 11, GENERAL CHEMISTRY FIELD DUPLICATE RESULTS

Well ID HEIS Sample No.	S31-E10A (B061D6)	Dup S31-E10A (B061D9)		S31-E10C (B061F1)	Dup S31-E10C (B061F4)		SNP-SPL (B061H7)	Dup SNP-SPL (B061J0)	
Parameter			**RPD (%)**			**RPD (%)**			**RPD (%)**
Ortho-phosphate	35 B	40 B	13	36 B	36 B	0	113	90	23
Fluoride	371	354	5	378	387	2	2270	2260	0
Alkalinity	166,000	166,000	0	165,000	NA	NC	145,000	NA	NC
Ammonia	50 U	50 U	NC	50 U	NA	NC	4520	NA	NC
Chloride	17,100	18,300	7	17,000	NA	NC	10,500	NA	NC
Nitrite	100 U	100 U	NC	100 U	100 U	NC	100 U	100 U	NC
Nitrate	55,700	55,600	0	51,300	51,300	0	23,300	24,700	6
Sulfate	67,800	69,600	3	67,100	NA	NC	49,300	NA	NC
Total Dissolved Solids	606,000	588,000	3	582,000	558,000	4	366,000	366,000	0

Note: All results are in µg/L

NC Not calculated
NA Not analyzed
B Analyte found between the instrument detection limit and the contract-required detection limit
U Not detected

TABLE A-8

ROUND 11, METALS FIELD DUPLICATE RESULTS

Well ID	S31-E10A	Dup S31-E10A	
HEIS Sample No.	(B061D6)	(B061D9)	
Metal			**RPD (%)**
Barium	103	104	1
Calcium	102,000	103,000	1
Iron	100 U	100 U	NC
Magnesium	20,700	20,900	1
Manganese	15.0 U	15.0 U	NC
Potassium	8,310	8,500	2
Sodium	29,700	30,400	2

Note: All results are in µg/L

NC Not calculated
U Not detected

TABLE A-9

ROUND 11, VOLATILE ORGANIC COMPOUND FIELD DUPLICATE RESULTS

Well ID	S31-E10A	Dup S31-E10A		S31-E10ADIL	Dup S31-E10ADIL		S31-E10C	Dup S31-E10C		S31-E10CDIL	Dup S31-E10CDIL	
HEIS Sample No.	(B061D6)	(B061D9)		(B061D6)	(B061D9)		(B061F1)	(B061F4)		(B061F1)	(B061F4)	
Compound			RPD (%)			RPD (%)			RPD (%)			RPD (%)
Chloromethane	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
Trichlorofluoromethane	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
Bromomethane	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
Vinyl chloride	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
Chloroethane	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
Methylene chloride	3 U	3 U	NC	15 U	15 U	NC	3 U	3 U	NC	15 U	15 U	NC
Acetone	10 U	10 U	NC	50 U	50 U	NC	10 U	10 U	NC	50 U	50 U	NC
Carbon disulfide	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1-Dichloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1-Dichloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
cis-1,2-Dichloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
trans-1,2-Dichloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Chloroform	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,2-Dichloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
2-Butanone	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
Tetrahydrofuran	10 U	10 U	NC	50 U	50 U	NC	10 U	10 U	NC	50 U	50 U	NC
1,1,1-Trichloroethane	1	1	0	2 U	2 U	NC	1	1	0	2 U	2 U	NC
Carbon tetrachloride	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Vinyl acetate	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Bromodichloromethane	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,2-Dichloropropane	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
cis-1,3-Dichloropropene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
trans-1,3-Dichloropropene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Trichloroethene	42 E	39 E	7	33 D	50 D	41	47 E	43 E	9	39 D	51 D	27
Dibromochloromethane	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1,2-Trichloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Benzene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Bromoform	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
4-Methyl-2-pentanone	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
2-Hexanone	1 U	1 U	NC	5 U	5 U	NC	1 U	1 U	NC	5 U	5 U	NC
Tetrachloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
m,p-Xylene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
o-Xylene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Toluene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Chlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Ethylbenzene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
Styrene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,3-Dichlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,4-Dichlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC
1,2-Dichlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC	0.5 U	0.5 U	NC	2 U	2 U	NC

Note: All results are in µg/L

NC Not calculated
U Not detected

E Analyte exceeded calibration range

D Quantitated on diluted sample

TABLE A-9

ROUND 11, VOLATILE ORGANIC COMPOUND FIELD DUPLICATE RESULTS
(CONTINUED)

Well ID HEIS Sample No.	SNP-SPL (B061H7)	Dup SNP-SPL (B061J0)		SNP-SPLDIL (B061H7)	Dup SNP-SPLDIL (B061J0)	
Compound			RPD (%)			RPD (%)
Chloromethane	1 U	1 U	NC	5 U	5 U	NC
Trichlorofluoromethane	1 U	1 U	NC	5 U	5 U	NC
Bromomethane	1 U	1 U	NC	5 U	5 U	NC
Vinyl chloride	1 U	1 U	NC	5 U	5 U	NC
Chloroethane	1 U	1 U	NC	5 U	5 U	NC
Methylene chloride	3 U	3 U	NC	15 U	15 U	NC
Acetone	10 U	10 U	NC	50 U	50 U	NC
Carbon disulfide	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1-Dichloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1-Dichloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC
cis-1,2-Dichloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC
trans-1,2-Dichloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC
Chloroform	0.5 U	0.5 U	NC	2 U	2 U	NC
1,2-Dichloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC
2-Butanone	1 U	1 U	NC	5 U	5 U	NC
Tetrahydrofuran	10 U	10 U	NC	50 U	50 U	NC
1,1,1-Trichloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC
Carbon tetrachloride	0.5 U	0.5 U	NC	2 U	2 U	NC
Vinyl acetate	0.5 U	0.5 U	NC	2 U	2 U	NC
Bromodichloromethane	0.5 U	0.5 U	NC	2 U	2 U	NC
1,2-Dichloropropane	0.5 U	0.5 U	NC	2 U	2 U	NC
cis-1,3-Dichloropropene	0.5 U	0.5 U	NC	2 U	2 U	NC
trans-1,3-Dichloropropene	0.5 U	0.5 U	NC	2 U	2 U	NC
Trichloroethene	22 E	20 E	10	18 D	18 D	0
Dibromochloromethane	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1,2-Trichloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC
Benzene	0.5 U	0.5 U	NC	2 U	2 U	NC
Bromoform	0.5 U	0.5 U	NC	2 U	2 U	NC
4-Methyl-2-pentanone	1 U	1 U	NC	5 U	5 U	NC
2-Hexanone	1 U	1 U	NC	5 U	5 U	NC
Tetrachloroethene	0.5 U	0.5 U	NC	2 U	2 U	NC
m,p-Xylene	0.5 U	0.5 U	NC	2 U	2 U	NC
o-Xylene	0.5 U	0.5 U	NC	2 U	2 U	NC
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	NC	2 U	2 U	NC
Toluene	0.5 U	0.5 U	NC	2 U	2 U	NC
Chlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC
Ethylbenzene	0.5 U	0.5 U	NC	2 U	2 U	NC
Styrene	0.5 U	0.5 U	NC	2 U	2 U	NC
1,3-Dichlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC
1,4-Dichlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC
1,2-Dichlorobenzene	0.5 U	0.5 U	NC	2 U	2 U	NC

Note: All results are in µg/L

NC Not calculated
U Not detected

E Analyte exceeded calibration range

D Quantitated on diluted sample

APPENDIX B

ROUND 9 DATA SUMMARY TABLES

9 3 1 2 3 1 0 7 6

TABLE B-1

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06194		B06195		B06196		B06197		B06198		B06199		B06202		B06203	
Lab Sample Number	920313001		920312010		920312004		920312007		920311001		920311003		920311008		920311010	
Analysis Date	3/13/92		3/13/92		3/13/92		3/13/92		3/11/92		3/11/92		3/11/92		3/11/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	29.0	B	36.0	B	25.0	U	25.0	U	31.0	B	31.0	B	31.0	B	32.0	B
Fluoride	331		306		309		299		373		387		426		431	
Alkalinity	154,000		161,000		159,000		161,000		171,000		169,000		172,000		NA	
Ammonia	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	NA	
Chloride	13,800		16,200		26,000		26,200		17,700		17,000		17,400		17,400	
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	5,090		6,540		43,000	D	48,800	D	51,600	D	51,000	D	50,700	D	51,500	D
Sulfate	42,500		29,800		68,700		75,400		70,700		69,400		70,300		70,100	

B Analyte found between the instrument detection limit and the contract-required detection limit

D Quantitated on diluted sample
NA Not analyzed

Q Qualifer
U Not detected

9 3 1 2 1 0 7 7

TABLE B-1

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (,µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06206		B06207		B06208		B06209		B06210		B06211		B06212		B06213	
Lab Sample Number	920311015		920313004		920310001		920310004		920318001		920312013		920312015		920313003	
Analysis Date	3/11/92		3/11/92		3/11/92		3/11/92		3/18/92		3/13/92		3/13/92		3/13/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	40.0	B	34.0	B	32.0	B	38.0	B	34.0	B	13.1		133		25.0	U
Fluoride	615		331		296		346		323		2,130		2,130		100	U
Alkalinity	159,000		142,000		162,000		142,000		144,000		156,000		NA		NA	
Ammonia	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	6,720		NA		NA	
Chloride	14,300		12,100		14,500		13,200		13,200		11,400		11,500		1,000	U
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	23,600	D	3,610		35,000	D	4,170		6,260		20,200		20,300		100	U
Sulfate	46,300		35,300		89,600		35,100		37,200		49,500		49,800		2,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

D Quantitated on diluted sample

NA Not analyzed

Q Qualifer

U Not detected

9 3 1 2 [illegible] 1 0 7 8

TABLE B-1

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06214		B06215		B06216		B06217		B06218		B06219		B06220		B06221	
Lab Sample Number	920312012		920312006		920312009		920311005		920311012		920311017		920313006		920310003	
Analysis Date	3/13/92		3/13/92		3/13/92		3/11/92		3/11/92		3/11/92		3/13/92		3/11/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U	25.0	U
Fluoride	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Alkalinity	NA		NA		NA		NA		NA		NA		NA		NA	
Ammonia	NA		NA		NA		NA		NA		NA		NA		NA	
Chloride	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Sulfate	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

D Quantitated on diluted sample
NA Not analyzed

Q Qualifer
U Not detected

9 3 1 2 9 TABLE B-1 1 9 7 9

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06222		B06223		B06224	
Lab Sample Number	920310006		920318003		920312014	
Analysis Date	3/11/92		3/18/92		3/13/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q
Ortho-phosphate	25.0	U	25.0	U	25.0	U
Fluoride	100	U	100	U	100	U
Alkalinity	NA		NA		NA	
Ammonia	NA		NA		NA	
Chloride	1,200		1,000	U	1,000	U
Nitrite	100	U	100	U	100	U
Nitrate	100	U	100	U	100	U
Sulfate	2,000	U	2,000	U	2,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit
D Quantitated on diluted sample
NA Not analyzed
Q Qualifer
U Not detected

9 3 1 7 1 0 3 0

TABLE B-2

METALS ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06194		B06195		B06196		B06197		B06198		B06199		B06202		B06206	
Lab Sample Number	920313001		920312010		920312004		920312007		920311001A		920311003		920311008		920311015	
Analysis Date	3/20/92		3/20/92		3/20/92		3/20/92		4/2/92		4/2/92		3/20/92		3/20/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	51.1		50.3		90.3		84.1		103		106		83.2		65.3	
Calcium	50,800		54,700		95,800		105,000		102,000		103,000		102,000		70,300	
Iron	120		100	U	100	U	100	U	100	U	100	U	100	U	100	U
Magnesium	10,600		13,100		19,800		22,600		20,800		21,000		21,200		14,600	
Manganese	15.0	U	15.0	U	15.0	U	20.1	U	15.0	U	15.0	U	15.0	U	15.0	U
Potassium	5,790		5,160		7,530		8,330		7,790		7,670		7,820		6,190	
Sodium	20,600		21,700		30,500		35,600		30,900		30,600		30,600		25,400	

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not detected

9 3 1 2 TABLE B-3 1 2 3 1

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06207		B06208		B06209		B06210		B06211		B06213		B06214		B06215	
Lab Sample Number	920313004		920310001		920310004		920318001		920312013		920313003		920312012		920312006	
Analysis Date	3/20/92		3/20/92		3/20/92		3/20/92		3/20/92		3/20/92		3/20/92		3/20/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	50.0	U	93.1		50.0	U	50.0	U	82.5		50.0	U	50.0	U	50.0	U
Calcium	44,100		91,000		44,600		47,500		56,700		1,000	U	1,000	U	2,980	B
Iron	100	U	172		100	U	100	U	100	U	100	U	100	U	100	U
Magnesium	8,740		18,200		9,000		9,410		13,500		100	U	100	U	1,080	
Manganese	15.0	U	28.0		15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Potassium	5,730		7,700		5,460		5,670		6,670		1,000	U	1,000	U	1,000	U
Sodium	19,800		30,600		20,300		20,900		22,000		1,000	U	1,000	U	3,670	

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not detected

9 1 1 2 TABLE B-2 1 0 0 2

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06216		B06217		B06218		B06219		B06220		B06221		B06222		B06223	
Lab Sample Number	920312009		920311005		920311012		920311017		920313006		920310003		920310006		920318003	
Analysis Date	3/20/92		3/20/92		3/20/92		3/20/92		3/20/92		3/20/92		3/20/92		3/20/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Calcium	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Iron	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Magnesium	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Manganese	34.4		15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Potassium	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Sodium	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not detected

9 5 1 2 TABLE B-2 1 0 9 3

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06224	
Lab Sample Number	920312014	
Analysis Date	3/20/92	
Metal	**Result**	**Q**
Barium	50.0	U
Calcium	1,000	U
Iron	100	U
Magnesium	100	U
Manganese	15.0	U
Potassium	1,000	U
Sodium	1,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not detected

TABLE B-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06194		B06195		B06196		B06197		B06198DL		B06199		B06199DL		B06202	
Lab Sample Number	920312001		920312010		920312004		920312007		920311001DL		920311003		920311003DL		920311008	
Analysis Date	3/20/92		3/19/92		3/20/92		3/20/92		3/18/92		3/20/92		3/18/92		3/19/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
Methylene chloride	3	U	3	U	3	U	3	U	30	U	3	U	30	U	3	U
Acetone	10	U	10	U	10	U	10	U	100	U	10	U	100	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
2-Butanone	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	10	U	100	U	10	U	100	U	10	U
1,1,1-Trichloroethane	0.5	U	2		0.8		1		5	U	1		5	U	1	
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	2		6		58	D	41	E	72	D	42	E
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
2-Hexanone	1	U	1	U	1	U	1	U	10	U	1	U	10	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5		5	U	0.6	
m,p-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range

Q Qualifier
U Not detected

9 1 1 2 TABLE B-3 2 1 0 8 5

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06202DL		B06203DL		B06206		B06206DL		B06207		B06208		B06209		B06210	
Lab Sample Number	920311008DL		920311010DL		920311015		920311015DL		920313004		920310001		920310004		920318001	
Analysis Date	3/19/92		3/19/92		3/19/92		3/19/92		3/20/92		3/18/92		3/18/92		3/23/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
Bromomethane	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
Vinyl chloride	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
Chloroethane	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
Methylene chloride	30	U	30	U	3	U	30	U	3	U	3	U	3	U	3	U
Acetone	100	U	100	U	10	U	100	U	10	U	10	U	10	U	10	U
Carbon disulfide	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
Tetrahydrofuran	100	U	100	U	10	U	100	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	5	U	5	U	0.7		5	U	0.5	U	0.5		0.5	U	0.5	U
Carbon tetrachloride	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	58	D	72	D	28	E	34	D	0.5	U	4		0.5	U	0.5	U
Dibromochloromethane	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
2-Hexanone	10	U	10	U	1	U	10	U	1	U	1	U	1	U	1	U
Tetrachloroethene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range

Q Qualifier
U Not detected

9 3 1 2 TABLE B-3 3 1 0 3 6

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEES Sample Number	B06211		B06211DL		B06212DL		B06213		B06214		B06215		B06216		B06217	
Lab Sample Number	920312013		920312013DL		920312015DL		921313003		920312012		920312006		920312009		920311005	
Analysis Date	3/20/92		03/20/92		03/20/92		03/20/92		03/19/92		03/20/92		03/20/92		03/18/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	3	U	8	U	8	U	3	U	3	U	3	U	3	U	3	U
Acetone	10	U	25	U	25	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	1	U	1	U	2		3		3		2		3	
1,2-Dichloroethane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran	10	U	25	U	25	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	16	E	21	D	18	D	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	1	U	2	U	2	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	1	U	1	U	0.7		0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	1	U	1	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
Q Qualifier
U Not detected

9 3 1 2 TABLE B-3 3 1 0 3 7

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06218		B06219		B06220		B06221		B06222		B06222REDL		B06223		B06224	
Lab Sample Number	920311012		920311017		920313006		920310003		920310006		920310006REDL		920318003		920312014	
Analysis Date	03/18/92		03/19/92		03/20/92		03/18/92		03/16/92		03/18/92		03/23/92		03/19/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
Methylene chloride	3	U	3	U	3	U	3	U	3	U	5	U	3	U	3	U
Acetone	10	U	10	U	10	U	10	U	10	U	17	U	10	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Chloroform	3		4		2		4		3		3	D	0.7		3	
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
2-Butanone	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	10	U	10	U	17	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
2-Hexanone	1	U	1	U	1	U	1	U	1	U	2	U	1	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	0.5	U	0.5	U	0.6		0.5		0.8	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.7		0.6		0.5	U	0.8	U	0.6		0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.8	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
Q Qualifier
U Not detected

9 3 1 2 TABLE B-3 2 1 0 3 8

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06234		B06235		B06236		B06237		B06238		B06239		B06240		B06241	
Lab Sample Number	920313002		920312011		920312005		920312008		920311002		920311004		920311009		920311011	
Analysis Date	03/20/92		03/19/92		03/19/92		03/19/92		03/18/92		03/18/92		03/18/92		03/18/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
Q Qualifier
U Not detected

9 3 1 2 TABLE B-3 1 2 3 9

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 9
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06242		B06243		B06244		B06245		B06245RE		B06246		B06247		B06248	
Lab Sample Number	920311016		920313005		920310002		92031005		920310005RE		920318002		920312016		920312017	
Analysis Date	03/19/92		03/20/92		03/18/92		03/16/92		03/18/92		03/23/92		03/19/92		03/19/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range

Q Qualifier
U Not detected

APPENDIX C

ROUND 10 DATA SUMMARY TABLES

9 3 1 2 0 3 3 1 0 9 1

TABLE C-1

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06251		B06252		B06253		B06254		B06255		B06256		B06257		B06260	
Lab Sample Number	920512003		920512006		920512007		920512012		920513006		920513007		920513012		920515018	
Analysis Date	5/13/92		5/13/92		5/13/92		5/13/92		5/14/92		5/14/92		5/13/92		5/14/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	31.0	B	25.0	B	26.0	B	38.0	B	24.0	B	23.0	B	35.0	B	30.0	B
Fluoride	304		371		385		350		438		451		685		317	
Alkalinity	163,000		167,000		168,000		142,000		171,000		NA		160,000		161,000	
Ammonia	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	NA		50.0	U	50.0	U
Chloride	14,500		22,700		16,600		11,400		17,400		17,200		14,300		26,900	
Nitrite	400	U	600	U	100	U	100	U	100	U	100	U	300	U	100	U
Nitrate	35,100		47,600		42,900	E	4,110		50,900		51,600		26,400		46,800	
Sulfate	85,000		65,200		65,300		34,100		70,900		69,000		46,900		68,600	

B Analyte found between the instrument detection limit and the contract-required detection limit
E Analyte exceeded calibration range
NA Not analyzed
Q Qualifer
U Not detected

9 3 1 2 TABLE C-1 1 0 9 2

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06261		B06262		B06263		B06264		B06265		B06266		B06267		B06268	
Lab Sample Number	920515021		920604008		920605002		920604011		920604014		920519021		920604022		920519024	
Analysis Date	5/14/92		6/5/92		6/5/92		6/5/92		6/5/92		5/20/92		6/4/92		5/20/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	27.0	B	39.0	B	22.0	B	35.0	B	32.0	B	49.0	B	27.0	B	45.0	B
Fluoride	311		306		331		336		329		288		217		296	
Alkalinity	160,000		159,000		148,000		142,000		153,000		NA		NA		NA	
Ammonia	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	NA		NA		NA	
Chloride	26,000		16,000		14,900		11,700		13,000		12,800		8,590		15,500	
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	47,200		6,450		4,280		3,810		5,360		3,180		2,100		3,730	
Sulfate	72,600		29,200		33,400		35,900		41,800		32,900		21,800		31,800	

B Analyte found between the instrument detection limit and the contract-required detection limit
E Analyte exceeded calibration range
NA Not analyzed
Q Qualifer
U Not detected

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

Lab Sample Number	B06270		B06272		B06273		B06274		B06275		B06276		B06278		B06279	
Analysis Date	920606005 6/5/92		920512004 5/13/92		920512008 5/13/92		920512013 5/13/92		920513008 5/13/92		920513013 5/13/92		920515019 5/14/92		920515022 5/14/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	583		10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Fluoride	153		100	U	100	U	100	U	100	U	100	U	100	U	100	U
Alkalinity	NA		NA		NA		NA		NA		NA		NA		NA	
Ammonia	NA		NA		NA		NA		NA		NA		NA		NA	
Chloride	103,000		1,000	U	NA		1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	875		100	U	100	U	100	U	100	U	100	U	100	U	100	U
Sulfate	16,400		2,000	U	NA		2,000	U	2,000	U	2,000	U	2,000	U	2,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

E Analyte exceeded calibration range

NA Not analyzed

Q Qualifer

U Not detected

9 3 1 2 TABLE C-1 1 0 9 4

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06280		B06281		B06282		B06283		B06284		B06285		B06286		B06287	
Lab Sample Number	920604009		920605003		920604012		920604015		920519022		920604023		920519028		920605009	
Analysis Date	6/5/92		6/5/92		6/5/92		6/5/92		5/20/92		6/5/92		5/20/92		6/5/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Fluoride	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Alkalinity	NA		NA		NA		NA		NA		NA		NA		NA	
Ammonia	NA		NA		NA		NA		NA		NA		NA		NA	
Chloride	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Sulfate	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U	2,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

E Analyte exceeded calibration range

NA Not analyzed

Q Qualifer

U Not detected

9 5 1 2 3 3 1 0 9 5

TABLE C-2

METALS ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06251		B06252		B06253		B06254		B06255		B06257		B06260		B06261	
Lab Sample Number	920512003		920512006		920512007		920512012		920513006		920513012		920515018		920515021	
Analysis Date	5/28/92		5/28/92		5/28/92		5/28/92		5/28/92		5/28/92		5/28/92		5/28/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	96.9		111		106		50.0	U	88.3		68.7		96.7		80.0	
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	91,900		101,000		99,000		44,600		103,000		70,600		96,300		96,600	
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	20.5		19.8	
Copper	10.5	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Iron	104		100	U	100	U	100	U	100	U	100	U	172		100	U
Magnesium	18,300		20,700		20,100		9,010		21,300		14,500		20,000		20,800	
Manganese	22.2		15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.5	
Nickel	15.0	U	15.0	U	15.0	U	15.0	U	18.0		15.0	U	19.9		15.0	U
Potassium	7,610		7,980		7,710		4,950		7,700		6,400		7,770		7,870	
Silver	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Sodium	30,500		31,100		29,900		20,100		31,100		24,400		30,700		32,000	

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not Detected

9 3 1 2 0 2 1 0 9 6

TABLE C-2

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06262		B06263		B06264		B06265		B06266		B06267		B06268		B06269	
Lab Sample Number	920604008		920605002		920604011		920604014		920519021		920604022		920519024		920519027	
Analysis Date	6/12/92		6/12/92		6/12/92		6/12/92		5/28/92		6/12/92		6/12/92		6/12/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	53.4		50.0	U	50.0	U	50.1		50.0	U	50.0	U	50.0	U	50.0	U
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	51,200		47,100		44,800		51,000		45,200		40,900		54,000		53,700	
Chromium	10.0	U	10.0	U	10.0	U	15.5		10.0	U	13.1		15.6		16.8	
Copper	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Iron	100	U	100	U	100	U	100	U	116		100	U	434		131	
Magnesium	12,300		9,460		9,060		10,800		9,790		8,640		11,200		11,100	
Manganese	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Nickel	15.0	U	15.0	U	15.0	U	19.5		15.0	U	15.0	U	24.9		31.9	
Potassium	4,400		5,810		5,500		5,530		4,420		4,350		5,830		5,700	
Silver	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Sodium	18,400		21,300		19,800		20,200		23,800		14,200		22,100		21,900	

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not Detected

9 3 1 2 TABLE C-2 1 0 9 7

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06270		B06271		B06272		B06273		B06274		B06275		B06276		B06278	
Lab Sample Number	920605005		920605006		920512004		920512006		920512013		920513006		920513013		920515019	
Analysis Date	6/12/92		6/12/92		5/28/92		5/28/92		5/28/92		5/28/92		5/28/92		5/28/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	198		215		50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	123,000		124,000		1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Chromium	2,810		2,950		10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Copper	74.0		84.7		10.7		10.0	U	12.5		10.0	U	10.0	U	10.0	U
Iron	30,900		34,300		100	U	100	U	100	U	100	U	100	U	100	U
Magnesium	26,500		26,600		231		100	U	182		100	U	107		166	
Manganese	347		552		15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Nickel	242		269		15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Potassium	9,140		9,000		1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Silver	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Sodium	38,500		38,800		1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not Detected

9 3 1 2 3 1 0 9 8

TABLE C-2

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06279		B06280		B06281		B06282		B06283		B06284		B06285		B06286	
Lab Sample Number	920515022		920604009		920605003		920604012		920604015		920519022		920604023		920519028	
Analysis Date	5/28/92		6/12/92		6/12/92		6/12/92		6/12/92		5/28/92		6/12/92		6/12/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Calcium	1,000	U	1,050	B	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Copper	13.8		16.2		10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	23.7	
Iron	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Magnesium	100	U	493		100	U	100	U	100	U	100	U	100	U	100	U
Manganese	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Nickel	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Potassium	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U
Silver	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U
Sodium	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U	1,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not Detected

9 1 2 TABLE C-2 0 9 9

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06287	
Lab Sample Number	920605009	
Analysis Date	6/12/92	
Metal	**Result**	**Q**
Barium	50.0	U
Beryllium	1.0	U
Calcium	1,000	U
Chromium	10.0	U
Copper	10.0	U
Iron	100	U
Magnesium	100	U
Manganese	15.0	U
Nickel	15.0	U
Potassium	1,000	U
Silver	10.0	U
Sodium	1,000	U

B Analyte found between the instrument detection limit and the contract-required detection limit

Q Qualifer
U Not Detected

9 3 1 2 1 1 0

TABLE C-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number		B06251		B06252		B06252DL		B06253		B06253DL		B06254		B06255		B06255DL	
Lab Sample Number		920512003		920512006		920512006DL		920512007		920512007DL		920512012		920513006		920513006DL	
Analysis Date		5/18/92		5/15/92		5/15/92		5/18/92		5/18/92		5/18/92		5/18/92		5/18/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
Trichlorofluoromethane		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
Bromomethane		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
Vinyl chloride		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
Chloroethane		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
Methylene chloride		3	U	3	U	30	U	3	U	30	U	3	U	3	U	30	U
Acetone		10	U	10	U	100	U	10	U	100	U	10	U	10	U	100	U
Carbon disulfide		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,1-Dichloroethene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,1-Dichloroethane		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
cis-1,2-Dichloroethene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
trans-1,2-Dichloroethene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Chloroform		0.5	U	0.5		5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,2-Dichloroethane		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
2-Butanone		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
Tetrahydrofuran		10	U	10	U	100	U	10	U	100	U	10	U	10	U	100	U
1,1,1-Trichloroethane		0.5		2		5	U	2		5	U	0.5	U	2		5	U
Carbon tetrachloride		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Vinyl acetate		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Bromodichloromethane		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,2-Dichloropropane		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
cis-1,3-Dichloropropene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
trans-1,3-Dichloropropene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Trichloroethene		5		46	E	57	D	45	E	44	D	0.5	U	48	E	66	D
Dibromochloromethane		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,1,2-Trichloroethane		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Benzene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Bromoform		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
4-Methyl-2-pentanone		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
2-Hexanone		1	U	1	U	10	U	1	U	10	U	1	U	1	U	10	U
Tetrachloroethene		0.5	U	0.5		5	U	0.5	U	5	U	0.5	U	0.5		5	U
m,p-Xylene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
o-Xylene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,1,2,2-Tetrachloroethane		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Toluene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Chlorobenzene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Ethylbenzene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
Styrene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,3-Dichlorobenzene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,4-Dichlorobenzene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U
1,2-Dichlorobenzene		0.5	U	0.5	U	5	U	0.5	U	5	U	0.5	U	0.5	U	5	U

D Quantitated on diluted sample

E Analyte exceeded calibration range

Q Qualifier

U Not detected

9 3 1 2 0 0 3 1 1 0 1

TABLE C-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number		B06256		B06256DL		B06257		B06257DL		B06260		B06261		B06266		B06268	
Lab Sample Number		920513007		920513007DL		920513012		920513012DL		920515018		920515021		920519021		920519024	
Analysis Date		5/19/92		5/19/92		5/18/92		5/18/92		5/19/92		5/19/92		5/20/92		5/20/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
Bromomethane		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
Vinyl chloride		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
Chloroethane		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
Methylene chloride		3	U	30	U	3	U	15	U	3	U	3	U	3	U	3	U
Acetone		10	U	100	U	10	U	50	U	10	U	10	U	10	U	10	U
Carbon disulfide		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
Tetrahydrofuran		10	U	100	U	10	U	50	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		1		5	U	0.7		2	U	1		1		0.5	U	0.5	U
Carbon tetrachloride		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene		43	E	56	D	32	E	38	D	4		7		0.5	U	0.5	U
Dibromochloromethane		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
2-Hexanone		1	U	10	U	1	U	5	U	1	U	1	U	1	U	1	U
Tetrachloroethene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene		0.5	U	5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
Q Qualifier
U Not detected

TABLE C-3
VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number		B06272		B06273		B06274		B06275		B06276		B06278		B06279		B06284	
Lab Sample Number		920512004		920512008		920512013		920513008		920513013		920515019		920515022		920519022	
Analysis Date		5/18/92		5/18/92		5/18/92		5/18/92		5/18/92		5/19/92		5/19/92		5/20/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride		3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
Q Qualifier
U Not detected

9 3 1 2 9 1 1 0 3

TABLE C3
VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number		B06288		B06288		B06289		B06290		B06291		B06292		B06294		B06295	
Lab Sample Number		920519028		920512005		920512011		920512014		920513011		920513014		920515020		920515023	
Analysis Date		5/20/92		5/15/92		5/15/92		5/15/92		5/18/92		5/19/92		5/19/92		5/19/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride		3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range

Q Qualifier
U Not detected

TABLE C-3
VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number		B061B0		B061B2		B06263		B06264		B06265		B06270		B06281		B06282	
Lab Sample Number		920519023		920519029		920605002		920604011		920604014		920605005		920605003		920604012	
Analysis Date		5/20/92		5/20/92		6/08/92		6/08/92		6/08/92		6/08/92		6/08/92		6/08/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride		3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
Q Qualifier
U Not detected

9 1 1 2 1 1 0 5

TABLE C-8
VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number		B06283		B06287		B06297		B06298		B06299		B061B3		B061C3		B061C4	
Lab Sample Number		920604015		920605009		920605004		920604013		920604016		920605010		920611053		920611054	
Analysis Date		6/08/92		6/08/92		6/08/92		6/08/92		6/08/92		6/08/92		6/12/92		6/12/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride		3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone		10	U	10	U	10	U	10	U	10	U	10	U	10	U	11	
Carbon disulfide		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.6		0.5	U
1,2-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran		10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.9		0.5	U
Carbon tetrachloride		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone		1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.7		0.5	U
m,p-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

CRQL Contract-required quantitation limit
Q Qualifier
U Not detected
D Quantitated on diluted sample
E Analyte exceeded calibration range

TABLE C-3
VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number		B061C5		B061C7		B061C8		B061C9	
Lab Sample Number		920611055		920611057		920611058		920611059	
Analysis Date		6/12/92		6/12/92		6/12/92		6/12/92	
Volatile Organic Compound	CRQL	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane		1	U	1	U	1	U	1	U
Trichlorofluoromethane		1	U	1	U	1	U	1	U
Bromomethane		1	U	1	U	1	U	1	U
Vinyl chloride		1	U	1	U	1	U	1	U
Chloroethane		1	U	1	U	1	U	1	U
Methylene chloride		3	U	3	U	3	U	3	U
Acetone		10	U	10	U	10	U	10	U
Carbon disulfide		0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene		0.5	U	0.5	U	0.5	U	0.5	U
Chloroform		0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane		0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone		1	U	1	U	1	U	1	U
Tetrahydrofuran		10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		0.5	U	2		0.5	U	0.5	U
Carbon tetrachloride		0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate		0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane		0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane		0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene		0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene		0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane		0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane		0.5	U	0.5	U	0.5	U	0.5	U
Benzene		0.5	U	0.5	U	0.5	U	0.5	U
Bromoform		0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone		1	U	1	U	1	U	1	U
2-Hexanone		1	U	1	U	1	U	1	U
Tetrachloroethene		0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene		0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene		0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane		0.5	U	0.5	U	0.5	U	0.5	U
Toluene		0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene		0.5	U	0.5	U	0.5	U	0.5	U
Styrene		0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene		0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
Q Qualifier
U Not detected

9 1 1 2 TABLE C4 1 1 0 7

PESTICIDE ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06251		B06252UNS		B06253		B06254		B06255		B06257	
Lab Sample Number	05120090513		05120060513		05120070513		05120120513		05130060513		05130120513	
Analysis Date	6/21/92		6/21/92		6/21/92		6/21/92		6/21/92		6/21/92	
Pesticides	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Alpha-BHC	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Beta-BHC	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Delta-BHC	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Gamma-BHC (Lindane)	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Heptachlor	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Aldrin	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Heptachlor Epoxide	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Endosulfan I	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Dieldrin	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
4,4'-DDE	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Endrin	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Endosulfan II	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
4,4,'-DDD	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endosulfan sulfate	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
4,4'-DDT	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Methoxychlor	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Endrin ketone	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Endrin aldehyde	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Alpha-Chlordane	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U
Gamma-Chlordane	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U
Toxaphene	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1016	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1221	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1232	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1242	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1248	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1254	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Arochlor-1260	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U

Q Qualifier
U Not detected

9 3 1 2 TABLE C-4 1 1 0 8

PESTICIDE ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06260		B06261		B06266		B06268		B06263		B06265	
Lab Sample Number	05150180519		05150210519		05190210519		05190240519		06050020608		06040140608	
Analysis Date	6/23/92		6/23/92		6/23/92		6/23/92		7/11/92		7/11/92	
Pesticides	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Alpha-BHC	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Beta-BHC	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Delta-BHC	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Gamma-BHC (Lindane)	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Heptachlor	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Aldrin	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Heptachlor Epoxide	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Endosulfan I	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Dieldrin	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
4,4'-DDE	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Endrin	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Endosulfan II	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
4,4,'-DDD	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Endosulfan sulfate	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
4,4'-DDT	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Methoxychlor	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Endrin ketone	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Endrin aldehyde	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U	0.040	U
Alpha-Chlordane	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U
Gamma-Chlordane	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U	0.020	U
Toxaphene	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1016	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1221	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1232	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1242	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1248	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aroclor-1254	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Arochlor-1260	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U

Q Qualifier
U Not detected

9 1 2 TABLE C4 1 1 9

PESTICIDE ANALYSIS, WATER MATRIX (µg/L) (CONTINUED)

Project: 1100-EM-1, Round 10
Laboratory: Montgomery Laboratories

HEIS Sample Number	B06270		B061C3		B061C6	
Lab Sample Number	06050050608		06110530616		06110560616	
Analysis Date	7/11/92		7/13/92		7/13/92	
Pesticides	Result	Q	Result	Q	Result	Q
Alpha-BHC	0.0026		0.0020	U	0.0020	U
Beta-BHC	0.0020	U	0.0020	U	0.0020	U
Delta-BHC	0.0020	U	0.0020	U	0.0020	U
Gamma-BHC (Lindane)	0.0020	U	0.0020	U	0.0020	U
Heptachlor	0.0020	U	0.0020	U	0.0020	U
Aldrin	0.0020	U	0.0020	U	0.0020	U
Heptachlor Epoxide	0.0020	U	0.0020	U	0.0020	U
Endosulfan I	0.0020	U	0.0020	U	0.0020	U
Dieldrin	0.040	U	0.040	U	0.040	U
4,4'-DDE	0.040	U	0.040	U	0.040	U
Endrin	0.040	U	0.040	U	0.040	U
Endosulfan II	0.040	U	0.040	U	0.040	U
4,4,'-DDD	0.10	U	0.10	U	0.10	U
Endosulfan sulfate	0.040	U	0.040	U	0.040	U
4,4'-DDT	0.040	U	0.040	U	0.040	U
Methoxychlor	0.20	U	0.20	U	0.20	U
Endrin ketone	0.040	U	0.040	U	0.040	U
Endrin aldehyde	0.040	U	0.040	U	0.040	U
Alpha-Chlordane	0.020	U	0.020	U	0.020	U
Gamma-Chlordane	0.020	U	0.020	U	0.020	U
Toxaphene	0.10	U	0.10	U	0.10	U
Aroclor-1016	0.10	U	0.10	U	0.10	U
Aroclor-1221	0.10	U	0.10	U	0.10	U
Aroclor-1232	0.10	U	0.10	U	0.10	U
Aroclor-1242	0.10	U	0.10	U	0.10	U
Aroclor-1248	0.10	U	0.10	U	0.10	U
Aroclor-1254	0.10	U	0.10	U	0.10	U
Arochlor-1260	0.10	U	0.10	U	0.10	U

Q Qualifier
U Not detected

APPENDIX D

ROUND 11 DATA SUMMARY TABLES

TABLE D-1

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061D0		B061D1		B061D3		B061D4		B061D6		B061D7		B061D9		B061F1	
Lab Sample Number	921001079		921001080		920916157		920916158		920916160		920916163		920916165		920916167	
Analysis Date	10/1/92		10/1/92		9/16/92		9/16/92		9/16/92		9/16/92		9/16/92		9/16/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	39.0	B	10.0	U	36.0	B	11.0	B	35.0	B	11.0	B	40.0	B	36.0	B
Fluoride	318		100	U	253		100	U	371		100	U	354		378	
Alkalinity	160,000		NA		155,000		NA		166,000		NA		166,000		165,000	
Ammonia	50.0	U	NA		50.0	U	NA		50.0	U	NA		50.0	U	50.0	U
Chloride	27,800		NA		27,700		NA		17,100		NA		18,300		17,000	
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	43,300		100	U	61,300		100	U	55,700		100	U	55,600		51,300	
Sulfate	63,800		NA		76,200		NA		67,800		NA		69,600		67,100	
Total Dissolved Solids	556,000		NA		614,000		NA		606,000		NA		588,000		582,000	

B Analyte found between the instrument detection limit and the contract-required detection limit

E Analyte exceeded calibration range

NA Not analyzed

Q Qualifer

U Not detected

9 3 1 2 TABLE D-1 1 1 1 2

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061F2		B061F4		B061F6		B061F7		B061F9		B061G0		B061G2		B061G3	
Lab Sample Number	920916170		920916172		920916174		920916175		920916177		920916178		920916180		920916181	
Analysis Date	9/16/92		9/16/92		9/16/92		9/16/92		9/16/92		9/16/92		9/16/92		9/16/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	10.0	U	36.0	B	39.0	B	11.0	B	59.0		15.0	B	40.0	B	12.0	B
Fluoride	100	U	387		577		100	U	140		100	U	288		100	U
Alkalinity	NA		NA		158,000		NA		347,000		NA		152,000		NA	
Ammonia	NA		NA		50.0	U	NA		NA		NA		50.0	U	NA	
Chloride	NA		NA		14,900		NA		67,700		NA		15,200		NA	
Nitrite	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Nitrate	100	U	51,300		32,100		100	U	416		100	U	5,700		100	U
Sulfate	NA		NA		52,100		NA		6,750		NA		45,800		NA	
Total Dissolved Solids	NA		558,000		424,000		NA		494,000		NA		294,000		NA	

B Analyte found between the instrument detection limit and the contract-required detection limit
E Analyte exceeded calibration range
NA Not analyzed
Q Qualifer
U Not detected

9 3 1 2 0 1 1 1 3

TABLE D-1

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061G5		B061G6		B061G8		B061G9		B061H1		B061H2		B061H4		B061H5	
Lab Sample Number	920916183		920916184		920916186		920916187		920917085		920917086		920917088		920917089	
Analysis Date	9/16/92		9/16/92		9/16/92		9/16/92		9/17/92		9/17/92		9/17/92		9/17/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Ortho-phosphate	46.0	B	13.0	B	57.0		13.0	B	54.0		13.0	B	55.0		14.0	B
Fluoride	288		100	U	319		100	U	261		100	U	307		100	U
Alkalinity	139,000		NA		150,000		NA		161,000		NA		139,000		NA	
Ammonia	50.0	U	NA		50.0	U	NA		55.2		NA		50.0	U	NA	
Chloride	12,400		NA		14,500		NA		14,800		NA		11,800		NA	
Nitrite	100	U	100	U	100	U	215		100	U	100	U	100	U	100	U
Nitrate	3,830		100	U	3,750		100	U	32,400	E	100	U	3,840		100	U
Sulfate	38,000		NA		34,900		NA		85,000		NA		33,800		NA	
Total Dissolved Solids	264,000		NA		264,000		NA		498,000		NA		246,000		NA	

B Analyte found between the instrument detection limit and the contract-required detection limit

E Analyte exceeded calibration range

NA Not analyzed

Q Qualifer

U Not detected

9 5 1 2 9 3 1 1 1 4

TABLE D-1

GENERAL CHEMISTRY ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061H7		B061J0		B061J2	
Lab Sample Number	920917091		920917094		920917096	
Analysis Date	9/17/92		9/17/92		9/17/92	
General Chemistry Analyte	Result	Q	Result	Q	Result	Q
Ortho-phosphate	113		90.0		95.0	
Fluoride	2,270		2,260		283	
Alkalinity	145,000		NA		155,000	
Ammonia	4,520		NA		50.0	U
Chloride	10,500		NA		17,800	
Nitrite	100	U	100	U	100	U
Nitrate	23,300		24,700		6,840	
Sulfate	49,300		NA		29,600	
Total Dissolved Solids	366,000		366,000		280,000	

B Analyte found between the instrument detection limit and the contract-required detection limit

E Analyte exceeded calibration range

NA Not analyzed

Q Qualifer

U Not detected

9 3 1 2 **TABLE D-2** 3 1 1 1 5

METALS ANALYSIS, WATER MATRIX (μg/L)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061D0		B061D1		B061D3		B061D4		B061D6		B061D7		B061D9		B061F1	
Lab Sample Number	921001079		921001080		920916157		920916158		920916160		920916163		920916165		920916167	
Analysis Date	10/21/92		10/21/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	87.7		50.0	U	81.0		50.0	U	103		50.0	U	104		78.8	
Magnesium	19,400		100	U	22,600		100	U	20,700		100	U	20,900		20,100	
Manganese	15.0	U	15.0	U	30.4		15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Sodium	31,400		1,000	U	32,700		1,000	U	29,700		1,000	U	30,400		29,600	
Potassium	7,380		1,000	U	9,080		1,000	U	8,310		1,000	U	8,500		8,210	
Calcium	94,600		1,000	U	107,000		1,000	U	102,000		1,000	U	103,000		98,200	
Iron	175		100	U	100	U	100	U	100	U	100	U	100	U	100	U
Arsenic	NA		NA		NA		NA		NA		NA		NA		NA	

NA Not analyzed
Q Qualifer

U Not detected

9 3 1 2 9 3 1 1 1 6

TABLE D-2

METALS ANALYSIS, WATER MATRIX (μg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061F2		B061F6		B061F7		B061F9		B061G0		B061G2		B061G3		B061G5	
Lab Sample Number	920916170		920916174		920916175		920916177		920916178		920916180		920916181		920916183	
Analysis Date	9/24/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	50.0	U	69.2		50.0	U	NA		NA		50.0		50.0	U	50.0	U
Magnesium	100	U	15,500		100	U	NA		NA		11,200		100	U	9,270	
Manganese	15.0	U	15.0	U	15.0	U	NA		NA		15.0	U	15.0	U	15.0	U
Sodium	1,000	U	24,900		1,000	U	NA		NA		20,600		1,000	U	20,700	
Potassium	1,000	U	7,150		1,000	U	NA		NA		6,330		1,000	U	5,990	
Calcium	1,000	U	75,400		1,000	U	NA		NA		53,400		1,000	U	46,600	
Iron	100	U	100	U	100	U	NA		NA		100	U	100	U	100	U
Arsenic	NA		NA		NA		50.0	U	50.0	U	NA		NA		NA	

NA Not analyzed
Q Qualifer
U Not detected

9 3 1 2 TABLE D-2 3 1 1 1 7

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061G6		B061G8		B061G9		B061H1		B061H2		B061H4		B061H5		B061H7	
Lab Sample Number	920916184		920916186		920916187		920917085		920917086		920917088		920917089		920917091	
Analysis Date	9/24/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92		9/24/92	
Metal	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Barium	50.0	U	50.0	U	50.0	U	88.2		50.0	U	50.0	U	50.0	U	75.1	
Magnesium	100	U	9,250		100	U	17,600		100	U	8,860		100	U	14,000	
Manganese	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U	15.0	U
Sodium	1,000	U	21,500		1,000	U	30,000		1,000	U	20,600		1,000	U	23,200	
Potassium	1,000	U	5,890		1,000	U	8,550		1,000	U	5,970		1,000	U	6,960	
Calcium	1,000	U	46,800		1,000	U	89,700		1,000	U	44,100		1,000	U	58,600	
Iron	100	U	100	U	100	U	100	U	100	U	100	U	100	U	100	U
Arsenic	NA		NA		NA		NA		NA		NA		NA		NA	

NA Not analyzed
Q Qualifer
U Not detected

9 3 1 2 TABLE D-2 1 1 1 8

METALS ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061H8		B061J2		B061J3	
Lab Sample Number	920917092		920917096		920917097	
Analysis Date	9/24/92		9/24/92		9/24/92	
Metal	Result	Q	Result	Q	Result	Q
Barium	50.0	U	50.0	U	50.0	U
Magnesium	100	U	11,900		100	U
Manganese	15.0	U	15.0	U	15.0	U
Sodium	1,000	U	18,800		1,000	U
Potassium	1,000	U	5,510		1,000	U
Calcium	1,000	U	50,700		1,000	U
Iron	100	U	100	U	100	U
Arsenic	NA		NA		NA	

NA Not analyzed
Q Qualifer
U Not detected

9 3 1 2 [illegible] 1 1 1 9

TABLE D-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061D0		B061D1		B061D2		B061D3		B061D4		B061D5		B061D6		B061D6DIL	
Lab Sample Number	921001079		921001080		921001081		920916157		920916158		920916159		920916160		920916160	
Analysis Date	10/05/92		10/05/92		10/05/92		9/27/92		9/27/92		9/27/92		9/27/92		9/27/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
Methylene chloride	3	U	3	U	3	U	3	U	3	U	3	U	3	U	15	U
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	10	U	50	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
2-Butanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
Tetrahydrofuran	10	U	10	U	10	U	10	U	10	U	10	U	10	U	50	U
1,1,1-Trichloroethane	1		0.5	U	0.5	U	1		0.5	U	0.5	U	1		2	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Trichloroethene	4		0.5	U	0.5	U	8		0.5	U	0.5	U	42	E	33	D
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
4-Methyl-2-pentanone	1		1	U	1	U	1	U	1	U	1	U	1	U	5	U
2-Hexanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	5	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
m,p-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
J Concentration estimated
Q Qualifier
U Not detected

9 2 1 2 2 3 1 1 2 0

TABLE D-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061D7		B061D8		B061D9		B061D9DIL		B061F0		B061F1		B061F1DIL		B061F2	
Lab Sample Number	920916163		920916164		920916165		920916165		920916166		920916167		920916167DIL		920916170	
Analysis Date	9/27/92		9/27/92		9/28/92		9/27/92		9/27/92		9/28/92		9/28/92		9/27/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
Bromomethane	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
Vinyl chloride	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
Chloroethane	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
Methylene chloride	3	U	3	U	3	U	15	U	3	U	3	U	15	U	3	U
Acetone	10	U	10	U	10	U	50	U	10	U	10	U	50	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
2-Butanone	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	50	U	10	U	10	U	50	U	10	U
1,1,1-Trichloroethane	0.5	U	0.5	U	1		2	U	0.5	U	1		2	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Trichloroethene	0.5	U	0.5	U	39	E	50	D	0.5	U	47	E	39	JD	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
2-Hexanone	1	U	1	U	1	U	5	U	1	U	1	U	5	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
m,p-Xylene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
J Concentration estimated
Q Qualifier
U Not detected

9 5 1 2 3 2 1 1 2 1

TABLE D-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061F3		B061F4		B061F4DIL		B061F5		B061F6		B061F6DIL		B061F7		B061F8	
Lab Sample Number	920916171		920916172		920916172DIL		920916173		920916174		920916174DIL		920916175		920916176	
Analysis Date	9/27/92		9/28/92		9/28/92		9/27/92		9/28/92		9/28/92		9/27/92		9/27/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
Trichlorofluoromethane	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
Bromomethane	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
Vinyl chloride	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
Chloroethane	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
Methylene chloride	3	U	3	U	15	U	3	U	3	U	15	U	3	U	3	U
Acetone	10	U	10	U	50	U	10	U	10	U	50	U	10	U	10	U
Carbon disulfide	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
2-Butanone	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
Tetrahydrofuran	10	U	10	U	50	U	10	U	10	U	50	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	1		2	U	0.5	U	0.7		2	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Trichloroethene	0.5	U	43	E	51	D	0.5	U	39	E	34	D	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
2-Hexanone	1	U	1	U	5	U	1	U	1	U	5	U	1	U	1	U
Tetrachloroethene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	2	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
J Concentration estimated
Q Qualifier
U Not detected

9 3 1 2 2 3 2 1 1 2

TABLE D-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HRIS Sample Number	B061F9		B061G0		B061G1		B061G2		B061G3		B061G4		B061G5		B061G6	
Lab Sample Number	920916177		920916178		920916179		920916180		9209116181		920916182		920916183		920916184	
Analysis Date	9/28/92		9/28/92		9/28/92		9/29/92		9/28/92		9/28/92		9/28/92		9/28/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	0.5		0.5	U	0.5	U	0.6		0.5	U	0.5	U	0.6	
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.7		0.5	U	0.5	U	0.7		0.5	U	0.5	U	0.8	
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
J Concentration estimated
Q Qualifier
U Not detected

9 3 1 2 TABLE D-3 3 1 1 2 3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061G7		B061G8		B061G9		B061H0		B061H1		B061H2		B061H3		B061H4	
Lab Sample Number	920916185		920916186		920916187		920916188		920917085		920917086		920917087		920917088	
Analysis Date	9/28/92		9/28/92		9/28/92		9/27/92		9/29/92		9/29/92		9/29/92		9/29/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methylene chloride	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
Acetone	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U	5		0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2-Hexanone	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	0.5	U	0.5		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.6		0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
J Concentration estimated
Q Qualifier
U Not detected

TABLE D-3

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061H5		B061H6		B061H7		B061H7DIL		B061H8		B061H9		B061J0		B061J0DIL	
Lab Sample Number	920917089		920917090		920917091		920917091DIL		920917092		920917093		920917094		920917094DIL	
Analysis Date	9/29/92		9/29/92		9/30/92		9/30/92		9/29/92		9/29/92		9/30/92		9/30/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
Trichlorofluoromethane	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
Bromomethane	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
Vinyl chloride	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
Chloroethane	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
Methylene chloride	3	U	3	U	3	U	15	U	3	U	3	U	3	U	15	U
Acetone	10	U	10	U	10	U	50	U	10	U	10	U	10	U	50	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Chloroform	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
2-Butanone	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
Tetrahydrofuran	10	U	10	U	10	U	50	U	10	U	10	U	10	U	50	U
1,1,1-Trichloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Trichloroethene	0.5	U	0.5	U	22	E	18	D	0.5	U	0.5	U	20	E	18	D
Dibromochloromethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Benzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Bromoform	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
4-Methyl-2-pentanone	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
2-Hexanone	1	U	1	U	1	U	5	U	1	U	1	U	1	U	5	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
m,p-Xylene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
o-Xylene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Toluene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
Styrene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	2	U	0.5	U	0.5	U	0.5	U	2	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
J Concentration estimated
Q Qualifier
U Not detected

9 3 1 2 TABLE D-3 3 1 1 2 5

VOLATILE ORGANIC ANALYSIS, WATER MATRIX (µg/L)
(CONTINUED)

Project: 1100-EM-1, Round 11
Laboratory: Montgomery Laboratories

HEIS Sample Number	B061J1		B061J2		B061J3		B061J4	
Lab Sample Number	920917095		920917096		920917097		920917098	
Analysis Date	9/30/92		9/29/92		9/29/92		9/29/92	
Volatile Organic Compound	Result	Q	Result	Q	Result	Q	Result	Q
Chloromethane	1	U	1	U	1	U	1	U
Trichlorofluoromethane	1	U	1	U	1	U	1	U
Bromomethane	1	U	1	U	1	U	1	U
Vinyl chloride	1	U	1	U	1	U	1	U
Chloroethane	1	U	1	U	1	U	1	U
Methylene chloride	3	U	3	U	3	U	3	U
Acetone	10	U	10	U	10	U	10	U
Carbon disulfide	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	0.5	U	0.5	U	0.5	U	0.5	U
Chloroform	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloroethane	0.5	U	0.5	U	0.5	U	0.5	U
2-Butanone	1	U	1	U	1	U	1	U
Tetrahydrofuran	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane	0.5	U	2		0.5	U	0.5	U
Carbon tetrachloride	0.5	U	0.5	U	0.5	U	0.5	U
Vinyl acetate	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.5	U	0.5	U	0.5	U	0.5	U
Trichloroethene	0.5	U	0.5	U	0.5	U	0.5	U
Dibromochloromethane	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	0.5	U	0.5	U	0.5	U	0.5	U
Bromoform	0.5	U	0.5	U	0.5	U	0.5	U
4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
2-Hexanone	1	U	1	U	1	U	1	U
Tetrachloroethene	0.5	U	0.5	U	0.5	U	0.5	U
m,p-Xylene	0.5	U	0.5	U	0.5	U	0.5	U
o-Xylene	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	0.5	U	0.5	U
Toluene	0.5	U	0.5	U	0.5	U	0.5	U
Chlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
Ethylbenzene	0.5	U	0.5	U	0.5	U	0.5	U
Styrene	0.5	U	0.5	U	0.5	U	0.5	U
1,3-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
1,4-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichlorobenzene	0.5	U	0.5	U	0.5	U	0.5	U

D Quantitated on diluted sample
E Analyte exceeded calibration range
J Concentration estimated
Q Qualifier
U Not detected